



JABATAN PERDANA MENTERI



ECONOMIC
TRANSFORMATION
PROGRAMME

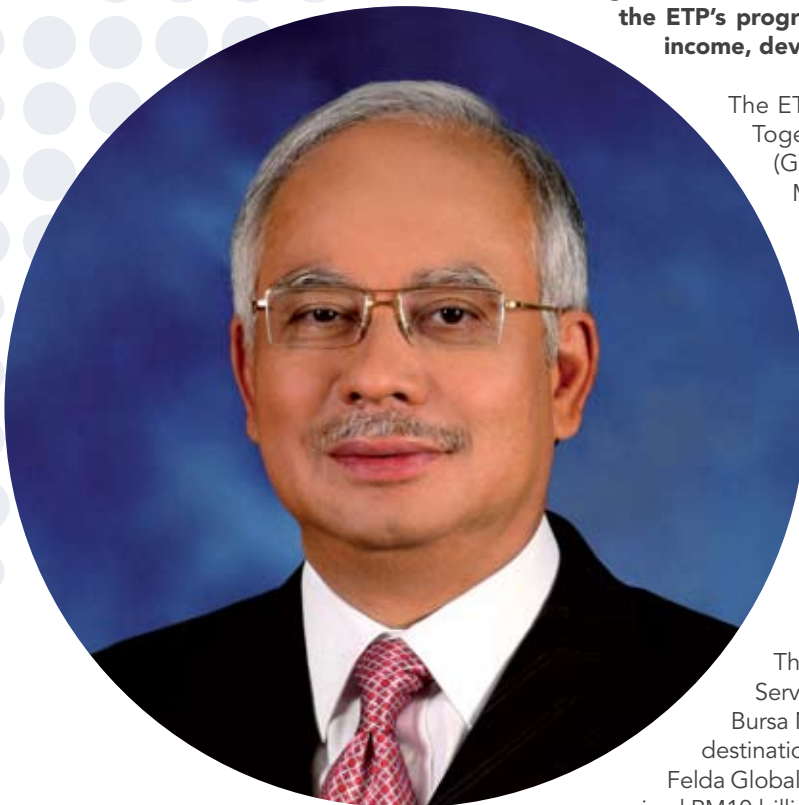
ANNUAL REPORT
2012

CONTENTS

2	A Note from the Prime Minister
4	A Note from the Deputy Prime Minister
6	Review of the ETP 2012
16	ETP Milestones
18	National Key Economic Areas (NKEAs)
20	Greater Kuala Lumpur/Klang Valley
42	Oil, Gas and Energy
60	Financial Services
80	Wholesale and Retail
96	Palm Oil and Rubber
118	Tourism
142	Electrical and Electronics
164	Business Services
178	Communications Content and Infrastructure
198	Education
220	Agriculture
244	Healthcare
262	Strategic Reform Initiatives (SRIs)
264	Competition, Standards and Liberalisation
275	Public Finance Reform
281	Public Service Delivery
287	Narrowing Disparity
293	Reducing Government's Role in Business
297	Human Capital Development
310	International Performance Review
321	Agreed-Upon Procedures by PwC
322	ETP Scorecard
	Appendices
323	List of Entry Point Projects and Business Opportunities
330	Glossary of Terms

A NOTE FROM THE PRIME MINISTER

Since the launch of the Economic Transformation Programme (ETP) two years ago, we have been making huge economic strides: Gross Domestic Product (GDP) growth has been strong and stable, unemployment and inflation low, and investment, including what had been raised through the world's third largest Initial Public Offering last year, has been increasing. This has been achieved despite difficulties elsewhere in the global economy. Malaysia has, in many ways, been a bright spot amidst the gloom, and it is against this backdrop that I take pride in sharing the ETP's progress in helping to transform Malaysia into a high-income, developed nation by 2020.



The ETP in itself is a subset of the New Economic Model. Together with the Government Transformation Programme (GTP), it forms a groundbreaking plan to propel Malaysia towards a developed nation status. The programme focuses on 12 National Key Economic Areas (NKEAs) and six Strategic Reform Initiatives (SRIs). In 2012, they recorded favourable results in meeting their Key Performance Indicator targets. But further than that, I am pleased to report that the ETP also facilitated cross-structural reform needed for Malaysia to achieve sustainable levels of economic growth.

Through increased private investments and growth in domestic consumption, we were able to meet our targeted GDP growth of 5.6 per cent in 2012, despite the increasingly volatile and challenging global landscape.

Through measures implemented by the Financial Services NKEA and the Government's Role in Business SRI, Bursa Malaysia emerged as one of the world's most attractive destinations to raise capital in 2012. Home-grown champion, Felda Global Ventures Holding Bhd's landmark initial public offering raised RM10 billion, the third largest in the world during the year.

With the population in Kuala Lumpur expected to hit 11 million in 2020, there will be an increasingly high demand for an efficient and dynamic intra-city public transport system. In March 2012, we witnessed the start of groundwork for the Klang Valley Mass Rapid Transit (MRT) project spearheaded by the Greater Kuala Lumpur/Klang Valley NKEA. I believe this project will play a major role in enriching the lives of the rakyat increasing productivity levels of city dwellers, while at the same time enhancing the liveability factor within our nation's capital city.

PETRONAS RM60 billion Refinery and Petrochemical Integrated Development (RAPID) project in Johor under the Oil, Gas and Energy NKEA, launched this year is the largest green field investment in the Asia-Pacific. It will see us upping our game in the global oil and gas downstream industry, and open up a host of economic activities that will benefit the rakyat living in the vicinity of the project.

Small businesses have also benefited from the programme of reform, particularly through the Small Retailer Transformation Programme (TUKAR). Since its launch, TUKAR has helped 1,087 sundry shops increase their competitiveness, transforming the lives of shop owners and their businesses.

Our efforts at transformation have been recognised by international bodies such as the World Bank, which ranked Malaysia at the 12th position for ease of doing business in its Doing Business 2013 report. This was compared to 18th in 2012. Malaysia also led the report's ranking for ease of access to credit and was ranked fourth for investor protection.

I am proud to note that in addition to private sector contribution, a large part of the ETP's initiatives have been realised through the civil service, thus creating a holistic and inclusive approach in our country's development.

I would, therefore, like to express my gratitude to the civil service for their tireless efforts, without which we would not have achieved the major milestone recorded so far.

I would also like to thank PEMANDU for their hard work in facilitating the rollout of the ETP and GTP initiatives, and in helping to ensure we remain on track for our future aspirations.

Despite these achievements, there are challenges ahead of us and we must not rest on our laurels. Malaysia must continue to address issues such as poverty, labour productivity, environment sustainability and education, while factors in the external economy are likely to remain demanding in the foreseeable future.

Nonetheless, I remain confident of our continued progress in the years to come. And when the time comes, I shall look forward to sharing the rewards of becoming a high-income economy along with those who helped achieve it: The rakyat.



Yang Amat Berhormat
Dato' Sri Mohd Najib Tun Hj. Abdul Razak
Prime Minister and Minister of Finance I

“Through measures implemented by the Financial Services NKEA and the Government's Role in Business SRI, Bursa Malaysia emerged as one of the world's most attractive destinations to raise capital in 2012.”

A NOTE FROM THE DEPUTY PRIME MINISTER

The last 12 months proved to be a challenging but rewarding time for our country as we continued on the path towards a better Malaysia. The complementary Government Transformation and Economic Transformation Programmes (GTP and ETP) have yielded significant changes in the way Malaysians live and work, and will continue to do so in the coming years.

As the Chairman of the GTP Delivery Task Force, I have been heartened to witness the symbiotic relationship between GTP and ETP.

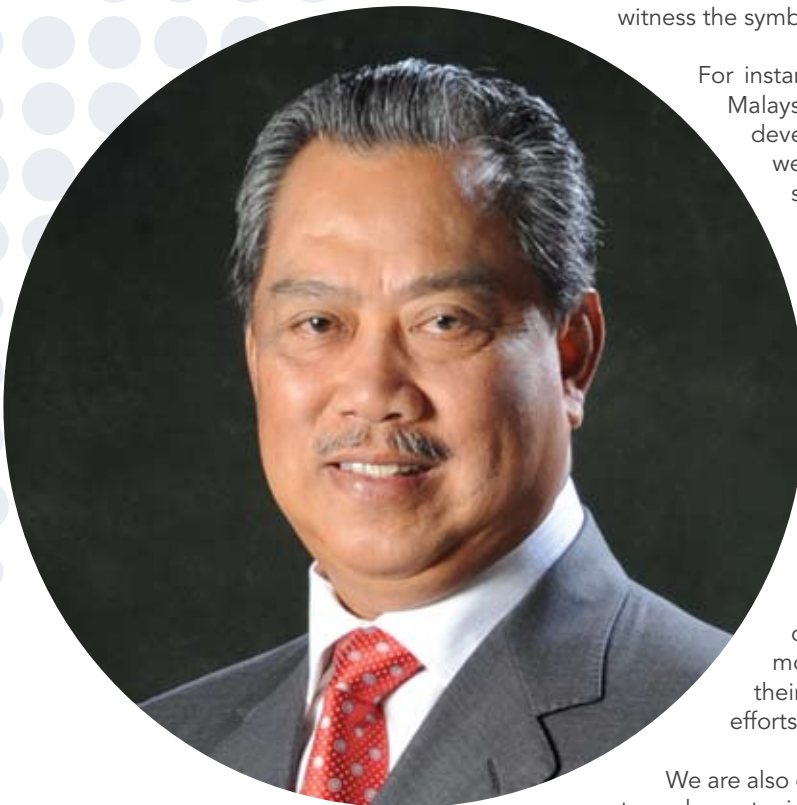
For instance, we have taken broad measures to ensure that Malaysia's talent pool will meet the requirements of a developed nation. In developing local human capital, we have taken substantial steps to bring our education standards up to speed and have laid out our plans through the National Education Blueprint 2013-2025, which has been recently approved by the Cabinet.

Under the blueprint, we have identified the shortcomings within our present education system and detailed specific measures to ensure international competitiveness of Malaysian graduates. A skilled domestic workforce will assure multinationals that they can secure the best-in-class talents with the right creative, industrial and management capabilities.

Malaysia is also a safer place today as crime levels have dropped a further 8.7 per cent based on reports of Index Crime to the police. We recognise that a lot more has to be done to help the rakyat feel safe within their own communities, which is why we will intensify our efforts to do so over the next three years.

We are also engaging the business and international communities to seek greater input on how we can better improve security, and have since implemented measures drawn from their feedback.

Additionally, our work in fighting corruption has seen Malaysia's rank improve from 60th to 54th in Transparency International's Corruption Perception Index – an improvement that will raise confidence levels of foreign investors to come to Malaysia. Business owners will no doubt also be pleased, as lower corruption translates to greater ease of doing business.



The number of complaints made under the recently enforced Whistleblower Protection Act is also gaining traction, suggesting that the public is increasingly pro-active in reporting corruption. I believe this bodes well in creating a more competitive business environment which will in turn benefit the nation from a social and economic perspective.

In short, both the ETP and GTP touch people's lives in areas that matter the most to them, while at the same time transforming the fundamental way that Malaysia delivers public service. This will in turn change the way Malaysia conducts business and spur the economic development story through the ETP.

I am particularly pleased and proud of the way the civil service has responded to our call for change. We recognise that both the GTP and ETP remain mere plans without the execution by our civil servants and I would like to personally thank them for their hard work in making this vision a successful reality.

Despite our steady progress, more needs to be done if we are to achieve our development goals by 2020. These programmes of change require the support of the rakyat to help us drive and further improve on these initiatives.

We all have a part to play in ensuring that future Malaysians enjoy a brighter tomorrow, and I invite everyone to help the Government secure that future for our children and grandchildren.



Yang Amat Berhormat
Tan Sri Dato' Hj. Muhyiddin Mohd Yassin
Deputy Prime Minister of Malaysia

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REVIEW OF THE ETP 2012



Tan Sri Nor Mohamed Yakcop
Minister in the Prime Minister's Department,
Economic Planning Unit



Senator Dato' Sri Idris Jala
Minister in the Prime Minister's Department
CEO, Performance Management and Delivery Unit (PEMANDU)

Just over two years since the launch of the Economic Transformation Programme (ETP) in October 2010, it is with great pleasure that we present to you its progress in 2012.

The global economy remained fraught with risks during the year due to the Eurozone's continuing financial crisis and concerns on fiscal policy reforms in the US. These headwinds continued to cast a challenging outlook on world economies throughout much of the year.

Malaysia's economy, nonetheless, stayed resilient amid slower global economic growth, recording Gross Domestic Product (GDP) growth of 5.6 per cent in 2012, surpassing the Asia Pacific growth consensus of 3.8 per cent. This growth was buoyed by a robust investment pipeline and expansion in domestic consumption.

We believe that these developments were largely driven by the economic transformation agenda undertaken by the Government from 2010 to propel Malaysia towards becoming a high-income nation by 2020.

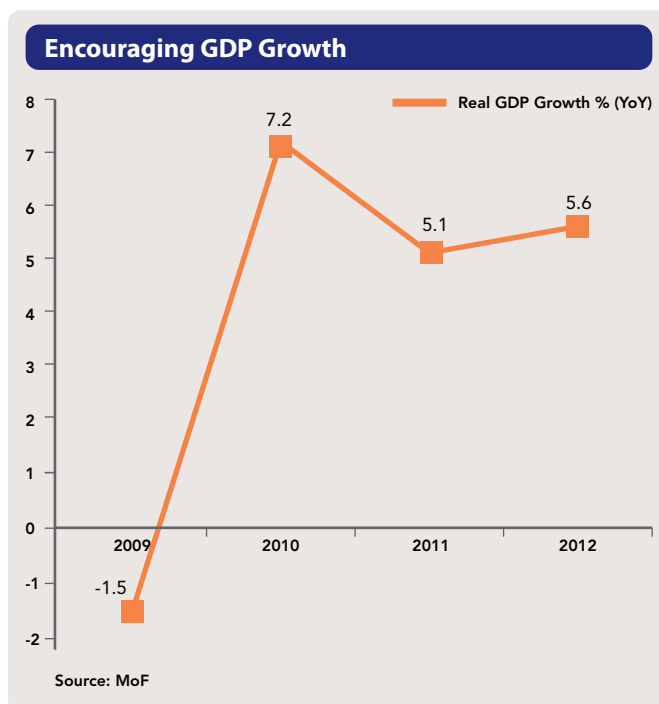


Exhibit A

Establishing the National Transformation Programme

The prevailing slowdown in the global economy, which has persisted since the historic global financial crisis of 2008/2009, presents a stark reminder of the need for a fresh approach to achieving stable and sustainable growth through a new economic model. The 'leverage model' pursued particularly by the West which involves borrowing to spur development, and the 'tax and spend' model, all seem to be struggling at the seams.

Under these challenging global economic scenarios, in 2010, Prime Minister Dato' Sri Mohd Najib Tun Razak laid the foundation for the National Transformation Programme (NTP) by announcing both the Government Transformation Programme (GTP) and the Economic Transformation Programme (ETP).

The NTP was born out of the need to implement the New Economic Model, which the Prime Minister had launched earlier in the same year to lift Malaysia out of the middle-income economy doldrums and into high-income status by 2020, ultimately benefiting the people of Malaysia and uplifting their standards living. It is envisaged that the GTP would spearhead important social transformation initiatives whilst the ETP would enable Malaysia to realise its true economic potential.

Whilst being focused on the 'True North' of achieving high income status, the NTP banks on two very critical aspects: sustainability and inclusiveness.

In this respect, the NTP takes deliberate steps to ensure balanced development so that no group of people or community is excluded from the overall economic development taking place in the country, and that our journey towards prosperity can be sustained for the future.

The national transformation initiative however is not just a plan, it is a programme involving targets, allocation of resources and quantified outcomes. In achieving economic targets, we are cognisant of crucial social aspects such as quality of life, cost of living, the safety and security of the rakyat, and nurturing values that are essential in getting us towards our goals.

Economic Transformation Programme in a nutshell

As a component of the NTP, the ETP is a two-pronged initiative geared at building economic sustainability for Malaysia. It highlights 12 National Key Economic Areas (NKEAs) which articulate key sectors of economic opportunities in the country. Its second point of emphasis is the creation of a competitive economic landscape for businesses to flourish through six cross-cutting structural policies we termed as Strategic Reform Initiatives (SRIs).

The ETP sets out to achieve a Gross National Income (GNI) of US\$15,000, create 3.3 million jobs and secure US\$444 billion in investments by 2020. We used a credible global yardstick - the World Bank's approach to define our high income target. The World Bank's current GNI per capita threshold for a high income economy is US\$12,476. We factored in the World Bank's published historical global inflation figure of two per cent until 2020 to arrive at a high-income threshold of US\$15,000.

On the investment front, the ETP is aimed at encouraging the private sector to retake its rightful role as the engine of economic growth whilst enabling public investment to stay focused on catalytic projects with significant economic returns. By 2020, it is hoped that private investment would make up 92 per cent of total investments in the country, with public sector investment to account for the remainder.

Large, public sector-driven catalytic projects include those such as such as the Mass Rapid Transit (MRT), River of Life (ROL) and the Pengerang Integrated Petroleum Complex (PIPC).

Through this catalytic approach, the ETP is aimed at impacting the entire Malaysian economy and not just the Entry Point Projects (EPPs) identified under the NKEAs. The investment flows into these NKEAs will result in wider multiplier benefits that spill out across other economic sectors.

Towards 2020: The 10 Indicators of Success

Before diving into the achievements of the ETP in 2012, we should take stock of the overall milestones achieved since the programme was first announced in 2010. This is especially important as the ETP is not designed to be a yearly programme, but one with clear targets that stretch across a span of 10 years to be achieved by 2020. Our journey towards high-income status is a marathon, not a sprint. Therefore, it is imperative for us to remain focused on achieving measured, sustainable growth, rather than a rapid boom that may be vulnerable to shocks.

1. EPPs expanded to 152 and SRIs are on track:

The ETP's catalytic approach means that a lot of focus is given to the EPPs because of its multiplier effect potential. When the ETP was first launched in 2010, there were 131 EPPs. We now have a total of 152 EPPs, from which, 149 projects have been announced with a total committed investment of RM211.34 billion. These investments are expected to generate Gross National Income (GNI) of RM135.64 billion in 2020 and create 408,443 jobs.

We also see steady progress in the implementation of the SRIs. Some examples include the introduction of the Competition Act on 1 January 2012, liberalisation of 15 out of 17 sub-sectors, improvements in business processes, establishment of the minimum wage and rationalisation in the Government's role in the private sector.

2. 49 per cent GNI growth since 2009:

The country's GNI per capita has risen from US\$6,700 in 2009 to US\$9,970* in 2012. This represents a 48.8 per cent surge in just a three-year period. Based on current projections and barring unforeseen circumstances, this gives Malaysia the potential to achieve a GNI per capita of US\$15,000 earlier than the 2020 target.



Exhibit B

3. Continued robust GDP growth:

Although the global economy is going through a slowdown, Malaysia continues to achieve robust growth. In 2012, our GDP rose 5.6 per cent against 5.1 per cent in 2011. This significantly outpaced Singapore's GDP growth, which rose 1.3 per cent, and even beat out some of the region's developed economies – South Korea and Taiwan, for example, recorded contractions in GDP of two per cent and 1.25 per cent, respectively. Meanwhile, the US economy grew 2.2 per cent and the UK weakened by 0.1 per cent.

4. Highest revenue in history recorded in 2012:

Malaysia's economy continued to surpass its GDP and GNI targets in 2012. It is this healthy economic growth that enabled the Government to record its highest revenue in our history in 2012, estimated at about RM207 billion. As a result, the Government was able to implement many socio-economic programmes, including those under the Government Transformation Programme such as *Bantuan Rakyat 1Malaysia* (BR1M).

5. The strong investment story:

Despite a sluggish global economic landscape, Malaysia's investment as a whole grew by 19.9 per cent in 2012 compared to 6.5 per cent in 2011, accounting for a healthy 26.7 per cent of GDP.

Private investment has tripled since the start of the ETP, recording a 22 per cent growth in 2012 compared to 12.2 per cent in 2011 and an average of 6.7 per cent between 2000 and 2010. This uptrend serves as a testament of growing private sector confidence in the national transformation initiative, and has led private sector investment to continue outpacing public investment in 2012, accounting for 58 per cent of total investment.

During the year, private investment amounted to RM139.5 billion, handily beating the target of RM127.9 billion by 9.1 per cent, driven by high capital expenditure in the manufacturing, services and mining sectors. From 2009-2011, private investment has risen 51.7 per cent, 54 per cent and 57 per cent, respectively.

Public sector investment, on the other hand, which accounted for 42 per cent of total investment, reached RM100.7 billion in 2012. This came in just over the RM100 billion target for the year, and was mainly due to RM34.6 billion in fourth-quarter in the transport, utility, and oil and gas sub-sectors.

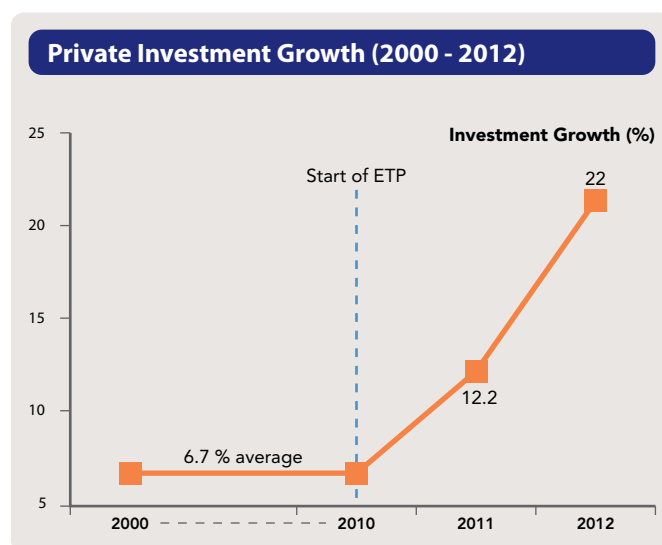


Exhibit C

6. Private consumption on the rise:

Domestic private consumption hit 7.7 per cent in 2012 compared to 7.1 per cent in 2011, reflecting growing consumer confidence in our economic transformation journey. This continued growth in private consumption is critical as this component accounts for 50.7 per cent of GDP.

7. Robust capital market development:

The Malaysian stock market performed very well in 2012, with the FTSE Bursa Malaysia KLCI scaling to a historic high of 1,681.33 points on 31 December 2012, and Bursa Malaysia's market capitalisation rising 14.1 per cent to RM1.47 trillion from the end of 2011. In monetary terms, the exchange's market capitalisation has grown by 31.2 per cent, or RM350 billion, from RM1.12 trillion in August 2010.

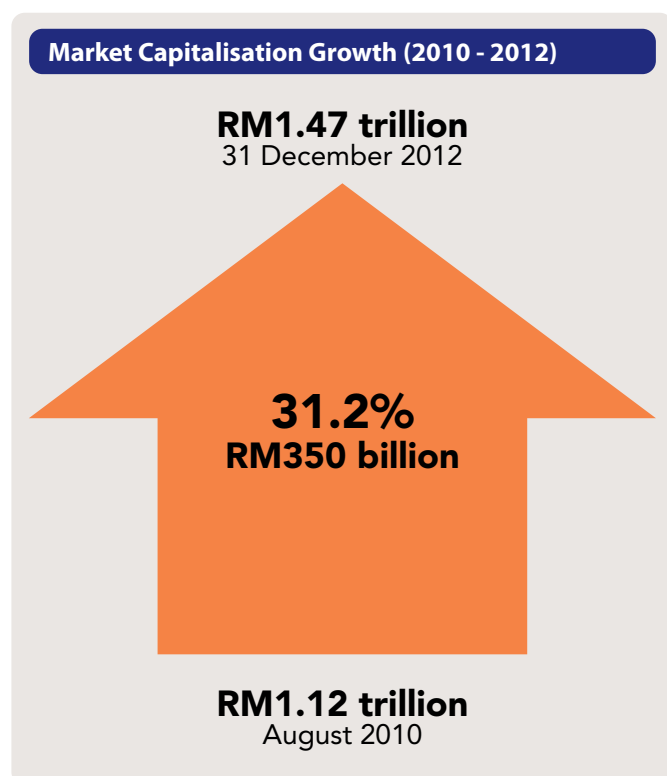


Exhibit D

8. Consistent reduction in fiscal deficit:

While many countries promise to reduce their fiscal deficit yet fail to deliver, Malaysia by contrast has been successful in moving towards near-budget neutral by 2020. The Government has consistently reduced its fiscal deficit from 6.6 per cent of GDP in 2009, to 5.6 per cent in 2010, 4.8 per cent in 2011 and 4.5 per cent in 2012. Moving forward, the aim is to reduce the fiscal deficit to 4.0 per cent and 3.0 per cent in 2013 and 2015, respectively, and achieving a balanced budget by 2020.

Malaysia has also put in place a debt ceiling of 55 per cent of GDP. Most countries do not have such a ceiling, which explains why many of them have accumulated massive debt. The Prime Minister has publicly announced that the Government will continue to pursue fiscal prudence and keep its debt below the self-imposed ceiling. To keep within this parameter, the strategy is to ensure that the economy grows at a healthy pace to allow Government borrowing within the ceiling.

9. Endorsement from credible global organisations:

External parties continue to recognise Malaysia's tremendous progress. For example, the World Bank has raised Malaysia's global ranking in its Doing Business Report from 18th position in 2012 to 12th in 2013, ahead of Sweden, Taiwan, Germany, Japan and Switzerland. On AT Kearney's FDI confidence index, Malaysia has risen from 21 in 2010 to 10 in 2012, ahead of France, South Korea, Thailand, Vietnam, Canada and Turkey.

The IMD World Competitiveness Yearbook ranking shows Malaysia improving from 16th spot in 2011 to 14th in 2012, ahead of Australia, UK, South Korea, Japan and France. Malaysia's WEF Global Competitiveness ranking however, has been inconsistent i.e. 24 (2009), 26 (2010), 21 (2011) and 25 (2012). Most recently, CNN ranked Kuala Lumpur as the fourth-best shopping city in the world, ahead of Paris and Hong Kong.

It is also interesting to note that Harvard Business School and Princeton University, two Ivy League institutions of higher learning in the US, have written case studies on the transformation of Malaysia. These case studies are used in their teaching courses.

10. Overall excellent KPI achievements in 2012:

In 2012, our KPI result for NKEAs surpassed targets to reach 118 per cent, whilst for SRIs, we recorded nearly full KPI achievement at 93 per cent. This achievement has been externally validated by global audit firm PricewaterhouseCoopers (PwC), and received commendations from a team of international experts.

NKEAs: Progress in 2012

Because transparency is central to everything that we do within the ETP, we engaged PwC, to conduct a series of Agreed Upon-Procedures (AUPs) to ensure accuracy of reporting. This rigorous exercise is extremely useful to help us establish clear accounting and best practices as we move forward.

Based on the AUP in 2012, we secured a total of 39 projects, pulling in RM32.14 billion in investments which are projected to contribute RM6.63 billion to GNI in 2020 and create 94,702 jobs.

In 2011, we announced committed investment of RM179.2 billion, GNI of RM129.5 billion and 313,741 new jobs.

Since its launch in 2010, the ETP has announced a total of 149 projects with a cumulative total of RM211.34 billion in committed investments as at 31 December 2012. In 2020, this is expected to translate into RM135.64 billion in GNI with 408,443 jobs expected to be created.

We would like to stress that the lower amount in investments, GNI and jobs for 2012 in contrast with 2011 does not in any way reflect slowing momentum. This is because in 2011, which represented the first year of reporting for the ETP, there was significant front-loading of EPPs announced under the NKEAs.

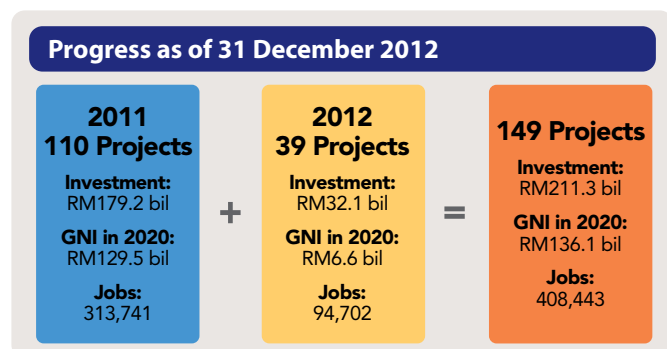


Exhibit E

NKEAs: Tracking progress

The 12 National Key Economic Areas (NKEAs) marked continued progress in 2012. Detailed reporting of the KPIs, targets and achievements are disclosed within the respective NKEA chapters.

Greater Kuala Lumpur/Klang Valley

In 2012, the Greater Kuala Lumpur/Klang Valley (KL/KV) NKEA recorded significant milestones. Most notable were the substantial progress under the Klang Valley Mass Rapid Transit (MRT) project and InvestKL surpassing its target for the year.

The land acquisition exercise under the MRT project is 94 per cent complete. MRT Corp has awarded all 41 civil tenders packages for civil engineering works required. Construction work also started last year, focusing on completing advance works and preliminaries for the main elevated and underground works.

InvestKL as a lead implementing agency for the NKEA has managed to attract 11 Multinational Corporations into Greater KL/KV in 2012, creating 1,393 jobs. Amongst them, Service Source and Alstom are due to set-up centres of excellence, and companies such as Darden and Oleon will be establishing their regional management centre and headquarters respectively.

Oil, Gas and Energy

The Oil, Gas and Energy (OGE) NKEA seeks to nurture the development of Malaysia's downstream sector while ensuring constant production levels and exploration of alternative energy. This is in support of an industry that represents among the country's key engines of economic growth.

One of the highlights of 2012 for the OGE industry was under EPP 3, which is aimed at intensifying exploration activities, Petroliaam Nasional Bhd (PETRONAS) in November recorded first oil production from the Gumusut-Kakap field, located offshore Sabah. Representing Malaysia's second deepwater development, this is a major achievement within the Malaysian oil and gas industry following a 14-month planning and execution process. Production is expected to reach a maximum of 25,000 barrels per day (bpd) upon ramping up of the two wells in Gumusut-Kakap.

Another development of great significance within this NKEA was SapuraCrest Petroleum Bhd and Kencana Petroleum Bhd's merger in May to create the world's fifth-largest integrated oil and gas services firm and to compete more effectively with regional companies for projects. In a deal worth more than RM10 billion of market capitalisation, the merged firm, SapuraKencana Petroleum Bhd, brings together SapuraCrest's experience in transportation and installation contracts and Kencana Petroleum's expertise as fabricators.

Financial Services

The domestic financial services industry plays an integral role in ensuring Malaysia's economic sustainability. It contributed to 11.6 per cent of the country's real GDP in 2011, growing at an average of 7.5 per cent in 2006-2011.

In 2012, the financial services sector performed exceptionally well with landmark capital market developments and our banks continuing to remain well-capitalised, demonstrating healthy asset quality and continuing to report record profits, whilst rapidly expanding outside of Malaysia.

Under the Financial Services NKEA, our market performed exceptionally well despite uncertainties in the global economy and markets. The attractiveness of the market also saw foreign investors emerge as net buyers on Bursa Malaysia as at the end of December 2012.

During the year, the divestment of Government-linked Investment Companies (GLICs) continued to gather pace, culminating in some of the world's largest IPOs, namely Felda Global Ventures Holdings Bhd (FGVH) and Integrated Healthcare Holdings Bhd. The listings of FGVH and IHH raised RM9.9 billion and RM6.3 billion in capital, respectively, boosting Bursa Malaysia's market capitalisation by an additional RM39 billion.

The launch of the Private Retirement Scheme (PRS), a voluntary retirement savings plan, marked a significant turning point in facilitating the growth of the private pension industry. The PRS was structured by private sector fund providers and licensed and approved by the Securities Commission (SC).

As at December 2012, RHB Investment Management Sdn Bhd, CIMB-Principal Asset Management Bhd, Manulife Asset Management Services Bhd, Public Mutual Bhd and Hwang Investment Management Bhd had launched a total of 26 PRS funds which fall under the oversight of the SC.

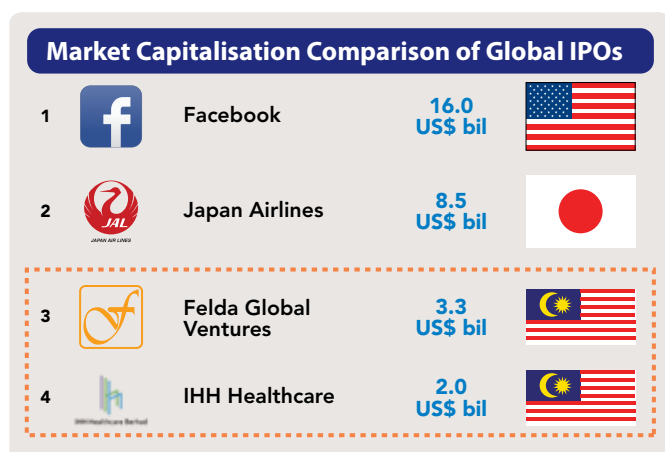


Exhibit F

While significant progress has been made in maintaining the financial services industry's momentum, more efforts will continue to be undertaken. These include pushing for more velocity and liquidity on Bursa Malaysia, encouraging financial industry consolidation, and addressing human capital requirements.

Although future developments hinge, in part, on prevailing uncertain external conditions, the Financial Services NKEA will also continue to focus on strengthening domestic factors that will help build a sophisticated industry serving the needs of a high-income nation.

Wholesale and Retail

This NKEA made significant progress in 2012, and in some areas, surpassed targets set for the year. The transformation of sundry shops continues with great success with 568 TUKAR stores established, surpassing its initial target of 500 stores for the year. This brings the total number of shops converted to 1,087 so far. On average, TUKAR participants have reported a sustained 30 per cent increase in revenue post-transformation.

The Automotive Workshop Modernisation Project (ATOM) also surpassed its 2012 target, successfully transforming 110 workshops for the year. Since 2011, 165 workshops have been transformed under this project.

The first Makan Bazaar, located in the Mall of Medini has been operational since the middle of 2012. The 180,000 sq ft Bazaar features 18 F&B outlets and 6 kiosks, catering to over 1,000 patrons.

Meanwhile, EPP 3, Developing Pasar Komuniti, has since been transferred to the Agriculture NKEA for smoother execution due to the involvement of agriculture-based stakeholders.

Palm Oil and Rubber

The Palm Oil and Rubber NKEA seeks to harness Malaysia's competitive edge and expertise in the agriculture commodities industry, which has emerged as one of our country's key socio-economic drivers.

Under EPP 2 for palm oil, we have successfully established a total of 23 smallholders' sustainable palm oil cooperatives with the inclusion of eight cooperatives this year, representing about 43,000 smallholders covering some 172,000 ha of oil palm area. This is envisaged to bring smallholders a step closer to increasing the scale and efficiency of their planted area.

For the rubber industry, the Government continues to ensure ongoing replanting and new planting activities among the smallholders. Malaysia's rubber plantation area has been gradually decreasing over the last 10 years but the upstream sector continues to be important in providing sufficient raw materials to the downstream industry. Policies have been formulated to ensure that rubber areas are maintained at 1.2 million ha, of which one million ha are tappable.

Tourism

With Malaysia's warm climate, diversity of attractions and connectivity with the rest of the world, tourism has long represented a key component to the country's economic growth.

In 2012, this NKEA's multi-faceted approach in revitalising the Tourism industry recorded several key achievements. Kuala Lumpur has been ranked fourth in CNN Travel's survey on the top 10 best shopping cities in the world 2012, ahead of well-established shopping hubs such as Paris, Hong Kong and Dubai.

Kuala Lumpur's impressive score came from its winning combination of high quality shopping, affordable prices and regular sales, such as the 1Malaysia Year-End Sales. It is noteworthy that Malaysia scored full marks for value.

Kuala Lumpur was also crowned the second best shopping destination in Asia Pacific by Globe Shopper Index, created by the Economist Intelligence Unit, part of the Economist Group and commissioned by Switzerland-based shopping tourism company Global Blue.

In addition, 45 major meetings, incentives, conventions and exhibitions (MICE) events (minimum 650 delegates) were secured for 2012, attracting a total of 61,659 delegates and generating estimated revenue of RM597 million, representing a 100 per cent increase in both the number of delegates and revenue generated compared to 2011.

One of the key events secured was the 127th International Olympic Committee (IOC). This event, scheduled to be hosted in Kuala Lumpur in 2015, is expected to receive approximately 1,500 international delegates including IOC members and honorary members, as well as an additional 1,500 members from the international media.

Electrical and Electronics

The past few decades has seen the Electrical and Electronics (E&E) industry being a prime mover of the Malaysian economy, providing a critical component of GDP, attracting foreign investment and creating employment. As a result, the E&E NKEA has taken vital steps to move the industry up the value chain to enhance its competitiveness in the global market, while protecting the industry from disruptive events that may impact its performance.

This resulted in E&E 2.0 – a new roadmap for the E&E NKEA which re-clustered the current EPPs and introduced four new EPPs. E&E 2.0 is geared towards encouraging local players to move away from manufacturing and up the value chain into design, assembly and packaging, and ultimately become total solutions providers. In turn, this will lead to the creation of high-income jobs, higher GDP and GNI, and increased FDI thus driving Malaysia towards its 2020 targets. The four new projects under E&E 2.0 are:

- Development of Balance Systems for Solar Photovoltaics (PV)
- Growing the Embedded Systems Industry
- Enabling Electric Vehicle Component Manufacturing
- Supporting Regional Rail MRO

Additionally, under EPP 11, National Instrument in collaboration with the Government has set up a shared-service lab facility at Technology Park Malaysia. This shared facility allows local companies to utilise the facilities for design and development as well as a training hub for engineers to obtain and upgrade their proficiency.

Meanwhile, the National Instruments Academy & Innovation Nucleus, a work-in-progress, aims to nurture innovation, develop the local talent pool and promote intellectual property rights creation in the local SME community.

Business Services

In targeting the development of selected specialised service sectors in the Malaysian economy, the Business Services NKEA makes an essential contribution to the country's quest for high-income nation status by 2020. These sectors are aviation maintenance, repair and overhaul (MRO) services, outsourcing, data centres, green technology, engineering services and ship-building and ship repair.

Under the outsourcing sector, global consulting firm Frost & Sullivan has set up its Global Innovation Centre for Excellence in Iskandar Malaysia, while other foreign firms, namely AIG, Chartis and AIA, have also expanded their shared services centres here. These developments are expected to help the outsourcing segment surpass its targets for export revenue by 117 per cent and jobs created by 113 per cent. The Government has also played its part in awarding outsourcing contracts for the Government Unified Communications and Government Data Centre-2 projects to boost the outsourcing sector.

This NKEA has also succeeded in nurturing home-grown pure-play engineering services companies. Strand Aerospace Malaysia (SAM) and DreamEdge Sdn Bhd (DESB) have both expanded their businesses at home and abroad, achieving consistent gains in revenue and increasing number of jobs in a space of two years.

Despite these successes, human capital, a lack of scale and scope of local outsourcing companies, as well as expensive pricing and untested business viability of the green technology industry remains a prevalent issue within this NKEA. Nonetheless, existing hindrances will be continually addressed to support the necessary initiatives required to enhance Malaysia's fields of specialisation in the face of ever-increasing competition in the global economy.

Communications Content and Infrastructure

As the platform designed to cement Malaysia's position in the information age, the Communications Content and Infrastructure (CCI) NKEA represents among one of the most vibrant and dynamic undertakings by the Government to-date.

Highlights of this NKEA in 2012 showcase significant outcomes from strong public-private partnership. These include a RM1 billion revenue contribution from the creative content field, achieved through higher sales of film, television, animation and handicraft. This NKEA supported the animation *War of the Worlds: Goliath* – a Malaysian production that was named the Best 3D Animated Feature Film in Los Angeles. This is testament that Malaysia is able to offer quality content and hopefully, drive the dreams of young Malaysians for pursuing careers in this field.

In addition, SmarTag and the Royal Customs Department launched the Container Security and Trade Facilitation System RFID in 2012. This system reduces processing time at each Custom checkpoint by 47 minutes per container, significantly increasing trade efficiency across Malaysia. Despite a delay in implementing the system, 64,629 transactions were processed in 2012 compared to the target of 66,000 transactions.

Education

As one of the most basic requirements of a developed economy, the Education NKEA takes a multi-faceted approach to addressing the country's education.

During the year, three new EPPs were formed to address market demand. These comprise EPP 14: Building a Games Development Cluster; EPP 15: Establishing Branch Campuses for Foreign Universities; and EPP 16: Establishing Not-for profit Education Institutions.

The Games Development Cluster, created in 2012, will focus on two areas – creating awareness for Malaysia as a games development hub and developing talent to meet industry demand.

KDU University College, as the project lead, and Codemasters Studios Malaysia signed a Memorandum of Understanding in January 2012 to collaborate on the creation of a curriculum for game development that ensures students graduating from the programme are sufficiently prepared for the competitive job market.

Under EPP 15, Heriot-Watt University (HWU) established its second international branch campus in Putrajaya last year. While work on HWU's 20,000 square metre campus is ongoing, the university first commenced operations with an MBA programme in September at a temporary site in Putrajaya. The official campus in Putrajaya, Malaysia then opened to students in the early part of 2013 when the school launched its global MBA programme from Edinburgh Business School.



Agriculture

The main goal of the Agriculture NKEA is to move the industry towards agribusiness, from a previously agriculture-centric focus. This will be achieved through a transformation strategy which covers four key themes, namely: capitalising on competitive advantages, tapping premium markets, aligning food security objectives with increasing GNI, and participation in the regional agriculture value chain.

In 2012, this NKEA surpassed its KPI targets and achieved several significant milestones. A total of 107 anchor companies have received approval to participate under this NKEA so far, with committed private investments of up to RM8.9 billion to generate RM13 billion in GNI and a total of 55,936 jobs by the end of each project's completion date. Committed private investment for EPPs outweighed public investment 71 per cent to 29 per cent, surpassing the initial 2020 ratio estimate of 60:40.

Most notable was the appointment of Lobster Aqua Technologies Sdn Bhd, a subsidiary of US-based Darden Aquasciences, as an anchor company. Lobster Aqua Technologies will develop the world's first integrated lobster aquaculture park in Sabah under EPP 4: Integrated Cage Farming, bringing in investment of about RM2.03 billion.

Positive developments seen during the year however did not come without its challenges. This included a lack of awareness for innovation within the industry; a shortage of incentives to encourage the participation of more players; and the limited number of companies with sufficient experience to manage value chains across the industry.



Healthcare

In ensuring the rakyat has access to high quality, affordable healthcare, and to unleash new areas of growth within the industry, the Healthcare NKEA seeks to complement Malaysia's existing range of healthcare services; while bridging the divide between public and private healthcare offerings.

In 2012, the NKEA recorded a number of significant developments, namely in the area of developing local pharmaceuticals for export. Another key highlight for the year was the Seniors' Living (Aged Care) lab which took place in September 2012 to review the aged care sector. The lab sought ways to transform the sector into a recognised part of the healthcare industry, which will in turn see the development of an ecosystem for senior citizens in the high- and middle-income brackets. The outcomes of the lab were focused on three areas – Retirement Villages, Mobile Healthcare Services and Institutional care.

On another note, the medical devices industry is experiencing a healthy growth as there is strong uptake from the private sector. As a result, the Medical Devices Business Opportunity was upgraded into seven EPPs in 2012, receiving investments from six private sector companies. To ensure the safety of devices marketed in Malaysia, the Medical Device Authority (MDA) was set up in August 2012 as a statutory body entrusted to enforce and implement the Medical Device Act 2012 (Act 737).

SRIs: Enabling change

The ETP's six SRIs are derived from NEM policy recommendations and represent cross-cutting reforms which enable Malaysia to achieve global competitiveness.



Competition, Standards and Liberalisation

This SRI documented significant progress in 2012, such as with the enforcement of the Competition Act 2010 in January. The newly-set up Malaysia Competition Commission (MyCC) has taken swift action in addressing cases and enforcing the Act, supplemented by the establishment of the Competition Appeal Tribunal, announced in May 2012. MyCC completed its first case and issued a Final Decision on the case on 6 December 2012.

In addition, the autonomous liberalisation of 15 out of 18 sub-sectors was completed in stages in 2012. The sub-sectors comprise accounting/taxation services, courier services, dental specialists, departmental and specialty stores, incineration services, legal services, international schools, technical and vocational schools, technical and vocational schools for special needs, skills training centres, private higher education with university status, private hospitals, medical specialists, telecommunications (Applications Services Providers) and telecommunications (Network Services Providers/Network Facilities Providers). The remaining sub-sector, Quantity Surveying is expected to be liberalised in 2013.



Human Capital Development

In the area of workplace and workforce transformation, effort towards modernising labour legislation were made through amendments to the Minimum Retirement Age Act, paving the way for increased productivity, and the introduction of the Minimum Wage Order to address depressed wages and to mend a previously inefficient wage-setting mechanism.

The Minimum Retirement Age Act 2012 was gazetted on 16 August 2012, and will be enforced on 1 July 2013. Meanwhile, the Minimum Wage Order was gazetted on 16 July 2012 and enforced on 1 January 2013. The Minimum Wage Act, also announced in 2012, has set a minimum payment of RM900 for workers in Peninsular Malaysia and RM800 for workers in Sabah and Sarawak.

Furthermore, the MyProCert programme expanded this year with 10 additional certification partners, offering more skill sets to Malaysians. They are Huawei Technologies (M) Sdn Bhd, Oracle Corporation Malaysia Sdn Bhd, iTrain (M) Sdn Bhd, Scicom (Academy) Sdn Bhd, SnT Global Services Sdn Bhd, PMP, MyTriz, Autodesk, National Instruments and Embedded System Design. The MyProCert programme aims to upskill 7,500 Malaysian workers to international certification standards in three years.



Reducing Government's Role in Business

This SRI aims to rationalise the Government's role in business in order to avoid crowding out the private sector, increase the liquidity of the capital markets and improve the Government's fiscal position.

As part of this SRI, four GLICs were hived off in 2012. This was completed through exercises such as the listing of FGVH, Ekuiti Nasional Bhd's sale of its 24 per cent stake in Tanjung Offshore Bhd, the sale of the Armed Forces Fund (Lembaga Tabung Angkatan Tentera or LTAT)'s 97 per cent stake in Johan Ceramics Bhd, and the paring down of the Employees Provident Fund's stake in RHB Capital Bhd.

Divestments under the scope of this SRI also cover rationalisation at the Ministry level, with the Ministry-Level Divestment Plan established in 2012. Following concentrated efforts and rigorous discussions on this initiative nine companies under four Ministries were identified as ready for divestment from 2012-2016.

While market factors have hindered some progress in this SRI, the divestment plan will continue as and when required criteria are met, with the Government remaining committed to facilitating a competitive and open market for Malaysian companies.

It is envisaged that the initiatives that fall under this SRI will return the private sector to the driver's seat in Malaysia's journey towards high-income status.



Public Finance Reform

As one of the more challenging initiatives undertaken by the Government, this SRI nonetheless recorded several achievements during the year. These include the promotion of transparent procurement, representing just one of 21 initiatives outlined under this SRI. Through this initiative, the Government realised RM24.19 million in savings as at the end of October, making it on track to achieve the full-year target of RM30 million.

In 2012, the SRI also oversaw improvements in tax compliance and administration. The Inland Revenue Board Malaysia collected additional revenue of RM1.7 billion and increased the amount of direct tax revenue collected to an estimated RM116 billion as compared with the actual collection of RM102 billion in 2011.



Public Service Delivery

Under the Public Service Delivery SRI, the Business Process Reengineering (BPR) initiative has consolidated 548 licenses into 323 licenses so far. Out of 28 licenses identified for abolishment, nine were successfully abolished in 2012. The full consolidation of licenses is expected to be completed by 2015, with the majority completed in 2012. Upon completion of the BPR exercise, the newly revised business license applications and approval processes will then be automated under the Business Licensing Electronic Support System (BLESS).

The roll-out of the counter rating system to assess the performance of counter officers is now available at all police stations as well as other Government departments, namely selected Immigration and National Registration Departments, DBKL, Perbadanan Putrajaya and Perbadanan Labuan.



Narrowing Disparity

The High-Performing Bumiputera Companies or TeraS programme, which aims to identify high-performing Bumiputera companies to help them grow beyond the Malaysian market, has seen much progress with 300 companies approved for TeraS status so far.

To further support this, TERAJU as the lead implementing agency, together with SME Bank, introduced the RM500 million TeraS Fund – an Islamic financing facility offering TeraS companies with better access to funding at attractive rates. In 2012, 29 applications were approved for financing valued at RM202 million.

Furthermore, 47 per cent of total MRT packages were awarded to Bumiputera companies, valued at RM9.1 billion. This exceeded the initial target set for the allocation of MRT projects to Bumiputera companies.

Enabling nationwide economic growth through regional corridors

The Government introduced the country's five Regional Economic Corridors in an effort to achieve a balanced growth throughout Malaysia. Each region focuses on individual areas of economic specialisation, with their respective growth accompanied by the further development of key cities to ensure liveability is considered in their growth plan.

The five Corridors and key cities within each region comprise of Iskandar Malaysia and Johor Bahru, Northern Corridor Economic Region (NCER) and Georgetown, East Coast Economic Region (ECER) and Kuantan, Sarawak Corridor of Renewable Energy (SCORE) and Kuching and Sabah Economic Development Corridor (SDC) and Kota Kinabalu.

In 2011, the Corridor agencies with facilitation by PEMANDU conducted labs to produce the Regional Economic Corridors Transformation Programme. The lab focused on making the most of existing initiatives and problem-solved existing issues. It also identified 254 EPPs which will be developed in phases aimed at generating an annual GNI of RM176 billion in 2020. The execution and development of the Corridors are led by the Corridor Authorities with support from the Economic Planning Unit (EPU), the Public-Private Partnership Unit (UKAS) and PEMANDU.

While the Corridor EPPs remain separate from the EPPs implemented under the ETP, the Corridor Authorities intend to align their efforts with the National Key Economic Areas (NKEAs) and the National Key Result Areas (NKRAs). The Corridor projects will therefore be complementary to the NTP and State Development Plans.

Corridor EPP are governed by the Corridors' individual Steering Committees. Along with existing reporting and monitoring of projects submitted to EPU and UKAS, the Corridors will begin sharing their KPIs and project issues in 2013 through PEMANDU's online dashboard which is visible by the Prime Minister, Cabinet Ministers, EPU and UKAS.

Continued support from major stakeholders: Civil service and the private sector

Given that transformation is only as good as the implementation process, credit for much of the success that we have seen in the ETP to date belongs to two main stakeholders, namely the civil service and the private sector. Without their support, a transformation of this magnitude cannot be achieved.

The civil service forms an important cornerstone in ensuring the success of the ETP, as they work on the ground to implement initiatives that spur private sector participation. We must be mindful of the immense effort by the various Ministries and implementing agencies to ensure that the pipeline continues to be attractive enough for economic opportunities to exist.

However, keeping in mind that this journey is far from over, there is a constant need for the civil service to up their game. It is important for them to continuously strive for excellence by stretching targets and making the impossible become possible in dealing with today's dynamic business and economic landscape. In a way, this journey of transformation is also an exercise in transforming the civil service to become more effective and agile in responding to challenges of current times.

Meanwhile, we look forward to continue working closely with the private sector in bringing about the nation's economic transformation. The private sector has done an excellent job of working with the Government to identify the areas of economic opportunity in the country and we would like to see private sector players benefit from these endeavours.

As far as possible, we have to find ways to embed a culture and ethos of excellence, and institutionalise the ability to change and respond to dynamic environments within these two segments of society. The civil service must embrace wholeheartedly the role of catalyst and change agent whilst the private sector drives the economy for the benefit of all Malaysians.

Towards 2020: Staying the Course

We now have less than eight years to complete our transformation process. In 2013, our focus is to maintain our growth trajectory in line with our goals for 2020.

Whilst investment and consumption are expected to continue to prop up our economy, we cannot remain dependent upon these factors alone. More effort has to be geared towards improving our external trade activities.

Understandably, global demand has been affected the slowdown in various large consumer economies such as Europe, the US and Japan, but we cannot use the external conditions as a reason to remain ensconced in our comfort zone. Malaysian companies must work towards enhancing competitiveness and being world class. Instead of being threatened by the sluggish global economic outlook there is need for Malaysians to be tenacious in seizing opportunities that the downturn can present.

The only way we can penetrate the global marketplace is when our products and services are competitive and are able to meet with global standards. Malaysian companies should not merely look inward towards the domestic market as key consumers, but rather develop the capacity to compete with the best outside the country.

In enabling this, the Government is committed to pursuing the strategic reforms under the ETP so that we have a level playing field for every business in the country. This is really the next challenging step in our journey towards becoming a developed nation, but we are convinced that it is only a matter of time before we achieve these reforms.

Over and above that, it is crucial that the Government and its stakeholders do not lose sight of the objectives ahead, no matter how tempting it gets to move away from the original path. We must stay the course.

The journey thus far has already placed us in good stead in heading towards our ultimate goal of becoming a high-income nation. We look forward to sharing more and better results going forward.

ETP MILESTONES

ECONOMIC TRANSFORMATION PROGRAMME



2 Apr
ETP Annual Report 2011
Launch by Prime Minister
at Angkasapuri



1 Jan
TalentCorp
A government agency tasked
to attract local and foreign talents
to work in Malaysia takes off in
January 2011

13 Feb
TalentCorp



19 Apr
Malaysia Petroleum
Resources Corp
Established



5 Jul
ETP Update
Introduction of
the six Strategic
Reform Initiatives



8 Sept
InvestKL
Announced by the
Prime Minister



25 Oct
ETP turns One

14 Feb
Cities and Corridors
Open Day
Kota Kinabalu



7 - 9 Feb
International
Performance Review
ETP and GTP Annual Report 2011



2011

2012

May - Jun
Electrical and
Electronic 2.0 Lab



28 May
Progress Update

21 new projects announced
6 SRI updates



13 Sept
Progress Update

21 new projects announced
3 SRI updates

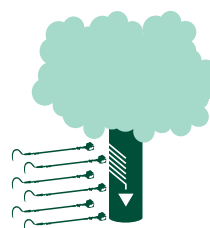


18 Sept - 19 Oct
Seniors Living Lab



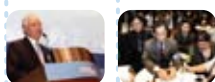
1 - 15 Nov
Special Needs
Education Lab

28 Jan - 8 Feb
Palm Oil 2.0 Lab



16 Nov
Progress Update

20 new ETP and Corridors projects announced
3 SRI updates



27 Nov
ETP Turns Two
Implementation in full swing

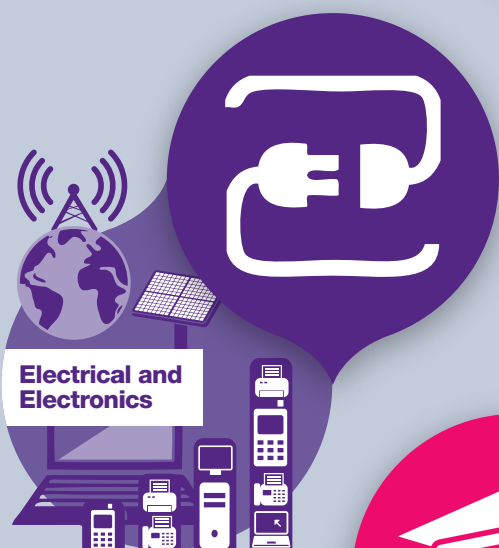


19 Mar
ETP Annual Report 2012
Launch by Prime Minister
at Angkasapuri

4 - 6 Feb
International
Performance
Review
ETP and GTP
Annual Report 2012



2013



NATIONAL KEY ECONOMIC AREAS

Focused Approach to Economic Growth

Malaysia will leverage its competitive advantages by prioritising investment and policy support behind a selected number of key growth engines. Hence, the Economic Transformation Programme focuses on 12 National Key Economic Areas (NKEAs) as announced in the 10th Malaysia Plan. These NKEAs will receive prioritised government support including funding, top talent and Prime Ministerial attention.

The Government nonetheless remains committed to provide ongoing support for the growth of the non-NKEA sectors. However, the Government will focus its efforts on the NKEAs because of their significant role in driving the economy through GNI contribution.





Greater Kuala Lumpur/ Klang Valley





**Senator Dato' Raja Nong Chik
Dato' Raja Zainal Abidin**

Federal Territories and Urban Wellbeing Minister

The Greater Kuala Lumpur & Klang Valley National Key Economic Area (Greater KL/KV NKEA) took great strides forward in 2012 to turn Kuala Lumpur into a world-class city.

From the environment to the transportation network, this NKEA's stakeholders are working hard to improve almost every aspect of Greater KL/KV, which will turn Malaysia's capital into one of the world's pre-eminent city by 2020.

But make no mistake: We are only at the very beginning of the transformation story. We are still sowing those early seeds of transformation, but there is already evidence of results in the work that we have done.

For instance, we have broken ground for one of our flagship projects, the Klang Valley Mass Rapid Transit (KV MRT) network, and we have started to put in place key elements for the River of Life project, which will clean and transform the Klang River into a vibrant urban waterfront.

The MRT, when complete, will become a key artery commuting the rakyat to and from the economic heart of Kuala Lumpur while the River of Life will transform a much neglected area in the city centre into a vibrant commercial and recreational district.

Meanwhile, the NKEA simultaneously worked on a number of other initiatives such as greening Kuala Lumpur and luring more multinational corporations (MNCs) to set up shop in Kuala Lumpur as part of the NKEA's overall plan of turning Greater KL/KV into a thriving metropolis.

I am pleased to report that our accomplishments in 2012 indicate that our earlier work has borne fruit, and we are optimistic that there is much, much more to come. I recognise that change does not come easy to anyone, but the NKEA team is committed towards creating a cleaner, smarter and better Kuala Lumpur.

GREATER KUALA LUMPUR/ KLANG VALLEY

As the capital and the commercial heart of the country, Greater Kuala Lumpur/Klang Valley is a crucial component in the plan to transform Malaysia into a high-income nation by 2020. Despite its importance regionally and nationally, Greater Kuala Lumpur/Klang Valley is in danger of falling behind regional peers that have pulled ahead. The Greater Kuala Lumpur/Klang Valley NKEA thus aims to reignite growth in the area.

The overall aim of the Greater Kuala Lumpur/Klang Valley NKEA is to transform Malaysia's capital and economic heart into a world-class metropolis that will boast best-in-class standards in every area from business infrastructure to liveability. Nine Entry Point Projects (EPPs) have been implemented for this NKEA and some 300,000 new jobs will be created under this NKEA by 2020. The nine EPPs were tailored to attain specific goals including:

- Enhancing and upgrading the transport network throughout the region
- Improving connectivity and beautifying physical environments, and greening the environment
- Improving sewerage infrastructure and services

The initiatives of the EPP are driven by two aspirational goals: To become among the most liveable cities in the world and to become a globally competitive country. Towards these ends, the Greater Kuala Lumpur/Klang Valley NKEA kicked off two flagship projects in 2012: The Klang Valley Mass Rapid Transit (KV MRT) and the River of Life (RoL) projects.

The former aims to create Klang Valley's pre-eminent people mover and will become the central artery for commuters travelling to and from the city centre. Meanwhile, the latter will transform what is now a neglected and run-down district into a thriving commercial and recreational waterfront in the heart of the city.

These two flagship projects of the NKEA will not only generate billions of ringgit in terms of investment and create thousands of jobs, but will also function as a catalyst for economic growth and commercial activity in Greater Kuala Lumpur/Klang Valley.

At the same time, the NKEA is working on a number of smaller initiatives that will contribute towards the attainment of its aspirational goals. From increasing the number of MNCs in Kuala Lumpur to greening the city to making it more pedestrian-friendly, the goals work to collectively take Kuala Lumpur to the next level.

2012 Key Performance Indicators

Greater Kuala Lumpur / Klang Valley NKEA		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Conclude letter of intent with MNCs for location of HQs or regional HQs in GKL/KV	10	11	110	●	100	●	1.0	●
	Employment generated	600	1,393	232	●	100	●	1.0	●
EPP #2	Returning Expert Programme	1,200	920	77	●	77	●	0.5	●
	Residence Pass Programme	800	852	106	●	100	●	1.0	●
	Employment Pass (Category II)	300	31	10	●	10	●	0.0	●
	Database and Portal enhancement (Phase 2)	100%	100%	100	●	100	●	1.0	●
	STAR Programme (JPA Scholars)	800	168	21	●	21	●	0.0	●
	STAR Programme (Corporate Partners)	50	111	222	●	100	●	1.0	●
EPP #3	High Speed Rail	100%	100%	100	●	100	●	1.0	●
EPP #4	Issuance of notice (Borang K) - formalisation of the possession of the land by the state for land acquisition for SBK Line	100%	93.6%	94	●	94	●	0.5	●
	Award of MRT tenders for elevated and underground civil works packages	100%	100%	100	●	100	●	1.0	●
	Feasibility Studies for Lines 2 & 3 and submission of section 4 for the freezing of the MRT Corridors	100%	100%	100	●	100	●	1.0	●
EPP #5	Installation of Wastewater Treatment Plant at 2 Wet Markets	100%	90%	90	●	90	●	0.5	●
	Number of gross pollutant traps installed in KL	55	64	116	●	100	●	0.0	●
	Appointment of contractor by December 2012	100%	100%	100	●	100	●	1.0	●

(more on next page)

(continued from previous page)

Greater Kuala Lumpur / Klang Valley NKEA		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
	Reducing oil and grease discharge from hawker centres in DBKL using Communal Grease Traps	90%	99.98%	111	●	100	●	1.0	●
	Reducing oil and grease discharge from hawker centers in MPAJ and MPS using Communal Grease Traps	90%	98%	109	●	100	●	1.0	●
	Number of Tender Packages by JPP Under construction	8	8	100	●	100	●	1.0	●
	Percentage Completion of Construction of projects under Key Initiatives 5-7	70%	77%	110	●	100	●	1.0	●
	Reduction in tonnage/year floatables in the river after installation of gross pollutant traps	1,200	1,486	124	●	100	●	1.0	●
EPP #6	Number of trees Planted	30,000	31,898	106	●	100	●	1.0	●
	Number of Trees Funded by the Private Sector	5,000	9,143	183	●	100	●	1.0	●
EPP #7	Average completion of Heritage Trail Routes 2-3	50%	45%	90	●	90	●	0.5	●
	Upgrading Masjid Jamek	50%	55%	110	●	100	●	1.0	●
	Completion of planning submissions and detailed design of Malaysia Truly Asia Centre (MTAC)	100%	100%	100	●	100	●	1.0	●
EPP #8	Total Pedestrian Walkway improved (km)	12	13.35	111	●	100	●	1.0	●
EPP #9	Roll-out of Separation at Source (Household Wastes) - Distribution of Bins to KL households	100%	95.4%	95	●	95	●	0.5	●
	Setting Up of Food Waste Treatment Plant. Identify suitable sewerage treatment plant for hybrid STP/Food Waste streatment plant	100%	100%	100	●	100	●	1.0	●
	Construction and Demolition Waste Facility - Procurement of equipment to upgrade existing insert facility in Sg. Kertas	100%	100%	100	●	100	●	1.0	●
				108%		92%		84%	

Exhibit 1.1

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score#2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

ENTRY POINT PROJECTS

EPP 1

Attracting 100 of the World's Most Dynamic Firms within Priority Sectors

This EPP recognises the importance of transforming Greater KL/KV into an international commercial hub with MNCs being their key ambassadors. As part of the first phase of development, InvestKL, a special purpose vehicle, was set up in June 2011 to transform Greater KL/KV into one of the world's top investment destinations.

InvestKL's key performance indicator is to attract 10 MNCs per annum and the agency targets key industries under the other 12 National Key Economic Areas (NKEAs) including business services, agriculture, electronic, financial services, business services and oil & gas.

Achievements and Challenges

In 2012, 11 MNCs agreed to establish their presence in the KL/KV area. While the target was to attract 10 MNCs, InvestKL surpassed their initial target to end 2012 with sweet success. The agency is certain that this momentum will continue in 2013 and will continue to drive this initiative forward.

In 2012, InvestKL managed to secure commitments from the following MNCs:

1. Service Source (Centre of Excellence)
2. Alstom (Centre of Excellence)
3. Promat (Operational HQ)
4. Darden (Regional Management Centre)
5. Oleon (Regional HQ)
6. Philips Healthcare (Sleep Competency Centre)
7. Altran (Regional Innovation Centre)
8. International SOS
(Regional HQ for Medical Services)

The remaining three deals were to set up a regional trading hub, a centralised training academy and a branded outlet mall in partnership with a local company in Greater KL/KV.

One of the key challenges faced in implementing this EPP is the lack of coordination between the various agencies involved. While InvestKL has been set up as the agency responsible for managing and developing this programme, it does not have executive powers and must rely on the appropriate agencies to do so on its behalf.

Moving Forward

InvestKL aims to be more selective in its search for foreign direct investments (FDI), placing greater focus on quality investments to support Malaysia's transition into a high-income economy. The agency will seek quality FDIs in areas such as service and knowledge-intensive industries, high-technology industries, and green and alternative energy technologies.

In 2013, InvestKL is also taking a more targeted approach in luring MNCs now that it has completed its database comprising some 2,000 Fortune 500 and Forbes 2000 companies. The agency has created stronger alliances with the Big Four consulting firms, various investment banking partners and chambers of commerce to attract strong prospects into Greater KL/KV. InvestKL will continue to hold roadshows, conduct presentations to various embassies, organise mission trips to the US and EU and work closely with MIDA, MDeC, Biotech Corp and all the other economic corridors towards achieving the objectives of this EPP.

Greater KL/KV's population will need to grow by an additional four million to 10 million by 2020 to meet employment and Gross National Income (GNI) growth demands. Of these four million, about 2.5 million will comprise foreign expatriates and Malaysians living outside the region.

The initiatives under this EPP are undertaken by TalentCorp, which was established in December 2010. The efforts take a three-pronged approach to achieve its goal of building a skilled workforce for Greater KL/KV:

- **Reversing Malaysian Diaspora:** TalentCorp will draw qualified and talented Malaysians living abroad to return home under the Returning Expert Programme (REP) through incentives such as tax relief and expediting permanent resident applications for direct family members
- **Attracting Foreign Talent:** TalentCorp introduced the Resident Pass Programme, which enhances the benefits of existing Employment Pass holders (i.e. expatriates) by providing them incentives such as long-term work visas and employment mobility
- **Encouraging Managed Local Immigration:** Meanwhile, TalentCorp is also casting its nets within Malaysia in search of local talent currently based outside the capital. This is in recognition of talented Malaysians elsewhere in the country who can fill talent needs in Greater KL/KV, and efforts will be made to encourage them to fill those vacancies

Achievements and Challenges

As of December 2012, 1,971 persons have relocated to Malaysia under TalentCorp's programmes. The breakdown is as follows:

- 920 Malaysians under the REP (680 in 2011)
- 852 persons under the Residence Pass Programme (482 applicants in 2011)
- 31 under the Employment Pass II Programme
- 168 JPA Scholars and 111 corporate partners recruited under the Scholarship Talent Attraction and Retention (STAR) Programme (launched Aug 2011)



Attracting foreign talent. Photo courtesy of BERNAMA Images

TalentCorp also intensified efforts in 2012 to streamline its business process. This saw the agency:

- Increasing the use of automation
- Introducing new business models and systems development for the Returning Expert Programme
- Improving immigration set-up for Residence Pass and Employment Pass applications

One key challenge facing this EPP is the diminishing returns of one of its key programmes, namely the REP. A victim of its own success, it has become increasingly difficult to identify more Malaysians abroad willing to return home as the pool of eligible candidates diminishes over time.

TalentCorp also faces challenges in retaining foreign graduates of local universities. Although there is a programme in place to help these graduates secure employment in critical sectors post-graduation – under the Employment Pass II Programme – the reluctance of local industry to hire these graduates has emerged as a major stumbling block.

Moving Forward

TalentCorp will undertake a number of measures to improve the performance of its specific programmes.

In the case of the REP, the agency will revise its approval process to ensure that candidates meet the eligibility criteria, and have the necessary skills required to contribute effectively to the economic transformation plan.

In response to the diminishing returns of the REP, TalentCorp has acknowledged that Malaysians can still contribute to the country's development while abroad. In doing so, the agency will leverage the Malaysian diaspora to act as Malaysian Talent Ambassadors in promoting valuable opportunities at home or by contributing from abroad. Contribution from abroad can be facilitated through various options such as participation in conferences and seminars, setting up of global offices, or via online platforms such as virtual forums and social networking media.

As for the STAR programme, TalentCorp will continue to work with JPA to enhance awareness programmes and monitoring of graduates to ensure fulfilment of their respective contracts and bonds.

Repatriating Malaysian talent

Over the past several decades, over 700,000 Malaysians have made the decision to emigrate and ply their trades outside the country.

TalentCorp recognises that these Malaysians represent a unique opportunity to fill the human resource needs and gaps in the country, and have marshalled efforts under the Returning Experts Programme (REP) to convince these Malaysians to return home.

"When offered the opportunity to come back to Malaysia, it did take me some time to reach a decision," says Toi See Jong, the CEO of Tokio Marine Life Insurance Bhd and a participant of the REP programme.

"But what really motivated me to return was the thought of being able to contribute to the development of this nation by sharing the expertise, skills and experience I gained during my time abroad."



JPA scholars. Photo courtesy of BERNAMA Images

The Land Public Transport Commission (*Suruhanjaya Pengangkutan Awam Darat* or SPAD) aims to build a high-speed rail system (HSR) connecting Kuala Lumpur and Singapore. The rail system has been envisioned to further enhance commerce and business between two of Southeast Asia's largest economic centres.

The HSR is also expected to facilitate a speedier and more reliable commute between these two cities, which will take no more than 90 minutes to complete. Cities along the rail track are also expected to benefit from the HSR, which will help provide greater connectivity to and from the two urban centres.

Achievements and Challenges

SPAD received approvals from the Economic Council in 2012 to undertake a detailed feasibility study on the proposed HSR track. SPAD is leading the study which is expected to run through the first half of 2013 and will look at the following issues:

- The final alignment and location of stations along the route
- The project's macro-economic impact to both Malaysia and Singapore
- The preliminary business case for the HSR
- Management strategies for the various stakeholders
- Potential environmental and social impact of the HSR
- Technical specifications of the preliminary design

At the same time, high-level meetings have been held with key stakeholders to seek feedback and input. The Government of Singapore has also been engaged at all working level meetings.

Moving Forward

HSR Phase 1B Feasibility Study complete findings by June 2013 to include economic benefit analysis, strategic implementation plan and required technical/engineering components. The feasibility study for the rail connection will be completed in the first half of 2013, and will be finalised and reviewed by SPAD's Members of Commission before being presented to Malaysia's Economic Council. A final decision on the rail connection is expected by the end of 2013, after taking into account results from the study, which will include negotiations and discussions with the Singapore Government.

EPP 4

Building an Integrated Urban Mass Rapid Transit System

The mass rapid transit system (MRT) in Greater KL/KV aims to reduce congestion in the city centre by providing an efficient and environmentally sustainable mode of public transport. Led by MRT Corp, a company set up in September 2011 as project developer and asset owner of the MRT project to cater to Greater KL's increasing population which will reach 10 million by the year 2020.

By then, Greater KL/KV's additional four million new workers and residents will place greater stress on its already heavily utilised road network. The overall vision is to create an integrated public transport network, including the MRT, which will account for at least half of all trips commuting to and from, and within Kuala Lumpur.

The first phase of the MRT – the Sungai Buloh-Kajang line (SBK) – is expected to be completed by December 2016, and will connect Sungai Buloh to the city centre. The SBK line will cut across the heart of Kuala Lumpur, providing quick and reliable access to the city centre for around 400,000 commuters daily.

The MRT project is expected to raise the value of properties and create demand along the Sungai Buloh – Kajang corridor when completed. This positive impact will spur development of surrounding areas, widen house-buyers' choices, enable developers to expand their footprint to newer areas, higher pedestrian volume and improved amenities.

Because this is the nation's largest infrastructural project, it is important to ensure the project meets its schedule and cost according to targets. Based on the learnings of similar infrastructure projects worldwide, a project delivery partner is appointed to work alongside the project developer. This results in better co-ordination for all the work package contractors, allowing the project developer to focus on the key deliverables.

MRT as a catalyst for economic growth

The MRT project is also expected to be a strong catalyst of economic activity, creating jobs from both its construction and its operation. The MRT project is expected to create more than 130,000 jobs during its construction period, and will generate between RM3 billion to RM4 billion in GNI per annum.

Associated activities related to construction is also expected to multiply the amount of income generated by an anticipated 2.5 to 3.5 times, translating to an additional RM8 billion to RM12 billion per annum. In total, an average of RM24 billion in GNI will be created over the next decade.

At the same time, the greater connectivity and access provided by the MRT is expected to raise property values by an estimated RM300 million in gross development value. Four areas in particular are expected to benefit:

- The Rubber Research Institute development in Sungai Buloh
- Warisan Merdeka
- Tun Razak Exchange (former KL International Financial District)
- The Cochrane Development

Greater connectivity also serves as a catalyst for greater commercial activity as the MRT will ferry a larger number of retail customers to the city centre and business districts. To better leverage on this advantage, linkages will be created between the MRT underground stations and shopping malls.



Tunnel Boring Machine. Photo courtesy of BERNAMA Images

Achievements and Challenges

The MRT project saw significant development in 2012 in several areas including:

- Completing 94 per cent of all land acquisition processes
- Awarding all 41 civil tender packages for civil engineering works required
- Completing the feasibility studies for Lines 2 and 3

While land acquisition has proceeded smoothly in almost all cases, the exercise has encountered stumbling blocks in several areas due to concerns from residents and business owners. However, the high density of development in Kuala Lumpur makes track relocation impossible and/or economically unfeasible, leaving no other alternative available. The impasse has stalled the land acquisition process as negotiations continue to take place.

Moving Forward

Focus will be on the final Implementation Plan for MRT Lines 2 and 3 after agreement with the relevant stakeholders based on the EC/Cabinet's decision. Focus will be on the final Implementation Plan once buy-in from all the relevant stakeholders have been obtained post the EC/Cabinet's decision. Completion of the elevated guideway foundation should reach 72 per cent by year's end and 10 tunnel boring machines will be delivered to various sites along the line to commence the next stage of construction. Finally, excavation works on the seven underground stations should be 50 per cent completed barring any severe unforeseen conditions.

MRT Corp aims to continue negotiations with the outstanding land owners and have given assurances that construction of the MRT line will not damage the residents' properties. However, in the unlikely case that some damage does occur, MRT Corp has given its assurance that the owners would be fairly compensated. To further minimise the risk of injury, residents living in the affected areas will be relocated at MRT Corp's expense during construction.

Meanwhile, the construction of the MRT remains on track with Phase One to be completed by December 2016 and Phase Two in the following year. Construction is also expected to stay within the budget although the final cost will only emerge at a later date.

EPP 5

Revitalising the Klang River into a Heritage and Commercial Centre

This EPP, also known as the River of Life (RoL) project, aims to transform specific areas within Kuala Lumpur facing the Klang River into a vibrant waterfront with high economic and commercial value. The project further aims to raise the water standard in the Klang River to recreational standards in a holistic manner whilst addressing surrounding infrastructure beyond the river itself. The project is divided into three parts: river cleaning, river master planning and beautification, and land development.

Owing to the length and sprawl of the Klang River, the effort to rehabilitate the river involves a large number of ministries and Government authorities. These include the Ministry of Federal Territories and Urban Wellbeing; the Ministry of Natural Resources and Environment; the Ministry of Energy, Green Technology and Water; and the Ministry of Housing and Local Government.

The Department of Irrigation and Drainage Malaysia and the Sewerage Services Department are also involved in this project, as upgrades are required for the drainage and sewerage infrastructure to prevent pollutants from seeping into the river. Finally, various city authorities – Dewan Bandaraya Kuala Lumpur (DBKL), Majlis Perbandaran Ampang Jaya and Majlis Perbandaran Selayang – are also involved in this programme as the Klang River flows through their respective jurisdictions.

River Cleaning

A 110km stretch of the Klang River will be cleaned, covering the municipalities under the jurisdiction of Majlis Perbandaran Selayang, Majlis Perbandaran Ampang Jaya and Dewan Bandaraya Kuala Lumpur. The goal is to raise the water standard from its current Class III – Class V (unsuitable for body contact) to Class IIB (suitable for recreation) by 2020.

River Master Planning and Beautification

The goal of this component is to increase the economic viability of the river area, specifically a 10.7km tract along the Klang and Gombak river corridors. The beautification plan will affect landmarks in the area including Dataran Merdeka, Bangunan Sultan Abdul Samad and Masjid Jamek.

Land Development

As part of the redevelopment programme, areas immediately adjoining the river corridor will be developed under a master plan aiming to spur economic investment. Government land will be tendered out to private investors to catalyse this programme.

Achievements and Challenges

The past 12 months has seen the basic foundation laid for the execution of this project, one of which has been the appointment of AECOM as the overall master planner and design architect for Precinct 7. The execution team has also been engaging various stakeholders throughout the year to seek input in completing the draft master plan and schematic design.

The RoL EPP has seen construction begin on seven of 17 identified sewerage projects, which were tendered and awarded in 2012. Construction of new facilities under the Drainage and Stormwater Management Master Plan designed to remove pollutants, such as retention ponds, and new corridors was also undertaken last year and is now 77 per cent complete.

At the same time, the installation of wastewater treatment plants at the Selayang and Jalan Klang Lama wet markets are 90 per cent complete, and Phase 1 of the Public Outreach Programme at the Upper Sungai Klang catchment area has begun.

Over the past 12 months, the project delivery team identified that among obstacles to the execution of this project has been gaining the *rakyat's* support and cooperation in supporting the EPP's objectives. For instance, public dumping into the river remains a significant issue, as is water run-off from polluted areas.

These counter-productive measures must be stopped if the project is to meet its goals, with the team to step up its awareness campaign over the coming months.

Moving Forward

The RoL project will see a number of developments in 2013. For instance, the Precinct 7 construction work is expected to be tendered out by the end of 1Q2013, while detailed design work for the remaining precincts will have begun by February. The team is expecting 14 construction packages under the EPP to be completed by 2013, while sewerage upgrading and construction works are expected to continue throughout the year.

The delivery team will be adding another structural measure to prevent pollutants from entering the Klang River through the construction of a 10.7km long interceptor pipe, 310 rubbish traps including log booms, trash rakes and static screens at key areas. The latter will be put in place by the end of 2013.

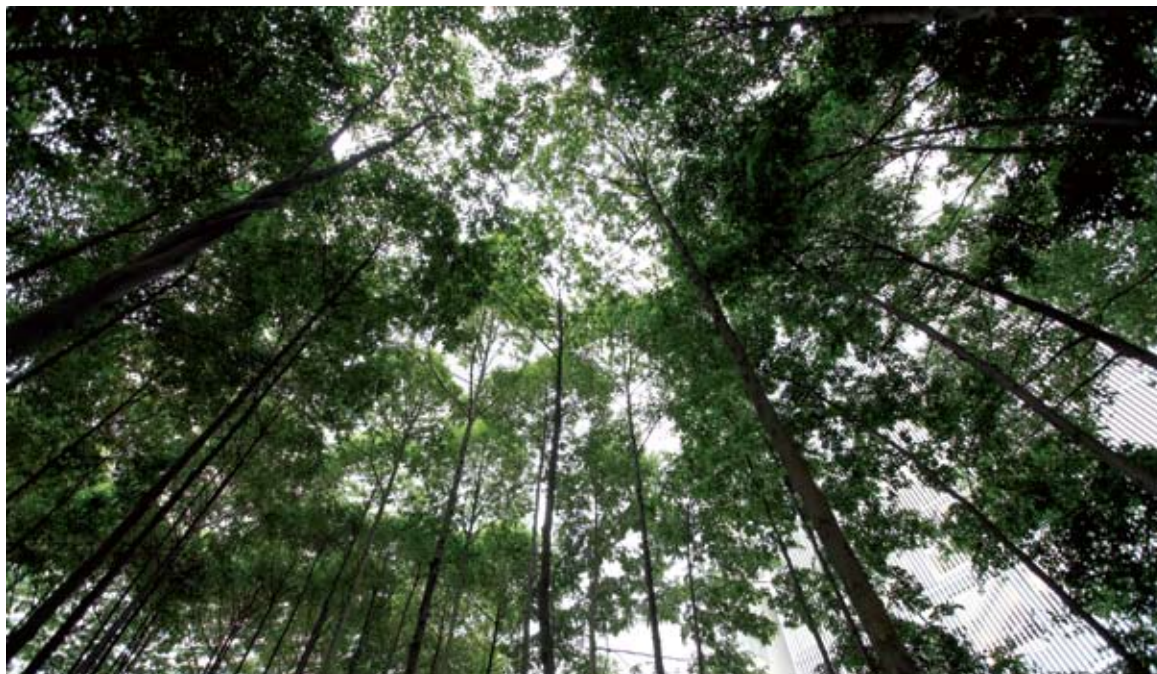
Finally, the EPP's Public Outreach Programme will be in full swing at the upper Klang River district. The programme will be further expanded in Phase Two by extending the outreach programme to the Gombak River catchment area, and eventually to the entire project's catchment.



Klang River. Photo courtesy of BERNAMA Images

EPP 6

Greener Kuala Lumpur



Greener KL seeks to increase the amount of green space per person in KL

As part of the effort to turn Kuala Lumpur into a world-class, liveable city, DBKL is committed to boosting the amount of greenery within the city. At present, there is about 11 square metres of green space per person in Kuala Lumpur compared with 22 square metres in Vancouver, Canada, which has been deemed one of the world's most beautiful and liveable cities.

DBKL aims to achieve its Green Goal by planting 100,000 large-coverage trees within Kuala Lumpur by 2020. As part of its greening programme, DBKL is working closely with the private sector to sponsor the planting of trees and the establishment of parks within the city. This initiative has already yielded results in 2012 (see below).

DBKL will also help promote outdoor activities that are expected to spur greater and more diverse commercial activities within the city centre.

Achievements and Challenges

As part of the overall plan to secure greater private sector cooperation in greening the city, DBKL has struck an agreement with Standard Chartered Bank which will see the latter adopt, upgrade and maintain a pocket park near Kuala Lumpur City Centre (KLCC). Standard Chartered is the first company to participate in DBKL's greening programme under the latter's Signature Park Adoption Programme.

DBKL has also planted an additional 31,898 trees in 2012, bringing the total number of trees planted to-date to 63,345 trees. In 2012, the private sector provided funding for 9,143 trees.

One challenge for this EPP is the limited space within KL city, which puts constraints on identifying suitable locations to plant trees. Thus new solutions are being considered, such as greater utilisation of rooftop gardens

Moving Forward

As part of this EPP's KPI in 2013, DBKL will be planting another 30,000 trees during the year, while continuing to maintain trees planted in 2011 and 2012. At the same time, it will improve its efforts to increase participation by the public and private companies in greening KL. The Greener KL team is continually looking for private participation either via tree sponsorship, tree planting or pocket park adoption. This EPP also targets the sponsorship of 5,000 trees by the private sector in 2013.

EPP 7

Creating Iconic Places and Attractions

The goal of this EPP is to increase the overall appeal of Greater KL/KV for both residents and tourists alike by creating and identifying iconic landmarks and attractions throughout the city. This EPP, which is jointly led by the Ministry of Federal Territories and Urban Wellbeing and DBKL, will leverage existing attractions and landmarks to cement Kuala Lumpur's unique identity and heritage.

New areas under development such as the Pudu Jail area, the Tun Razak Exchange and the Sungai Buloh Rubber Research Institute will also be built with this in mind, and designed to showcase their unique historical heritage.

Four initiatives have been identified under this EPP:

- **Establishing and Enhancing Heritage Trails (HT):** This initiative will develop guided pedestrian trails through landmark sites such as Dataran Merdeka, Medan Pasar and Central Market. These trails will be supported by additional informational facilities such as trail maps, write-ups and guided walks to help tourists better locate and recognise the significance of these landmarks. Historical buildings along the trail will be preserved under this initiative and managed as tourism-related landmarks. Three routes have been identified so far:
 - HT Route 1 - Masjid Negara - Dataran Merdeka
 - HT Route 2 - Masjid Jamek - Pusat Perhutanan Bukit Nanas
 - HT Route 3 - Medan Pasar - Hang Kasturi - Jalan Petaling - Lebuhraya Pudu - Bangkok Bank
- **Reviving Medan Pasar:** This initiative will see the transformation of the old clock tower area into a pedestrian arcade. Measures include improvements such as sidewalk cafes, souvenir shops, guided walks-and-talks as well as improved infrastructure for the buildings. This project is due for completion by June 2013
- **Upgrading Masjid Jamek:** One of the oldest mosques in Kuala Lumpur, Masjid Jamek is located at the confluence of the Klang and Gombak River. Although a significant tourist attraction, the mosque has fallen into disrepair, with its restoration currently underway
- **Malaysia Truly Asia Centre (MTAC):** An integrated cultural tourism park, the Centre sits on a 65.66 acre site bordered by the Tugu Peringatan, Padang Merbok, Bank Negara's Lanai Kijang residential complex and Istana Selangor. MTAC will showcase the best of Malaysia in an innovative and entertaining style. The attraction will consist of immersive and compelling experiences that will provide the visitor a snapshot of Malaysia's rich and diverse offerings. This project is due for launch in 4Q 2013. This project is wholly managed by Themed Attraction Resorts, a subsidiary of Khazanah Nasional



Reviving Medan Pasar



Malaysia Truly Asia Centre (MTAC), artist impression

Achievements and Challenges

Restoration work on Masjid Jamek is 60 per cent complete and will be reopened to the public in April. The project team is working closely with the National Heritage Department (Jabatan Warisan) to ensure that work is satisfactory.

At the same time, the land amalgamation and title issuance for the construction of the MTAC was completed in 2012, and a revised master plan for the project has been approved. Occupants within the area affected by Phase One of the construction have been successfully relocated.

There, however, remain several obstacles in relation to the development of MTAC, namely the relocation of two offices belonging to Government agencies of which the alternative sites have not yet been identified.

Moving Forward

The next 12 months will see the completion of all three proposed Heritage Trail Routes with Heritage Trail Route One expected to be completed by June 2013. Heritage Trail Routes Two and Three will be ready for visitors by August. Meanwhile, the restoration of Masjid Jamek, which began in the middle of 2012, will be completed in March 2013.

The project team will also study a plan to connect Dataran Merdeka to the proposed Kuala Lumpur City Gallery at Jalan Silang, Muzium Mata Wang Bank Negara and the Memorials of Malaysia's previous Prime Ministers. The idea behind this integrated plan is to create greater connectivity between these landmarks and places of interest for Kuala Lumpur visitors.

As for MTAC, the lease agreements are targeted to be signed by 2Q2013 once the land is free from outstanding encumbrances. This will be followed by project launch/groundbreaking event by the Prime Minister in mid-2013 and project commencement at the end of the year.



Jalan Raja Chulan underwent walkway improvement works in 2012

There are presently insufficient sidewalks and facilities for pedestrian traffic in the Greater KL/KV region. The current pedestrian network is often criticised as being inefficiently designed, poorly maintained and difficult to access, especially for the physically challenged.

The joint leads of this EPP, the Ministry of Federal Territories and Urban Wellbeing and DBKL, are looking to create a fully integrated and accessible pedestrian network by 2020.

The pedestrian facilities will also be designed with the Safe City Concept, a programme stemming from the Crime National Key Result Area in the Government Transformation Programme, in mind. The Safe City Concept emphasises the use of environmental design and the placement of security devices to minimise opportunities for would-be criminals to prey on pedestrians.

Achievements and Challenges

The following stretches of pedestrian walkways were constructed in 2012:

- 3.4km stretch of sidewalk along Jalan Raja Laut, Jalan Ipoh and Jalan Putra: 100 per cent completed
- 3.0km stretch of sidewalk along Jalan Ampang: 100 per cent completed
- 6.9km stretch of sidewalk along Jalan Raja Chulan, Jalan Bukit Bintang, Jalan Nagasari, Jalan Tong Shin and Jalan Pudu: 100 per cent completed

Although the sidewalks were constructed exclusively for pedestrian use, motorcycle users have been found to continue using the sidewalks, thereby blocking pedestrian access. This not only damages the newly-improved sidewalks, but also endangers pedestrians who have to wander into the streets to avoid the parked vehicles.

Moving Forward

As part of the overall plan of the EPP, a further 12km of pedestrian walkways in KL will be upgraded in 2013 as part of this EPP's KPIs. The routes covered comprise Jalan Raja Muda Aziz, Jalan Dang Wangi, Jalan Pahang, Jalan Conlay, Jalan Kia Peng, Jalan Pinang, Jalan Barat, Jalan Binjai and Jalan Khoo Teik Ee. Greater enforcement action will also be taken to discourage and punish errant motorcyclists.

EPP 9

Developing an Efficient Solid Waste Management System

Solid waste management remains an issue for Greater KL/KV and efforts need to be taken to better dispose of solid waste to enhance the liveability of the region. There are four major initiatives under this EPP, namely:

- Encouraging greater implementation of the Reduce, Reuse, Recycle (3R) programme
- Increasing waste treatment capacity to reduce reliance on landfills
- Improving governance of solid waste management and public cleaning services
- Assessing the potential of new technological developments such as automatic waste collection and the use of deep bins

Achievements and Challenges

Implementation of the “Separation at the Source Scheme” for Household Waste in KL through the Distribution of Bins to Landed Properties:

Alam Flora Sdn Bhd, under the purview of the National Solid Waste Management Department (JPSPN), started distributing 120-litre bins to households in Kuala Lumpur at the beginning of the year. This is to encourage greater separation of recyclables from non-recyclables at the source, allowing for better waste handling. In future, the collection of household wastes will be divided into recyclable and non-recyclable wastes.

Identification of Site for Composting/Anaerobic Digestion Facility for Food Waste:

JPSPN has identified a site for a future Food Waste Recycling Facility. This pilot facility will serve as an alternative for the disposal of food waste generated from eateries in Greater KL/KV. Food waste presently makes its way to landfills, taking up capacity in the limited resource. The food waste recycling facility is a greener and cleaner solution, and is also expected to generate natural gas.

Setting up of a Construction and Demolition Waste Facility:

JPSPN has finalised the procurement of equipment and machineries to upgrade the current site in Sg Kertas to a Construction and Demolition Waste Facility. The site currently has no waste-processing facilities.

Moving Forward

Focus will be on the testing and commissioning of the Anaerobic Digestion facility while operations of the upgraded Construction and Demolition Waste facility in Sg. Kertas is expected to begin. The project team is committed to ensuring that the construction of the facilities identified above will be completed on time and properly utilised once established. The team is committed to ensure the pilot project for Food Waste Recycling Facility will deliver tangible results in 2013 and the construction and demolition waste site is expected to begin operations by the end of 2013.



Construction and demolition waste recycling facility at Sungai Kertas

BUSINESS OPPORTUNITIES

Business Opportunity 1:

Vitalising Putrajaya

The rapid growth of Greater KL/KV is expected to spill over to satellite townships, and one key beneficiary will be the new Government administrative capital Putrajaya. The city is already equipped with top-of-the-line infrastructure, but lacks vitality.

The Greater KL/KV NKEA believes that Putrajaya could receive a stronger boost in its vibrancy through the execution of the following initiatives:

- Reshaping the Main Boulevard: The plan calls for populating the 4.2km main strip of Putrajaya town with retail shops and upscale street vendors to generate foot traffic and life for the city centre.
- Leverage Waterfront Potential: The natural lake waterfront will be developed to create a commercial and recreational district.
- Increased Connectivity: Create better linkages between Putrajaya and surrounding areas, e.g. Cyberjaya, Dengkil, etc.
- Stimulate Economic Activity: Develop appropriate supporting industries such as education and economic zones to attract commercial entities and enhance development.
- Increase Tourism and Optimise Use of the Putrajaya International Convention Centre: Increasing the number of events and visitors will help raise the profile of the city.

Achievements and Challenges

Perbadanan Putrajaya initiated and completed a number of projects including the Laman Perdana and retail kiosks at the Main Boulevard area, which is expected to further stimulate economic activity. Meanwhile, a study on boosting tourism has been completed this year, and initiatives from the resulting report will begin in 2013.

Moving Forward

A number of initiatives are expected to begin in 2013 to help vitalise the area. Events scheduled for 2013 include:

- Floria: Malaysia's premiere outdoor and indoor garden festival
- Putrajaya Lighting Festival
- Putrajaya Art Festival
- Putrajaya City Trail

Business Opportunity 2:

Housing

This Business Opportunity is no longer tracked by the Greater KL/KV NKEA and has been moved under the jurisdiction of the Ministry of Housing and Local Government (Kementerian Perumahan dan Kerajaan Tempatan).

Business Opportunity 3:

Basic Sewerage Services

Greater KL/KV needs to accommodate its growing population, and one key basic amenity is the provision of an efficient sewerage system. With an anticipated inflow of an additional four million residents by 2020 – over 65 per cent increase in its population – existing sewerage facilities cannot be expected to keep up with demand.

Meanwhile, efforts are being undertaken to move the population away from fragmented and small sewerage treatment plants (STPs) and connect them to more efficient regional networks.

Some 32 regional STPs and 1,495 multi-point STPs that do not meet the new Department of Environment standards will be upgraded through an injection of capital investment by the Government. The goal is to have 91 per cent of all STPs upgraded to Standard A Category 1 by 2020. A rehabilitation programme will also be undertaken to upgrade 346km of the existing sewer network.

Achievements and Challenges

- 12 projects were identified, comprising four "Quick-Win" projects and eight "Non-Quick Win" projects, which will be undertaken and completed in phases from 2011 to 2020. These projects involve the refurbishment and upgrading of existing STPs, rehabilitation of defective sewers, and the regionalisation of small STPs
- To-date there are 37 packages identified from the 12 projects. Seven packages are now under construction while 15 more are in tendering process

STP projects can be very challenging as some of the issues are outside of *Jabatan Perkhidmatan Pembentungan's* control. Some of the main concerns are:

- The work has to be carried out at existing and high density areas with many existing utility pipes and structures already buried underground, of which some were unsuccessfully detected during the survey stage. As such, the alignment of the new pipes required re-designing, which has caused delay to the rationalisation of 27 STPs at Old Klang Road
- Hydraulic piling, instead of hammer piles, had to be used at Kajang 2 to minimise noise as work is undertaken at highly populated areas. The size and mobility of the piling machine has caused delays in completing the piling works
- Hard soil conditions, such as the Lot 130 Klang project, have slowed down piling works. This is as the work required added caution to avoid damage to the piles
- The rehabilitation of sewer pipes encountered several problems including DBKL's decision to reject JPP's proposal to use the open-cut system, site constraints at the back lanes of existing residential areas and the lack of specialist contractors to undertake CIPP re-lining and pipe-jacking works. JPP is presently in the process of appealing DBKL's decision

Moving Forward

Rationalisation of 27 STPs in Old Klang Road is due for completion at the end of 2013, which will benefit 20,000 residents once completed, while seven more "Non-Quick Win" packages will be tendered out in phases this year.

Summary of Greater Kuala Lumpur/Klang Valley NKEA

	2020 Target
Incremental GNI impact	RM190 billion
Additional Jobs	0.32 million
Critical targets for 2013: <ul style="list-style-type: none"> • To achieve rank of 75 on the Liveability Index • MNC Attraction <ul style="list-style-type: none"> - Conclude letter of intent with 10 MNCs for location of HQs or regional HQs in Greater KL/KV - 600 employment generation under Greater KL/KV • Talent Attraction <ul style="list-style-type: none"> - The Returning Expert Programme aims to see 1,200 expats return to Malaysia - The Residence Pass Programme targets for 800 approved passes - The STAR Programme aspires to have 400 JPA scholars - The Structured Internship Programme aims to attract 12,000 interns • High Speed Rail (HSR) <ul style="list-style-type: none"> - Completion of HSR Phase 1B – Detailed Feasibility Study • My Rapid Transit <ul style="list-style-type: none"> - Presentation of Final Implementation Plan of MRT Line 2 & 3 to the Economic Council/Cabinet - Complete 72 per cent of the elevated guideway foundation - Deliver all Tunnel Boring Machines (TBM) to construction sites - Complete 50 per cent of underground station excavation • River of Life <ul style="list-style-type: none"> - Installation of wastewater treatment plants at 3 wet markets (Pasar Borong Selayang, Jalan Klang Lama and Pasar Air Panas) - Installation of 55 gross pollutant traps - Reduce oil and grease levels in 63 communal grease traps installed at MPS and MPAJ hawker centres by 92 per cent - Complete 67 per cent of four construction packages • Greener KL/KV <ul style="list-style-type: none"> - Plant 30,000 new trees - 5,000 trees planted by the private sector • Iconic Places <ul style="list-style-type: none"> - 100 per cent completion of Heritage Trails 2-3 - 100 per cent completion of Masjid Jamek upgrade works - Completion of countdown clock - 50 per cent completion of Malaysia Truly Asia Centre • Pedestrian Walkway <ul style="list-style-type: none"> - Improve 12km of pedestrian walkways • Solid Waste Management <ul style="list-style-type: none"> - 100 per cent completion of construction works of AD facility for food waste - Setting up a food waste treatment plant and commencing operations 	

Enabling Change

TOURISM

ON THE GROUND WITH THE CIVIL SERVICE

Despite the ETP's strong emphasis on private sector participation in catalysing growth in the Malaysian economy, the civil service remains an important component in the country's agenda of change, as demonstrated by the public sector's role in the Tourism NKEA.

"The civil service represents the core of the management and delivery system of the NKEA initiative," says YBhg Dato' Dr Ong Hong Peng, Secretary General of Ministry of Tourism.

"The key roles of the civil service, particularly the lead agencies include engaging, coordinating, managing, optimizing resources and addressing issues together with stakeholders,

industry players and Government officials to implement the EPPs with the objective of meeting targets and KPIs."

Dato' Ong chairs several Councils under the Tourism NKEA, working closely with the private sector, non-Government organisations and the relevant Government agencies, to facilitate the progress of the Tourism EPPs. "A major challenge is not just for the civil service to be a catalyst at the nascent stage of implementation, but more importantly, to put in place an institutional framework, implementation structure and modus operandi for the private sector to own and take the lead in driving the EPPs," he observes.

"Although the private sector is key in driving the success of the ETP, that does not discount the importance of the civil service," concurs YBhg Dato' Mirza Mohammad Taiyab, Director General of the Tourism Malaysia.

Dato' Mirza, whose role includes ensuring that the EPPs are well facilitated by his team and that the promotion of the projects is efficiently planned and implemented, emphasises the cooperative effort between the public and private sector

in delivering the NKEA. "We have built a close working relationship with all of them. Tourism Malaysia works closely with the respective Working Groups and facilitates the marketing of the EPPs, to our offices overseas".

"The ETP has yielded positive outcomes and touch points for the rakyat in terms of generating income, foreign exchange earnings and employment," adds Dato' Ong, as the Tourism NKEA is on track to meet its targets of charting 36 million tourist arrivals, generating RM168 billion in tourist receipts and creating 500,000 new jobs by the year 2020.

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*The civil service
represents the core of
the management and
delivery system of the
NKEA initiative*

”



YBhg Dato' Dr Ong Hong Peng,
Secretary General of Ministry of Tourism

Enabling Change

PUBLIC SERVICE DELIVERY

ON THE GROUND WITH THE CIVIL SERVICE

As the public's first point of contact with the Government, the public service delivery system and its transformation may be among the most visible initiatives undertaken through the ETP. Implemented through the Public Service Delivery SRI, some of these measures have however been in place before the introduction of the transformation programme, such as the Business Licensing Electronic Support System (BLESS).

Formerly parked under the purview of PEMUDAH, the task force set up to address bureaucracy in business-Government dealings, the implementation of BLESS is now monitored by PEMANDU under the Public Service Delivery SRI. This has helped to speed up the project, which involves the migration of business license and permit applications to an online portal, says Pn Musalmiah Hj Asli, BLESS BPR Team Leader at the Implementation Coordination Unit of the Prime Minister's Department.

"Under Phase 1 of the project, which began in 2007, we succeeded in migrating 101 licenses online within one-and-a-half years, in an exercise which involved 45 Government agencies. Following the concerted monitoring of the project by the Public Service Delivery SRI, we have seen a more

coordinated approach and received more commitment from Government agencies involved in migrating to BLESS," says Pn Musalmiah, who explains that the project, which is already 50 per cent complete, is targeted for completion in 2014.

The transfer of the monitoring of BLESS to the Public Service Delivery SRI has also helped create awareness and get buy-in from the civil service on the overall goals of the establishment of the online portal, which is to support the Government's transformation into a more efficient and facilitative body for business and public-related services.

Pn Musalmiah also says the ETP represents a good initiative in helping to transform the public service, although its implementation may be a challenge as it is a large undertaking and due to the demanding timeline.

Nonetheless, with the civil service on board and a more focused approach in its implementation, such as with the Public Service Delivery SRI, the outlook remains positive for the Government to achieve its goal of transforming Malaysia into a high-income economy by 2020.

“

The ETP represents a good initiative in helping to transform the public service, although its implementation may be a challenge as it is a large undertaking and due to the demanding timeline

”



Pn Musalmiah Hj Asli,
BLESS BPR Team Leader at the
Implementation Coordination Unit

A stylized illustration in shades of pink and purple. In the upper left, a large pink circle contains a white icon of a drop with a plug inside it. To the right, a solar panel is shown. In the background, there is an oil derrick. In the foreground, a stylized oil pipeline runs across the bottom, ending in a plug. The overall theme is energy and oil/gas.

Oil, Gas and Energy



Dato' Sri Peter Chin Fah Kui

Minister of Energy,
Green Technology and Water

With the nation's oil and gas reserves steadily declining, the industry has made headway in adopting more stringent measures to conserve our natural resources. It is our duty to ensure we do not over-exploit Malaysia's national resources at the expense of our future generations and at the same time, strive for economic competitiveness.

The year 2012 has been one of transformation for the energy supply industry. Over the past year, PETRONAS and its partners have worked to establish Malaysia's first regasification terminal in Malacca to meet premium gas demand, and the Energy Commission moved to introduce competitive bidding for power generation plants. The Government's special purpose vehicle, MyPower, has made progress in reviewing the power purchasing agreements Tenaga Nasional Bhd makes with independent power producers.

With this rapidly changing energy landscape, we must continue to address the impact of rising fuel costs on subsidies and energy efficiency to ensure the sustainability of Malaysia's economy. Economic competitiveness requires efficient energy production and consumption, a view the Government has addressed in the 10th Malaysia Plan for 2011-2015 with several initiatives to ensure effective sourcing and delivery of energy.

At the same time, the Government has facilitated opportunities in policy that both Malaysian and foreign investors have taken up. A case in point is the feed-in-tariff for renewable energy, where the individuals and companies can sell back solar energy generated from homes. Additionally, 10 companies have enrolled under the Global Incentives for Trading (GIFT) programme to trade petroleum and other products as well as set up operations in Malaysia.

Moving in to 2013 and the coming years, the Government, with the focus of this NKEA and the support of the *rakyat*, will push on this energy policy to secure and manage reliable energy supply, encourage energy efficiency and adopt market-based pricing while strengthening governance and steering the country through a landscape of rapid change.

OIL, GAS AND ENERGY

The Oil, Gas and Energy (OGE) industry plays a prominent role in the Malaysian economy, contributing about one-fifth of the national GDP over the past decade. This NKEA targets a greater emphasis on building Malaysia's downstream sector while retaining incentives to ensure constant production levels and moving into alternative forms of energy – from solar power to electric vehicles.

There are 13 EPPs that will deliver this target ranging from plans to turn Malaysia into an oil and gas hub, to tax incentives to spur exploration investment in marginal oil and gas fields. With a sustainable energy platform that includes fuel subsidy rationalisation and a greater push for renewable energy, this NKEA targets annual growth of five per cent in the sector from 2010-2020.

These EPPs are projected to generate Gross National Income (GNI) of RM131.4 billion and create an additional 52,300 jobs by 2020. Major industry players such as PETRONAS, Shell, ExxonMobil, Dialog Group and Royal Vopak have made huge investments in this sector.

2012 Key Performance Indicators

Oil, Gas and Energy NKEA		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Addition Resources – million stock tank barrel (mmstb)	*Information kept confidential at request of involved parties		124	●	100	●	1	●
EPP #2	Production from Marginal Field – thousand barrel of oil equivalent per day (kboed)			0	●	0	●	0	●
	Production from Marginal Field (Gas) – million standard cubic feet per day (mmscfd)			18	●	18	●	0	●
EPP #3	Number of explored wells			76	●	76	●	0.5	●
EPP #4	Additional committed amount of land-based oil storage capacity – million cubic metre	3,000,000	3,000,000	100	●	100	●	1	●
	Number of oil trading companies based in Malaysia	4	5	125	●	100	●	1	●

(more on next page)

(continued from previous page)

Oil, Gas and Energy NKEA		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #5	Number of additional confirmed gas requirement (mmscfd) (Note: Additional confirmed gas requirement for 2012 is an additional 100 mmscfd. Making the total 240 mmscfd = Regasification plant capacity)	100	100	100	●	100	●	1	●
EPP #6	Amount of investments made by OFSE MNCs (RM mil)	400	1,503	376	●	100	●	1	●
EPP #8	Number of MNC or JVs between local OFSE companies with global MNCs	3	6	200	●	100	●	1	●
EPP #7	Number of successful mergers of fabricators	2	2	100	●	100	●	1	●
EPP #9	Reduction in electricity bills through energy management in all government offices (%)	10	10.4	104	●	100	●	1	●
	Market share of 5-star appliances (refrigerator) (%)	25	40.8	163	●	100	●	1	●
	Market share of 5-star appliances (air-conditioner) (%)	20	21.6	108	●	100	●	1	●
	Market share of 5-star appliances (chiller) (%)	39	39.2	101	●	100	●	1	●
EPP #10	Amount of grid-connected renewable energy plants installed capacity (MW)	110	100.5	91	●	91	●	0.5	●
				119%		86%		80%	

Exhibit 2.1

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score#2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

ENTRY POINT PROJECTS

EPP 1

Rejuvenating Existing Fields Through Enhanced Oil Recovery (EOR)

In order to extract maximum potential from Malaysia's mature oil fields, this EPP encourages the use of Enhanced Oil Recovery (EOR) – a technique that uses gas, chemical injection or thermal flooding to improve oil recovery. These methods can lift the amount of oil recovered from underground reservoirs to 30 - 50 per cent from industry norms of 20 - 35 per cent.

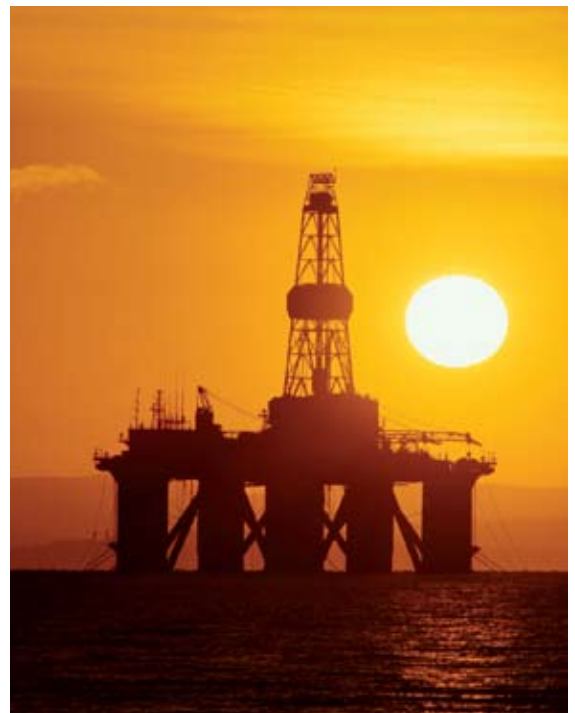
Harnessing EOR requires the use of advanced technologies and significant capital investment, which are initiatives supported by national oil firm PETRONAS. PETRONAS, where necessary, has reviewed existing production sharing contract (PSC) terms and introduced new petroleum arrangements to reward companies or investors who implement EOR techniques. This has encouraged companies who specialise in EOR to set up shop in Malaysia. As an industry regulator, PETRONAS has also ensured the most cutting-edge methods and technologies are deployed to cut capital and operating costs.

Achievements and Challenges

This EPP showed continued momentum in 2012. In January, PETRONAS signed PSCs with Shell Malaysia for EOR projects off the coast of Sabah and Sarawak, involving investments of over US\$12 billion. These are expected to boost the average recovery rate in the Baram Delta, offshore Sarawak, and North Sabah fields, to 50 per cent from 36 per cent.

In May, PETRONAS inked a new type of PSC with Talisman and PETRONAS Carigali Sdn Bhd for EOR projects in Kinabalu Fields, a number of fields with matured reservoirs off the coast of Sabah. The contract drew in US\$1 billion in investment. PETRONAS devised the new PSC under the Progress Volume-Based (PVB) terms. Under the agreement, the share of profits grow over the lifetime of the field, providing an incentive for contractors to boost oil recovery and production as the risk from developing mature fields grow.

In November, PETRONAS signed another PSC with Shell Malaysia to explore Central Luconia, offshore Sarawak. Under the PSC, in which Shell and PETRONAS Carigali share a 50:50 equity split, Shell will undertake an initial three-year exploration programme to comprehensively explore 2,727 square kilometres (sq km) within block SK319 in Central Luconia. 90 per cent of the output is earmarked for the PETRONAS liquefied natural gas (LNG) complex in Bintulu.



EPP 2

Developing Small Fields through Innovative Solutions

Malaysia's small fields each hold at least 30 million barrels of recoverable oil that represent the bulk of Malaysia's remaining fossil fuel resources. Developing these fields profitably can be challenging as they require the same expensive infrastructure as much larger fields, while the returns are less substantial due to the smaller reserves.

To tap the potential of these small fields, PETRONAS has worked with the industry on three aspects. First, it began reviewing PSC terms, where necessary, to introduce new agreements that ensure operators of these small fields receive sufficient incentives.

PETRONAS has also looked to attract exploration and production (E&P) operators who specialise in developing small fields. To help improve the economics of small field development and encourage the sharing of facilities, PETRONAS will facilitate collaboration between industry players.

Achievements and Challenges

In June 2012, PETRONAS signed three main PSCs with PETRONAS Carigali and Hess Exploration and Production Malaysia BV that will pave the way for the implementation of the North Malay Basin project, a new integrated gas development in Peninsular Malaysia.

The PSCs involve three blocks in the North Malay Basin, a project which entails the development and commercialisation of nine stranded gas fields. It will also see the establishment of a new gas gathering, processing and transportation hub. Approximately US\$5.2 billion will be invested in the North Malay Basin project over the next five years. The project will commercialise around 1.7 standard trillion cubic feet of gas reserves from the area.

PETRONAS also recorded successful natural gas production from the Berantai Field, located offshore Terengganu. Natural gas production from the field is carried out by Petrofac Energy Developments Sdn Bhd and SapuraKencana Petroleum Bhd, which were awarded the Risk Service Contract (RSC) by PETRONAS in January 2011.

The gas, which was brought on stream on 20 October 2012, is extracted at a rate of 50 mmscfd from the field's first three wells. This is expected to reach 80 mmscfd with the addition of two wells. The gas is processed at the Berantai floating production, storage and offloading (FPSO) unit and exported to the existing onshore terminal at Kertih.

Meanwhile, the Bentara-2 well, the first well to be drilled in the Balai Cluster RSC area covering four fields offshore Sarawak, has been successfully tested, achieving a stable oil flow-rate that ranges between 1,600-2,200 barrels per day. The well achieved its target depth of 2,830 metres on 20 October 2012, and initial results indicate an estimated 100 metres of hydrocarbon net pay in stacked reservoirs in the Bentara Field. The RSC was awarded to Roc Oil, Dialog Group and PETRONAS Carigali in August 2011 and was later reassigned to BC Petroleum Sdn Bhd, a joint venture of the three companies.

PETRONAS also recorded the discovery of gas in Block PM307, located offshore Peninsular Malaysia. Tembakau-1, a vertical exploration well drilled to a depth of 1,565 metres, encountered 60 metres of total net gas sand with preliminary gas initially in-place (GIIP) volume of 600 billion standard cubic feet. Tembakau-1 is operated by Lundin Malaysia with PETRONAS Carigali as a partner. It is currently being evaluated for potential fast-track gas development.

Meanwhile, Halliburton Bayan Petroleum Sdn Bhd, a joint venture between Dialog Group and Halliburton International Inc, signed an agreement with PETRONAS Carigali to provide services to recover the reserves from the Bayan Field, offshore Bintulu, Sarawak. The project is estimated to have a total project value of US\$1.2 billion over 24 years.

There are however delays in the implementation of new tax incentives to be incorporated under the Petroleum Income Tax Act (PITA). Once in place, these incentives will promote the development of new oil and gas resources, incentivise the development of technically challenging resources and further stimulate domestic capital-intensive exploration activities involving CO₂ gas fields, High Pressure High Temperature (HPHT), deepwater and infrastructure projects.

To maintain Malaysia's position as one of Asia's top oil and gas producers, future resources must be discovered and developed in a timely yet prudent manner. There is growing evidence that there are resources yet to be discovered, although these fields are likely to be high-risk and more difficult to access. Exploring new fields in Malaysia will involve intensive capital outlay, with the discovery of new reserves likely to take several years to develop.

Due to the decline in Malaysia's production, however, new and sizeable discoveries must be made in this decade. This will entail geological and geophysical studies, seismic surveys, exploration well drilling and testing of new exploration methods. In a bid to attract the necessary exploration investments and expedite such projects, PETRONAS is reviewing PSC terms and introducing new petroleum contract arrangements.

Gumusut-Kakap Field begins First Oil Production

Just over a year since the launch of the Gumusut-Kakap deepwater development project located offshore Sabah, the field achieved a major milestone with its first oil production on 18 November 2012.

The production was achieved via an interim crude evacuation system (ICES), linking two wells from the field to a floating production, storage and offloading (FPSO) unit at the existing Kikeh field, also located offshore Sabah.

The two wells are expected to reach peak production of 25,000 barrels per day (bpd), with the total 19 subsea wells located in Gumusut-Kakap seen to produce a maximum of 120,000 bpd.

Representing Malaysia's second deepwater development, Gumusut-Kakap's first oil production is seen as a significant stride under the Oil, Gas and Energy NKEA, with PETRONAS taking just 14 months to complete the planning and execution of the project. The field is operated by Sabah Shell Petroleum Co, in partnership with Murphy Sabah Oil Co, Conoco Philips Sabah and PETRONAS Carigali.

The parties, including the Gumusut-Kakap production-sharing contractors and relevant service providers, also achieved zero Lost Time Injury in executing the project.

Achievements and Challenges

The recent drilling of the NC3 wildcat well offshore Sarawak and a subsequent appraisal well led to PETRONAS making a significant discovery in Block SK316. Early estimates show 2.6 trillion standard cubic feet (tscf) of net gas in place.

The Spaoh-1 well with a 3,000 metre drilling depth, also located in Block SK306, shows similar potential. With the well currently undergoing preparation for production testing, preliminary evaluations indicate around 100 million barrels of oil and 0.2 tscf of available gas.

On 18 November 2012, PETRONAS recorded first oil production from the Gumusut-Kakap field, located offshore Sabah and representing Malaysia's second deepwater development. The field is operated by Sabah Shell Petroleum Co, partnering with Murphy Sabah Oil Co, Conoco Philips Sabah and PETRONAS Carigali. Gumusut-Kakap's first oil production is a major achievement following a 14-month planning and execution process.

The production is expected to reach a maximum of 25,000 barrels per day (bpd) upon ramping up of the two wells. The field's full development comprises 19 subsea wells, a permanent semi-submersible floating production system (FPS) and an oil export pipeline connected to the Sabah Oil and Gas Terminal (SOGT) in Kimanis, Sabah.

Moving Forward

The first three EPPs will remain under the purview of PETRONAS, which has recognised the need to continue exploring innovative ways to unlock the hydrocarbon resource potential in Malaysia's matured fields. PETRONAS will push to further develop more challenging fields in a sustainable process that helps boost oil output in the face of dwindling reserves and growing demand.

For deepwater, PETRONAS and its production sharing contractors are expecting consistent drilling and offshore exploration over the next five years and plan to increase investments in capability building. To further develop oil and gas reserves, PETRONAS will enhance investment in extensive subsea oil and gas pipelines to enable fields in more diverse locations to be monetised.

EPP 4

Building a Regional Storage and Trading Hub

Energy-hungry Asia consumes an estimated 420,000 barrels of crude oil and 730,000 barrels of petroleum products daily. This is set to grow further with petroleum product imports seen to increase by 1.8 million barrels daily from 2010-2020.

This makes oil storage crucial, as growing energy demand and the rising inflow of crude oil from Africa, Middle East and Latin America result in longer transit times and spurs the need for a larger storage buffer of crude oil and associated products.

While Singapore dominates the oil storage business in Asia, with a total of 10 million cubic metres of independent storage capacity, Malaysia is well-placed to tap into the RM1 trillion in physical oil trade and RM1 trillion in derivative trades that Singapore has built up. With strategic port locations on major shipping routes like the Straits of Malacca for crude oil and refined products, proximity to Singapore, land availability and deepwater marine accessibility, Malaysia could form a hub with the island nation.

This hub could be similar to Amsterdam-Rotterdam-Antwerp (ARA), complementing each other in refining and petrochemical activities, independent storage, bunkering and blending, as well as enjoying market access to customers in the growth markets of China, India and Southeast Asia.

There are four emerging business drivers that could support these ambitions:

1. Break bulk of larger crude oil and fuel cargoes from outside Asia to smaller cargoes to destinations within the region
2. Reducing costs by blending crude oil output from regional producers before supplying as feedstock to regional refiners
3. Blending various refinery outputs to meet the diverse mix of downstream products
4. Tapping arbitrage opportunities, where futures markets for oil products can be hedged via physical storage

To achieve this, the Malaysia Petroleum Resources Corporation (MPRC) is working with agencies such as the Ministry of International Trade and Industry (MITI), Ministry of Finance (MoF), Malaysian Industrial Development Authority (MIDA), Malaysian External Trade Development Corporation (MATRADE), State Governments and Regional Economic Corridor Authorities to encourage private investments into this sector. This includes formulating solutions to address key investor issues such as permits and incentive schemes, as well as tracking the development of key projects.

Malaysia Petroleum Resources Corporation

Malaysia Petroleum Resources Corporation (MPRC) was formed in April 2011 and started operations in July. As an agency under the Prime Minister's Department, MPRC's role is to promote, catalyse and transform the oil and gas services sector to become stronger entities to support industry needs domestically as well as in international markets. In doing so, MPRC seeks to position Malaysia as the number one O&G hub in the Asia-Pacific region by 2017.

To achieve that goal, one of MPRC's mandates is to recommend appropriate policies relating to the O&G sector by reviewing existing business regulations and tax incentives to ensure that they are competitive and attractive for international O&G companies to set up their regional or operation headquarters in Malaysia. MPRC also collaborates and promotes partnerships and joint ventures between local companies with global MNCs, research institutions and academia. This will encourage greater involvement in research and development activities, technology transfer and talent training and development. In doing so, Malaysian companies will be able to contribute to the O&G value chain.

In view of this, a public-private partnership between the Johor State Government, Holland's Royal Vopak and Dialog Group to build an independent deepwater oil storage terminal in Pengerang has already begun, representing a flagship project under this EPP.

Additionally, the Government, MPRC and the Labuan Financial Services Authority (LFSA) launched the Global Incentives For Trading (GIFT) programme in October 2011. The programme aims to attract oil and gas players to trade petroleum and other petroleum-related products, while utilising Malaysia as a cost-efficient base to conduct regional trading business.

The GIFT programme comes under the Labuan International Trading Commodity Company (LITC) and represents collaboration between MPRC and LFSA. It offers oil and gas firms incentives such as a flat corporate tax rate of three per cent of chargeable income, 100 per cent exemption on director fees paid to non-Malaysian directors and 50 per cent exemption on gross employment income for non-Malaysian professional traders and managers working in LITC companies.

Achievements and Challenges

Ten trading companies have registered for the GIFT programme, with a few planning to start transactions in 2013.

In April, Vitol, the world's largest independent oil trader with its joint venture partner, MISC Bhd, kicked off operations in its storage facility in Tanjung Bin, Johor. Platts, which provides Asian benchmark assessments for most oil products traded in the region, agreed to include the Tanjung Bin storage terminal in its pricing process for fuel oil, diesel, jet fuel and gasoline beginning 1 December 2012. This signals the growing importance and influence of Malaysia as an emerging hub for trading in petroleum and petroleum-related products.

Also in Johor, capital dredging work was completed at the Tanjung Langsat Port in November 2012. The project deepens the channel and basin area to 15 metres and will pave the way for Malaysia to position Tanjung Langsat Port as a strategic location to cater for storage facility.

Moving Forward

Competition from neighbouring countries has heated up in the race to build storage terminals. China's Sinopec, which is also Asia's top refiner, has started work on Southeast Asia's largest oil storage terminal at the Batam free trade zone in Indonesia. This will spur healthy competition and provide Malaysia with more opportunities arising from Singapore's land scarcity.



Overview of storage facility projects in Southern Johor

EPP 5

Unlocking Premium Gas Demand in Peninsular Malaysia

The lack of gas supply in Peninsular Malaysia due to declining domestic production has led to limited investment in energy intensive industries such as glass, plastic and semiconductor wafer manufacturing.

Additionally, the limited domestic gas supply has prevented current industrial diesel and Liquefied Petroleum Gas (LPG) users from switching to more competitively priced natural gas.

Domestic gas supply, augmented by imports from Indonesia and the Joint Development Area with Thailand, is expected to decline at 12 per cent per year this decade, signalling weaker supply in the region.

To resolve this, this EPP looks at importing liquefied natural gas (LNG) farther afield at market prices. Without subsidy intervention, it is estimated that there would be more than 500 mmscfd of extra latent gas demand by 2020. Of this, 270 mmscfd will constitute demand from companies that did not invest in Malaysia due to lack of gas availability. A total of 230 mmscfd will represent demand from industrial users utilising higher priced diesel and are looking to switch to cheaper natural gas if supply is available.

Achievements and Challenges

In September 2012, the Prime Minister announced that a consortium comprising Dialog Group, Royal Vopak and the Johor State Government will invest RM4.08 billion to build the Pengerang LNG terminal. The terminal will allow various LNG users to store and trade the commodity. The project includes a LNG storage facility, loading and regasification terminal for trading, import as well as domestic use.

Meanwhile, the operation of the Sungai Udang regasification terminal, initially slated to be completed in third quarter of 2012, was delayed due to technical issues. PETRONAS and its contractors have deployed additional technical teams to rectify the issues.

The operation of the Sungai Udang facility, managed by PETRONAS Gas Bhd's subsidiary Regas Terminal Sdn Bhd, the facility has a maximum capacity of 3.8 million tonnes per annum with two floating storage units (FSUs) to receive and store LNG. The terminal also provides an island jetty and regasification units.

Each FSU has a lifespan of 20 years and will remain berthed at the jetty. Subsea and offshore pipelines will link the regasified LNG to the Peninsular Gas Utilisation (PGU) pipeline network, located 30km away from Sungai Udang.

Moving Forward

With global demand for LNG expected to reach 400 million tonnes a year in 2025, the GIFT programme has been enhanced to cover this commodity. LNG trading companies stand to benefit from a 100 per cent income tax exemption on statutory income for the first three years of operation, followed by three per cent tax in subsequent years. Moving forward, MPRC together with MIDA, InvestKL, LFSA and corridor agencies will be actively promoting GIFT, especially on LNG trading.

Following PETRONAS's efforts to resolve issues at the Sungai Udang terminal, the facility is expected to be operational in early 2013.



Pengerang Independent Storage Terminal - Land Reclamation Progress

EPP 6

Attracting MNCs to Bring Their Global Oil Field Services and Equipment Operations to Malaysia

This EPP aims to attract 10 to 20 major firms in the oil field services and equipment (OFSE) industry to base 10 per cent of their business operations in Malaysia. This is expected to transform the country into a cost-efficient base for engineering, procurement, construction, installation, and commissioning activities in the Asia-Pacific region.

Achievements and Challenges

In May, MPRC formed the Industry Consultative Council (ICC) to grow the sector and transform the country into a regional hub by 2017.

The ICC acts as an advisory body for the discussion of industry matters and in the pursuit of collaborative efforts. MPRC chairs the Council, which is made up of the presidents of five main trade associations in the sector, namely Malaysian Oil and Gas Engineering Council (MOGEC), the Malaysian Oil and Gas Services Council (MOGSC), Malaysian Offshore Vessel Owners Association (OSV Malaysia), Malaysian Offshore Constructors Association (MOCA) and the Institute of Materials Management (IMM).

A key challenge for this EPP is to set up a single entity with deep industry knowledge and expertise in coordinating Malaysia's OFSE sector. This lack of oversight has led to unstructured growth within the sector. At the same time, wider access to financing and capital is required to aid in project finance and encourage new investment. There also needs to be a review of the capital and finance requirement and the regional competition in each segment of the oil and gas sector.

One way to address this is to encourage the industry to take an active role in trade associations. This will allow its stakeholders to understand and meet its specific needs, such as human capital development and research and development (R&D).

Moving Forward

Malaysia will host Asia's first ever Offshore Technology Conference (OTC) in Kuala Lumpur in 2014, aimed at stimulating discussion and collaboration within the industry. OTC, a premier global oil and gas services exhibition held annually in Houston, Texas, agreed to hold OTC Asia in Kuala Lumpur in view of the vast opportunities arising in Asia. OTC Asia 2014 will provide Malaysian as well as regional oil and gas companies a strong platform to promote and market their capabilities to international players.



EPP 7

Consolidating Domestic Fabricators

Given the size of the Malaysian fabrication market vis-à-vis regional players, it is essential for Malaysian fabricators to explore consolidation. This is seen to help achieve economies of scale, reduce operating costs, enhance work track records and increase competitiveness against regional players.

Yard capacity, technology deployment and manpower capabilities are key factors driving the need for consolidation. Furthermore, local players are encouraged to reduce their reliance on jobs from PETRONAS, which is unsustainable in the medium- to long-term.

At the same time, understanding and realising trends and strategies set by regional fabricator giants such as Singapore's Keppel and Sembawang, and South Korea's Hyundai, makes a stronger case for rationalisation and consolidation.

In addition, Malaysian companies are more used to domestic projects that are tendered on a multi-contract and specialised basis. More lucrative international work is put to tender on a single contract, making it difficult for Malaysian companies with limited experience to manage and complete a full service contract in a cost-effective manner. This is compounded by the large amount of duplication of services in the market.

Malaysian fabricators are already moving in the right direction. Where there used to be eight, there are now five major fabricators, comprising MMHE Bhd, Kencana HL Bhd, Brooke Dockyard & Engineering Works Bhd, BHIC Penang Shipyard Bhd and Ramunia Bhd.

Achievements and Challenges

In May, SapuraCrest Petroleum Bhd and Kencana Petroleum Bhd merged to create the world's fifth-largest integrated oil and gas services firm and to compete more effectively with regional companies for projects. In a deal worth more than RM10 billion in market capitalisation, the merged firm, SapuraKencana Petroleum Bhd, brings together SapuraCrest's experience in transportation and installation contracts and Kencana Petroleum's expertise as fabricators.

In spite of this development, many smaller oil and gas services players remain hesitant on joint ventures (JV) or mergers and acquisitions (M&A). This is due to various issues ranging from stiff competition to ownership and governance. There must, therefore, be greater advocacy in creating awareness and support for industry consolidation.

Moving Forward

The SapuraKencana Petroleum success story could be used as an example to encourage other smaller companies to consolidate. In view of this, MPRC will continue ongoing education efforts to promote the importance of strategic JV and M&A to the industry, with emphasis on creating sustainable business models which are resilient amid any market volatility. Consolidation will allow companies to broaden their skill sets, increase competitiveness and financial resources, while encouraging knowledge and technology transfer.

EPP 8

Developing Engineering, Procurement and Installation Capabilities and Capacity through Strategic Partnerships and Joint Ventures

Malaysian companies in the domestic OFSE sector often lack expertise and experience in engineering, procurement, construction, installation and commissioning (EPCIC). This prevents them from winning major projects, while hindering the growth of their regional market share. This EPP notes the significant potential for improvement by encouraging world class players to form JVs with local companies. These JVs are expected to cultivate domestic industry, grow local capabilities and increase international footprint of Malaysian companies.

These JVs will help local players capture a larger share of the domestic market, particularly procurement and installation, which have been dominated by foreign companies. In the long-term, this may give local companies a boost in capturing regional jobs.

Achievements and Challenges

BC Petroleum Sdn Bhd, the JV company of Roc Oil, Dialog and PETRONAS Carigali operating the RSC for the Balai Field, is expected to invest about RM626 million to RM782.6 million during the project's pre-development phase. The collaboration between the three companies provides an example of how players can work together to scale greater heights. Nonetheless, other OFSE players may require further encouragement to team up.

Moving Forward

MPRC will continue to promote Malaysian OFSE champions to the international oil and gas market through internationally renowned oil and gas conferences, such as the Offshore Technology Conference and World Gas Conference.

Malaysian oil and gas companies as well as Government agencies will also continue to participate in domestic and international conferences to build relationships with investors and to stay abreast of the latest developments in the global market. This provides exposure and opportunities for companies to expand their network and explore possible collaborations, JVs or synergetic alliances.

EPP 9

Improving Energy Efficiency

Malaysia uses 34 per cent more energy than peer countries and can improve on its power and fuel consumption, potentially making companies more competitive and reducing household electricity bills. There are a number of initiatives that can produce quick results. These include:

1. Government Leading by Example on Energy Efficiency Practices

The Government will gradually rationalise the subsidy on electricity to spur industries and consumers to adopt more energy efficient practices. To complement this, the Government will launch large-scale education campaigns to help companies and households to adopt energy-saving practices. To make this effective, the Government will lead by example and use energy-saving methods in public sector buildings.

The Ministry of Energy, Green Technology and Water (KeTTHA) will request for energy efficiency plans from Ministries, universities and hospitals. These represent 120 entities, or less than one per cent of the Government's total entities, accounting for a sizable 44 per cent of its electricity bill of RM1.5 billion in 2009.

For this to work, entities which implement plans to reduce electricity budgets will receive, in exchange, allocations to invest in energy-efficient equipment such as light bulbs and new chillers. Each entity will nominate an Energy Efficient Champion who will devise an action plan to cut electricity consumption, with KeTTHA overseeing the group and monitoring the targets.

Another mechanism to promote energy efficiency is the Energy Performance Contracting (EPC) method. A performance-based procurement method, EPC helps building owners achieve effective energy conservation and electricity bills reduction without upfront capital cost. This is as utility bill savings resulting from the retrofitting or installation of new building systems can be used to pay for the upfront costs incurred during retrofitting or installation.

2. Stimulate Sales of Energy Efficient Appliances

Under this initiative, consumers will receive rebates of five to seven per cent for models and limited units of appliances such as refrigerators, air-conditioners and chillers, which form the bulk of household electricity bills. The Government will also implement Minimum Energy Performance Standards (MEPS), a minimum performance level set for many types of energy-consuming products which will effectively eliminate inefficient energy-consuming products from entering the market.

3. Government Will Work with TNB to make Co-Generation Economically Viable

This initiative entails a review on TNB tariffs in three aspects. This includes increasing the electricity tariff by rationalising current subsidies to encourage more energy efficiency, reducing the stand-by tariff to spur use of energy-efficient options, and increasing the buy-back tariff to make it more attractive for industries to co-generate electricity and re-sell the excess to TNB.

4. Regulating to Ensure Better Insulation for New and Renovated Buildings

Current regulations on building insulation are inadequate for encouraging more efficient energy use. As a result, developers are constructing residential, commercial and industrial properties without proper insulation. This creates higher costs as additional air-conditioning is then required.

To encourage the construction of better-insulated properties, the Government will lead by carrying out large-scale awareness campaigns and implementing strict regulation through the building plans approval process. This is envisioned to increase the construction of better-insulated properties and, in turn, improve the living environment in low-cost premises where occupants cannot afford air-conditioning and have suffered heat-related stress.

5. Encouraging Sales of Energy Efficient Vehicles by Offering Rebates to Encourage Adoption of Hybrid or Electric Vehicles

This Government initiative will promote the use of foreign-made hybrid vehicles by reducing their import taxes. With lower selling prices for hybrid cars, the *rakyat* will be provided with more choices, while local manufacturers will be encouraged to develop similar vehicles for the domestic market.

Achievements and Challenges

Due to higher awareness on hybrid vehicles by the public coupled with zero per cent tax incentives promoted by the Government, the sales of hybrid cars has increased more than fourfold compared to 2009 sales. This has led the Government to extend the incentive until the end of 2013.

Additionally, from the one-off SAVE rebates programme, this EPP has recorded significant improvement in terms of market share of 5-star refrigerators (40.8%), air-conditioners (21.6%) and chillers (39.2%), exceeding their respective 2012 targets.

This EPP however faces several concerns, such as the delay in implementing the MEPS and EPC regulations. Without these, the enforcement of energy efficient markets in Malaysia will prove to be a challenge.

The implementation of fuel subsidy rationalisation faces some difficulties, as the subsidy removal will impact household cost of living.

Moving Forward

SEDA will continue its E&E awareness programmes and work closely with industry players to boost locally manufactured E&E appliance at affordable prices.

Meanwhile, national car maker Proton plans to roll out electric vehicles (EVs) by 2014, and will be coupled with the establishment of more EV charging stations nationwide.

There are also plans for Public-Private partnerships to promote EVs to the Malaysian public.





Building Up Renewable Energy and Solar Power Capacity

This EPP aims to harness renewable power as a viable energy alternative in an effort to reduce Malaysia's reliance on fossil fuels, minimise carbon emissions, encourage job creation and spur foreign direct investment.

This project also builds on existing recommendations, such as from the 10th Malaysia Plan, which targets to have renewable energy account for five per cent of the total capacity mix in 2015. This represents 985 megawatts of renewable generating capacity, from less than one per cent of renewable energy in the country's energy mix today.

Additionally, under the National Renewable Energy Policy, solar power is to contribute a minimum of 220 megawatts to the total capacity mix. This is considering the country's projection that Peninsular Malaysia will need to build about four gigawatts of additional power capacity to meet rising demand, while maintaining a healthy power reserve margin.

In aid of the objectives of this EPP, a regulatory framework was developed for the feed-in tariff mechanism, which allows locally produced electricity to be sold to power utilities at a fixed premium for a specific period. This framework is built on the foundation that renewable generation, such as solar power, will reach grid parity with that of fossil fuel generation, such as gas, in the long term.

In addition, for this EPP to succeed, strong business models must be developed, taking into account financing, Public-Private Partnerships and the role of the Government, TNB and private investors.

Achievements and Challenges

Since December 2011, Sustainable Energy Development Authority (SEDA) Malaysia has invited Malaysian households as well as small- and medium-sized independent power producers to apply and book the amount of green electricity they plan to produce and re-sell to TNB. There are fixed quotas assigned for four renewable energy sources that include biomass, biogas, small hydro and solar photovoltaic (PV) systems.

As of 31 December 2012, a total of 960 applications for the feed-in-tariff mechanism with an installed capacity of 450.85MW were approved out of 1480 applications SEDA Malaysia received within the year.

Source	Capacity (MW)
Solar PV (individual)	2.20
Solar PV (bukan individual)	22.807
Biomass (oil palm/agro waste)	41.5
Biomass (solid waste)	8.9
Biogas	6.1572
Mini hidro	15.7
Solar MBIPV	1.96
SREP	1.25
Total	100.47

Exhibit 2.2: Cumulative installed capacity (MW) from installed RE sources
Source: SEDA 2012

Solar PV has drawn the greatest response so far, with owners of landed homes able to apply for the 2,000 Solar Home Roof Programme initiated by SEDA from September 2012. Under the programme, the authority allocated 2,000 kilowatts of solar PV in the fourth quarter of 2012 and 6,000 kilowatts for 2013 to homeowners keen on generating electricity from their rooftops.

There has however been low take-up for biomass and biogas, due to issues surrounding feedstock, transmission costs for connecting to the national grid and land approval issues. Additionally, financing remains limited for parties keen on venturing into renewable energy.

Moving Forward

SEDA is targeting a cumulative installed capacity of renewable energy of 450.64MW by the first half of 2014. This will allow the Government to meet its renewable energy aims. There will also be a greater push on promoting more investment and participation in renewable energy, with stronger cooperation especially with local financial institutions to provide easy access financing to interested parties.

EPP 11

Deploying Nuclear Energy for Power Generation

Malaysia has been exploring the option of deploying nuclear energy to meet future demand and diversifying the energy mix for Peninsular Malaysia. Since 2009, a Nuclear Power Development Steering Committee, driven by KeTTHA, has been conducting various studies towards preparing a Nuclear Power Infrastructure Development Plan (NPIDP). The committee also worked on nuclear pre-feasibility and initial site selection studies.

In 2011, the Government formed the Malaysia Nuclear Power Corporation (MNPC) to lead the feasibility study of this project taking into consideration safety and environment impacts.

EPP 12

Tapping Malaysia's Hydroelectricity Potential

Hydroelectricity has many advantages for a developing country like Malaysia as it helps reduce carbon dioxide emissions and has a proven track record in providing secure, long-term supply of power.

Sarawak has shown the most potential for hydroelectricity, with only 0.6 per cent of its estimated 20 gigawatts of potential power capacity currently under development. The State can also help supply the approximately 25 terawatt hours of latent power demand from industries operating in Borneo Island – the third-largest non-continent island in the world.

This initiative is spearheaded by the Sarawak State Government, through efforts implemented via Sarawak Energy Bhd (SEB) and the Regional Corridor Development Authority (RECODA). Both agencies will plan, construct, own and operate hydroelectric dams in the State. They will also attract energy-intensive industries to Sarawak, identify the necessary supporting infrastructure and facilities, and negotiate transmission lines and electricity supply to the Borneo Island with neighbouring Indonesia and Brunei.

The development of Sarawak's hydroelectric dams will require total investment of RM20.2 billion. This will cover the construction of five dams with a combined capacity of five gigawatts, a transmission grid, and the required infrastructure to attract smelters and manufacturers.

Achievements and Challenges

SEB has secured customers from companies in the Sarawak Corridor of Renewable Energy (SCORE) for most of the electricity output from the Bakun hydro dam. Customers include aluminum smelter Press Metal Bhd, which requires 480MW, Tokuyama Malaysia Sdn Bhd (140MW), OM Materials (Sarawak) Sdn Bhd (500MW) and Asia Minerals Ltd (270MW).

While plans are afoot to supply power from Sarawak's dams across the Borneo island, several issues must be taken into consideration. These include neighbouring Sabah's under-developed electricity grid, land rights and pricing issues.

Moving Forward

The next phase is to gear up the rest of the dams to meet the potential surge in demand from energy intensive industries which have set up in SCORE.

This EPP revolves around PETRONAS' efforts in the development of the Refinery and Petrochemical Integrated Development (RAPID) in Johor and the Sabah Ammonia Urea (SAMUR) projects. These projects involve investments of more than RM65 billion, and mark the expansion and diversification of PETRONAS's petrochemicals business. The facilities will also create volume growth and cater to the premium specialty chemicals industry in Asia-Pacific.

RAPID will cost RM60 billion, representing the largest green field investment in Asia-Pacific and for PETRONAS. The complex will include a crude oil refinery with a capacity of 300,000 barrels per day, a naphtha cracker with a combined production capacity of three million tonnes of ethylene, propylene, C4 and C5 olefins, which are used in products ranging from automobiles to baby diapers. There will also be further development of 22 mini petrochemical complexes.

The development site in Pengerang, Johor, is strategically located for easy access to regional demand centres in China and India. The site is also central to major shipping lanes, deepwater ports and complements existing refineries and petrochemical hubs on the east coast of Peninsular Malaysia and Singapore.

The SAMUR project meanwhile, with an estimated development cost of US\$1.5 billion, involves the construction of a new fertiliser plant with urea production capacity of 1.2 million metric tonnes per annum (mmtpa). Located in Sipitang Oil & Gas Industrial Park (SOGIP) in Sabah, the plant is expected to be commissioned by 2015 following the start of its construction in 2Q 2012.

Achievements and Challenges

RAPID was launched on 13 May 2012. The project's implementation is expected to start by the middle of 2013, after PETRONAS reaches its final investment decision (FID). Job opportunities are abundant with 40,000 contract-based workers needed to construct the complex.

PETRONAS has also started making preparations to ensure the availability of about 4,000 personnel to work at the various plants and facilities within the RAPID complex.

To support the RAPID project and other Johor oil and gas initiatives, Johor Petroleum Development Corporation (JPDC) was formed to assist with investor management, local community engagement, new industry and business opportunity development as well as human capacity building.

The SAMUR complex broke ground in 2012 and is expected to export 1.2 million tonnes of urea worth at least US\$4.8 billion annually upon its commissioning in 2015.

PETRONAS is currently training 24 Sabahans who will complete their course in July 2013. A second intake of 20 more trainees was conducted in July 2012. PETRONAS estimates that at least 3,000 to 4,500 workers will be needed during the peak of the construction.

While these projects will generate considerable economic activity, the Government remains mindful that relocating and resettling villagers residing in the affected areas may prove to be a major task.

Moving Forward

The next phase is to draw in committed investments to the Pengerang Integrated Petroleum Complex (PIPC) as well as other potential investments for SAMUR.

To kickstart human capital development an inaugural intake of 500 students will report for oil and gas training in the National Youth Skills Institute (IKBN) Bandar Penawar in January 2013. Under the joint cooperation of Ministry of Youth and Sports and PETRONAS, 20 trained teachers will provide a training based on curriculum and modules developed collectively by the Institute and PETRONAS.

BUSINESS OPPORTUNITIES

Following the conversion of Business Opportunities (BOs) 3 and 4, RAPID and SAMUR, into EPP 13, this NKEA currently monitors the following BOs:

Business Opportunity 1:

Process Improvements

Adherence to global benchmarks to operate refining and petrochemical facilities shows significant economic benefits. Such improvements typically translate into efficiency gains of 0.5 per cent per year, representing an additional GNI contribution of RM3.4 billion.

Business Opportunity 2:

Economic Growth

Malaysia's consumption is expected to grow by three per cent a year in tandem with the country's resilient growth, which helps to expand the oil, gas and energy sectors. The increased consumption will require an additional two gigawatts of installed capacity worth RM9.6 billion. The additional transmission will require an investment of RM12.4 billion.

Summary of Oil, Gas and Energy NKEA

	2020 Target
Incremental GNI impact	RM131.4 billion
Additional Jobs	52,300

Critical targets for 2013:

- Target to complete the Pengerang Integrated Petroleum Complex Masterplan and start earthwork for RAPID project
- Completion of Malaysia's first LNG Regasification Terminal in Malacca and commence gas import mechanism
- Target of additional four oil & gas trading companies to be based in Malaysia through GIFT programme
- The establishment of national strategic reserve for LNG
- Ramping-up of energy-efficiency initiatives through the introduction of Minimum Energy Performance Standards (MEPS) and the implementation of Energy Performance Contracting (EPC)
- Targeting for up to 190MW cumulative of grid-connected renewable energy power plants installed capacity (MW) through Feed-in-Tariff programme, which includes solar power generated on residential roof-tops and in commercial and industrial premises

A blue-toned graphic for a financial services report. It features a large blue circle in the upper left containing a white dollar sign and a white line graph with an upward trend. To the right, three stylized human figures in business attire are shown; one is pointing towards a large, dark blue downward-pointing arrow. Below the figures are three circular icons containing the dollar (\$), pound (£), and euro (€) symbols. In the lower left, the word 'TAX' is written in large, bold, dark blue letters, with a pair of scissors positioned as if cutting through it. The bottom right corner shows a stylized bar chart with four bars of increasing height. The background is white with a pattern of grey dots of varying sizes in the top left corner.

Financial Services

TAX



**Dato' Seri Ahmad Husni
Mohamad Hanadzlah**

Minister of Finance (II)

2012 marked the second year of implementation and, indeed, the Financial Services NKEA has performed remarkably well. With the framework and infrastructure that we have now - to be strengthened further by work in progress on all fronts - Malaysia has put in place a robust, sustainable and vibrant domestic financial services industry that is globally connected and ready to serve the needs of businesses and consumers in a high-income economy.

The strength of the Malaysian financial services industry is evidenced by the resilience of the Malaysian economy. The Malaysian *sukuk* and bond markets emerged as the third largest in Asia in a year of record issuances. In the equity market, Bursa Malaysia became the third largest IPO destination in the world in 2012 with the listings of Felda Global Ventures Holdings Bhd and IHH Healthcare Bhd. Our banking sector continued on its rapid growth track, both in terms of profits and regional reach. Another major milestone for the financial services industry was the launching of the Private Retirement Scheme in 2012.

My most sincere appreciation to all parties - the Government agencies, financial institutions and the private sector - for your commitment and dedication to meet and exceed goals under the Financial Services NKEA.

The Financial Services NKEA aims to make Malaysia home to an innovative, competitive and thriving financial services industry. Together, we will build on our strong fundamentals to provide the most conducive environment to sustain its development and create new niche areas that will fuel growth in the future.

FINANCIAL SERVICES

An integral component of Malaysia's economy, the domestic financial services industry contributed to 11.6 per cent of the country's real Gross Domestic Product (GDP) in 2011, growing at an average of 7.5 per cent in 2006-2011.

The Financial Services NKEA has put in place 10 high-impact Entry Point Projects (EPPs) targeted at strengthening Malaysia's financial institutions and creating deeper and more vibrant financial markets. Championed by the Ministry of Finance (MoF), this NKEA targets the financial services industry to contribute RM180.2 billion to the country's total Gross National Income (GNI) and create 275,400 new jobs by 2020.

In view of this, the financial services sector took significant strides forward in 2012. Our banks continue to be well-capitalised, possess healthy asset quality and report record profits, while they have also rapidly expanded outside of Malaysia.

Propelled by some of the world's largest initial public offerings (IPOs) in 2012, Bursa Malaysia was among the world's best performers during the year. Notable listings included those by Felda Global Ventures Holdings Bhd (FGVH), IHH Healthcare Bhd (IHH) and Astro Malaysia Holdings Bhd (Astro Malaysia).

The debt market also showed growing vibrancy, with *sukuk* market developments cementing Malaysia's position as a leading Islamic financial hub globally. In 2012, there was a 71.12 per cent increase in the total amount of *sukuk* raised at US\$142.2 billion compared to US\$83.1 billion for 2011. This contributed to about 70 per cent of the global *sukuk* issuances of which Malaysian entities continued to dominate at almost 74 per cent.

Another major achievement for the debt market in 2012 comprised the launch of the framework and regulations for exchange traded bonds and *sukuk* (ETBS), allowing retail investors to participate in debt issuances.

There, however, remains a long road ahead to reach this NKEA's aspirations for 2020. The stock market needs to display more velocity and liquidity, and financial institutions must consider consolidating to achieve greater local and regional competitiveness. Human capital requirements, while currently not a pressing concern, must be addressed to ensure there is sufficient talent to drive the financial services sector going forward.

In spite of these challenges, efforts under the Financial Services NKEA in tandem with other factors, such as the realisation of the ASEAN Economic Community slated for 2015, is expected to pave the way for further expansion of local banks abroad.

Additionally, BNM's continued robust governance of Malaysian financial institutions and an effective fund intermediation environment bode well for the future progress of the country's financial services sector. This is underscored by Malaysia's fifth consecutive year of being ranked first in terms of Ease of Getting Credit in the World Bank's Doing Business Report.

Moving ahead, this NKEA will continue to focus on sustainable development of the financial services industry, given its critical role in the growth of the country's economy.

2012 Key Performance Indicators

Financial Services NKEA		KPI (Quantitative)							
No.	KPI	Target (FY)	Sebenar (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Value of new listings of GLCs - Total of RM20bil by 2012 (RM Bil)	20	60.1	300.5	●	100	●	1	●
	Government-linked investment companies (GLICs) divestment programme - 33 companies (24 companies by 2012, nine 2013 onwards)	24	15	62.5	●	63	●	0.5	●
EPP #2	Strengthen retail participation - Facilitate retail trading in sukuk and conventional bonds.	Q2 2012	100%	100	●	100	●	1	●
EPP #3	Higher financing to targeted sectors: (i) Improved impaired financing ratio to 8% (Original value is 10.4%)	8%	6.3%	170.83	●	100	●	1	●
	(ii) Improved efficiency (turn around time for retail loans to 7 days and SME loans to 15 days).	7 days (retail) 15 days (SME)	92%	92	●	92	●	0.5	●
	Sustainable social lending frameworks for DFIs.	Q4 2012	60%	60	●	60	●	0.5	●
EPP #4	Expand merchant acceptance : Increase in the number of POS terminals by 15% (from 227,283 terminals as at end-Dec 2011)	34,092	17,784 (As at Dec 2012) FY 2012: 245,067 POS terminals	52.16	●	52	●	0.5	●
	All government payments to be made via electronic funds transfer.	100% (By Q2 2012)	98.7%	98.7	●	99	●	0.5	●
	Formulate tax incentive plan to promote the use of e-payments.	100% (By Q4 2012)	55%	55	●	55	●	0.5	●
	Expand ATM links to Vietnam and China	100% (By Q2 2012)	85% (Vietnam - 100%) (China - 70%)	85	●	85	●	0.5	●
	Increase volume of mobile banking transactions by 20% (from 2,154,752 transactions between Jan-Dec 2011)	2,585,702 (By Q4 2012)	7,148,989 As at end of December 2012	276.48	●	100	●	1	●

(more on next page)

(continued from previous page)

Financial Services NKEA		KPI (Quantitative)							
No.	KPI	Target (FY)	Sebenar (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #5	Increase insurance penetration for low-income households (i) Complete baseline study	Q2 2012	100%	100	●	100	●	1	●
	(ii) percentage increase	Q4 2012	100%	100	●	100	●	1	●
EPP #6	Develop private pension to supplement existing public pensions - SC to launch private pension framework.	Framework to be launched by March 2012	100%	100	●	100	●	1	●
EPP #7	Increase range of wealth management products available -Review definition and threshold of sophisticated investors.	1H 2012	100%	100	●	100	●	1	●
EPP #8	Expand GLICs' role in stimulating industry.	2H 2012	100%	100	●	100	●	1	●
	Carve a niche in Islamic asset management - SC to provide proposals and recommendations.	2H 2012	100%	100	●	100	●	1	●
EPP #10	Issuance of Shariah Parameters on Mudharabah, Musharakah and Ijarah.	Q4 2012	60% Parameters on Mudharabah issued in October 2012	60	●	60	●	0.5	●
	Amendment to Legal Professional Act to allow for greater flexibility for foreign legal firms to provide services in Malaysia.	Q2 2012	100% Royal assent was given on 5 September 2012	100	●	100	●	1	●
				111%		88%		79%	

Exhibit 3.1

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score#2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

ENTRY POINT PROJECTS

EPP 1

Revitalising Malaysia's Equity Markets

Through its key initiative of a Government-linked Investment Company (GLIC) divestment exercise, EPP 1 seeks to increase vibrancy and competitiveness in Bursa Malaysia and enhance its standing within ASEAN. A total of 33 companies under six GLICs have been identified as ready for divestment either through a listing, pare-down or outright sale.

EPP 1 targets a compounded annual growth rate (CAGR) of 15 per cent in Bursa Malaysia's market capitalisation to RM3.9 trillion by 2020 from RM1 trillion in 2010. In addition, this EPP aims to enhance market liquidity, measured by velocity, from 31 per cent to 60 per cent in line with regional averages.

Achievements and Challenges

Malaysia's equity market captured the spotlight in 2012 amid uncertainties in the global economy and markets. The attractiveness of the market also saw foreign investors emerge as net buyers on Bursa Malaysia as at the end of December 2012.

During the year, the divestment of GLICs continued to gather pace, culminating in the listing of some of the world's largest IPOs, namely FGVH and IHH.

The listings of FGVH and IHH raised RM9.9 billion and RM6.3 billion in capital respectively boosting Bursa Malaysia's market capitalisation by an additional RM39 billion. As at the end of 2012, the exchange's market capitalisation rose 14 per cent from the end of 2011.

Additionally, of the GLICs identified for divestment, four were hived off in 2012. These included the listing of FGV, Ekuiti Nasional Bhd's sale of its 24 per cent stake in Tanjung Offshore Bhd, the sale of a 97 per cent stake in Johan Ceramics Bhd by the Armed Forces Fund (*Lembaga Tabung Angkatan Tentera* or LTAT) and the paring down of the Employees Provident Fund's stake in RHB Capital Bhd.

Private sector listings, such as the re-listing of Astro Malaysia and the public float of IGB Real Estate Investment Trust (REIT), raised RM4.6 billion and RM838 million in capital respectively. These also helped to strengthen Malaysia's standing as one of the top IPO destinations globally.

On 18 September 2012, Bursa Malaysia became one of the first two exchanges to begin trading on the ASEAN Trading Link. The trading link connects the seven securities exchanges in ASEAN and offers investors easier access across the markets. It has since created a virtual market of over 2,200 listed companies and a total market capitalisation of US\$1.4 trillion. Bursa Malaysia expects the link to further facilitate the net inflow of funds from foreign investors.

In October, the Asia-Pacific Real Estate Association ranked Bursa Malaysia, with its 16 REITs worth US\$8 billion in market capitalisation, fourth in Asia for encouraging the development of REITs.

Other improvements in ranking during the year include Malaysia's corporate governance standing, which rose to fourth place from sixth out of 11 countries in Asia. Malaysia is also ranked fourth amongst 142 countries globally for investor protection.

While these achievements show that efforts to revitalise the country's equity markets have begun to bear fruit, various issues remain to be resolved. It is now critical to maintain the momentum of growing foreign investor participation. Additionally, Bursa Malaysia's low velocity and trading volume relative to its peers still requires further rejuvenation.

Moving Forward

In building up Bursa Malaysia as a vibrant, regional marketplace, future initiatives to improve the market's liquidity and scale will focus on niche growth areas and leverage on Malaysia's existing strong regulatory framework. The country's robust corporate governance practices will also be further strengthened.

As one of the catalysts of Malaysia's economy, Bursa Malaysia will continue to diversify its securities, Islamic and derivatives offerings, while ensuring market stability.



Felda Global Ventures Holdings Bhd IPO prospectus launch. Photo courtesy of BERNAMA Images

EPP 2 Deepening and Broadening Bond Markets

With total bonds outstanding of RM1.01 trillion as at end-December, Malaysia has among the most well-developed bond markets in Asia which provides providing an important alternative source of funds to complement bank financing and equity funding.

To further develop the depth, breadth and liquidity of the bond markets, EPP 2 targets a CAGR of 23 per cent in the average annual trading value of bonds and *sukuk* to RM618 billion in 2020 from RM64 billion in 2010. According to PEMANDU projections, Malaysia has already surpassed its 2020 target to increase total bonds and *sukuk* outstanding to around RM880 billion, from around RM758.6 billion in 2010.

Initiatives undertaken through EPP 2 include widening the bond market's credit spectrum and encouraging GLICs to increase diversification of their portfolios by investing in "A"-rated bonds. Measures have also been taken to attract niche investors with higher risk appetites to invest in lower-rated instruments.

Did you know?

Projek Lebuhraya Usahasama Bhd (PLUS) issued the world's largest *sukuk*, worth RM30.6 billion, in January 2012.

Other landmark *sukuk* sales during the year included Bahrain Mumtalakat Holding Company's offering of the first tranche of its RM3 billion *sukuk* programme.

The Development Bank of Kazakhstan chose to issue its country's first sovereign *sukuk* in Malaysia and raised RM240 million in its sale on 20 July 2012.

Achievements and Challenges

The launch of the SC's framework for retail bonds and *sukuk* in September 2012 marked a major milestone in spurring retail investment in bonds and *sukuk*, and is in line with initiatives under the SC's Capital Market Masterplan 2.

The framework enables the issuance of retail bonds and *sukuk* on Bursa Malaysia or over-the-counter (OTC) via appointed banks. During the year, the SC also approved Bursa Malaysia's relevant rules and listing requirements to facilitate the offering of retail bonds and *sukuk*.

During the introductory phase, retail investors will be allowed to invest in bonds and *sukuk* issued or guaranteed by the Malaysian Government. Retail investors' access to bonds and *sukuk* will then be expanded to include issuances by public-listed companies and banks licensed under the Banking and Financial Institutions Act 1989 or Islamic Banking Act 1983. This phased approach will provide retail investors time to gain the necessary understanding and familiarity with investing and trading in bonds and *sukuk*.

Moving Forward

Government-guaranteed issues are expected to play a significant role in the first phase of retail bonds and *sukuk* issuances, helping to expose and educate investors. This is projected to be followed by offerings from a wider range of issuers including corporate guaranteed companies, listed firms and Government-linked entities. On 2 January 2013, SC launched the revised "Guidelines on Private Debt Securities and *Sukuk*" to allow public-listed companies and banks to offer bonds and *sukuk* to retail investors.

As part of this first phase, Dana Infra Nasional Berhad announced its first retail *sukuk* on 8 January 2013 which will be the first infrastructure bond issuance to be opened to the public. Malaysia's first exchange traded bond and *sukuk* (ETBS) was listed on 8 February 2013.



Launch of a retail *sukuk* by Dana Infra Nasional Bhd on 8 January 2013. Photo courtesy of Star Publications (Malaysia) Bhd



Transforming Development Financial Institutions (DFIs)

DFIs such as EXIM Bank of Malaysia, SME Bank, Bank Pembangunan Malaysia, Bank Simpanan Nasional, Agrobank and Bank Rakyat were set up by the Government to develop priority areas including small- and medium-sized enterprises and infrastructure and agriculture, as well as to increase financial inclusion and achieve other developmental goals.

Following a review of the DFIs' activities, the Economic Council agreed in 2010 that the institutions will remain focused on their existing mandates, while efforts will also be taken to enhance their capacity and capability to ensure they perform their roles efficiently and effectively. Under EPP 3, PEMANDU expects DFIs to reduce the level of their non-performing loans to less than six per cent by 2020, and achieve a cost-to-income ratio of 40 per cent.

The transformation of the country's DFIs involves restructuring the institutions' towards higher productivity and sustainability. Measures under EPP 3 are undertaken through the cooperation of the MoF and other relevant ministries, and are coupled with initiatives under the Financial Sector Blueprint 2011-2020.

These measures include:

- Aligning the operations and mandates of DFIs with developmental needs
- Improving their operations and promoting self-sustainability by inculcating a performance-based culture
- Expanding their services to advisory or technical assistance; and Encouraging the DFIs to adopt an "Islamic finance first" approach

Achievements and Challenges

This EPP continued to record progress in 2012, with the DFIs improving their impaired financing ratio to 6.3 per cent as at December 2012, compared to 10.4 per cent in 2005. The improved ratio generally reflects the healthier growth of financing by DFIs supported by a robust risk management framework as well as the sound financial position of the borrowers. Additionally, the turnaround time for the majority of retail loans has decreased to seven days, and for all SME loans to less than 15 days.



Moving Forward

BNM's framework for sustainable social lending for DFIs is expected to be finalised in 2013. The framework is aimed at enhancing risk-sharing and accountability arrangements between the institutions and the Government, while strengthening the DFIs' long-term sustainability.

BNM is also undertaking efforts to develop a structured research and development and advisory framework for DFIs. This aims to support the institutions' business development, growth strategies, risk management and product development.

The provision of advisory services by DFIs will also be a key focus moving forward in order to strengthen their mandate of developing targeted sectors and segments of the economy, in line with Financial Sector Blueprint 2011-2020 initiatives.

EPP 4

Creating an Integrated Payment Ecosystem

With 91 per cent of payment transactions in Malaysia completed using cash, compared to 60 per cent in countries such as Hong Kong and the Netherlands, this EPP is aimed at accelerating the migration to e-payments, thus reducing the use of cash and cheques. Studies have also shown that e-payments cost up to 50 per cent less than paper-based payments. The measures are anchored by efforts to drive consumer, business and Government adoption of electronic payment systems, expand merchant acceptance of cashless payments and reduce the use of cheques.

The initiatives are undertaken through a strategy developed by BNM, in collaboration with relevant agencies and merchant acquirers, and include:

- Sourcing cheaper point-of-sale (POS) terminals
- Providing a competitive merchant discount rate through tiered pricing
- Attracting customer demand through loyalty programmes

By 2020, BNM is targeting 25 POS terminals per 1,000 inhabitants.

The Government is also considering gradually increasing the stamp duty on cheques to better reflect the actual cost of processing cheques. This is expected to discourage cheque usage and promote e-payments. The increase in Government revenue from higher stamp duties, meanwhile, will be channelled towards e-payment education campaigns and offsetting tax rebates for investment in POS terminals.

Efforts are also underway to eliminate the use of cheques in Government-related payments, while BNM and banks will begin educating customers on the cost of using cheques.

To facilitate greater integration and promote cross-border financial intermediation in the retail space, MEPS (Malaysian Electronic Payment System Sdn Bhd) will expand its strategic partnerships abroad. This will allow Malaysians to benefit from cheaper transactions in partner countries. Following the completion of ATM links to South Korea in December 2010, Automated Teller Machine (ATM) links to China and Vietnam are now also under development.

Achievements and Challenges

The initiatives under EPP 4 implemented in co-operation with various authorities and agencies have borne numerous results. As at the end of December 2012, the number of POS terminals used by merchants has increased by 52.1 per cent or by 17,784 terminals, which brings the total accumulative terminal numbers to 245,066 as at December 2012. Additionally, the volume of mobile banking transactions has increased by 277 per cent to 7.15 million at the end of December 2012 from 2011.

While the volume of transactions undertaken through e-payment channels has significantly increased, efforts to further increase the utilisation of e-payments, particularly by smaller merchants, as well as to further enhance user confidence in using e-payments will be pursued in line with the Financial Sector Blueprint 2011-2012.

Government efforts to increase the use of electronic funds transfers has resulted in 98.72 per cent of Government payments completed electronically as at 31 December 2012.

In June 2012, MyClear, a subsidiary of BNM, implemented a pilot programme for MyMobile, allowing users to transfer funds and perform balance enquiries, bill payment and prepaid top-up via their mobile phones. The service is already available to the public via CIMB Bank, Maybank and Public Bank.

Moving Forward

The Financial Sector Blueprint 2011-2020 has outlined various initiatives moving forward to accelerate the migration towards electronic-based payments. These include enhancing the e-payment infrastructure, driving the adoption of mobile phone banking, promoting a conducive pricing structure for payment services and enhancing awareness and user confidence in using e-payments.

On the Government's part, the Accountant General's Office (JANM) targets 100 per cent usage of e-payment methods for transactions such as cash advances, petty cash disbursement and deductions for loan repayments by 2013.

Financial security and the existence of a social safety net are important components of a developed nation's economy. However, the lack of disposable income amongst low-income earners to purchase insurance plans has resulted in a low penetration rate in Malaysia, at 2.8 per cent. In comparison, regional counterparts have higher rates such as 6.1 per cent in Singapore and 7.7 per cent in Japan.

Under EPP 5, the Government aims to enhance the population's financial security and social safety net, targeting a life insurance penetration rate of four per cent of GDP, with 75 per cent of the population insured by 2020.

In view of this, the 1Malaysia Micro Protection Plan (1MMPP) was launched in 2011. Jointly developed by the insurance and *takaful* industry with the support of BNM, the plan aims to enhance accessibility and affordability of insurance and *takaful* products for Malaysians. The scheme covers life insurance, family *takaful*, general insurance and general *takaful*, with monthly payments starting from under RM20. 1MMPP is distributed through banks and financial institutions in collaboration with insurers and *takaful* operators.

Achievements and Challenges

Following a BNM survey on insurance penetration and insurance purchasing habits within the Malaysian population, the central bank has constructed a measure for the insurance penetration rate for the country's low-income segments. The survey has also provided better insights to the general demand, awareness and access to insurance products as well as allow for a more targeted effort to identified areas that lack adequate access to financial services.

In tandem with efforts under the Government Transformation Programme, BNM and PEMANDU have taken steps through the Low-Income Households National Key Result Area to identify a suitable micro-insurance scheme for 1AZAM participants. The one-year scheme, which covers death and permanent disability, will benefit 100,000 low-income households or 500,000 poor people.

Moving Forward

In line with initiatives outlined in the Financial Sector Blueprint 2011-2020, BNM will undertake further efforts to expand the range of insurance and *takaful* products and services that will meet the financial needs of all citizens, including the underserved. This includes facilitating the development of affordable micro-insurance and micro-*takaful* products.



EPP 6

Accelerating the Growth of the Private Pension Industry

While Malaysia's pension system has thus far effectively been led by the Employees' Provident Fund (EPF), this EPP envisions the creation of a vibrant private pension industry offering Malaysians wider options for sustaining a comfortable lifestyle upon retirement. The development of a private pension industry is also in line with the World Bank's multi-pillar pension framework that is being increasingly adopted by other countries, which encompasses private savings and pension schemes.

The current mandatory pension system utilised in Malaysia faces several limitations, such as the exclusion of more than two million working adults, including the self-employed, from EPF coverage. Furthermore, it has been found that a majority of EPF contributors exhaust their savings within three to five years of retirement, while the average life expectancy rate has also increased.

EPP 6 is expected to boost the value of the private pension industry to RM30.9 billion in the next 10 years. Initiatives under EPP 6 are threefold and are aimed at:

- Developing the infrastructure required for the growth of the private pension industry
- Educating the public on the new pension system
- Incentivising the industry to promote its development

The measures that have been undertaken or are ongoing comprise:

- The development of private pension funds (PPFs) to supplement existing retirement schemes
- Allowing voluntary participation and offering the self-employed and those not covered by the EPF an alternative for retirement savings

Incentives have also been introduced to promote the growth and sustainability of the private pension industry, including tax exemption on private pension disbursements, additional tax relief for PPF contributions and tax deductibility of employer contributions to PPFs. Individuals are granted tax relief of up to RM3,000, while employers are provided tax deduction on contributions to private retirement schemes above the statutory rate and up to 19 per cent of employees' remuneration.



The launch of the Private Retirement Scheme. Photo courtesy of BERNAMA Images

Additionally, through a public-private sector effort involving the SC, BNM, industry bodies and training providers, a comprehensive, long-term financial education programme for the public will continue to create awareness and promote basic financial and retirement planning. Key activities include media campaigns, the creation of a retirement planning handbook and public training on basic retirement planning.

Achievements and Challenges

The launch of the Private Retirement Scheme (PRS), a voluntary retirement savings plan, marked a significant turning point in facilitating the growth of the private pension industry. The PRS was structured by private sector fund providers and licensed and approved by the SC.

To facilitate the introduction of PRS, Capital Markets and Services (Amendment) Act 2011 came into force in October 2011, which was followed by the Capital Markets and Services (Private Retirement Scheme Industry) Regulations 2012, which came into force on 19 March 2012. Thereafter "Guidelines on Private Retirement Schemes" were issued to set out regulatory and operational requirements for PRS Providers, PRS Scheme Trustees and investments of PRS Schemes.

Eight financial intermediaries were approved by the SC in April 2012 to offer PRS, namely AmlInvestment Management Sdn Bhd, American International Assurance Bhd, CIMB-Principal Asset Management Bhd, Hwang Investment Management Bhd, ING Funds Bhd, Manulife Unit Trust Bhd, Public Mutual Bhd and RHB Investment Management Sdn Bhd.

In July 2012, the Prime Minister launched the final component of the PRS framework, the Private Pension Administrator (PPA). The PPA represents a one-stop centre ensuring the efficient administration of the PRS industry. The SC also appointed the PPA's board members, led by Chairman Zaiton Mohd Hassan.

As at December 2012, RHB Investment Management Sdn Bhd, CIMB-Principal Asset Management Bhd, Manulife Asset Management Services Bhd, Public Mutual Bhd and Hwang Investment Management Bhd have launched a total of 26 PRS funds.

Moving Forward

The PRS industry is expected to gain traction amid strong take-up of the products by the public, with a larger number of funds offered, including Syariah-compliant PRS funds.

Spurring the Growth of the Nascent Wealth Management Industry

Despite 2011 estimates that almost 40,000 Malaysians are categorised as high net worth individuals (HNWIs), the local wealth management industry remains at a nascent stage. EPP 7 aims to create a conducive environment for industry growth.

To this end, the approach under EPP 7 covers:

- Increasing the range of wealth management products
- Attracting more wealth managers
- Creating a competitive edge for the local wealth management industry

Among efforts undertaken include a measured liberalisation of wealth management products to allow for a wider range of products, such as structured products.

The SC has also fully liberalised the Islamic fund management industry, and as at December 2012, the number of Islamic fund management companies in Malaysia stood at 18. The regulator has also issued five licenses for foreign conventional fund management companies to set up operations in Malaysia.

Achievements and Challenges

To widen the range of products available, SC has focused on developing the framework for business trusts. The Capital Markets and Services Amendment Act 2012 was passed in Parliament in the middle of 2012, followed by the unveiling of a facilitative tax regime for business trusts during the announcement of Budget 2013 in September. In line with this, stamp

duty and real property gains tax were waived for the initial transfer of assets, business and property to business trusts. On 2 January 2013, the SC released the "Business Trusts Guidelines" which allows for greater fundraising flexibility and provides investors with an opportunity to invest in a new asset class.

To further enhance investor protection, on 2 January 2013, the SC introduced "Guidelines on Sales Practices of Unlisted Capital Market Products" to promote responsible conduct in the development and sale of unlisted capital market products. The "Sales Practices Guidelines" will provide investors with access to quality advice and require Product Highlights Sheet to be given to investors at the point of sale. The Product Highlights Sheet will enable product comparisons and allow investors to obtain relevant information for more informed investment decisions. The sales practice regime has also been enhanced through streamlining the categories of "sophisticated investors" to limit the distribution of high risk and complex products.

Moving Forward

In the coming year, the SC is expected to propose the development of a mercantile exchange for the trading of gold futures and other precious metals.

The creation of a niche in Islamic wealth management has also been planned. However, this will require strengthening *Syariah* financial planning capabilities and increasing the number of *Syariah* financial planners. Wealth managers will also be encouraged to explore synergies with Islamic asset management firms to gain access to new products.

EPP 8

Accelerating and Sustaining a Significant Asset Management Industry

Malaysia aspires to become a vibrant, regional asset management hub catering to a diverse mix of local and foreign fund management firms. EPP 8 targets assets under management (AUM) of RM1.6 trillion by 2020, representing a CAGR of 17 per cent. This EPP will also encourage the growth of the retail market and develop a niche in the area of Islamic asset management.

To help achieve these ambitions, GLIC mandates to external fund managers will be increased to 15 per cent from five per cent of AUM. In order to attract external fund managers to these mandates, RM1 billion to RM2 billion will be allocated for management by top fund managers. These fund managers will be required to establish operations in Malaysia with at least six employees, including at least two portfolio managers. They must also match foreign capital on a one-for-one basis within their first three years here, with the possibility of receiving financial support in the form of subsidised rent or salaries.

Achievements and Challenges

As part of the seeding strategy to tap into GLIC funds and increase diversification of Islamic investment strategies, the SC conducted an industry dialogue with Islamic fund managers on 9 August 2012. The session was aimed at helping to develop a preliminary proposal for the seeding strategy. While the SC has engaged GLICs and fund managers, a comprehensive strategy will require efforts at the national level.

Moving Forward

Future plans will focus on carving a niche for Malaysia in Islamic asset management within the larger global Islamic funds industry that was valued at RM166 billion in AUM in 2009. While Malaysia has the largest number of Islamic funds in the world at 184, and the second-largest AUM of RM18.2 billion, the industry still lacks scale and receives limited foreign investment.

To address these concerns, GLIC mandates will be leveraged to attract leading fund managers to Malaysia. This is expected to create growing demand for wealth management services. In the long run, Malaysia is targeted to become a global Islamic asset management product innovation hub.

Steps will also be taken to stimulate the retail wealth management market. The Government is considering allowing EPF members with more than the maximum RM120,000 basic savings amount in Account 1, regardless of age, to invest up to 50 per cent of the excess in unit trusts and exchange traded funds.

EPP 9

Nurturing Regional Banking Champions

This EPP will catalyse the expansion of the regional and international footprint of qualified Malaysian banks, with Malaysian banks targeted to be among the top three in ASEAN in terms of market capitalisation by 2020.

Initiatives under this EPP are largely market-led and hinge upon the specific banks' needs and resources and the approval of BNM. However, EPP 9 targets to spur foreign expansion of qualified banks by supporting a meaningful presence in priority regional and international markets.

Malaysian banks are also encouraged to grow beyond ASEAN and explore opportunities across Asia such as in Greater China or South Asia. These are markets experiencing strong growth in demand for financial services and have received a significant proportion of Malaysia's outward foreign direct investment (FDI). While expansion into these markets requires significant capital commitments, banks and GLICs will be encouraged to acquire banking assets in those countries when the opportunity arises.

Achievements and Challenges

This EPP's stakeholders recorded a significant number of achievements in 2012, including BNM's Memorandum of Understanding with the Central Bank of Turkey. The agreement aims to enhance co-operation, promote bilateral investment and liquidity arrangements and to strengthen bilateral trade and investment.

ASEAN central banks have also made major headway in support of economic integration through the ASEAN Economic Community (AEC). The central banks endorsed a high-level framework to advance regional financial integration, reinforcing cross-border coordination and cooperation to support a more dynamic role for ASEAN banks within the region.

Of particular significance has been the systematic expansion of Malaysia's banks abroad, and beyond ASEAN. In 2012, CIMB acquired the cash equities and associated investment banking businesses of The Royal Bank of Scotland (RBS). The purchase provides CIMB access to new markets such as Taiwan and Australia, and enlarged its operations in Hong Kong, India and China. CIMB also signed an agreement with the Philippines's San Miguel Corp to acquire almost 60 per cent of its stake in Bank of Commerce.

Maybank, meanwhile, has set up a physical presence in all 10 ASEAN member countries, following its entry into Laos in November 2012. The bank also received a local incorporation license from Cambodia's central bank and in October 2012, launched its third branch in China with a presence in Beijing.

Did you know?

CIMB is now the fifth largest banking group, in terms of assets in Southeast Asia.

Maybank is present in all 10 ASEAN countries.

While Malaysian banks have achieved significant strides in their expansion abroad, international regulatory reforms in the financial sector as well as the global economic environment will continue to present key challenges to Malaysian banks in expanding their presence and activities abroad.

Moving Forward

The prospects for the further expansion of Malaysian banks abroad remain promising. Maybank has expressed interest to enter Thailand and CIMB is keen on establishing operations in South Korea. Bank Islam is also keeping an eye on opportunities in Indonesia.

The Government also continues to participate in negotiations for the Trans-Pacific Partnership Agreement, which covers areas including financial services. A Malaysia-EU free trade agreement is also in the works, with negotiations set to continue in 2013.

Becoming the Indisputable Global Hub for Islamic Finance

Over the past two decades, the Government and BNM's efforts to nurture the domestic Islamic finance industry have resulted in the country's emergence as a hub for Islamic finance. With *sukuk* issuances in the local market accounting for over 60 per cent of total global *sukuk* issuances, the Malaysian Islamic bond market remains the world's largest. To cement Malaysia's position as a global leader in the industry, this EPP will help lay the groundwork for the local market to grow into an international intellectual and capital centre for Islamic finance.

Under EPP 10, the Government targets to increase Islamic financing's share of total financing to 40 per cent in 2020, from 29 per cent in 2010. The Government has also targeted for at least one local Islamic financial institution to be among the top 10 Islamic financial institutions in the world in terms of assets by 2020.

The initiatives under this EPP leverage Malaysia's existing advantage in the Islamic finance industry, and comprise:

- **Codifying and Standardising *Syariah* Guidelines:** BNM will accelerate the issuance of *Syariah* parameters for developing Islamic financial products and services. This process is aimed at ensuring consistent interpretation of *Syariah* contracts in Malaysia, facilitating the formulation of policies and guidelines, promoting innovation and enabling faster time-to-market for new products
- **Becoming a Centre of Excellence for Islamic Finance Research, Development and Education:** Following the establishment of human capital development institutions in Malaysia, including the International Centre for Education in Islamic Finance (INCEIF), International Shari'ah Research Academy for Islamic Finance (ISRA) and the Asian Institute of Finance, investments will continue in Islamic finance research and education. Priority areas include:
 - **Legal:** Evaluate the potential of transforming the KL Regional Centre for Arbitration into a global arbitration centre with a specific focus on Islamic finance, or create a dedicated global Islamic finance arbitration centre and ensure an accommodative legal framework for innovation.
 - **Human Capital:** The Islamic Banking and Finance Institute Malaysia will develop training programmes to prepare the workforce in the industry, while INCEIF and ISRA will expand its scholarship and research grants programme to attract international students and industry experts. The Ministry of Education will increase the capacity and quality of Islamic finance higher education institutions with a focus on drawing foreign students.
 - **Research Development and Innovation:** ISRA will spearhead innovation in Islamic finance and Islamic financial institutions will be encouraged to increase their R&D budgets. To recognise innovation in Islamic finance, Malaysia International Islamic Financial Centre (MIFC) will highlight awards programmes hosted in Kuala Lumpur.

Achievements and Challenges

International news and data provider Bloomberg launched its local currency *sukuk* index in September 2012 developed with the Association of Islamic Banking Institutions Malaysia (AIBIM) and Bursa Malaysia. The index benchmarks ringgit-denominated *sukuk* in Malaysia.

Meanwhile, in October 2012, BNM issued *Syariah* parameters for contracts based on the *Mudharabah* structure.

For greater flexibility for foreign legal firms to provide services in Malaysia, the amendment to Legal Professional Act 1976 has been tabled to the Parliament on 18 April 2012. The Bill for the Legal Profession (Amendment) Act 2012 was passed on 13 June 2012, and the Amendment Act was gazetted on 20 September 2012. However, the Minister has not (by notification in the Gazette) appointed the date on which the Amendment Act is to come into operation yet (which is expected to be in effect no later than the first half of 2013).

Moving Forward

In the coming year, BNM will issue more *Syariah* parameters as guidance and reference for Islamic financial institutions, with standards for *Musharakah* and *Ijarah* currently under development.

A new legal framework for Islamic banking and *takaful* known as the Islamic Financial Services Bill (IFSB) has been passed by the Parliament in December 2012 and is expected to be implemented in 2013. The new Act will provide greater clarity on the legal and prudential requirements underpinned by *Syariah* principles on the Islamic finance industry in Malaysia.

BUSINESS OPPORTUNITIES

Business Opportunity 1:

Investment Banking

Investment banking is anticipated to maintain strong growth of 15 per cent per annum throughout 2010-2015, before moderating to 10 per cent in 2016-2020. This rapid growth has given rise to business opportunities including:

- Increase in IPOs through a push for innovation under the Tenth Malaysia Plan
- Integration of capital markets (e.g. taking advantage of Qualified Domestic Institutional Investor status with China and mutual recognition agreements with Hong Kong and Dubai)
- Increase in merger and acquisition activities due to expected consolidation in key sectors

Business Opportunity 2:

Other Segments including DFIs

Other segments of the financial services sector include DFIs, private equity and venture capital firms. The Tenth Malaysia Plan has highlighted the following areas of potential growth:

- Investment activities from 1Malaysia Development Bhd's RM100 million business development plan
- Opportunities in private equity and venture capital for innovation and green financing, with an emphasis on renewable energy projects, especially biofuels
- Private equity and venture capital firms to move up the value chain as a result of a more vibrant capital market
- Move from informal to formal money-lending and remittance businesses
- Shift in focus to more productive and higher value-added activities by financial institutions as a result of back-office centralisation

Business Opportunity 3:

Commercial Banking

The commercial banking segment is projected to maintain an annual growth rate of seven per cent over the next 10 years. The expansion is expected to be contributed by the following business opportunities:

- Innovation in the delivery of financial services, such as through new business models designed to tap underserved segments and the adoption of new branch formats such as branchless banking
- Higher financial inclusion via the national financial literacy programme
- Potential for commercial banks to support the growth of SMEs, which are crucial towards achieving growth and innovation
- Rapidly growing personal finance segment

Business Opportunity 4:

Insurance and *Takaful*

Industry growth, forecasted at six per cent for conventional insurance and reinsurance and 20 per cent for *takaful* and *retakaful* in 2010-2014, will be contributed by baseline growth and business opportunities including:

- Greater insurance take-up from the Government's efforts to educate the public on financial planning and the importance of protection
- Expected consolidation and rationalisation of the industry will strengthen insurers and *takaful* providers and their platform for growth
- Growing viability of micro-insurance as a result of more efficient distribution models

Business Opportunity 5: Asset and Wealth Management

The asset and wealth management industries are expected to achieve an average growth of eight per cent in 2010-2020. Apart from baseline growth, the following business opportunities are also expected to contribute to the industries' expansion:

- The establishment of a RM500 million fund to finance innovative start-ups
- The creation of a Mudharabah Innovation Fund under the Tenth Malaysian Plan
- Outsourcing opportunities arising from the RM20 billion public-private partnership fund developed in support of the Tenth Malaysian Plan
- Greater demand for asset and wealth management services due to growing Malaysian wealth
- Higher demand for unit trusts, mutual funds and wealth management services from foreign workers and Malaysians returning from abroad
- Increasing awareness and critical mass for retail aggregators such as FundSupermart, which can negotiate lower fees for unit trusts

Business Opportunity 6: Islamic Banking

Growth in the Islamic banking industry is expected to be supported by the following business opportunities:

- Islamic pawnbroking (*ar-rahnu*)
- Migration of money-lending businesses to conventional and Islamic banking following proposed amendments to rules on money-lending

Summary of Financial Services NKEA

	2020 Target
Incremental GNI impact	RM121.5 billion
Additional Jobs	275,400
Critical targets for 2013:	
<ul style="list-style-type: none"> • To increase number of products and offerings in securities and derivatives markets by five new issuances • To complete framework on a trading venue for unlisted firms • To achieve Average Daily Value (ADV) traded of RM1.7 billion • To achieve Value of new listings (Including GLC listings) of RM15 billion • To achieve Value of issuance on the Exchange Traded Bonds and <i>Sukuk</i> (ETBS) of RM300 million • To issue a sustainable social lending framework for DFIs • To issue guidelines to increase DFI resource capacity and capability in advisory/R&D • All Government payments to be made via electronic funds transfer • To provide proposal and recommendation on the development of a Mercantile Exchange • To issue <i>Shariah</i> Parameters on <i>Musharakah</i> and <i>Ijarah</i> 	

Enabling Change

AGRICULTURE

ON THE GROUND WITH THE CIVIL SERVICE

For En Ibrahim Saleh, a veteran of the civil service, the experience of implementing the ETP through the Agriculture NKEA has been fulfilling yet challenging, with its share of ups and downs encountered along the way.

"Every Ministry has a focal point for the NKEA projects. Within the Ministry of Agriculture (MoA), there are many players and owners of the 16 EPPs, which cover all agencies and most of the departments under the Ministry. These agencies and departments require co-ordination from the Ministry to operationalise the projects," says En Ibrahim, who is Head of the Agriculture NKEA Secretariat.

A retired civil servant who has returned to serve at the MoA for the ETP, En Ibrahim notes that he receives personal satisfaction in seeing anchor companies which have signed on to implement EPPs commence production, such as in the area of fisheries or dairy production. It is then even more fulfilling when anchor companies are able to lead the projects and take small farmers under their wing.

En Ibrahim Saleh,
Head of the Agriculture
NKEA Secretariat

"Initially, the process may be challenging, but the implementation concept is very good, and allows benefits to transcend big companies and reach the smaller farmers," he adds.

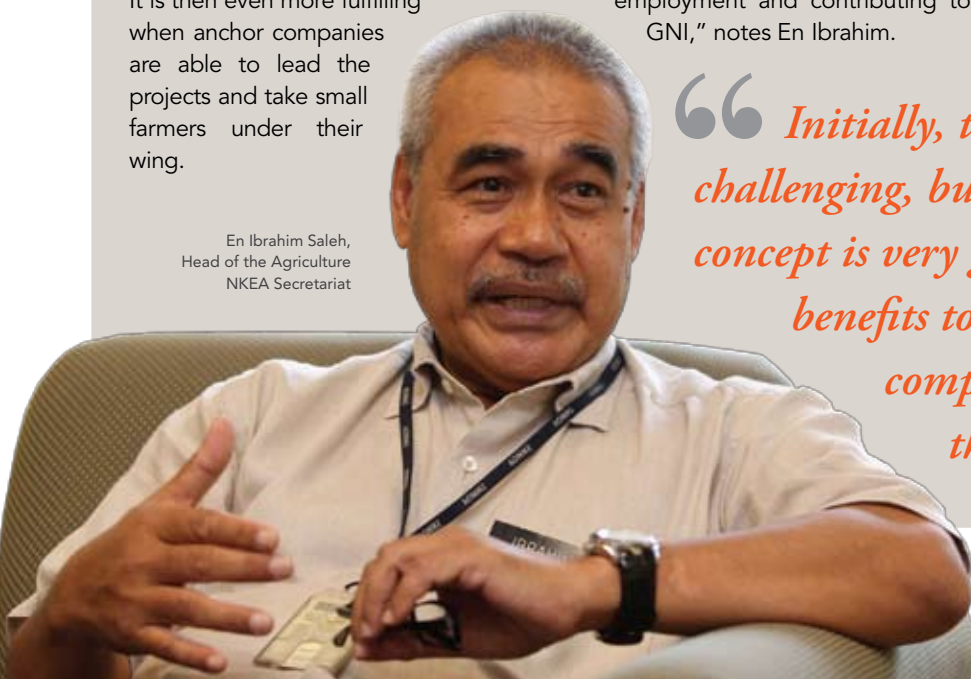
The work of En Ibrahim and his team has also included preparing a standard template for anchor companies' applications to participate in EPPs; and then evaluating those applications through a panel involving parties such as PEMANDU, banks, and the Economic Planning Unit. The team also participates in monthly meetings with the Delivery Management Office, tracking the progress of EPPs, problem-solving, and tackling issues that may arise in implementing the projects.

"One important function of the team is to assess the technical capability of prospective anchor companies. While most possess the financial capability, they may lack the technical expertise required to implement projects, which will hinder their sustainability in creating employment and contributing to GNI," notes En Ibrahim.

Certainly, challenges do exist in overseeing the EPPs, including the amount of monitoring required, ensuring anchor companies deliver, and managing funds in the most efficient way. In the area of funding, he suggests allocations be locked in until 2020, instead of providing financing as and when necessary, as is the practice now. This is to ensure that the funds are available once participating companies have been approved, and to avoid delay in rolling out projects.

Nonetheless, En Ibrahim sees the ETP's NKEAs and SRIs as a key component in the country's march towards high-income status. "NKEAs should be viewed as part and parcel of Ministries from now on, with the accompanying EPPs and initiatives performing a crucial role in the Government's overall economic development agenda," he says.

“Initially, the process may be challenging, but the implementation concept is very good, and allows benefits to transcend big companies and reach the smaller farmers”



COMPETITION, STANDARDS AND LIBERALISATION

ON THE GROUND WITH THE CIVIL SERVICE

The Competition, Standards and Liberalisation SRI represents a prime example of bringing together various stakeholders towards one goal: The creation of an efficient and competitive business environment in support of Malaysia's high-income aspirations.

Established in 2011, the Malaysia Competition Commission (MyCC) plays a key role in enhancing the competitive nature of Malaysian businesses. "The MyCC's role is to ensure the swift and resolute implementation of the Competition Act 2010," says Ms Shila Dorai Raj, CEO of the MyCC, crediting the speedy establishment of the MyCC to the efforts of the Ministry of Domestic Trade, Consumerism and Cooperatives.

The challenge for the SRI now, says Ms Shila, lies in ensuring that industry and the public are quickly brought up to speed on competition law and its provisions. "The public has very high expectations that the competition law will be brought to bear quickly and the MyCC will, of course, thus need to move expeditiously to educate on the implications of the Act as well as take appropriate action," she notes.

The Department of Standards Malaysia (STANDARDS MALAYSIA), an agency under the Ministry of Science, Technology and Innovation, meanwhile, spearheads the standards component under the SRI.

"Our role under the ETP is to encourage local companies to utilise standards towards enhancing the quality of products and service in order to make them more competitive domestically, and also to be able to market themselves abroad. As an export-oriented economy, Malaysia needs to develop and adopt standards that meet international requirements for its products and services," says Pn Fadilah Baharin, Director General of STANDARDS MALAYSIA.

For STANDARDS MALAYSIA, this entails evaluating the development and adoption of international standards for the ETP's 12 NKEAs, in addition to focusing on promoting standards usage and assessing the relevance of existing standards.

"What we see as our critical success factor moving forward will be to encourage the usage of standards and to have companies,

especially SMEs, understand that standards usage creates a larger market for them to sell their products and services," says Pn Fadilah.

The measures undertaken by the MyCC and STANDARDS MALAYSIA, together with services sector liberalisation led by the Ministry of International Trade and Industry (MITI), hence form enablers in making Malaysia the preferred foreign investment destination and a globally competitive nation.

"MITI as the lead agency, is responsible for coordinating the services liberalisation process, monitoring the progress of the liberalisation initiatives and promoting these market-opening initiatives," says YBhg Datuk Dr Rebecca Sta Maria, Secretary-General of MITI.

With the building blocks in terms of liberalising important services sub-sectors now in place, thus spearheading further economic growth, the ensuing challenge will be to ensure that progress is made in terms of investment and job creation, facilitating the achievement of high-income nation status by 2020, says Datuk Dr Rebecca.



“*The MyCC's role is to ensure the swift and resolute implementation of the Competition Act 2010*”

Ms Shila Dorai Raj,
Chief Executive Officer, MyCC



Wholesale and Retail





Dato' Sri Ismail Sabri Yaakob

Minister of Domestic Trade,
Co-operatives and Consumerism

The Wholesale and Retail NKEA aims to transform one of the key sectors of the economy, one that has far-ranging impact on all segments of society. From the neighbourhood mom-and-pop shops to the giant shopping malls in the big city, retail touches everyone – and each improvement to the sector has the potential to bring exponential improvements to the lives of the consuming public.

Reflecting the wide spectrum of retail offerings, this NKEA outlines initiatives that run the gamut. These range from establishing 1Malaysia malls in other countries, to providing soft loans to sundry shop owners to help modernise their premises – with many more Entry Point Projects (EPP) in between.

The results in 2012 have been encouraging. This year alone, the Ministry has successfully transformed 568 sundry shops, bringing the number of small stores helped by the TUKAR programme to 1,087 since the ETP began. We have also more than doubled our 2012 target of modernising 50 automotive workshops, with 110 workshops transformed this year alone.

We have similarly done well in the EPP to increase the number of large format stores, having met and exceeded last year's target of setting up five more hypermarkets and 13 additional superstores. As of December, an additional 19 hypermarkets and 18 superstores, on top of the original target, have begun operations. The roll-out of the Duty-Free EPP has been without fault, and Malaysia is well on its way to becoming a first tier reseller of preferred goods.

It is clear that considerable progress has been made, however, much more needs to be done to maintain the momentum. We cannot become complacent. Moving forward, we remain committed to meeting the ever more ambitious targets of this NKEA as the nation continues its stride towards high-income status.



WHOLESALE AND RETAIL

By 2020, Malaysia's wholesale and retail sector is expected to boost the country's total Gross National Income (GNI) by RM156 billion, creating 454,190 new jobs. Retail is the fourth biggest contributor to GNI among the 12 National Key Economic Areas (NKEAs), contributing RM100.6 billion in 2010 and RM114.4 billion in 2011.

Over 60 per cent of Gross Domestic Product (GDP) is contributed by domestic consumption, therefore the wholesale and retail sector plays a crucial role in driving Malaysia's growth over the next decade towards our 2020 GNI target despite the ongoing global economic slowdown.

Where the NKEA began with 13 EPPs, EPP 3, Developing *Pasar Komuniti*, has since been transferred to the Agriculture NKEA for smoother execution due to the involvement of agriculture-based stakeholders. Hence, there are now revised targets for GNI and jobs within the sector.

Private sector implementation of EPPs under this NKEA, with support from the Government, will cluster around three different themes, namely Modernise, Globalise and Revolutionise.

The EPPs under the Modernise theme address process and systems gaps in traditional retail outlets. The aim is to help small retailers transition to modern format stores, improve the skills of retailers in information technology, customer services and stock management, among others.

Globalise EPPs involve exporting and products to help the maturing local retail sector seek opportunities abroad. There are two approaches supported by the NKEA to achieve this: firstly, by assisting Malaysian mall operators and developers, who are among the best in the region, to explore opportunities beyond Malaysia. Secondly, by developing virtual platforms that allow global exposure of home grown products produced by small-and medium-sized enterprises.

Under the Revolutionise EPP, the NKEA seeks to tap into concepts and strategies not yet fully harnessed by the Malaysian retail sector. This includes the successful removal of import duties on luxury goods to make shopping more affordable for locals and tourists alike.

The NKEA will also continue to hold the annual 1Malaysia Unified Sale, which began last year, in order to bring together various retail and service-oriented sectors for the benefit of consumers and to increase domestic spending. This measure will also be expanded to include sales for the services sector, tourist attractions and other sub-sectors, and go beyond sales at shopping malls.

Three key areas have been identified in tandem with the development of the sector's 12 EPPs, aimed at ensuring continued growth of the wholesale and retail sector as a bulwark against volatile external headwinds. These areas comprise:

- Higher retail expenditure
- Urbanisation
- Population growth

2012 Key Performance Indicators

Wholesale and Retail NKEA		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Number of new hypermarkets	5	19	380	●	100	●	1.0	●
	Number of new superstores	13	18	138	●	100	●	1.0	●
EPP #2	Number of establishments modernized under the TUKAR program	500	568	114	●	100	●	1.0	●
EPP #4	Number of workshops modernized under the ATOM programme	50	110	220	●	100	●	1.0	●
EPP #5	Operational Makan Bazaar site	1	1	100	●	100	●	1.0	●
EPP #7	Virtual Mall operational by 2012	100%	100%	110	●	100	●	1.0	●
EPP #9	Percentage increase of Cost, Insurance and Freight (CIF) for 328 selected imported finised products (translated to RM billion)	2.48	3.69	149	●	100	●	1.0	●
EPP #11	Number of program/event launched – scheduled on 1st week of June 2012	1	1	100	●	100	●	1.0	●
	Number of sub-sectors involve in 1Malaysia Unified Sale	50	52	104	●	100	●	1.0	●
				156%		100%		1.0%	

Exhibit 4.1

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score#2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

ENTRY POINT PROJECTS

EPP 1 Increasing the Number of Large Format Stores

Large format stores are able to leverage their size for economies of scale, guaranteeing low prices for consumers while providing a one-stop solution for all their retail needs. With the increasing rate of urbanisation and greater consumer price sensitivity, such stores run by local and foreign players are necessary to provide better quality and wider choice at lower cost. This will ultimately allow shoppers to get the best value for their money.

In order to boost available floor space by 50 per cent from the current base of 1.4 million square metres, EPP 1 will see the establishment of 61 hyperstores (5,000 squares metres or more) and 163 superstores (3,000 to 4,999 square metres) within the next 10 years.

Working hand-in-hand with the Ministry of Domestic Trade, Cooperatives and Consumerism, this EPP will be led by leading foreign players like Tesco, Giant and Carrefour as well as home-grown champions Mydin, Tunas Manja, Econsave and TF Value Mart.

Achievements and Challenges

Last year's target of having five more hypermarkets (5,000 square metres or more each) and 13 additional superstores (3,000 to 4,999 square metres) up and running by 2012 has been met and exceeded. As of December 2012, an additional 19 hypermarkets and 18 superstores – on top of the previous target – have begun operations.

Given that this far exceeds the original target in 2012, we are confident that this EPP is well on course to meet the 2020 target.

Moving Forward

The establishment of large format stores is expected to continue apace as domestic consumption becomes an increasingly more important part of the economy. Moving forward we are looking at the possibility of further expansion into East Malaysia under this EPP.

Hypermarkets		
No.	Operator	Site
1	Carrefour	Seberang Prai Tengah, Penang
2	Giant	Sibu, Sarawak
3	Giant	Tabuan Jaya, Kuching, Sarawak
4	Giant	Kota Padawan, Kuching, Sarawak
5	Giant	Cheras, Selangor
6	Giant	Miri, Sarawak
7	Giant	Jalan Kebun, Klang, Selangor
8	Mydin	Manjoi, Ipoh, Perak
9	Mydin	Meru Raya, Ipoh, Perak
10	Mydin	Taman Saga, Alor Star, Kedah
11	Mydin	Bukit Jambul, Bayan Lepas, Penang
12	Tesco	Putra Nilai, Negeri Sembilan

(more on next page)

(continued from previous page)

Hypermarkets		
No.	Operator	Site
13	Tesco	Kulim, Kedah
14	Tesco	Scott Garden, Kuala Lumpur
15	Tesco	Tanjung Penang, Penang
16	Tesco	Stargate, Alor Star, Kedah
17	Tesco	Seremban Jaya, Negeri Sembilan
18	Tesco	Paradigm Mall, Kelana Jaya, Selangor
19	The Store	Pacific Mentakab, Pahang Darul Makmur

Superstores		
No.	Operator	Site
1	Carrefour	1st Avenue, Georgetown, Penang
2	Econsave	Batang Kali, Selangor
3	Econsave	Kluang, Johor
4	Giant	Viva Home, Jalan Loke Yew, Kuala Lumpur
5	Giant	Pandan Kapital, Kuala Lumpur
6	Giant	First Subang, Subang Jaya, Selangor
7	Giant	Farlim, Ayer Itam, Penang
8	Giant	Bercham, Ipoh, Perak
9	Mydin	Kulai Utama, Kulai, Johor
10	Mydin	Seremban 2, Negeri Sembilan
11	Mydin	Anjung, Nusajaya, Johor
12	Tesco	KSL City, Johor Bahru, Johor
13	Tesco	Bukit Beruntung, Selangor
14	Tesco	Seri Iskandar, Perak
15	TF Value-Mart	PD Waterfront, Port Dickson, Negeri Sembilan
16	Tunas Manja	Temerloh, Pahang Darul Makmur
17	Tunas Manja	Kuala Rompin, Pahang Darul Makmur
18	Tunas Manja	Jerantut, Pahang Darul Makmur

Modernising via the Small Retailer Transformation Programme (TUKAR)

Mindful of the role traditional sundry stores have to play in complementing the large format stores' retail offering, the Small Retailer Transformation Programme (TUKAR) was introduced to help smaller players keep a keen competitive edge. This EPP aims to address the need for mom-and-pop shops to evolve in order to keep up with rapidly changing consumer tastes and maintain their appeal to shoppers.

Major retailers like Mydin, Tesco and Carrefour have agreed to impart their valuable retail expertise and knowledge on participating sundry shops. These include providing advice on redesigning and modernising store layouts, preparing planograms for optimum product placement and participating in hand-holding development and other projects deemed necessary.

In addition, Bank Kerjasama Rakyat Malaysia Bhd will screen and disburse soft loans to fund store transformation to owners who take part in the TUKAR programme. Participants can apply for a loan of up to RM80,000. The loan is to be repaid at three per cent interest rate on reducing balance over a maximum of 15 years.

Distribution centres, which will help in reducing cost of goods sold and enhance efficiency, will also be set up to support TUKAR stores once a sufficient number of retailers have signed on to participate.

Achievements and Challenges

Up to 568 TUKAR stores have been established in 2012 alone. This brings the total of sundry shops that have been transformed under this EPP to 1,087. On average, TUKAR participants have also reported a sustained 30 per cent increase in revenue post-transformation.



Shopkeeper arranging products in his transformed store



TUKAR store owner sharing the transformation of his store

The TUKAR programme is still faced with the challenge of ensuring equitable participation of all races in Malaysia. Following a shift in strategy to encourage greater take-up of TUKAR, three more cooperatives have been chosen to help assist in increasing participation of various races in the programme. The six current cooperatives that are supporting the programme are:

1. Koperasi Jaringan Sepadu Malaysia Berhad (to reach out to the Malay community)
2. Koperasi Jayadiri Malaysia Berhad (to reach out to the ethnic Chinese community)
3. Koperasi Suria Malaysia Berhad (to reach out to the ethnic Indian community)
4. Koperasi Automobil Kuching Sarawak Berhad (to reach out to the indigenous Sarawak communities)
5. Koperasi Pembangunan Usahasama Masyarakat Maju Sabah Berhad (to reach out to the indigenous Sabah communities)
6. Koperasi Peralihan Cina Malaysia (to reach out to the Chinese community)

The result of the approach has been encouraging; the co-operatives had contributed to 20 per cent of the overall achievement of 568 transformed stores despite some of them only initiating this programme middle of the year. The co-operatives are also better able to monitor the progress of the store owners and render immediate assistance. This is to ensure that transformed stores do not revert to old practices, which is a major concern.

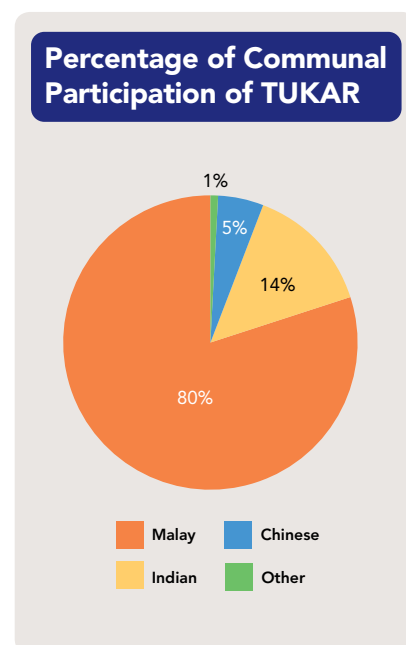
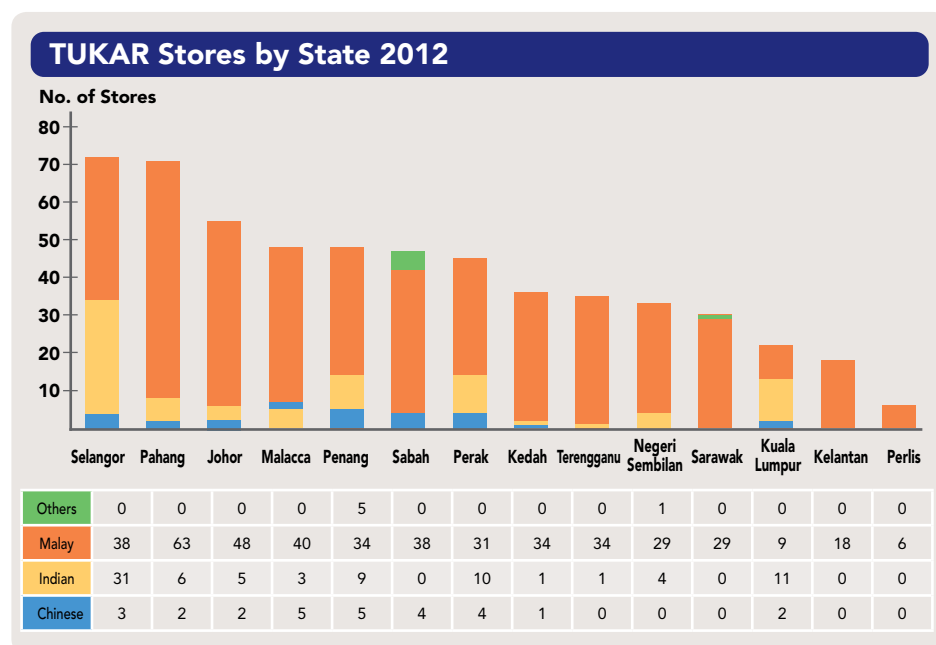


Exhibit 4.2: A snapshot of TUKAR participants in Malaysia

Completed								
This Week's Progress Update (10 – 14 December 2012)	Cumulative Update (June 2012 – 14 December 2012)				2011 – 14 December 2012			
8	568				1,087			
Breakdown by Race # Breakdown By Race %	Malay 453 80%	Chinese 28 5%	Indian 81 14%	Others 6 1%				
Breakdown by Sponsor # Breakdown Target by Sponsor # Breakdown Performance by Sponsor %	MYDIN 40 100 40%	TESCO 88 100 88%	CAREFOUR 86 150 57%	SKM 168 140 120%	AEON 6 10 60%	GIANT 13 100 13%	VPUTO 13 30 43%	XPOINT 59 60 98%
Breakdown by Sponsor # *(Actual completed) Breakdown Target by Sponsor # Breakdown Performance by Sponsor %	TRIPLES 29 100 29%	DPMM 2 5 40%	KOSURIAS 26 65 40% *(54)	KPUMMS 14 20 70%	KOKAS 20 20 100%	KOJADI 4 33 12%	KOJARIS 0 81 0% *(22)	KPUCB 0 33 0%

Exhibit 4.3: An example of the weekly dashboard to monitor the number of stores transformed

Moving Forward

The increase in the number of TUKAR stores will help lower prices for customers by making the retail supply chain more efficient. This is because participating retailers will typically buy larger product volumes after streamlining offerings as part of the transformation process. More stores have agreed to join the programme, ensuring that more consumers will soon be able to enjoy better savings.

Moving forward, the EPP will focus on meeting the overall target of 5,000 TUKAR stores, ensuring that the stores maintain their performance and compliance to best practices and increasing supply chain efficiency; as strong demand for the stores is seen to lead to greater value for customers.

EPP 3 Developing Pasar Komuniti

As of 2012, this EPP has been transferred to the Agriculture NKEA for smoother execution as a majority of the stakeholders are involved in agriculture-based industries.

EPP 4 Transforming Automotive Workshops

The Automotive Workshop Modernisation (ATOM) project began in 2011 with an eye to modernising and enhancing service standards of grassroots automobile workshops, a relatively informal sector not subject to much regulation or benchmarking. Greater workplace efficiency and new income streams from value-added offerings will not only help owners increase revenue but also benefit customers, who will enjoy better quality service.

Seven consultants – the Automobile Association of Malaysia (AAM), Automotive After-Sales Industry Malaysia (AAIM), Malaysian Association of Tyre Retreaders and Dealers Societies (MATRDS), Persatuan Pengusaha Industri-Industri Bengkel Malaysia (PPIBM), HYL Marketing Sdn Bhd, ITE Industrial Tools and Equipment Sdn Bhd and PNT Marketing – were tapped by the Ministry of Domestic Trade, Co-operatives and Consumerism to assist.

The consultants provided their expertise in redesigning workshop layouts, planning renovation and upgrading, purchasing machinery and equipment and outlining standard operating procedures to participating workshops. They also participated in hand-holding and training on entrepreneurship, automotive skills and inventory management.

ATOM is funded via soft loans offered to workshop owners courtesy of Bank Kerjasama Rakyat Malaysia Bhd, which also screens prospective applications. Participants can apply for a maximum 15-year loan of up to RM100,000 for car workshops and RM50,000 for motorcycle workshops. The loans are repaid with three per cent interest rate on the remaining balance.

Following strong demand and to ensure that participants receive sufficient funding for required tools and equipment, the EPP is also exploring the possibility of doubling the maximum loan amount for motorcycle workshops to RM100,000.

Achievements and Challenges

The initial target of modernising 50 automotive workshops in 2012 has been exceeded by more than double the amount, with 110 workshops transformed during the year. This brings the total number of workshops upgraded under ATOM to 165 since the programme began.

Given the success of the co-operatives in TUKAR, the same cooperatives were also charged with ensuring better participation of communal communities in the ATOM Programme. The six co-operatives that are supporting the programme are:

1. Koperasi Jaringan Sepadu Malaysia Berhad (to reach out to the ethnic Malay community)
2. Koperasi Jayadiri Malaysia Berhad (to reach out to the ethnic Chinese community)
3. Koperasi Suria Malaysia Berhad (to reach out to the ethnic Indian community)
4. Koperasi Automobil Kuching Sarawak Berhad (to reach out to the indigenous Sarawak communities)
5. Koperasi Pembangunan Usahasama Masyarakat Maju Sabah Berhad (to reach out to the indigenous Sabah communities)
6. Koperasi Peralihan Cina Malaysia (to reach out to the Chinese community)

The co-operatives currently account for about 10 per cent of the total 110 workshops transformed.



The ATOM logo prominently displayed at a transformed workshop

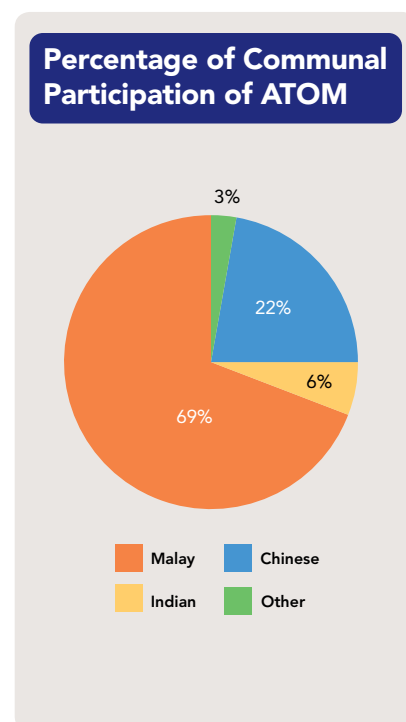
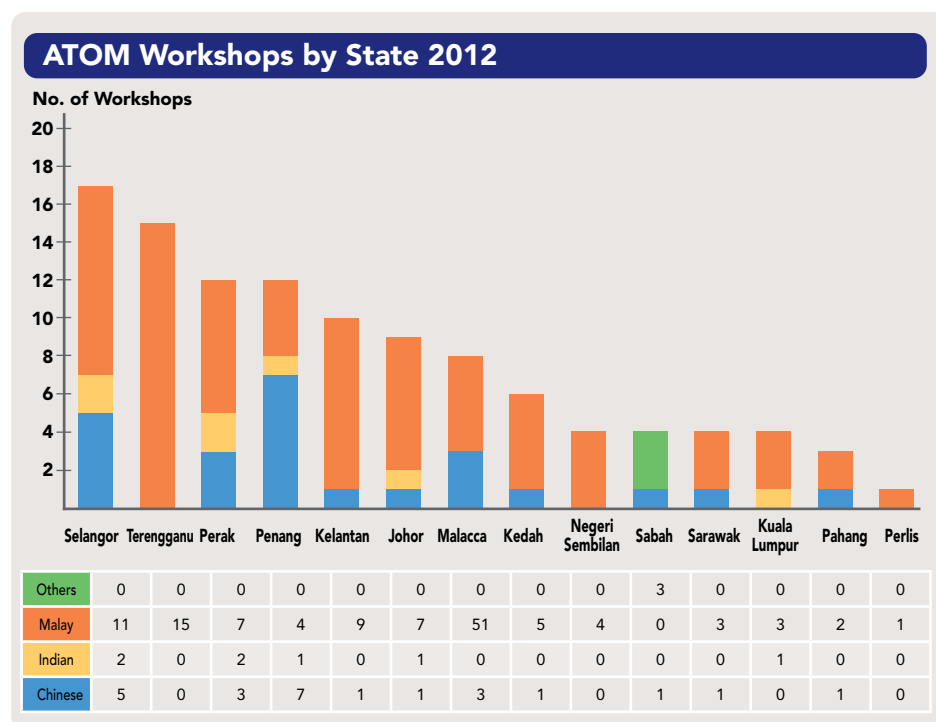


Exhibit 4.4: A snapshot of ATOM participants in Malaysia

Successfully Modernised								Target #	50
								Balance to be Achieved	
Completed This Week (7 – 14 December 2012)	Cumulative Update (January 2012 – 14 December 2012)				Total (2011– 14 December 2012)			#	%
1	110				165			60	120%
Breakdown by Race # Breakdown By Race %	Malay 76 69%	Chinese 24 22%	Indian 7 6%	Others 3 3%					
Breakdown by Race # Breakdown By Race %	AAM 42 38%	FAWOAM 1 1%	PPIBM 15 14%	HYL 15 14%	ITE 17 15%	PNT 6 5%	PPAS 2 2%	Others 3 3%	
Breakdown by Race # Breakdown By Race %	KOJADI 1 1%	KOJARIS 0 0%	KPUC 0 0%	SURIA 3 3%	KOKAS 3 3%	KUS 2 2%			

Exhibit 4.5: An example of the weekly dashboard to monitor the number of workshops transformed

Moving Forward

The response to the programme has been overwhelming, with hundreds of small automotive and motorcycle workshop owners applying to join since its launch. The public is expected to benefit from a more efficient and accountable workshop sector.

The EPP will focus on transforming more workshops and ensuring that the workshops maintain their performance and compliance to best practices introduced by the consultants. The EPP will also be concentrating on obtaining more automotive industry players to come in as consultants to further enhance recognition of these workshops.

EPP 5**Developing Makan Bazaars**

Malaysia, blessed with a multicultural society, is known around the world for its diverse range of good food. But the food service industry – which ranges from cheap and cheerful street hawkers to fine dining restaurants – remains quite fragmented.

The Makan Bazaar aims to create a hygienic one-stop food centre where diners can sample the best Malaysia has to offer. It also aspires to set a higher standard for professional management, with the long-term goal of raising the quality of their offerings.



Mall of Medini in the Iskandar region

Achievements and Challenges

The first Makan Bazaar, located in Johor's Iskandar region, has been operational since mid-year of 2012. Located in the Mall of Medini, the Makan Bazaar covers space of 180,000 square feet and currently features 18 F&B outlets and as well as six kiosks with further plans to increase the number of outlets and kiosks in the future. The Makan Bazaar can cater to over 1,000 patrons. It is also located at the entrance of Legoland, a popular attraction where it can tap into the typically high tourist spend.

Moving Forward

To cater to strong demand from both local and foreign tourists, a total of 10 Makan Bazaar outlets will be built across Malaysia over the next decade. Aside from housing a wide variety of hawker fare, the food centres will also be expected to include attractions like gardens, games areas, playgrounds and retail outlets. Moving forward, we would like to encourage greater participation in this EPP by private sector players.

EPP 6**Developing 1Malaysia Malls**

Malaysia is not only home to some of the largest malls in Asia but is also one of the regional leaders in retail mall development and management skills. Local players are therefore very well-positioned to develop 1Malaysia Malls in other Asian countries.

The malls are targeted to leverage the skill sets of Malaysian mall operators and retailers while providing an avenue for Malaysian brands and F & B offerings to go global.

PEMANDU and the ministry are in talks with potential players to join this EPP, which will focus on developing markets with large populations still underexposed to the integrated retail offered by shopping malls.

Achievements and Challenges

Several sites have been identified in China and Vietnam, which are targeted to be the first two countries where 1Malaysia Malls will be established. Weak market conditions have however delayed the launch of the first 1Malaysia Mall, which is now scheduled for 2015, a year later than planned.

Moving Forward

Aside from China, Vietnam and India, we are also exploring opportunities in Sri Lanka and Indonesia. Additional potential players are currently being sought to participate in this EPP as well as possible methods and means in which the Government can play a role to smoothen implementation. This is because this initiative is very much private sector driven.

EPP 7 Developing a Virtual Mall

Internet-based retail is rapidly gaining ground in Malaysia, thanks to higher disposable incomes, better broadband services and the proliferation of mobile devices. The online shopping market is expected to grow to RM5 billion in 2014, with the majority of purchases made on local websites. A virtual mall would help retailers as well as enterprises take advantage of this change in shopping behaviour, allowing them to distribute products and services online at minimal cost.

Achievements and Challenges

Over 100 small-to medium-sized enterprises have signed on to sell via a virtual mall spearheaded by Doorstep Retail Sdn Bhd. Burj Asia Corporation (M) Sdn Bhd has also pledged to invest RM16.8 million to integrate retail, payment and delivery under its Snap2Get platform. The system allows shoppers to make purchases and payments using quick response (QR) codes.

Moving Forward

More players are expected to join and expand the selection of products and services available online.



Online shopping

EPP 8 Facilitating Local Businesses to Acquire Stakes in Foreign Retail Businesses

The development of the retail sector should not rely on organic growth alone. Acquiring a stake in a foreign business will help accelerate expansion for big results by allowing local retailers to retain a portion of the foreign player's profits in Malaysia.

Achievements and Challenges

As stated in the 2011 Annual Report, the 2012 target of acquisition of one brand has been met in 2011 itself. Two foreign brands were taken over by local players:

1. In December 2010, Bonia acquired a 70 per cent share of JECO Pte Ltd, a licensee of Pierre Cardin leather goods in Singapore and a master licensee for Renoma in Singapore, Indonesia and Malaysia. The JECO Group is also the sole distributor of Bruno Magli products in Singapore and the trademark and brand representative of Braun Buffel in Asia Pacific.

2. Parkson acquired 100 per cent of Indonesia's PT Tozy Sentosa, a subsidiary of PT Mitra Samaya, for US\$12.8 million (RM38.7 million). This allowed it to gain immediate access to Centro, an Indonesian department store chain and Kem Chicks, a gourmet supermarket chain with five branches in Jakarta, Yogyakarta and Bali. Parkson has since expanded operations at two more Centro stores in Greater Jakarta and Surabaya, while work is ongoing at two other locations.

As acquisition of foreign brands are very much a business decision on the part of the private sector players, market conditions as well as the suitability of the brand to local conditions are among their key concerns.

Moving Forward

Moving forward, the EPP will seek more matchmaking opportunities whilst exploring possible ways/ schemes in which the Government can facilitate interested local players in acquiring foreign brands.

Malaysia, located at the crossroads of burgeoning China and India, has the potential to become Asia's premier shopping hub. To attract more foreign visitors, the country must do away with import duties on goods that have high-elasticity and pent-up demand. This has the added advantage of boosting average tourist spend, which has room for growth, and provide more retail choices to tourists and locals alike.

Achievements and Challenges

Import duty on 328 goods – including apparel, shoes, jewellery, handbag and perfumes – were abolished in 2011. This will allow Malaysia to become a first tier reseller, boosting the nation's income as well as eventually pushing down the price of preferred goods.

The EPP has also recorded an increase of Cost, Insurance and Freight (CIF) value of the 328 duty-free goods coming into Malaysia. As at December 2012, CIF Value has reached RM3.69 billion and has surpassed the 2011 total CIF Value.

In the middle of 2012, Tourism Malaysia did a survey of a basket of goods of medium/high-street brands and found that Malaysian goods were generally cheaper when compared with Singapore, Hong Kong, Thailand and Indonesia.

Moving Forward

Revenue from increase tourist arrivals has a powerful multiplier effect on the local economy. To make Malaysia's case as a retail haven more compelling, even more in-demand consumer goods will be identified for possible removal of import duty.

Shopping Basket (2012 survey)

Bobbi Brown Lip Colour
RM85
HKD 250 (RM92)
SGD 36 (RM90)
THB 950 (RM92)
IDR 250,000 (RM81)

-6%

Bobbi Brown Skin Foundation
RM150
HKD 440 (RM175)
SGD 75 (RM187)
THB 1,950 (RM191)
IDR 550,000 (RM180)

-14%

Zara Leather Jacket
RM459
HKD 2,299 (RM929.73)
SGD 199 (RM499.97)
THB 10,990 (RM1,089.11)
IDR 2,999,900 (RM982)

-8%

Zara Crochet Dress
RM559
HKD 699 (RM282.68)
SGD 189 (RM422.84)
THB 3,780 (RM375.59)
IDR 699,900 (RM327)

-15%

Mango Braided Leather Ballerina Flats
RM129
HKD 299 (RM120.55)
SGD 89 (RM222.68)
THB 2,290 (RM226.94)
IDR 1,189,000 (RM189.24)

-42%

UNIQLO Dry Cargo Shorts
RM79.90
HKD 199 (RM80.48)
SGD 54.90 (RM87.88)
THB 990 (RM98.11)
IDR Not Available

-9%

Prices of items from favourite high-street brands for apparel and shoes i.e. Zara, Uniqlo and Mango and make-up i.e. Bobbi Brown show that it is cheaper in Malaysia compared to Hong Kong, Singapore, Thailand and Indonesia

Exhibit 4.6: Comparison of retail prices of selected brands between Malaysia and neighbouring countries

Cost, Insurance and Freight Value for 2010, 2011 and 2012

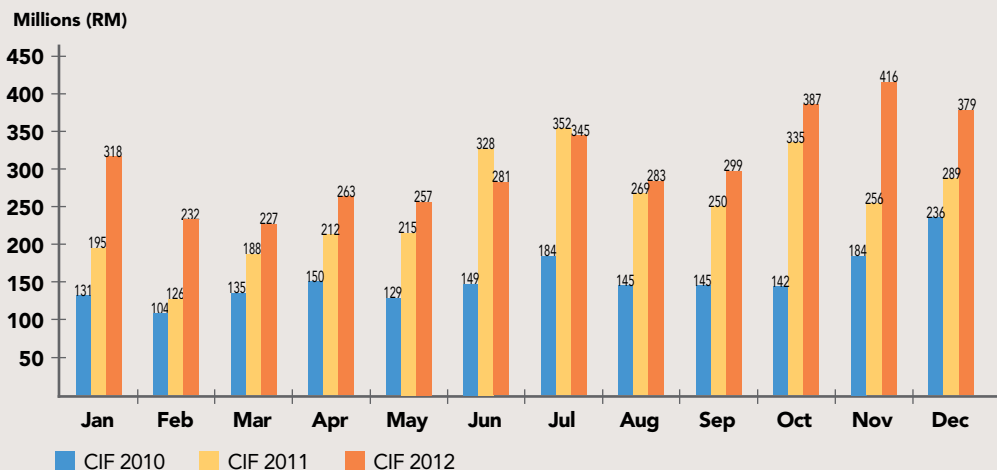


Exhibit 4.7: CIF between 2010 – 2012

EPP 10 Setting Up Wellness Resorts

The medical tourism industry has seen impressive growth in the past few years. International patient arrivals to Malaysia alone are expected to expand at a compound annual growth rate of 29.3 per cent between 2009 and 2013. With the mushrooming of modern private healthcare institutions and the explosion in affordable air travel, this trend will likely accelerate.

To tap into this important source of foreign exchange, wellness resorts will be established in strategic locations like Penang – already a popular destination for medical tourism – Selangor and Pahang. These fully integrated resorts will focus on anti-ageing as well as aesthetic and regenerative treatments, complete with supporting retail outlets.

Achievements and Challenges

Country Heights Holdings Bhd has pledged to expand its existing facility in Seri Kembangan, Selangor, into a 3,715 square metre wellness centre equipped with state-of-the-art facilities which will include a wellness hotel, a health sanctuary offering ayurvedic and traditional Chinese medicine services, a boutique hospital as well as a special centre with 60 units of specialist suites.

The newly expanded resort was launched in March 2011. The expansion is the first phase in the development of the Mines Wellness City master plan, which aims to transform the RM2.5 billion development into a one-stop health resort.

Berjaya Hills Bhd is also developing the Berjaya Hills Wellness Resort Project comprising The Chateau Spa and Organic Wellness Resort, a French theme resort, the Berjaya Hills Golf and Country Club, a Japanese Village, animal park, and equestrian and organic farm. It will be the world's first organic spa, comprising 210 guest rooms and a state-of-the-art European-style destination wellness spa. The resort had its soft opening in October 2011 and will be completed in stages by 2018.



An aerial view of The Chateau Spa and Organic Wellness Resort

Moving Forward

The EPP is currently in the process of obtaining the required approvals for one additional wellness centre to be established in Penang. Support will also be provided to existing players, linking them up to the Malaysian Healthcare Travel Council to promote healthcare travel to Malaysia. The link-up will hopefully lead to a full health tourism package and further enhance the experience of medical tourists in Malaysia. Moving forward, the EPP expects to have one fully operational wellness resort by 2014.



Lakeview of the Palace of the Golden Horses within Mines Wellness City

EPP 11 Organising Unified Malaysia Sales

Over the past decade, Malaysia has seen nationwide sales several times a year which have benefited the retail sector. Expanding on this, the EPP will bring together more sectors of the economy – from retailers to food and beverage as well as hotels and travel providers – through the annual 1Malaysia Unified Sale, to benefit those looking for the very best deals.

Achievements and Challenges

The second 1Malaysia Unified Sale held in November 2012 saw the participation of 52 sub-sectors comprising 805 companies and 11,935 outlets nationwide.

Bank Negara Electronic Payments Report showed expenditure of RM15.5 billion and RM1.5 billion in credit card and debit card transactions respectively during the sale period. This was an increase of seven per cent and 3 per cent respectively from the same period in 2011.

Moving Forward

Moving forward, the EPP will look into increasing product and services diversity in years to come while encouraging even more companies and sub-sectors to take part in this EPP. The EPP is also exploring the possibility of further collaborative efforts with the Tourism Sales under Tourism Malaysia.



The Deputy Minister of Domestic Trade, Co-operatives and Consumerism launching the 1Malaysia Unified Sale

EPP 12 Transforming KLIA into a Retail Hub

Kuala Lumpur International Airport (KLIA) is an important gateway to the country, connecting more than 50 international flights to over 100 international destinations. In 2011 alone, it handled some 37 million passengers.

There is, however, room for improvement in terms of sales per person, which averaged out to RM30.73 in the first quarter of 2012. To fully capitalise on KLIA's retail potential, a shopping hub will be created alongside the new KLIA2 low-cost terminal.

The key components of the retail hub will be driven by Malaysia Airport Holdings Bhd (MAHB's) overall Aeropolis masterplan which includes retail in KLIA2, a premium landside mall, as well as factory outlets.

Achievements and Challenges

MAHB has received overwhelming response during the tender phase from commercial operators keen on participating in this innovative retail concept, with rental submissions going as high as over RM2,000 per square metre a month.

Moving Forward

The construction of KLIA2, which includes retail area space, is on track to be completed by second quarter of 2013 as planned.

EPP 13 Developing Big Box Boulevards

Large-scale integrated retail outlets, or Big Box Boulevards (BBB), target to house large-scale retailers in a single location for the convenience of customers. These anchor category stores – which will include hypermarkets, furniture superstores, digital product malls and sporting goods stores – are expected to generate RM1.2 billion in GNI by 2020.

Achievements and Challenges

The EPP is currently in the process of assisting existing Champions in improving and promoting its development as a BBB. Malaysia Airports for example has agreed to arrange for KLIA transit passengers to stop over at Nilai 3 during their layover.

BBB developments require high-density areas in order to ensure continued profitability. Creation of the right brand mixture in the development has been a challenge for existing players and will be a challenge for any future BBB developments.

Moving Forward

Moving forward, Nilai 3 in particular is currently looking to expand its BBB categories and further enhance the shopping experience for its visitors. The EPP is also sourcing for more potential sites and players for new BBB developments. The EPP potentially expects there to be one fully operational BBB by 2014.

BUSINESS OPPORTUNITIES

Business opportunities and baseline growth are expected to contribute RM45.2 billion to GNI, and create around 226,000 additional jobs. This growth will be driven by three distinct economic drivers.

The first is higher retail expenditure per capita due to increased GNI per household. Secondly, urbanisation will also contribute, as the migration from rural to urban areas creates more demand for goods and

services, including higher value-added products. Lastly, population increase will also result in demand for more goods and services.

RM187.6 billion of private sector funding and investments will be required to capitalise on the business opportunities.

Summary of Wholesale and Retail NKEA

	2020 Target
Incremental GNI impact	RM55.4 billion
Additional Jobs	454,190
Critical targets for 2013: <ul style="list-style-type: none"> • 500 TUKAR shops • 75 ATOM workshops • Three Hypermarkets and 13 Superstores • One operational Makan Bazaar 	



Palm Oil and Rubber



Tan Sri Bernard Dompok

Minister of Plantation Industries
and Commodities

From the first oil palm cultivation in the early part of this century, the palm oil industry has transformed to become Malaysia's key socio-economic driver, eradicating poverty and providing direct employment to more than 610,000 people, including over 177,000 smallholders.

The phased development of the palm oil industry in the country has since been given a new focus with the implementation of the Economic Transformation Programme (ETP), where the industry has been identified as one of the core economic drivers or National Key Economic Areas (NKEA), to transform the nation into a high-income economy by 2020.

This transformation programme defines the priorities for our economic development in the coming years, taking a whole-of-government approach that aligns strategies on skills, research and development, infrastructure, environment and other elements critical to the development of the country's upstream and downstream palm oil sectors.

I am delighted to note that encouraging results were shown under the Palm Oil NKEA despite challenging external market conditions in the last 12 months. There is apparent impact in the replanting and new planting initiatives, where some 113,000 hectares (ha) of land was planted, and has helped to manage supplies at a time when growth concerns in Asia and Europe has curbed commodity demand.

At the same time, the move by another main palm oil producer, Indonesia, to revise their export taxes on palm oil, has placed our downstream palm oil sector under strain and pushed stockpiles of palm oil to an all-time high, dragging palm oil prices to multi-year lows in September.

Structural change has to occur to transition to new circumstances, to identify and fully understand the country's palm oil sector's constraints and to protect jobs. In the last few months, the Government has undertaken the necessary approach to boost the sector's competitiveness.

In demonstrating the Government's commitment to aid the downstream palm oil sector, the Government discontinued a duty-free export quota of crude palm oil and reduced crude palm oil export taxes beginning 1 January 2013. This will allow refineries and oleochemical producers in Malaysia to market their products at competitive rates to the global markets.

Under the Rubber NKEA, four entry point projects are being implemented, including maintaining the production area of one million ha and increasing the average yield. The framework also covers accelerating downstream activities and commercialising new rubber products to boost higher valued rubber exports for the country.

The Palm Oil and Rubber NKEA highlights that the country's key agricultural commodities are significant and I am glad to note that the country is well-positioned for a future where Malaysia will be at the forefront to meet growing demand for the two key commodities as global population increases and rising affluence in emerging countries boosts purchasing power.

On this note, I would like to record my appreciation for the commitment by all parties involved, Government agencies and the private sectors, as well as the Palm Oil and Rubber NKEA team for their tireless effort in ensuring the success of the NKEA.

PALM OIL AND RUBBER

By 2020, Malaysia's palm oil sector is targeted to boost the country's total Gross National Income (GNI) by RM125 billion to RM178 billion and create 41,600 new jobs.

Key statistics	2010	2011	2012
Planted area	4.8 million ha	5.0 million ha	5.1 million ha
CPO Production	16.99 million tonnes	18.91 million tonnes	18.79 million tonnes
Exports of palm oil	16.66 million tonnes	17.99 million tonnes	17.58 million tonnes
Exports of palm oil and products	23.04 million tonnes	24.27 million tonnes	24.59 million tonnes

Exhibit 5.1: Overview

Source: Malaysian Palm Oil Board (MPOB)

Malaysia's palm oil and rubber industries are long-time major contributors to GNI and plans are underway to boost the sector's value to Malaysia's economy. Palm oil production has surged in recent decades, owing to the success and support of research and development activities in developing higher-yielding, top quality crops by the Malaysian Palm Oil Board (MPOB) and empowering Malaysian farmers to participate through smallholder schemes.

The country also enjoyed success, thanks to a top-down approach through collaboration with the private sector on projects ranging from palm oil genome mapping to agronomic research and large-scale downstream palm oil processing.

However, with plans to make palm oil a major growth engine, the segment needs to undergo some fundamental shifts along its supply chain, from increasing the productivity of smallholders to increasing capacity expansion of the downstream sector.

The oil palm areas under cultivation have risen to well over five million ha of planted land, but areas with ageing oil palm trees profile have hampered production growth and the country's average productivity. Average annual yield of oil palm fresh fruit (FFB) remained relatively stagnant at 20 tonnes/ha per year.

Eight Entry Point Projects (EPPs) were identified under the Palm Oil National Key Economic Area (NKEA) to drive the sector's growth and its role as a central element of the national economy. These are divided into two strategic measures. The first aims to ensure sustainability and help bring up the country's oil palm FFB yield by 2020. Five EPPs are clustered under this:

- EPP 1:** Accelerating the replanting and new planting of oil palm
- EPP 2:** Improving fresh fruit bunch yield
- EPP 3:** Improving workers' productivity
- EPP 4:** Increasing the oil extraction rate
- EPP 5:** Developing biogas facilities at oil palm mills

Palm oil is also one of Malaysia's leading agricultural industries in terms of adding value through downstream processing. Much of this processing occurs close to coastal and farming areas, thereby generating economic activity and employment nationwide.

The second measure aims to maximise integration along the value chain with the goal of developing higher valued industry beyond crude palm oil production and refining. Three EPPs come under this goal:

- EPP 6:** Focusing on high value oleo derivatives
- EPP 7:** Commercialising second-generation bio-fuels
- EPP 8:** Expediting growth in food and health-based downstream segments

2012 Key Performance Indicators

Palm Oil and Rubber NKEA		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Area of backlog cleared by plantations and organized smallholders (ha)	100,000	81,976.74	82	●	82	●	0.5	●
	Area of replanting and new planting by smallholders (ha)	30,000	31,351.01	105	●	100	●	1	●
EPP #2	Number of new smallholders cooperatives established	7	8	114	●	100	●	1	●
	New area of plantations/smallholders complying with COP/NSGAP/RSPO/best practice (ha)	150,000	175,808	117	●	100	●	1	●
	National average yield (mt/ha/yr)	18.9	18.89	100	●	100	●	1	●
EPP #3	Number of Cantas™ taken up by plantations and smallholders	1,500	1,527	102	●	100	●	1	●
	Number of diamond sharpening tools taken up by plantations and smallholders	4,000	4,683	117	●	100	●	1	●
EPP #4	Number of new palm oil mills certified by MPOB for Code Of Practice and other international certification (RSPO or ISCC)	20	26	130	●	100	●	1	●
	Oil extraction rate	21.05%	20.35%	97	●	97	●	0.5	●
EPP #5	Number of new mills built with biogas facility (exclusive of 2011)	10	9	90	●	90	●	0.5	●
	Number of new mills with biogas plants connected to the grid	2	2	100	●	90	●	0.5	●
EPP #6	Take-up rate for the pre commercialisation and technology acquisition funds (RM mil)	15.889	15.889	100	●	100	●	1	●
	Total amount of realised investments in oleo derivatives sector (RM mil)	500	220.2	44	●	44	●	0	●

(more on next page)

(continued from previous page)

Palm Oil and Rubber NKEA		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #7	Completion of (one) bio oil plant	60%	29.38%	49	●	49	●	0	●
EPP #8	Take-up rate of funds for food and health-based products	100%	80.64%	81	●	81	●	0.5	●
	Total amount of investments in food and health-based segment (RM mil)	40	53.53	135	●	100	●	1	●
EPP Rubber	Area of replanting and new planting by smallholders (ha)	35,000	45,085.05	129	●	100	●	1	●
	Malaysian export revenue from latex product (RM bil)	12.48	12.01	99	●	99	●	0.5	●
	Malaysian export of natural rubber and compound rubber (mil MT)	1	1.33	133	●	100	●	1	●
	Production of ekoprena and pureprena (MT)	1,000	910	91	●	91	●	0.5	●
				101%		91%		73%	

Exhibit 5.1

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score#2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

ENTRY POINT PROJECTS

EPP 1

Accelerating the Replanting and New Planting of Oil Palm

Faced with a surge in demand for palm oil at a time when growers struggled to raise yields and boost supplies, prices of palm oil surged as much as 20 per cent between 2008 and 2011. The high prices of crude palm oil for most of 2011 and 2012 drove smallholders and plantation companies to delay replanting efforts leading to a substantial backlog of ageing palm trees due for replanting.

This EPP aims to speed up the ongoing replanting efforts by plantation companies and smallholders, the backbone of the plantation industry, replacing approximately 449,415 ha of low-yield and old trees with new, high-yielding seedlings.

Implementation of this EPP using better planting materials will ensure the stability of crop supply with higher average yield level of 26.2 tonnes/ha/year by 2020, which will ensure sufficient domestic supplies to drive future growth of the downstream sector. Efforts under this EPP are projected to generate RM4.6 billion.

In the past year, replanting and new planting activities were carried out in 113,000 ha of oil palm land in Malaysia. Out of this, the total area of backlog cleared by plantations and organised smallholders reached 81,977 ha while the total area of replanting and new planting implemented by independent smallholders was at 31,351 ha.

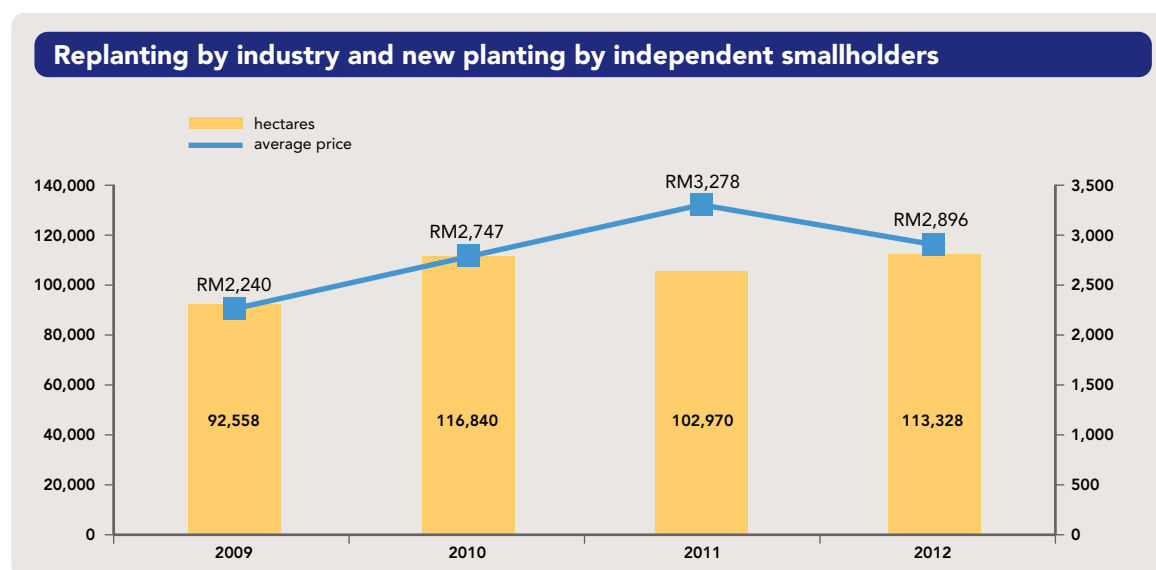


Exhibit 5.2: Area of replanting and new planting of oil palm

Today, the continuous effort of the plantations sector in ensuring the sustainability of crop supply by managing age profile of the planted area is showing positive progress. The area above 25 years old has now been reduced from 7.49 per cent in 2008 to 7.15 per cent of total planted area in 2012.

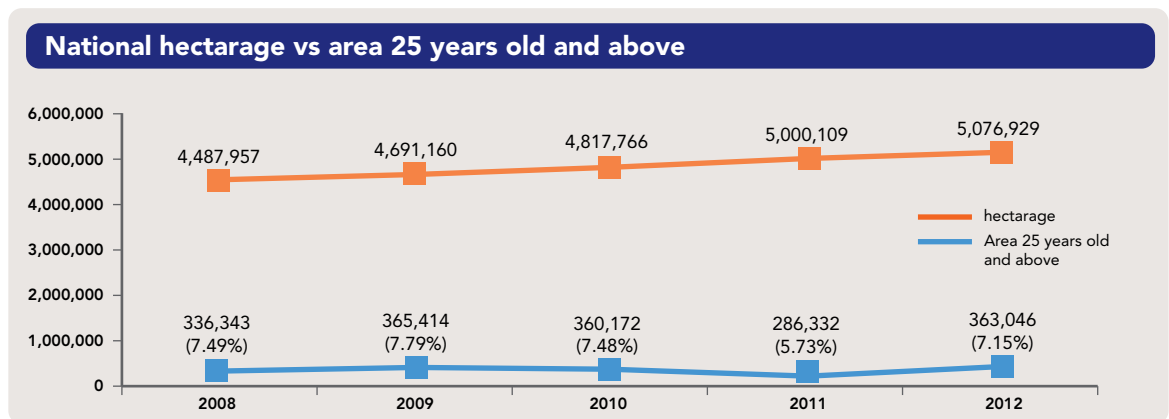


Exhibit 5.3: Total planted area vs area above 25 years

Moving Forward

As part of the Government's effort to accelerate the country's replanting and new planting programme and manage stock levels, the Government has allocated an additional RM432 million as funds for independent smallholders' replanting and new planting initiatives in 2013, with the aim of replanting and new planting around 30,000 ha of land.

The Government will focus on independent smallholders, granting RM9,000 per hectare for smallholders in Sabah and Sarawak and RM7,500 per hectare for smallholders in Peninsular Malaysia. Other forms of assistance include RM500 per month for two years as subsistence allowance to smallholders that qualify under the replanting programme. This is in addition to the expected replanting of 100,000 ha by plantations and organised smallholders.

EPP 2 Improving Fresh Fruit Bunch Yield

The second EPP involves increasing the national yield of FFB from the current 18.89 tonnes/ha/year to 26 tonnes/ha/year by 2020. Limited exposure to best plantation practices and insufficient economies of scale amongst smallholders have resulted in lower yields and smaller harvests in contrast to organised smallholdings and plantation companies.

Malaysia's smallholders, that account for 40 per cent of the country's palm oil plantation area but generate lower FFB yields than the bigger plantations, have

been encouraged to embrace best practices by adopting MPOB's Good Agricultural Practices (GAP)

Key measures taken under the EPP 2 include setting up co-operatives of oil palm planters across the country to educate and increase awareness of new technologies and best practices to increase productivity in accordance with the principles of responsible and sustainable palm oil production.

Achievements and Challenges

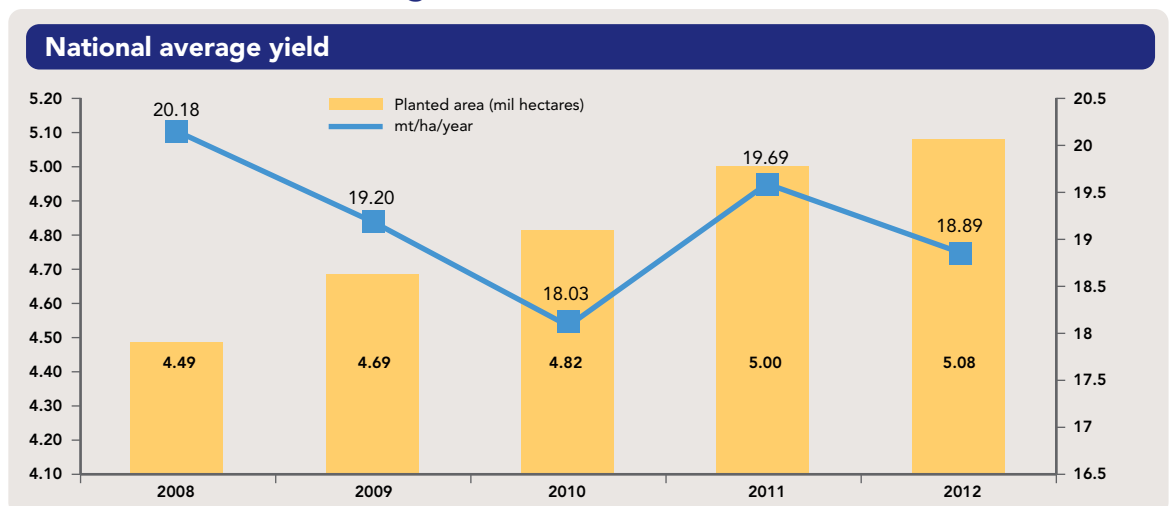


Exhibit 5.4: National average yield

Placing emphasis on the importance of best practices as a contributing factor to better yield, an additional of 175,808 ha of land achieved compliance with at least one of the best practices standards in 2012, surpassing an earlier target of 150,000 ha.

No	Location (cluster)	No. of SH	Ha	Co-operative	
				Potential memberships	Hectarage
1	Tongod, Sabah	1,230	4,920	615	2,460
2	Saratok, Sarawak	544	1,870	544	1,870
3	Kunak, Sabah	910	8,265	455	4,103
4	Jasin, Malacca	912	3,824	456	1,912
5	Kluang Utara, Johor	5,689	19,542	2,845	9,771
6	Belaga, Sarawak	511	1,191	511	1,191
7	Kinabatangan, Sabah	3,648	22,104	1,824	11,052
8	Tawau, Sabah	1,644	11,202	822	5,601
9	Kulaijaya, Johor	2,355	7,065	1,178	3,533
10	Kuala Selangor Selatan, Selangor	2,683	5,173	1,342	2,587
11	Temerloh, Pahang	1,185	6,001	593	3,001
12	Beluran, Sabah	4,701	26,917	2,351	13,459
13	Bera, Pahang	2,350	9,350	1,175	4,675
14	Selama, Perak	1,378	4,425	689	2,212
15	Serian, Sarawak	704	3,358	704	3,358
16	Keningau, Sabah	1,132	6,939	566	3,469
17	Teluk Intan, Perak	5,317	12,723	2,659	6,363
18	Selangau, Sarawak	531	2,944	266	1,475
19	Maran, Pahang	870	4,048	435	2,024
20	Dungun, Terengganu	231	1,129	116	567
21	Kuala Langat, Selangor	2,135	2,133	1,068	1,067
22	Bakong Marudi, Sarawak	1,500	5,417	750	2,708
23	Yong Peng, Johor	460	1,567	230	783
Total		42,620	172,107	22,194	89,241

Exhibit 5.5: Sustainable palm oil clusters

To date, this EPP has successfully established a total of 23 smallholders sustainable palm oil clusters with the inclusion of eight co-operatives this year, representing about 43,000 smallholders covering some 172,000 ha of oil palm area. This development put smallholders a step closer at increasing the scale and efficiency of their planted area.

Moving Forward

As part of its overall strategy to boost national oil palm yields and adopt sustainable agricultural practices, this EPP aims to raise the amount of area that comply with best practices by an additional 200,000 ha in 2013. It will also establish seven more co-operatives nationwide, bringing the total to 30 co-operatives nationwide.

EPP 3 Improving Worker Productivity

The palm oil industry is an extremely labour intensive and costly plantation crop to set up and manage effectively. Therefore, the exodus of foreign workers and tightening of foreign labour regulations had in part slowed the harvesting of FFBs and lowered crude palm oil production.

In line with our aspirations of reducing overdependence on manual labour, the third EPP aims to introduce new techniques to smallholders and plantation companies that could help increase productivity.

The use of the Cantas™ harvesting pole along with its Diamond Sharpening Tool has helped increase productivity by speeding up the process by reducing the frequency with which sickles and chisels need to be sharpened.

Cantas™ is a 15-foot long motorised sickle that is used to harvest oil palm fruits. Promotional efforts by MPOB on the motorised pole has resulted in further improvements on the product as well as increased usage by plantation companies and smallholders boosting harvesting coverage areas and productivity on a daily basis.

The Diamond Sharpening Tool is a portable tool that enables harvesters to increase their productivity by an estimated 40 per cent due to faster and less frequent sharpening of sickles and chisels.

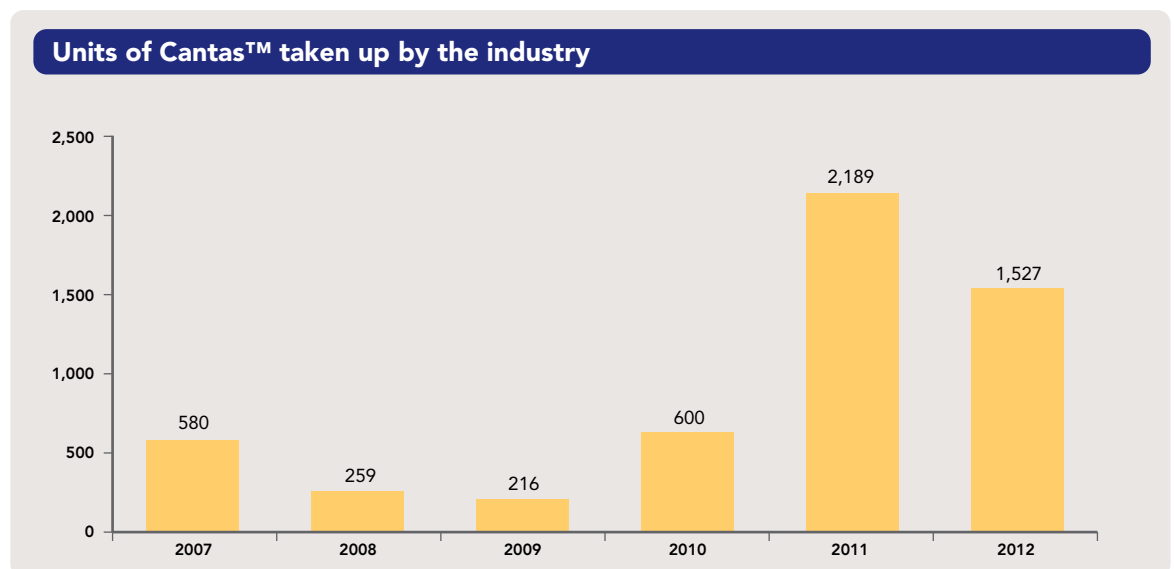


Exhibit 5.6: Units of Cantas™ taken up by industry

A total of 1,527 units of the targeted 1,500 Cantas™ sickle has been taken up by plantation companies and smallholders, in addition to 4,683 units of Diamond Sharpening Tool.

To increase the usage of Cantas™, 1,098 units of the motorised harvesting sickle were distributed as part of a seeding initiative aimed at reducing manual labour dependence and improving productivity.

Moving Forward

The EPP will continue to focus on raising the country's palm oil productivity and targets a take-up of 1,500 units of Cantas™ by plantation companies and smallholders.



Cantas™

EPP 4 Increasing the Oil Extraction Rate (OER)

The national average of palm oil extraction rate (OER) in recent years has remained below 20.5 per cent. Plantation companies and smallholders have been challenged to improve OER as it functions as a management tool in assessing the profitability of a plantation company. On a macro level, changes in OER have a bearing on the economy as such changes point to higher or lower crude palm oil output from a land area.

This EPP aims at improving the OER from 20.49 per cent in 2009 to 23 per cent by 2020 through proper grading of crops, thus reducing the amount of poor quality crop sent for processing. The presence of 241 MPOB enforcement officers at selected mills will provide advisory and enforcement services on crop quality.

Annual Oil Extraction Rate 2007 – 2012

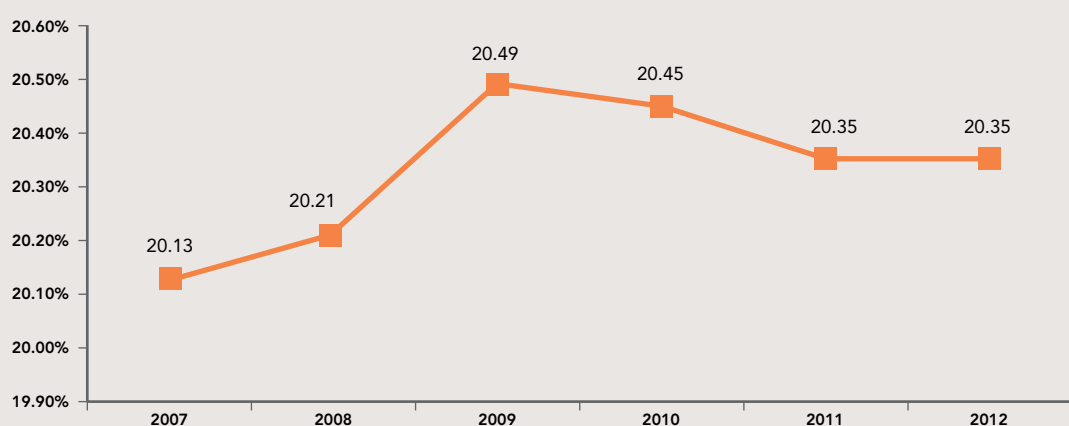


Exhibit 5.7: Annual OER 2007-2012

Oil Extraction Rate Performance in 2012

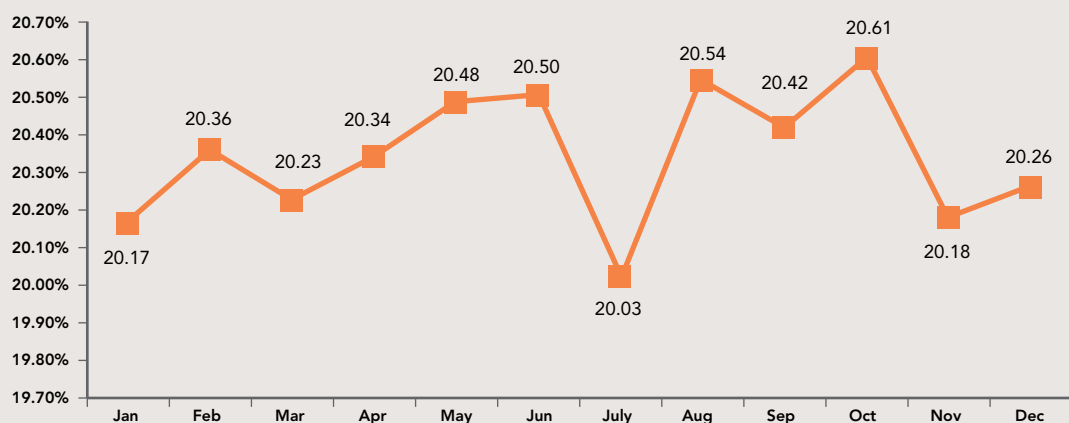


Exhibit 5.8: OER 2012

The OER for 2012 began at the national average of 20.17 per cent. This has been on an increasing trend over the past year to a recent rate of 20.26 per cent. The average OER for the year was recorded at 20.35 per cent.

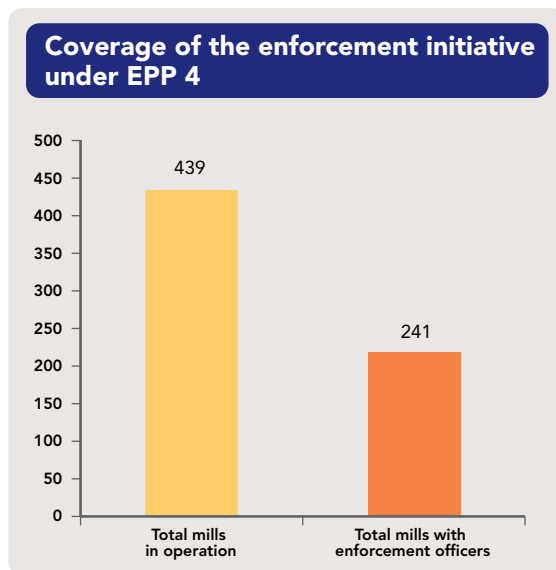


Exhibit 5.9: Coverage of enforcement initiative

This EPP has seen an improvement in OER a year after a majority of the 241 MPOB enforcement officers was deployed. Seven mills have recorded an increase in OER by more than one per cent, 20 mills have recorded an increase between 0.5 per cent and one per cent while 78 mills saw an increase of between zero per cent and 0.49 per cent.

In addition to the deployment of enforcement officers to ensure that only good quality crops are processed, an additional 26 mills have been certified under MPOB's Code of Practice and other international certification bodies

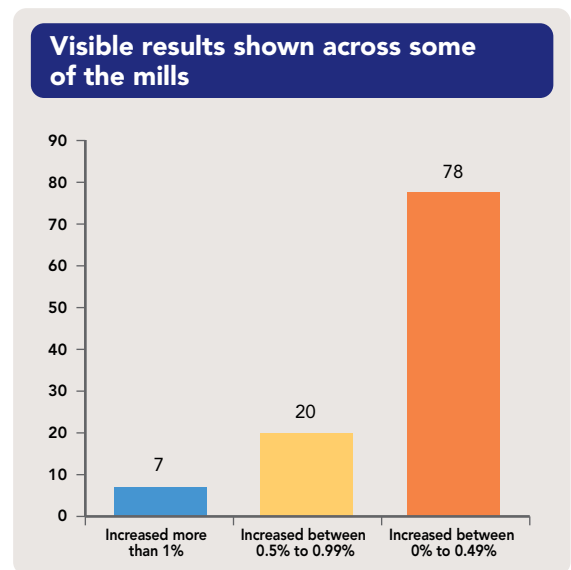


Exhibit 5.10: Mills showing improvements in OER

Moving Forward

In tandem with efforts under EPP 2 to boost national oil palm fruit bunches yields, ongoing discussions as well as research and development in an automated oil palm fruit quality grading process at harvesting points and in oil palm mills are underway. This will help pave the way for improved oil extraction rates by 2020.

EPP 5 Developing Biogas Facilities at Palm Oil Mills

FFBs that are boiled and crushed at palm oil mills in the country produce a by-product palm oil mill effluent (POME) that is usually treated via a ponding system that is inexpensive but requires a large land area.

The existing treatment of the palm oil industrial waste generates a huge amount of biogas containing methane, a greenhouse gas with a global warming potential 21 times that of carbon dioxide.

This EPP sets out to encourage palm oil millers to capture methane and turn the greenhouse gas into clean energy through the installation of biogas facilities in all palm oil mills located in Malaysia by 2020.

After a series of treatments, methane is converted into an electricity source that mills can use for their own consumption while biogas plants that meet certain pre-requisites will feed the excess electricity into the national power grid.

Achievements and Challenges

This EPP has achieved considerable success in setting up a total of 57 biogas plants at several palm oil mills across the nation to-date, with 15 mills currently developing biogas facilities and another 149 mills have begun planning. This year, a FELDA-owned biogas plant in Serting Hilir, Negri Sembilan, was connected to the national grid while another is currently supplying electricity to a local village in Tawau, Sabah in tandem with rural basic infrastructure development and efforts to reduce greenhouse gas emissions.

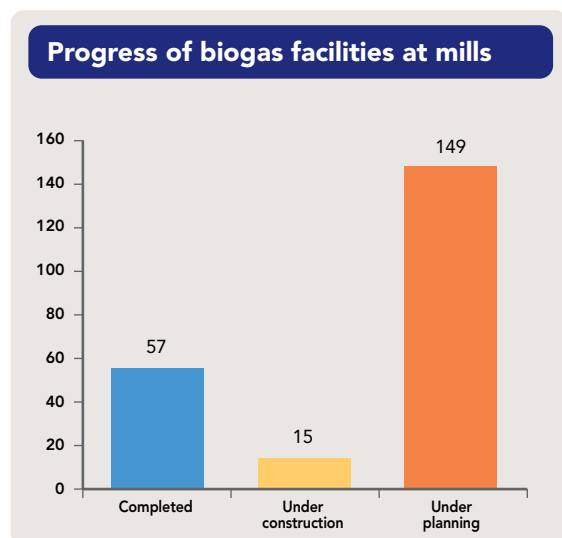


Exhibit 5.11: Progress of biogas facilities at mills in Malaysia

Moving Forward

The reduction of the cost of connecting biogas facilities to the national grid will continue to play a key role in supporting the widespread application of biogas-based power generation as the country moves ahead to cap greenhouse gas emissions in the palm oil industry.

In line with efforts to reduce greenhouse gas emissions, this EPP aims to set up an additional eight biogas plants at oil palm mills in 2013, of which an additional two mills are expected to feed excess electricity into the national power grid.

EPP 6

Developing High Value Oleo Derivatives and Bio-based Chemicals

Several forces are reshaping the downstream palm oil industry in Malaysia, but the most significant change is the development and global shift from petrochemicals to viable and environmentally friendly green oleo-chemicals that could lead to structural changes in worldwide demand for palm oil.

This evolution to a green-chemicals oriented market will require exporting countries and downstream organisations re-evaluate how they differentiate themselves to compete in this environment.

By transitioning to higher value-added products such as agrochemicals, bio-lubricants, biopolyols, surfactants and glycerol derivatives, the growth in the downstream segment will solidify and insulate the upstream plantation from volatile commodity price shocks.

This EPP is oriented toward steering production from basic palm oleo-chemicals to higher-value oleo derivatives that are long considered to be greener than petrochemicals.

Achievements and Challenges

In the period 2011-2012, seven major companies have announced plans to boost investments in the oleochemical business. These companies with total investments of RM1.36 billion over the next few years are:

- Esterchem (M) Sdn Bhd
- KL Kepong Oleomas Sdn Bhd
- Palm-oleo (Klang) Sdn Bhd
- Emery Oleochemicals (M) Sdn Bhd
- UniOleon Sdn Bhd
- Carotino Sdn Bhd
- Ancom Crop Care Sdn Bhd
- ICM Specialty Chemicals Sdn Bhd

Major palm oil producer Indonesia in 2011 revamped an existing export tax structure on crude palm oil and refined palm products, a two-pronged move to secure investments in their downstream palm oil processing industry and ensure ample supplies of cheap crude palm oil feedstock.

This development has made investment in Malaysia's downstream palm oil less attractive, although a move by the Government in October to discontinue a duty-free export quota of crude palm oil and slash taxes on crude palm oil exports may improve Malaysia's competitiveness as palm oil refiners and oleochemicals exporter in global markets.

Moving Forward

The Government has allocated an additional budget of RM127.1 million as developmental grants in 2013 to incentivise more players to venture into oleo derivatives that require high-skilled labour and technology.

EPP 7

Commercialising Second Generation Biofuels

Biofuels production and consumption has grown rapidly as countries shift to a new energy supply mix due to increased oil prices as well as price volatility, leading to support for renewable fuels, also known as first generation renewable energy. These are made from sugar, soybean, corn and vegetable oils.

However, the rapid growth of biofuels production has become controversial. The support that biofuels had enjoyed just over four years ago has diminished amid criticism that their production is linked to rising food prices and uncertain ability to replace fossil fuels.

The developments have stimulated greater interest, for the development of biofuels produced from non-food biomass – commonly referred to as second-generation biofuels.

The EPP aims to fast track the commercialisation of second-generation biofuels, including bio-oil, in a bid to mitigate coal and oil price fluctuations. The palm oil industry generates over 60 million tonnes

of oil palm biomass annually in the form of empty fruit bunches (EFBs), trunks and tree fronds. By using biomass-to-liquid technology, bio-oil can be used to generate electricity, fire up boilers and be used as fuel in diesel engines.

The focus of this EPP over the past year revolves around future uptake of the second-generation biofuels.

Construction of the bio-oil plant by Sahabat Renewable Fuel Ventures Sdn Bhd, a joint venture between Premium Renewable Energy Sdn Bhd and FELDA, been delayed due to structural changes to the management and after considering technological and market uptake conditions.

Moving Forward

The Government will continue to facilitate the development of the bio-oil project in addition to developing the market for renewable energy through other forms of biomass to energy.



Biodiesel plant at Pulau Carey. Picture courtesy of BERNAMA Images

EPP 8

Expediting Growth in Food and Health-Based Segment

In tandem with the aim under EPP 6 to steer production of basic palm oleo-chemicals to higher-value oleo derivatives, this EPP aims to tap into the vast application of palm-based derivatives in food and health-based products. It also aims to build up the production of halal goods, vitamins, plant-based pigments and resins to balance the sector's dependence on the upstream palm oil segment.

Tocotrienols, which are found naturally in palm oil, is part of the Vitamin E family and is used in a wide variety of pharmaceutical and health applications such as antioxidants. Preliminary research has shown that tocotrienols can help fight fatty liver disease, cardiovascular diseases and prevent strokes. Although tocotrienols can be found in rice bran, wheatgerm and coconut oil, palm oil is the richest source of the nutrient.

Researchers worldwide have carried out numerous studies over the past two decades and scientists are now embarking on conducting human clinical trials on stroke and cancer patients. The payoff from these clinical studies could be significant, as in the example of fish oil, when anti-cancer omega-3 fatty acids have exploded into a multi-billion dollar food-additive industry.

Achievements and Challenges

To help realise the potential of tocotrienols, MPOB has awarded 10 research grants for clinical trials related to palm-tocotrienols, carotenoids as well as other phytonutrients. These studies are being carried out by leading research institutions in South Africa, the US, United Kingdom and in Australia such as the Ohio State Medical University (OSMU - US), Cape Peninsula University of Technology (South Africa) and the Commonwealth Scientific and Industrial Research Organization (CSIRO – Australia).

Studies on the use of tocotrienols are also being conducted extensively in Malaysia, which is the world's biggest producer and exporter of the supplement. Davos Life Science Sdn Bhd, which is owned by one of the largest palm oil companies in Malaysia, Kuala Lumpur Kepong Bhd, is a leader in extracting tocotrienols from palm oil.

In June, Davos Life Science began human clinical trials on the effects of tocotrienols on late-stage prostate cancer patients at a research hospital in Kuala Lumpur. Cancer patients were administered high levels of tocotrienols under medical supervision.

On the operational side, Davos Life Science has also completed its move from Singapore to Malaysia. Having set-up the world's largest tocotrienols production complex in West Port, Klang.

Carotino Sdn Bhd is investing in a phytonutrients plant to produce natural palm-based carotenes and tocotrienols in Pasir Gudang, Johor, and will be operational by the first quarter of 2013.

Moving Forward

To allow for the commercialisation of the food and health-based segment such as phytonutrients in Malaysia, this EPP aims to push for more investment through the budget allocation of RM75 million by the Government to spearhead innovation and product development in the country.

RUBBER

Natural rubber production in Malaysia peaked in the early 20th century when prices were relatively high, making the country the biggest producer in the world. That changed in the 1980s with the introduction of oil palm cultivation, which promised quicker and higher returns.

Malaysia now trails Thailand and Indonesia in terms of production though there are plans to bring up productivity through research and development activities to ensure availability of domestic rubber supplies to develop higher-valued rubber products.

A very specific performance target has been set for the industry: its contribution to GNI is expected to increase from the current RM18.5 billion to RM52.9 billion by 2020, reflecting aspirations and belief that the industry has the capacity to scale to new heights and account for a bigger slice of the global rubber market share.

Four EPPs were identified as primary contributors to the projected GNI growth:

EPP 9.1: Increasing average national rubber productivity

EPP 9.2: Ensuring sustainability of the upstream rubber industry

EPP 9.3: Increase world market share of latex gloves to 65 per cent by 2020

EPP 9.4: Commercialise Ekroprena and Pureprena (Green Rubber)

The Palm Oil and Rubber NKEA combined are targeted to deliver RM230.9 billion in GNI by 2020.

ENTRY POINT PROJECTS

EPP 9.1

Increasing Average National Rubber Productivity

The global rubber industry is the second largest industry in the world after iron and steel. While demand has risen exponentially due to the growth of the tyre and automobile industries, rubber growers are struggling to increase production due to a shortage of skilled tappers, unpredictable weather and limited availability of land to expand rubber cultivation.

To boost rubber yield in Malaysia, this EPP aims to ensure only high-yielding and quality-planting materials are supplied to the smallholders. Measures such as verification of clones at source bush nurseries, establishment of Malaysian Rubber Budwood Centres and Good Agricultural Practices were adopted.

This EPP is projected to create an incremental GNI of RM3.1 billion by 2020 and 31,000 jobs.

Achievements and Challenges

Recognising that the key method of increasing average Natural Rubber Productivity to 2,000 kg/ha/year by 2020 is through the planting of high-yielding and quality planting materials, numerous initiatives have been identified and implemented to ensure only recommended clones are planted by the smallholders.

Seeds Production Areas (SPA)

Rubber seeds are required to produce rootstocks which are then budded to produce planting materials of identified clones. SPA was established by Malaysian Rubber Board (MRB) to supply additional rubber seeds for the preparation of the rootstocks by nurseries, should it be necessary.

Malaysian Rubber Budwood Centre (MRBC)

MRBC was established to supply sufficient quantity of high quality bud-eyes to nurseries to produce planting materials of the recommended clones. Two MRBCs in Bukit Kuantan, Pahang, and Penampang, Sabah, with an area of 30 ha and 15 ha respectively were successfully completed in 2012. This is in addition to the two MRBCs developed in Kota Tinggi, Johor, and Similajau, Sarawak, with an area of 30 ha each in 2011.

i-KLON and RiTeS

i-Klon has been introduced with the aim to add value to the current process of clone screening carried out manually, as well as to accelerate the certification process for nurseries. For the same purpose, a subjective mechanism, known as Rubber Information and Traceability System (RiTeS), was developed to monitor and track the sources of planting materials.

ARTS and Other Systems to Support Mechanisation

Automatic Rubber Tapping System (ARTS) is undergoing pre-commercial trials at the MRB's field and Sime Darby's plantation. Several technologies to mechanise field operations were also launched in 2012 and these include Soil Filling Machine (SoFiL), Planting Machine (PMac) and Latex Collection Vehicle (LCV).

Good Agricultural Practices (GAP)

RISDA and LIGS were active in conducting trainings related to Good Agricultural Practices (GAP) to ensure the young rubber trees are given the right inputs. As at Oct 31, 2012, a total of 111,727 smallholders in Peninsular Malaysia have been trained by RISDA while LIGS has provided training to 512 smallholders in Sabah.

Moving Forward

Two additional Malaysian Rubber Budwood Centres in Kota Tinggi, Johor, (8 ha) and Sungai Sari, Kedah, (12 ha) will be established in 2013.



Replanted rubber trees tapped for latex



Ensuring Sustainability of the Upstream Rubber Industry

Malaysia's rubber plantation area has been gradually decreasing over the last 10 years as rubber land was progressively converted to accommodate other crops and other economic activity. In 2000, the area under rubber stood at 1.43 million ha but has reduced to 1.02 million ha in 2011. Recognising the importance of upstream sector in providing sufficient raw materials to the downstream industry in the future, policies have been formulated to ensure that the rubber areas are maintained at 1.2 million ha, of which one million ha are tappable. Assuming a productivity of two tonnes/ha/year, the country is targeted to produce two million tonnes of rubber by the year 2020 to support the development of the downstream activities.

The Government, through implementing agencies such as RISDA, LIGS, JPS, FELDA and FELCRA, are committed to ensure ongoing replanting and new planting activities among smallholders. In 2011, the replanting grant was increased from RM7,000 to RM9,230/ha in Peninsular Malaysia and it was extended to Sarawak and Sabah at the rate of RM13,500/ha and RM14,000/ha respectively. This grant has been extended for the new planting activities.

Efforts under EPP 9.2 are projected to create RM3.2 billion and open up 233,766 job opportunities in the upstream rubber industry.

Achievements and Challenges

The replanting and new planting programmes in 2012 witnessed a majority of the replanting taking place in Peninsular Malaysia, whereas new planting mainly took place in Sabah and Sarawak. The total planting of rubber to date was recorded at 28,576.98 ha, which is approximately 82 per cent of the targeted hectareage of 35,000 ha for the year 2012. Another 16,508.07 ha of land are still at the work-in-progress (WIP) stage.

The rubber replanting and new planting programmes introduced by the Government received an overwhelming response from smallholders. The number of applications received by the three implementing agencies (RISDA, LIGS and JPS) far exceeded the NKEA hectareage targets by 374.9 per cent.

The implementing agencies on the other hand faced several challenges which impeded the progress of planting. Among them is the inadequate supply of planting materials, weather conditions and administrative process. Nevertheless, every effort has been taken by the implementing agencies to ensure that the objectives of the replanting and new planting programmes will be achieved.

Moving Forward

This EPP aims for replanting and new planting of 47,000 ha in 2013.

New planting	Applications received (ha)	Approved (ha)	Area (ha)	
			Work in progress	Planted
RISDA	5,268.53	4,377.80	1,751.92	1,318.18
Lembaga Industri Getah Sabah	39,222.05	4,982.00	1,389.75	2,285.33
Jabatan Pertanian Sarawak	20,776.90	8,516.60	1,890.00	-

Replanting	Applications received (ha)	Approved (ha)	Area (ha)	
			Work in progress	Planted
RISDA	62,232.20	53,824.16	11,071.88	23,972.42
Lembaga Industri Getah Sabah	3,725.93	2,412.00	404.52	1,001.05

Total			16,508.07	28,576.98
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Exhibit 5.12: Progress of rubber replanting and new planting

EPP 9.3 Increase World Market Share of Latex Gloves to 65 per cent by 2020

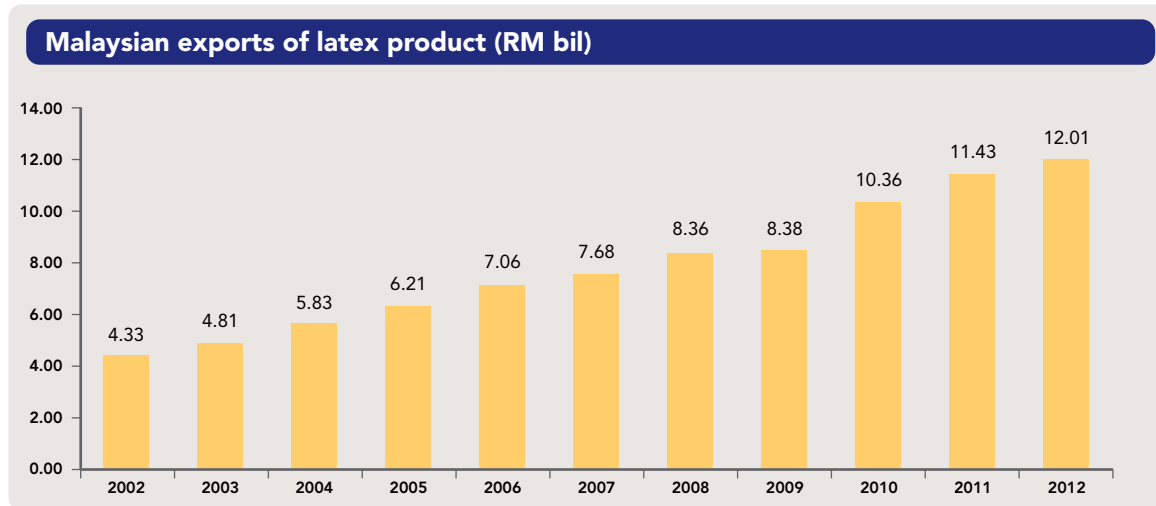


Exhibit 5.13: Malaysian Exports of Latex Products (RM billion)

The Malaysian Exports of Latex Products accounted for about 80 per cent of the total export value which is largely contributed by gloves. Currently, Malaysia is home to the world's leading producers of gloves. Fuelled by the surge in global demand, gloves have and will continue to dominate the Malaysian rubber products industry in terms of employment, rubber consumption and exports. In order to increase efficiency as well as to overcome the shortage of labour, the industry players are encouraged to embark on automation. With a steady supply of raw materials, it is hoped that the industry will be able to acquire the competitive edge essential to maintain the country's dominance as the world's biggest producer and continue to sustain itself as an important revenue and employment generator for the country.

This EPP aims to boost the natural rubber glove industry's global market share from 62 per cent in 2011 to 65 per cent by 2020, growing at 13 per cent per year. This activity is projected to create an incremental GNI of RM20.8 billion and create 29,000 jobs.

Achievements and Challenges

The total export revenue of Malaysian latex products, of which latex gloves is one of the major contributing items, was recorded at RM12.01 billion, approximately 96.15 per cent of the targeted value of RM12.48 billion for 2012.

Moving Forward

The Malaysian exports revenue of latex products in 2013 is targeted at RM12.85 billion.



EPP 9.4 Commercialising Ekoprena and Pureprena

While Malaysia has performed very well in the export market, competition from other producers, especially from lower labour cost countries in the Southeast Asian region such as Vietnam, are expected to challenge Malaysia's market share. To remain competitive in the global market, a reduction in the cost of production, improvement of technology and mechanisation would be required from Malaysian manufacturers. In an attempt to move away from this red ocean industry, MRB is spearheading the domestic NR industry to capitalise on the growing green consumerism movement in the world where the preference is for natural and renewable materials over synthetic materials.

Malaysia pioneered the production of specialty rubbers for the production of green tyres and high-performance engineering products. Processes to produce Epoxidised natural rubber (Ekoprena) and Deproteinised natural rubber (Pureprena) were transferred to two rubber processors for commercialisation. Improvements for Ekoprena and Pureprena production lines are being carried out to increase process efficiency and productivity.

The Federal Land Development Authority (FELDA) and MARDEC Bhd were the two companies licensed by Malaysian Rubber Board (MRB) to produce Ekoprena and Pureprena with a target capacity of 300,000 tonnes per year by 2020. The Government has allocated a RM5 million grant for both the plant's construction and promotional activities. This EPP involves RM125 million investments from the private sector and will lead to the creation of 560 jobs.

Achievements and Challenges

Felda Rubber Industries Sdn Bhd (FRISB) has started producing Ekoprena and Pureprena using the MRB facilities in Sg Buloh, Selangor, and the products produced from the tolling process was distributed to the potential customer as a promotional sample. In 2012, the first Ekoprena and Pureprena factory owned by FELDA was commissioned in Palong 8, Negri Sembilan, for commercial production.

Efforts to introduce these new products to the global market through technical visits to potential customers (major tyre companies such as Pirelli, Italy; Hankook, Korea; and Michelin Tyre, France), international conferences and exhibitions are ongoing. These efforts are just beginning to create an impact. Apart from promotional samples, to date a total of 910 tonnes have been produced. Uptake of Ekoprena remains weak despite these marketing and promotion efforts. Additional effort is needed to ensure greater customer acceptance.

Moving Forward

The global economic downturn will reduce the demand and the appetite for the major tyre manufacturers to develop or introduce new products. The Government, under this EPP, will continue to engage key tyre makers around the world with the aim at increasing Ekoprena and Pureprena sales. In 2013, seminars for targeted customers as an effort to promote and spread the information will be conducted.

BUSINESS OPPORTUNITIES

Palm oil is a major global commodity. Once planted, the tree can produce oil palm fruit for more than 25 years, providing a major source of income and employment for rural communities. Its oil is highly lucrative, as the plant yields more oil/ha than any other major oilseeds. Due to its versatility — the oil finds its way into toothpaste, soaps to chocolates and the clean fuel that powers automobiles — palm oil is poised for major growth in the decades ahead. Malaysia's palm oil industry is expected to grow in the next decade, powered by three Business Opportunities (BOs) in upstream expansion, development of existing downstream palm oil activities as well as biodiesel production worth RM57.6 billion by 2020.

These BOs aim to address key challenges to the industry which include increasing mechanisation to reduce the plantation industry's dependence on labour and raise yields.

Business Opportunity 1:

Expansion of Plantation Land Bank

Faced with increasing production costs and limited suitable lands available in Malaysia and Indonesia, plantation companies have turned to new areas in Myanmar and the Philippines, as well as West African nations.

Business Opportunity 2:

Development of Existing Downstream Activities

Malaysia is already the world's biggest commercial exporter of tocotrienols, exporting RM50 million of the supplement to major markets such as the US, Europe, Japan and South Korea. With increased awareness on the advantages of tocotrienols, the palm oil-based supplement industry could be poised for growth in the coming years.

Business Opportunity 3:

Development of National Biodiesel Activities

Global biofuels production and consumption has been rapidly growing as countries shift to a new energy supply mix to reduce dependence on fossil fuels. In light of heightened geopolitical tensions in the Middle East and increased efforts to reduce greenhouse gas emissions, accelerated usage of Malaysia's biodiesel programme, a five per cent biodiesel blend with petroleum diesel since 2011, dovetail with the country's efforts to manage carbon emissions.

Malaysia has a vast amount of annual biodiesel production capacity of 3.5 million tonnes annually. However, only 117,000 tonnes were produced by the biodiesel plants in 2010.

Summary of Palm Oil and Rubber NKEA

	2020 Target
Incremental GNI impact	RM230.9 billion
Additional Jobs	41,600
Critical targets for 2013	
Palm Oil	
<ul style="list-style-type: none"> Accelerate the replanting of oil palm by plantations and smallholders as well as new planting by independent smallholders to 130,000 ha Form seven new regional cooperatives to group more independent smallholders together Improve national oil extraction rate to 21.05 per cent Encourage uptake of connection to the Feed in Tariff system by biogas plants Ensure completion of eight biogas plants under construction 	
Rubber	
<ul style="list-style-type: none"> Accelerate the replanting and new planting of rubber by independent smallholders to 47,000 ha Improving the export of natural rubber and compound rubber to 1.2 million tonnes Establishing the market for Ekoprena and Pureprena as well as ensuring that the production is maintained at 1,000 tonnes. 	

Enabling Change

HEALTHCARE

ON THE GROUND WITH THE CIVIL SERVICE

While Malaysia has long enjoyed a robust public healthcare system, private healthcare providers now play a growing role in the domestic industry. In tandem with strong private sector participation envisioned for the ETP, the Healthcare NKEA provides opportunities for private healthcare providers to continue to flourish, especially through collaboration with the public sector.

According to YBhg Dato' Dr Haji Azmi Shapie, Director of the Medical Development Division at the Ministry of Health (MoH), with many of the initiatives under the NKEA driven by the private sector, the civil service and various Government agencies act as important partners in facilitating the business opportunities created.

The public sector also works to re-examine rules and regulations as it seeks to ease processes and expedite decision-making. This is not just to ensure that projects move forward, but also to ensure that existing Government policies are maintained, says Dato' Dr Azmi, who oversees EPP 5: Creating a Diagnostic Services Nexus (DSN).

EPP 5 aims to establish a competent provider in the niche area of specialised radiology reporting services, capitalising on the availability of competent radiologists in the country and harnessing ICT technology to develop efficient connectivity for radiology reporting.

The ultimate goal is to receive insourcing of services from abroad, which will contribute to Malaysia's GNI. Diagnostic Services Nexus Sdn Bhd (DSNSB), a private consortium, has been given the opportunity to spearhead the initiative, and will develop capacity and act as a competence provider for the DSN.

For EPP 5 specifically, MoH is supporting and helping to facilitate DSNSB in developing the expertise and competence in managing radiology reporting services. In view of this, MoH is providing a training ground for DSNSB by offering an opportunity to establish a network of ICT connectivity and by outsourcing radiology reporting to DSNSB. This is the beginning of the venture in this niche area before DSNSB will be able to go global and receive outsourcing orders from foreign countries.

DSNSB's journey however has just begun. The long and challenging road ahead will require commitment from DSNSB and all parties involved to chart the future strategy towards the creation of DSNSB's own branding as a competent and reliable radiology reporting service provider.

Nonetheless, the overall progress of the various EPPs under the Healthcare is very encouraging, contributing to the Healthcare NKEA exceeding its targeted GNI, job creation and investment targets in 2012.

"This achievement is the result of the synergy and close collaboration between the private sector and the various Government agencies, with guidance from PEMANDU," says Dato' Dr Azmi, who looks forward to greater success for all EPPs under the Healthcare NKEA in 2013.

Mr Choy Lup Bong, the Undersecretary of the Policy & International Relations Division at MoH, also sees the Healthcare NKEA representing a very focused and excellent programme in forwarding the Government's goals towards 2020. He highlights, however, that some initiatives may



Dato' Dr Haji Azmi Shapie, Pengarah Bahagian
Pembangunan Perubatan, Kementerian Kesihatan

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The overall progress of the various EPPs under the Healthcare is very encouraging, contributing to the Healthcare NKEA exceeding its targeted GNI, job creation and investment targets in 2012

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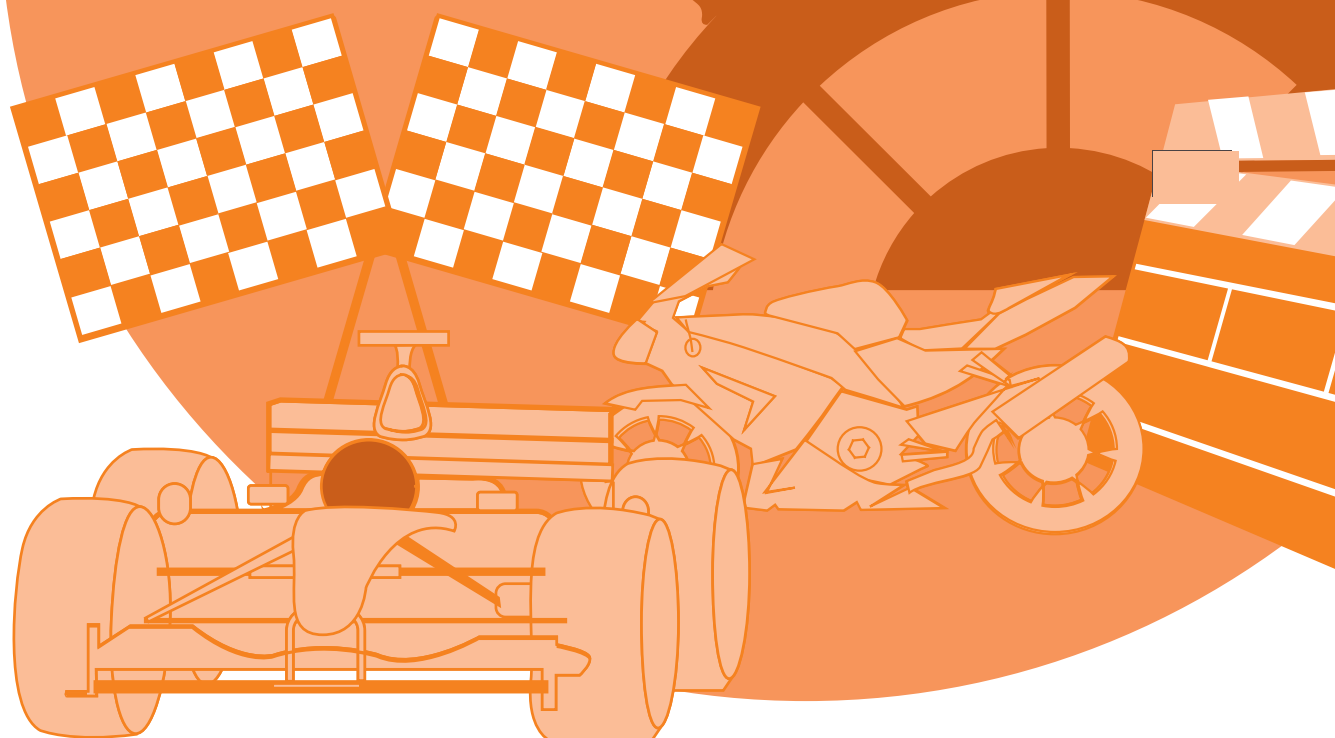
be held back by bureaucratic policies and procedures that require review to ensure progress is expedited.

The civil service, therefore, plays a key role in providing information and related data in the implementation of the NKEA, and providing better co-ordination between all Government agencies and speedier approvals while reducing bureaucracy.

Mr Choy also emphasises the need for buy-in from the civil service in implementing the ETP. “It is a challenge to change the perception of the public, the civil service and some of the industry players. However, some elements within the civil service are acceptable to change and innovation to ensure that people are able to obtain excellent service from the Government,” says Mr Choy.



Tourism





Dato' Sri Dr. Ng Yen Yen

Minister of Tourism

The transformation of the tourism industry is being successfully translated into tangible efforts to propel Malaysia to greater heights. This year with tourist arrivals registering at 25.03 million and a contribution of RM60.6 (USD19.5) billion in tourist receipts, the tourism industry stands as one of the top three contributors of foreign exchange to the economy.

Tourism is becoming an increasingly competitive business as nations strive to expand market share and increase tourist arrivals. It is significant that the Malaysia Tourism Policy is based on the philosophy that tourism protects, preserves and conserves Mother Nature, Culture and Heritage. The World Economic Forum, APEC and the G20 world leaders have, for the first time, recognized the importance of the tourism industry as a driver of jobs, growth and economic recovery. As a result of the Government's commitment to leverage on tourism to rejuvenate the rural economy, Malaysia was awarded first prize for the UNWTO Ulysses Award for Innovation in Public Policy and Governance for Malaysia Homestay Experience Program in 2012.

In addition, the ranking of Kuala Lumpur as the fourth-best shopping destination in the world by CNN in 2012 is a result of concerted efforts between the Government and tourism industry players to position Malaysia as a premier shopping destination. Moving forward, we aim to intensify our efforts to attract more tourists to stay longer.

I would like to record my highest appreciation to all for the strong commitment and collaboration in ensuring the success of the tourism EPPs.

TOURISM

The tourism industry in Malaysia is an important foreign exchange earner, contributing to economic growth, attracting investments and providing employment. Malaysia's warm weather, eco-diversity and retail landscape helps entice over 25 million tourist arrivals a year contributing over RM60 billion in receipts. Add to the mixture a fascination with shopping centres and experience in halal services, this sector has experienced continuous growth moving into 2013.

The focus of the Government to establish the Tourism NKEA has enhanced the co-operative efforts of various ministries. Greater collaboration between the Ministry of Tourism and the Ministry of Natural Resources and Environment has helped enhance Malaysia's position as a leading tourist destination.

The first year of the ETP saw the NKEA focus on establishing the environment necessary for the initiative to flourish. Throughout 2012, the EPPs executed most of their initial plans resulting in significant achievements. For example, *The Economist* survey placed Kuala Lumpur as the 2nd best shopping destination in Asia Pacific due to the significant growth of business tourism via the efforts of MyCEB and the smoother administration of cruise calls to Malaysia.

Moving forward, the NKEA will continue to build on the achievements of each Entry Point Project (EPP) and address the challenges that remain to ensure 2020 targets are realised.

2012 Key Performance Indicators

Tourism NKEA		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	% of shopping spend	32	30.7	96	●	96	●	0.5	●
	Total Tourist Spend per Arrival (RM per tourist)	770	743	96	●	96	●	0.5	●
EPP #2	Retail revenue per sq ft (RM/sq ft) (% increase)	1100	1488	135	●	100	●	1.0	●
EPP #3	Confirmation of operator for 2nd outlet centre	100%	100%	100	●	100	●	1.0	●
EPP #4	Upgrade of sites to meet Malaysia Mega Biodiversity Hub certified standards	Penaiktarafan lengkap (1 lokasi) Anugerah Kontrak (1 lokasi)	100%	100	●	100	●	1.0	●
EPP #5	Government approval of the development and building permits for the K Beachfront mixed development	100%	100%	100	●	100	●	1.0	●
EPP #6	Exemption of the cabotage policy for foreign cruise vessels providing services between Malaysian ports (excluding cruises to nowhere)	To gazette the exemption of the cabotage policy for foreign cruise vessels	100%	100	●	100	●	1.0	●
EPP #7	Total revenue from international events (RM mil)	900	916	102	●	100	●	1.0	●
EPP #8	Establish entertainment zones	1	1	100	●	100	●	1.0	●
EPP #9	Number of spa therapists trained/ undergoing training	150	152	101	●	100	●	1.0	●
	Revenue generated from spas (RM mil)	22	51.8	235	●	100	●	1.0	●
	Revenue generated from golf tourism (RM mil)	290	296	102	●	100	●	1.0	●
EPP #10	Number of events secured (with min. size of 650 delegates)	45	45	100	●	100	●	1.0	●
	% of business travelers /arrivals	5.3%	5.1%	96	●	96	●	0.5	●

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Tourism NKEA		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #11	Increment of weekly seats to 6 priority countries (China, Japan, India, Taiwan, Australia and Korea)	3780	7028	185	●	100	●	1.0	●
	Increase in number of international passenger traffic at all airports in Malaysia	5%	5.94%	119	●	100	●	1.0	●
EPP #12	New 4 and 5 Star hotel rooms	3000	3648	122	●	100	●	1.0	●
				117%		99%		91%	

Exhibit 6.1

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score#2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

ENTRY POINT PROJECTS

EPP 1

Positioning Malaysia as a Duty-Free Shopping Destination

This EPP targets to position Malaysia as the desired duty-free haven in the region by 2020. To propel us in this direction, competitive pricing will be the key driver in attracting tourists and increasing sales. This follows from the earlier abolition of import duties for 328 items under eight categories announced by YAB Prime Minister of Malaysia in the 2011 budget.

In addition to the efforts to promote shopping in Malaysia, the Ministry of Domestic Trade, Co-operatives and Consumerism and Tourism Malaysia have started monitoring the price of goods in the regional markets of Malaysia, Singapore, Hong Kong, Indonesia and Thailand, which enables continuous gauging of product and price competitiveness within the region.



Tourists are finding Malaysia an attractive shopping haven

Achievements and Challenges

As a result of these strategically targeted promotional efforts, the percentage of shopping spend in Malaysia increased from 30 per cent in 2011 to 30.7 per cent in 2012, while the total tourist spend per arrival increased from RM707 to RM743 in the same period.

In addition, Kuala Lumpur has been ranked fourth in a CNN Travel's Top 10 Best Shopping Cities 2012 survey. The city was placed ahead of well-established hubs such as Paris, Hong Kong and Dubai. Kuala Lumpur's impressive score was due to its winning combination of high quality shopping, affordable prices and reliable sales, citing the 1Malaysia Year-End Sales as an example. It is noteworthy that Malaysia scored full marks for value. This is the second recognition in 2012 for Kuala Lumpur's lure as a shopping destination. Kuala Lumpur was also crowned the second best shopping destination in Asia Pacific by Globe Shopper Index, which belongs to the *Economist Intelligence Unit* and commissioned by Switzerland-based shopping tourism company Global Blue.

Moving Forward

Throughout 2013, Tourism Malaysia will continue to intensify efforts to benchmark Malaysia as the regional shopping destination via ongoing awareness campaigns and competitive pricing.



Designating Bukit Bintang-Kuala Lumpur City Centre Area as a Vibrant Shopping Precinct

The Bukit-Bintang-Kuala Lumpur City Centre (BB-KLCC) Tourism Association has been assigned the task of carrying out projects to brand and promote the BB-KLCC area as an international shopping paradise. The objective is to elevate the shopping hub to a level on par with international shopping districts.

Set up in September 2011, the Association comprises both the public and private sectors and represents the interests of landowners, mall operators and retailers within the precinct. The association plays an integral and supporting role to the Ministry of Tourism, which is leading efforts to increase shopping spend in the precinct by creating better connectivity, increasing commercial mix and improving streetscaping. Among the members of the association are Bukit Bintang Plaza, Berjaya Times Square, Fahrenheit88, Federal Hotel KL, Lot 10, Piccolo Mondo, Plaza Low Yat, Pavilion Kuala Lumpur, Sungei Wang Plaza, Suria KLCC and Starhill Gallery.

The BB-KLCC Tourism Association's strategy includes creating a calendar of world-class attractions and events to promote Malaysia to the world, including the Street Illumination project. The Association also works with the authorities in their plans to enhance the infrastructure and facilities in the area. These plans include an elevated and covered pedestrian walkway linking KLCC to Bukit Bintang.

Achievements and Challenges

Phase 1 of the elevated walkway between KLCC and the Impiana Hotel was completed and launched in 2011 while the longer Phase 2: KLCC to Pavilion stretch was completed in December 2011 and launched by the Prime Minister on 28 January 2012. The aim of this 562-meter long walkway is to encourage more shoppers to walk within Kuala Lumpur by providing safe and comfortable walkways.

To better package the experience of shopping to tourists, the BB-KLCC Tourism Association initiated a Tourism Privileges Card that covers 550 participating outlets within the main malls in the precinct. The card comes with a host of privileges, benefits and discounts unique to each participating mall. These privileges are valid year-round.

As part of branding and promotional efforts, the first phase of the RM2 million BB-KLCC Street Illumination project was launched by the Minister of Tourism on 29 August 2012 where the entire BB-KLCC hub was transformed with large scale lighting and street illumination. This included the two archways at Bukit Bintang and KLCC, adorned with a combination of fountains, chandeliers and meteor lights along the streets. These lights are modular and can be changed to accommodate different seasons.

Together with this Street Illumination launch, the BB-KLCC Tourism Association website went live (<http://www.bbkklccmalaysia.com>). This website aggregates content from the participating malls, retailers and hotels, and also features general information, location and directions around the area.

The Go-KL initiative launched on 31 August 2012 under the Urban Public Transport GTP 2.0, provides a free bus shuttle between KLCC, Bukit Bintang and KL City attractions like Central Market. This has played an important part in enhancing the connectivity within the city and provides effective public transport for both tourists and locals.

Moving Forward

In 2013, the BB-KLCC Tourism Association will continue to schedule comprehensive events to complement efforts for the overall benefit of the area. The Association will also step up efforts to grow its membership base of 40 distinct members to include more retailers in its representation and activities.

EPP 3

Establishing Premium Outlets in Malaysia

The nationwide drive to make Malaysia a competitive regional shopping destination is reinforced with the establishment of outlet centres offering discounted luxury items. It forms part of the overall aim to attract more tourists, by improving the retail offerings and in return increasing tourist spend.

Achievements and Challenges

Since the launch of Phase I of the Johor Premium Outlets by YAB Prime Minister of Malaysia on 11 December 2011, the centre has received a consistent trend of visitors to the shopping venue. Located in Kulaijaya, this is the first of such outlet centres in Southeast Asia.

The second phase of Johor Premium Outlets is scheduled to be opened to the public in the fourth quarter of 2013. It will extend the existing concept and outlet shopping offering of Johor Premium Outlets, providing a larger and enhanced shopping experience.

Selangor will also witness the development of an outlet centre which will include development of an upscale factory outlet centre with complementary components. The outlet will be developed in three phases at a gross development cost of RM335 million.

Moving Forward

Leveraging on the latest tourist attractions in Johor like the Legoland and Hello Kitty theme parks, the Johor Premium Outlets will continue to enhance promotions in a bid to increase the visitor trend to the centre. The progress of Phase II of the Johor Premium Outlets will also be monitored to ensure timely completion. Development plans for an outlet center in Selangor will be finalized to target commencement of the construction by the third quarter of 2013.



Johor Premium Outlets



Establishing Malaysia as a Global Biodiversity Hub

This EPP aims to tap on Malaysia's unique biodiversity offerings and increase tourism revenue by establishing Malaysia as one of the world's premium nature and eco-tourism destinations. As one of the 12 mega diverse countries, Malaysia must preserve, conserve and enhance its natural biodiversity and eco-assets. To do this, a comprehensive system that monitors and conserves, the presentation of natural attractions is required.

The Malaysia Mega Biodiversity Hub (MMBH) Interim Board was established in December 2010, comprising representatives from the Ministry of Natural Resources and Environment, Ministry of Tourism, Ministry of Rural and Regional Development, Economic Planning Unit, Tourism Malaysia, Sarawak Forestry Department, Sabah Tourism Board, Malaysian Nature Society (MNS), Malaysian Ecotourism Association, World Wildlife Fund for Nature (WWF), Institute for Environment and Development (LESTARI, UKM) and private sector representatives. The MMBH Interim Board provides policy direction and decisions aimed at improving the standards of excellence in the management and preservation of key ecotourism sites.

One of the key roles of the Board is to identify and monitor eco sites, ensuring the sustainability of ecotourism development and activities. In 2011, MMBH identified and upgraded three sites – the Royal Belum State Park, UNESCO World Heritage Area Gunung Mulu National Park, and Pulau Tioman Marine Park. Meanwhile, Aquaria KLCC was identified as a Marine Discovery Centre.

Achievements and Challenges

Three additional sites identified by the MMBH Interim Board for upgrading works are now in various stages of completion: Taman Negara Kuala Tahan now has a new 5 km boardwalk which was completed in August 2012. The boardwalk was introduced as a measure to reduce the impact of tourist on the ecosystem. The National Elephant Conservation Center (NECC), Kuala Gandah and Kinabalu Park are also undergoing upgrades based on recommendations.

The Board has also developed and will soon commence pilot tests on the MMBH Criteria and Indicators (C&I) – a monitoring system assessing Malaysia's ecotourism products and to allow for systematic recommendations and improvements that may be required by each assessed site. The C&I were designed with input from representatives from various stakeholders.

Meanwhile, the Ministry of Natural Resources and Environment is in the midst of identifying a potential site as a Rainforest Discovery Centre where promotional efforts to showcase Malaysia's biodiversity of flora and fauna will be centralised.

Aquaria KLCC will continue to channel its efforts towards enhancing its Marine Discovery Centre, which will be implemented in phases. This will commence with enhanced interpretation areas and upgrades of its existing displays to promote ecotourism. New displays are also planned in the later phases.

Moving Forward

The C&I Implementation will commence with the pilot sites of Royal Belum State Park, Pulau Tioman Marine Park and Taman Negara Kuala Tahan in 2013. The implementation will be a combination of self-assessment and independently conducted on-site assessment of the sites.

NECC will see improved tourist amenities with great emphasis on conservation. Kinabalu Park will also see improved infrastructure including improved drainage and scenic hill stations.

EPP 5

Developing an Eco-Nature Integrated Resort

Following strong market demand, an integrated eco-nature resort city will be developed in Karambunai, Sabah comprising a rainforest safari, nature lodges, a mangrove centre and a discovery cove. This project is spearheaded by Karambunai Corporation Bhd (KRC).

In 2011, the first set of developments began, and applications for the various processes and approvals were sought. Throughout 2012, KRC worked with the various Government Ministries, agencies and local authorities to conform to the policies and requirements leading to the approvals and permits.

Achievements and Challenges

The new RM4.9 million restaurant was completed and has been operational since August 2012.

The Master Land Use Plan which spells out the development activities of the massive Karambunai peninsula was approved by the Sabah Central Board in 2012. KRC will now finalise the implementation plan for each phase of their development.

Moving Forward

In 2013, the focus will be on finalising the specific developments of the resort.



Karambunai Resort's new restaurant

EPP 6

Cruise Tourism: Creating a Straits Riviera

Cruise tourism intends to improve Malaysia's competitiveness as a cruise destination with the Asian and international cruise passenger market growing rapidly at an average of 14 percent annually over the past 10 years. With the increased interest in cruise tourism in the region, Malaysia is in good stead to benefit from the increased calls in the region.

By capitalising on Malaysia's strategic geographic location, this EPP aims to grow the number of cruise passengers coming to Malaysia. Furthermore, the ports of Penang, Port Klang and Langkawi already form part of the existing international cruise operators' call schedules, with interest also expressed to extend the schedule to several other ports in Malaysia.

Efforts will be focused on identifying Malaysia's primary ports and identifying the improvements needed at these ports to make them more attractive cruise destinations. Following successful improvements at these primary ports, attention can eventually be shifted to improve Malaysia's secondary ports as well.

The Cruise and Ferry Seaport Infrastructure Blueprint for Malaysia was commissioned by EPU in 2011, and provides vision and direction on developing the cruise industry in Malaysia. From this report, six primary ports were identified based on the number of existing cruise calls and potential interest by cruise operators to be a cruise destination. These are Penang, Port Klang, Kota Kinabalu, Langkawi, Malacca and Kuching. Initial efforts will be focused at improving the operations and attractiveness at these primary ports.

A policy-making public-private stakeholders' advisory committee called the Malaysia Cruise Council (MCC) was also mooted. The MCC is envisioned to be a coordinated voice to provide the direction for policies, developments and framework required by the cruise industry in Malaysia.

Achievements and Challenges

Since March 2012, to encourage foreign cruise vessels to provide services between Malaysian shores, the Cabotage Policy was gazetted to be exempt for all cruise vessels. This Policy previously only allowed for vessels that are registered in Malaysia to load and unload passengers in the ports of Malaysia. With this exemption, international cruise ships will now be able to disembark and re-embark passengers at more than one Malaysian port in any of its stopover destinations.

The MCC was set up and is co-chaired by the Secretaries General of the Ministry of Tourism and the Ministry of Transport, with representatives from both the public and private sectors. Under the MCC, six sub-task forces were formed for the six primary ports identified with representatives from the local port authorities, agencies and also private sector cruise industry players. The purpose of these sub-task forces is to efficiently address port-specific issues and develop focused recommendations. With the set-up of these sub task forces, operational matters are streamlined and ports are also better positioned with international cruise terminal operators.

There is a need to balance the development of port infrastructure and marketing elements to promote cruise tourism.

Cruise line operators have indicated that they were willing to accept and work around current Malaysian port infrastructure, as long as efforts are in place to continue improving the existing facilities and operations. However, in the medium- and long-term, there is a need to upgrade the infrastructure to support the increasing number of calls at the primary ports.

Moving Forward

The Ministry of Tourism and the various State Tourism Boards will assist cruise terminal operators to promote their surrounding attractions and also work with local tour operators to better develop targeted cruise tourism products. Tourism Malaysia will also work closely with the lead agencies of each sub-task force to market each destination at notable International Cruise Conventions such as the Cruise Shipping Miami and Seatrade Asia, and to engage regional cruise liners at these conventions.

Meanwhile, the Ministry of Transport will continue to improve the cruise infrastructures especially at the primary ports. The lead agencies of each sub-task force will also facilitate any prospective port developments by the private sector.



A cruise ship at Port Klang

EPP 7 Targeting More International Events

The hosting of international events is a significant platform for Malaysia to promote itself as a vibrant travel destination. Malaysia has a number of existing homegrown events that have been repackaged and clustered with these international events to boost international spectatorships.

A dedicated International Events Unit (IEU) was formed under the Malaysian Convention and Exhibition Bureau (MyCEB) to identify and bid for international events, and for clustering and developing homegrown events. Since its inception in 2011, IEU has secured 28 international events between 2011 and 2014.

Achievements and Challenges

In order to maintain a robust schedule of international events, IEU secured 10 events between 2011 and 2013 with a total target of 70,000 spectators and RM67.5 million in tourist expenditure. Meanwhile, for the 2012 to 2014 period, 19 events have been secured to boost the number of spectators to 323,680 with a targeted tourist expenditure of RM373 million.

Other than bidding for events to be hosted in Malaysia, the IEU has also developed homegrown events with nine successfully hosted in 2012, registering an 11 per cent increase in spectatorship and a 16 per cent increase in revenue as compared to 2011. Smaller events have also benefitted from IEU's efforts to further boost its effectiveness in attracting international spectatorships. With a total of eight events clustered throughout 2012, this segment saw an increase of 4 per cent in both spectatorship and revenue from 2011.

The Formula 1 and MotoGP events were repackaged and clustered with exciting events to further boost their appeal in attracting international spectatorship. With these efforts, the recent F1 2012 saw an increase of 14 per cent in spectatorship compared with 2011. MotoGP 2012, which took place in October 2012, witnessed a 15 per cent increase in the number of spectators compared with 2011.

To further facilitate the hosting of international events in Malaysia, the Central Agency for Application for Filming and Foreign Artistes (PUSPAL) introduced the pre-approval platform for the application of performances and concerts planned to be hosted in Malaysia. The PUSPAL guidelines were also amended based on input from industry experts and the public sector, with the aim to encourage more events to be held in Malaysia.



Justin Bieber at MTV Worldstage in Kuala Lumpur

Though tremendous efforts have been focused on promoting and supporting events to be hosted in Malaysia, some challenges remain for the private sector to obtain approval from local councils. As there are differing guidelines and requirements on the criteria for venues hosting events, an alignment of these requirements will provide better clarity and thus streamline the overall approval process.

Moving Forward

Together with the private sector, the IEU will continue to bid for international events to be hosted in Malaysia. The IEU will continue to work together with local players to design, develop and execute homegrown events and strategise on clustering smaller shows around major international events. Efforts to further promote these events overseas will also be intensified.



Kuala Lumpur Convention Centre is equipped with the required infrastructure to host international events in Malaysia



An entertainment outlet in Genting Highlands

In tandem with the concerted nationwide effort to boost tourism, the NKEA aims to create a thriving entertainment industry. The proposed set-up of Dedicated Entertainment Zones (DEZ) is meant to provide a more vibrant and lively city's night entertainment after most of the retail outlets have closed for the day.

The Ministry of Tourism has been facilitating discussions between entertainment outlet owners with their respective local councils and Government agencies to evaluate the suitability of such entertainment outlets under this EPP where such places can be promoted to tourists, who wish to experience the various night entertainment facility available in Malaysia especially in key tourist cities or areas.

Identified entertainment premises will be evaluated to ensure that they comply with DEZ guidelines, which stipulate that the premises need to be soundproof, located away from residential and religious areas, have adequate security and public transportation options, and convenient for tourists to patronise.

Achievements and Challenges

The Ministry of Tourism and the various Government agencies have agreed to accord DEZ status to compliant outlets on a premise-by-premise basis with the agreement of the local councils.

In 2011, the Kuala Lumpur City Hall (DBKL) agreed to Zouk KL being the first DEZ in Kuala Lumpur. Since its designation, Zouk KL has seen an estimated average increase of 22 per cent in the number of tourists. In 2012, four entertainment outlets in Genting Highlands were also given approval by the Bentong Municipal Council as DEZs.

These DEZs are being closely monitored on their tourist numbers and the economic impact on the local tourism industry.

Moving Forward

The two designated DEZ sites will continue to be monitored to ensure they meet the objectives of EPP8. Meanwhile, efforts will continue to evaluate prospective DEZs around the country to promote more interesting and well-managed entertainment outlets for tourists in Malaysia.



Zouk Club, Kuala Lumpur



Developing Local Expertise and Better Regulating the Spa Industry

The spa industry in Malaysia has grown significant especially with the increasing number of hotels offering spa services and this has spurred an increase in demand for spa therapists. However, public misconceptions of the industry may be contributing to the current shortage of local spa therapists.

Efforts are in place to better regulate the industry to ensure the quality and types of services provided by the spas. Steps are also being undertaken to address the negative public perception of the industry and to produce skilled local therapists.

The National Spa Council was established to regulate the spa industry and provide a platform to address issues pertaining to the industry. The Council, set up in 2011, comprises representatives from both the public and private sector as well as industry professionals. The Council has also developed an official criteria rating for spas, which is now being used by the Ministry of Tourism to rate spas.

Achievements and Challenges

Centres of Excellence (COEs) have been established to recruit and train locals to become spa therapists. In 2011, the Ministry of Tourism approved Energy Academy and Stella-In Beauty training centers as Centres of Excellence. Two additional COEs were approved in 2012, namely Langkawi International Spa Academy (LISA) and Jari-Jari Spa Sdn Bhd. To date, 52 spa therapists completed their training and have already secured employment with rated spa centres. Another 100 spa therapists are undergoing training.

As of December 2012, the Ministry of Tourism, together with the Spa Associations, rated 170 spas nationwide with 31 spas awarded a 5-star rating, and 40 spas given a 4-star rating. Spas that meet the rating criteria are eligible for inclusion in promotional efforts by the Ministry, and will be able to employ the trained local therapists by the COEs. The Ministry of Housing and Local Government (KPKT) is in the midst of implementing a policy to address spas which either fail to obtain a rating or only achieve a 1-star rating.

In providing awareness and addressing the public negative perception towards the industry, the Ministry of Tourism, together with Ministry of Human Resources and the COEs collaborated in organizing numerous roadshows across the country, attended live stream interviews and published several news articles on the opportunities provided by the industry. As a result, COEs have received applications from candidates interested to participate in the spa therapists' course.

Moving Forward

Centers of Excellence will step up efforts to recruit and train local spa therapists in meeting the industry's demand. The Ministry of Tourism and the Ministry of Human Resources will continue to support the COEs and promote the industry.



Dr Ng (middle) launching the Spa Therapist Programme. With her are (from left) President Persatuan Spa Malaysia, Ramona Suleiman, Deputy Minister Datuk James Dawos Mamit, Director-General Tourism Malaysia Datuk Azizan Noordin and Stella Hong, owner of Stella-In International

EPP 9b Golf Tourism

Although the country's golf industry has grown rapidly in recent years, Malaysia has yet to be considered a major golf destination. Golf tourism is forecast to grow with the concerted efforts of enhancing and repackaging products, and in targeting the high high-yield market segments. Collaborations between the various private sector players such as the golf tour operators, golf clubs and resort operators and also Tourism Malaysia will be key to unlocking this growth.

There are currently more than 200 golf courses in Malaysia, some of which are located at scenic locations. The country is also host to four major Golf Tournaments: the Maybank Malaysia Open, CIMB Classic, Sime Darby LPGA Open and Iskandar Johor Open. Malaysia can therefore better capitalize on the existing infrastructure and events to draw in more golf tourists to the country.

Established in March 2011, the Malaysian Golf Tourism Association (MGTA) was formed to co-ordinate the efforts of the various Malaysian golf tour operators, golf clubs, golf courses, hotels and media to promote Malaysia as a desired golf destination.

MGTA acts a facilitator for the industry by implementing various programmes to boost the number of golfers visiting Malaysia. The association held a recruitment drive and now has 45 members, of which 27 are golf clubs and resorts.

MGTA's efforts also include auditing member golf clubs and courses using the International Association of Golf Tour Operators (IAGTO) guidelines as 'export-ready'. 'Export-ready' golf clubs and courses are deemed to have sufficient facilities and access for international golf tourists.

MGTA also works closely with Tourism Malaysia to better facilitate golf tour packages by the tour operators to better cluster and take advantage of the major golf events in Malaysia.

Achievements and Challenges

Since October 2011, MGTA has set up an official website designed to be a comprehensive resource for golfers which include over 500 pages of information on tourist-friendly golf-courses, news and updates, as well as the latest golf packages offered by the various operators in Malaysia.

One of MGTA's key achievements in 2012 was the successful hosting of the inaugural Asian Golf Tourism Convention, organized by the IAGTO that was held in Kuala Lumpur in April. This is a major milestone as this Convention has previously never been held in Asia and managed to attract 426 delegates from 46 countries to facilitate business-matching in the area of golf tourism. The estimated economic impact of this event and its spillover effect is approximately RM 10 million. Along with the total revenue of RM 81 million by the four Major Golf events in Malaysia, golf tourism has contributed a total of RM 296 million to Malaysia's economy.



Tiger Woods in action at the CIMB Classic 2012. Image obtained from BERNAMA Images



The inaugural Asian Golf Tourism Convention

On the golf course audit front, 25 golf clubs were certified by IAGTO as being tourist friendly and export ready in 2011. In 2012, this number increased to 36 golf courses.

One of the challenges currently facing all golf courses in Malaysia, however, is the shortage of trained caddies. As part of the Ministry of Tourism's ongoing efforts to facilitate the golf industry whilst regulating the intake of foreign caddies, preference will be given to applications received from the IAGTO-rated courses.

The Ministry of Tourism is also working with the caddy training institutions conducted by Youth Golfing Skill Academy, under the Ministry of Youth & Sports and Primavoc Sdn Bhd. This effort is to encourage more school leavers to be trained as golf caddies through various road shows especially in smaller towns and rural areas.

Moving Forward

MGTA will continue its efforts to increase the number of golf courses in Malaysia which are IAGTO endorsed and rated. This initiative aims to re-educate Malaysian golf course operators in realising the prospects of opening up their courses and clubs beyond exclusive memberships to include international tourists.

Together with Tourism Malaysia, MGTA will continue to work to attract more golf tourists to make Malaysia a major golfing destination. These include efforts to design more consolidated collateral in the form of a Malaysian Golfing map, brochures in multiple languages and targeted articles in international golf media publications.

Efforts to capitalise on the major international golf tournaments currently held in Malaysia will continue. This includes the ongoing efforts to convince golf courses and clubs on the merits of creating packages to cluster around these events to attract more tourists to their premises.

MGTA is also working closely with Tourism Malaysia to support international road shows, seminars and FAM trips in support of building golf tourism as a long-term sustainable business.

Finally, efforts are also ongoing to promote golf to international corporate clientele to encourage in-bound conferences, seminars, meetings and incentives combined with golf tournaments, golf learning and team building events.



Establishing Malaysia as a Leading Business Tourism Destination

Business tourism is one key area of the high-yield segment market and has the potential to be developed to deliver high revenues to the country. The Malaysia Convention and Exhibitions Bureau (MyCEB) was established to further elevate Malaysia's position as a leading meetings, incentives, conventions and exhibitions (MICE) destination.

MyCEB was established with a mandate to grow business tourism in Malaysia, specifically in the MICE arena. The unit facilitates effective end-to-end business bidding which includes preparing the bidding documents, supporting due diligence during the selection process, providing support to defer costs during the event itself and finally, to support post-event activities.

Achievements and Challenges

As of December 2012, 45 major MICE events (minimum 650 delegates) had been secured for 2012, attracting a total number of 61,659 delegates and estimated revenue of RM 597 million, representing a 100% increase in both the number of delegates and revenue generated compared to 2011.

One of the key events secured was the 127th International Olympic Committee (IOC). This event, scheduled to be hosted in Kuala Lumpur in 2015, is expected to receive approximately 1,500 international delegates including IOC members and honorary members. An additional 1,500 members from the media are also targeted.

Other than being focused on events bidding, MyCEB has also developed several programs to further boost Malaysia's position in business tourism. In January 2012, MyCEB appointed 17 Kesatria 1Malaysia – leaders of major industrial sectors – to identify and encourage potential organizers to host large scale international conferences in Malaysia. For 2012, a total of 22 leads have been generated under this program, with an estimated 46,000 delegates and RM552 million in economic impact.

The Industry Partners Program (IPP) was also introduced to encourage industry collaboration with MyCEB, to package and promote Malaysia as an international business events destination as well as to improve Malaysia's competitiveness in the international market place. Currently, a total of 213 IPP members have signed up, with majority from accommodations and venues, followed by event management companies, touring and leisure agents and event product/services providers.



The Malaysian pavilion at the International MICE Exhibition

MyCEB's Chief Executive Officer (CEO), Zulkefli Hj. Sharif, was appointed as President of the renowned Asian Association of Convention and Visitor Bureaus (AACVB), from 2012 to 2014. Established in 1983 as an alliance of eight national convention bureaus from China, Hong Kong, Korea, Macau, Malaysia, Philippines, Singapore and Thailand, the AACVB is committed to promote Asia as the top choice for the business events organizers from around the world to host their events and to enhance the professional standards within the business events industry in the region.

Moving Forward

Currently with Malaysia placing 29th in the International Congress and Convention Association (ICCA) worldwide rankings, and Kuala Lumpur in 5th position in the ICCA's "Meetings Destination in Asia Pacific", MyCEB will continue to focus on attracting higher number of delegates attending conferences in Malaysia and assist in developing the professional standards and skills in the MICE industry.



Launching Ceremony of Kesatria 1Malaysia

EPP 11 Enhancing Connectivity to Priority Medium-Haul Markets

The medium haul segment markets (flights of four to six hours) from China, Japan, Australia, India, Korea and Taiwan continue to bring high yields and present the largest tourism potential. These countries possess the required critical mass and economic strength to provide the growth of quality tourists to Malaysia.



Kuala Lumpur International Airport

Achievements and Challenges

The lifting of restrictions on international destinations for Malaysian carriers in June 2011 enabled an increase of medium-haul flights to Australia, China, Taiwan and Japan.

This was evident from the overall increase of 8,619 weekly seats to these countries in 2011. However, due to commercial decisions based on market forces, airlines may opt to cancel some of their flights if they are not sustainable. In lieu of these decisions, some routes were dropped in a few target cities, namely New Delhi, India and Incheon, South Korea.

Close tracking of increasing flight frequencies between priority medium-haul countries for 2012 showed an average increase of 7,028 seats per week in 2011. As of December 2012, there was a 186 per cent increase to 91,151 weekly seating capacity to these countries from Malaysia. Overall, passenger traffic increased by 5.94 percent, from 30.9 million in 2011 to 32.7 million in 2012.

In terms of actual passengers, year on year (2012 vs 2011) China recorded the highest growth of 24.6 per cent followed by Japan (21.5 per cent), South Korea (7.8 per cent) and Taiwan (3.7 per cent). Despite the increase in capacity, tourists from Australia decreased by 9 per cent followed by India (-0.3 per cent).

The Ministry of Transport continues to conduct bilateral talks with Governments of target countries to obtain more air slots, particularly in India. National carriers also continue to negotiate better timings for their landing slots at these key destinations.

To further supplement the accessibility from the markets prioritised under this NKEA, Tourism Malaysia have also made consistent efforts to encourage charters especially during peak seasons when normal scheduled flights are unable to cope with high demands. These efforts have borne positive results. The number of charter flights in 2012 saw a tremendous increase of 110 per cent with a total of 471 charters as compared to 224 charters in 2011. Meanwhile with the continuous efforts made by Tourism Malaysia, the number of charter flights coming to Malaysia continues to grow. For the first quarter of 2013, Malaysia received confirmation of 225 charters to Malaysia including new routes from Australia and Russia.

Moving Forward

The Ministry of Transport will continue to work with the local travel industry to ensure that the medium-haul market will be geared to cater for the increase in tourist arrivals each year leading up to 2020. This will include bilateral discussions with other countries namely China and India to increase flight frequencies, assisting both local and foreign carriers to expand routes and increase flights, and assisting chartered flight operations during peak seasons and new route development.



KLIA departure hall

EPP 12 Improving Rates, Mix and Quality of Hotels

In line with Malaysia's focus of targeting high yield tourists, the number of 4-star and 5-star hotels need to be increased. The Government has put in place several tax incentives to encourage investment and to support the growth of the hotel industry.

Under the 2012 Budget announcement, the Ministry of Finance (MoF) approved Investment Tax Allowance and Pioneer Status for new hotels with a 4 and 5-star rating. Hotels which are 100 per cent foreign-owned will also be eligible for these incentives. MoF has also revised the equity conditions for eligibility of tax incentives to encourage more Malaysians to participate in hotels which have 1 and 2-star ratings while the foreign equity conditions will be gradually liberalised for hotels which have a 3-star rating.

Achievements and Challenges

In 2012, an additional 3,648 new 4-star and 5-star hotel rooms were completed, including the Majestic Hotel in Kuala Lumpur, and Gaya Island Resort located on Pulau Gaya, Sabah. The newly completed 4-star and 5-star hotel rooms contain 1,853 and 1,795 rooms respectively.

Efforts under this EPP also saw significant commitment and investments from the Alorie Lepa Lepa resort hotel. Located at the southern tip of Mabul Island in the Semporna Sipadan Mabul area off the coast of Sabah, this project involves a total development area of 80 acres with total investment of about RM168.4 million. The resort will include an underwater restaurant, a spa, scuba diving centre and a marine conservation centre. The construction commenced in early 2012 and the hotel is expected to be completed by early 2014.

Majestic KL

This EPP was announced on 30 November 2010 and was officially opened on 1 December 2012. Offering 300 units of 5-star rooms, The Majestic KL is the only hotel in Kuala Lumpur which was included in "The Leading Hotels of the World" (LHW) luxury hotel collection, putting it in the company of some of the best hotels in the world including The Ritz London, The Pierre in New York City and Hotel le Bristol in Paris.

This hotel features a pillar-less grand ballroom, Contango – a luxurious contemporary restaurant featuring open kitchens with a wide variety of cuisine; the Majestic Spa; which offers seven treatment rooms, a relaxation area, and its own swimming pool; and a second two-storey building called The Smokehouse will feature a lounge, grooming room, cigar room, private dining area, a screening room and card room.



Hotel Majestic, Kuala Lumpur

Pulau Gaya Resort

Pulau Gaya Resort was announced as an EPP on 11 January 2011 and this 5-star hotel was opened on 1 August 2012. It is designed as a deluxe family resort of 121 spacious hillside and sea-front villas, and features elements of traditional Sabahan architecture, which includes a Feast Village showcase restaurant paired with another specializing in epicurean fine dining. The highlight of the amenities is a Spa Village, which will be the only one in a shoreline mangrove setting.

Moving Forward

Efforts will continue to focus on bringing more 4-star and 5-star hotels to be developed in Malaysia.



Pulau Gaya Resort

BUSINESS OPPORTUNITIES

Business Opportunity 1:

Food and Beverage Outlets

Food and Beverage opportunities will always be available in most of the announced EPPs. The new restaurant in Karambunai was completed and operational in 2012. The Pulau Gaya Island Resort has two separate eateries with 35 chefs and 38 waiting staff in October 2012. The three new restaurants in the Majestic KL came online in December 2012 employing 39 waiting staff.

Business Opportunity 2:

Local Transportation

The Land Public Transport Commission (SPAD) will be implementing the Taxi Transformation Plan which will address issues and provide opportunities to the taxi industry in 2013.

In March 2012, Ministry of Tourism launched the Tourism Taxi Ambassadors Programme to improve the image of Malaysian taxi drivers. There are 79,571 registered cab drivers, with 33,000 in Klang Valley. The programme involved 3,000 budget taxi drivers, 500 executive taxi drivers and 500 limousine taxi drivers.

Even though it is still too early to perceive the results, the initial signs are positive, and taxi drivers involved in this programme have exhibited greater knowledge of the tourism industry. The tourism taxi ambassadors will be evaluated every six months before their tenures are renewed. They will be evaluated based on feedback given by the passengers. Inspections will be carried out to ensure that the vehicles are always clean, neat and in good shape.

Business Opportunity 3:

Tour Operator Segment

In 2012 there was a 9 per cent increase of tour operators registered with the Ministry of Tourism to 4,275. Besides the increase in tour related businesses, there was also an 8 per cent increase in tour guides comprising both City Guides and Nature Guides to 10,326 in 2012. The number of City Guides has increased from 7,425 to 7,984 while Nature Guides increased from 2,107 to 2,342.

Under the 2013 Budget, the Prime Minister announced that tour operators which bring in at least 750 foreign tourists or handle no less than 1,500 local tourists a year, would be eligible for a 100 per cent tax exemption on their statutory income until 2015.

Summary of Tourism NKEA

	2020 Target
Incremental GNI impact	RM66.7 billion
Additional Jobs	497,000
Critical targets for 2013:	
<ul style="list-style-type: none"> • Completion of Second Phase Johor Premium Outlets • Development of outlet centre in Sepang • Concerted development of the Cruise Industry • Increase spectatorship to International Events • Setting up of additional Centres of Excellence to train spa therapists • Increase in number of bids won and number of delegates for MICE • Expand routes and explore new routes with Chartered Flights • Development of more 4-star and 5-star hotels 	

Enabling Change

EDUCATION

ON THE GROUND WITH THE CIVIL SERVICE

As an enabler in developing Malaysia's human and intellectual capital, the Education NKEA plays a crucial role in the country's transformation towards high-income status. In turn, the civil service has helped ensure a comprehensive approach in managing, implementing and monitoring this NKEA's EPPs which cover the spectrum from early childhood education up to professional skills training.

"As key players and champions of NKEA projects are largely in the private sector, it is imperative that facilitation is given by the civil service, especially when projects come upon stumbling blocks with regard to policies, regulations and the like," says Associate Professor Dr Harshita Aini Bt Haroon, director at the National Higher Education Strategic Plan (PSPTN)'s Programme Management Office (PMO) for the Ministry of Higher Education (MoHE), which also functions to track MoHE EPPs.

Initially set up to manage and monitor the implementation of the Ministry's Higher Education Strategic Plan, the PMO now also works with the Ministry's KPI Officer to ensure EPPs under the Education NKEA proceed as planned.

With the scope of work for the civil service subsequently magnified, so has the complexity of their tasks increased.

"One challenge I can quickly think of at the top of my head rests upon the idea of 'business unusual'. At MoHE, whilst this is pivotal in our own implementation of the PSPTN, the entry of the Education NKEA's EPPs into our daily operations goes further to strengthen the notion. In operational terms, it really means that we have to work quicker, smarter, connect more, and see more of the bigger picture as we aim for global competitiveness," says Dr Harshita.

"What I particularly like about getting the NKEA's EPPs to operational levels is the way in which business communities and relevant parties, as well as government agencies, are brought together to discuss plans to ensure national objectives are achieved," she adds.

Intangible successes such as these form a large part of the civil service's efforts under the Education NKEA, as with the experience of YBhg Datuk Dr Pang Chau Leong, the Director General of the Department of Skills Development, Ministry of Human Resources. The Department, the lead agency responsible for skills development in Malaysia, is also the project owner of EPP 5: Scaling up Private Skills Training Provision.

While promoting closer ties with industry, facilitating funding, and harmonising the training provided by a myriad of bodies, the Department also spends a large part of its efforts under the Education NKEA to raise public awareness on the high value offered by skills-based and vocational professions.

The Department's efforts, therefore, are focused on the overarching goal of creating pathways for Malaysians to improve their skills and move into sustainable, higher income brackets, in line with the ETP's target of transforming the country into a high-value economy.

While the challenges are many, such as demanding deadlines and KPIs, Datuk Dr Pang nonetheless describes the Department's work in driving EPP 5 over the past two years as very fulfilling, helping to develop a skilled and competent workforce able to command better wages.

He also notes that the ETP has spurred the public sector to change the way it operates. "We are now very much focused on engagement, which entails going to the ground to meet with stakeholders and industry players, and creating smart public-private partnerships. We are also increasingly conscious on performance and quality," he says.

“*In operational terms, it really means that we have to work quicker, smarter, connect more, and see more of the bigger picture as we aim for global competitiveness*”

Associate Professor Dr Harshita Aini Bt Haroon,
Director at the National Higher Education Strategic Plan (PSPTN),
Programme Management Office (PMO)



Enabling Change

PUBLIC FINANCE REFORM

ON THE GROUND WITH THE CIVIL SERVICE

As among leading agencies implementing the Public Finance Reform SRI, the Royal Malaysian Customs Department (RMCD) and the Inland Revenue Board of Malaysia (IRBM) have achieved significant strides in helping the Government to strengthen public finances.

"Our priority is to increase revenue, and the SRI has led us to undertake a more focused approach in improving tax administration and compliance for indirect tax collection. Based on our performance last year, we have seen a tremendous increase in revenue," says YBhg Dato' Hj Chik Omar Chik Lim, the Director of Customs, Corporate Planning Division at the RMCD and the Coordinator of the RMCD's Public Finance Reform Group.

Dato' Hj Chik Omar says he has also seen growing dedication among customs officers in achieving set milestones, allowing the RMCD to reach short-term objectives while paving the way for reaching long-term goals. "Where we are now focused on increasing revenue, in the years to come we can begin to focus on other areas, such as meeting customer needs under a more customer-oriented approach," he says.

One challenge however has been to ensure everyone involved in the RMCD's efforts under the Public Finance SRI works according to schedule, in addition to completing their day-to-day jobs, he says.

Nonetheless, En Wan Apandi Wan Hassan, Senior Assistant Director of Customs, Corporate Planning Division, Strategic Planning Section,

at the RMCD, adds that the RMCD's initiatives under the SRI are able to be carried out more aggressively. This is as the project is directly under the purview of the Prime Minister's Department. Additionally, the SRI has allowed the RMCD to implement other key initiatives, such as provide special training for its workforce, reward high-performing audit officers and utilise computer aided audit software.

On the IRBM's side, Tuan Hj Mohd Idris Mamat, Director of the Tax Compliance Department at the IRBM, says the ETP has helped the civil service by providing guidelines required by various agencies to transform Malaysia into a high-income nation by 2020.

In addition to his day-to-day responsibilities at the IRBM, Tuan Hj Mohd Idris is also the Coordinator of the IRBM's Public Finance Reform Group. "When implementing the Public Finance Reform initiatives, the IRBM greatly requires and has received good co-operation from other civil service or Government agencies. For example, the IRBM works closely with the Accountant General's Department of Malaysia to help accelerate the tax submission process, while the Ministry of Finance also plays a role in co-ordinating meetings between the IRBM and other Government agencies.

"In other words, the civil service really needs to work closely with each other in order to meet objectives," he says.

Some challenges encountered by the IRBM in implementing its initiatives under the Public Finance Reform SRI includes limitations in procuring the required external data or information from other Government agencies, due to their related and governing Acts. "I think the way forward for the success of this initiative is for the establishment of a centralised database of all information related to all Government agencies," says Tuan Hj Mohd Idris.

Nonetheless, he sees a positive outlook for the Public Finance Reform SRI, with efforts taken to increase tax collection allowing the Government to generate higher revenue which can be re-distributed to the rakyat. "From the IRBM's perspective, in order to be a high-income nation, the wealth and prosperity should be enjoyed by everybody," he says.

YBhg Dato' Hj Chik Omar Chik Lim
Director of Customs,
Corporate Planning Division





Electrical and Electronics


Dato' Sri Mustapa Mohamed

Minister of International Trade and Industry (MITI)

2012 has been a gratifying year for the progress of the Electrical and Electronics (E&E) NKEA. I am pleased with the completion rate of the projects, although more work is required to hasten the transition towards newer, more resilient, and higher value-added activities.

As expected, the largely production-oriented solar industry experienced a big scare as a result of the European financial crisis. Therefore, MITI's agencies will continue to explore new markets and processes to enable the E&E industry to remain relevant. The Malaysia External Trade Development Corporation (MATRADE) is looking at arresting export declines, SME Corporation Malaysia (SME Corp) has implemented focused programmes for areas such as LEDs, and Malaysian Investment Development Authority (MIDA)'s transformation into a more nimble, customer-oriented organisation is almost complete.

With these internal transformations, we hope to be effective partners to the private sector as they move themselves higher up the E&E value chain and generate greater levels of income for the nation.


Datuk Seri Panglima Dr Maximus Ongkili

Minister of Science, Technology and Innovation (MOSTI)

A key principle of the New Economic Model (NEM), sustainability applies across the board including upon macro initiatives such as the Economic Transformation Programme (ETP). In order for the ETP to be sustainable towards 2020, the EPPs which provide the catalytic kickoff for a high-income nation must be complemented with a strong pipeline of private sector investment opportunities for it to maintain its growth momentum.

Towards this goal, the Government has made innovation one of its highest priorities. As the Ministry in charge of innovation in the Cabinet, MOSTI is happy that we have been able to transform our agencies to play key roles in enabling the revitalisation of the E&E sector. MIMOS Bhd, SIRIM Bhd, and the newly formed Nano Malaysia Bhd feature in key projects in the E&E NKEA strategy, and together with MOSTI, will continue their active role in exploring new impetus for the growth of the sector.

ELECTRICAL AND ELECTRONICS

The local Electrical and Electronics (E&E) industry is a leading sector which contributes 55.9 per cent of the country's exports and employs 28.8 per cent of the national workforce. Over the years, the industry has developed significant capabilities and skills for the manufacturing of consumer electronics, electronic components and electrical components.

The National Key Economic Area (NKEA) roadmap produced in 2010 identified a two-pronged strategy for the further development of this sector:

First was for its Entry Point Projects (EPPs) to place a heavier emphasis on industry (cluster) development enablers as opposed to direct investment projects, with the first four EPPs focused on building mature technology fabrication. This emphasis on enablers is to supplement MIDA's existing investment promotion efforts and to allow the sector to focus on preparing for future developments.

Secondly, this NKEA has undertaken a joint effort with Malaysia's Regional Economic Corridors to ensure that its initiatives achieve inclusive and holistic results. This also contributed towards cluster and ecosystem development with the improvement of industrial park infrastructure and talent development.

In 2013, this NKEA will move towards "E&E 2.0", where a re-clustering of existing EPPs and the introduction of several new EPPs will take place. The main reason for this is in order for the E&E sector to thrive, it needs to move away from manufacturing activities only towards higher value activities like design, assembly, packaging and becoming a total solutions provider. To put it simply, instead of manufacturing the chips used in smartphones, industry players should be assembling, packaging and selling the smartphones.

By moving up the value chain, the E&E industry will propel the country forward through the creation of high income jobs, increased Gross Domestic Product (GDP) and Gross National Income (GNI), and attracting more Foreign Direct Investment (FDI). Further, the money multiplier effect will be tremendous given that this industry is economically entrenched.

Despite the challenging environment, this NKEA recorded significant achievements in 2012, and growth opportunities remain. Milestones during the year include the development of MIDA's Strategic Fund for the promotion of Domestic Direct Investment (DDI). This led to renewed vigour among the various investment promotion agencies, helping to boost the success of this NKEA during the year.

MIDA's corporatisation exercise also showed continued progress, with the reinvigorated lead Investment Promotion Agency to pursue High Impact Projects that will meet the long-term demands of Malaysia's economic transformation. Furthermore, additional synergies are expected to be released with the re-configuration of its vertical focus areas to align with the cluster concept.

In addition, while Malaysia must continue to strive for innovation in the semi conductor segment, developments in personal computing models have created vast new opportunities for makers of small, highly mobile, and power sensitive devices.

Most importantly, new age financial modelling, which continues to encourage the migration to “asset light” operations, provides opportunities for Malaysian companies to utilise their cost-effective manufacturing strengths to enter nascent niche areas in partnership with intellectual property owners.

Moving forward, a pressing issue that needs to be resolved swiftly is the question of ownership of the development of the E&E industry. Many major

industries have agencies to oversee policy issues, execute investment drives and promotional activities. For instance, the palm oil industry is overseen by the Malaysian Palm Oil Board, which handles policy reforms, the industry's development initiatives and distribution of funds. Currently, the ownership over the E&E industry is shared by various agencies such as MIDA, Matrade, MIMOS and SME Corp which can result in inefficiencies; therefore structural reforms will be made in 2013.

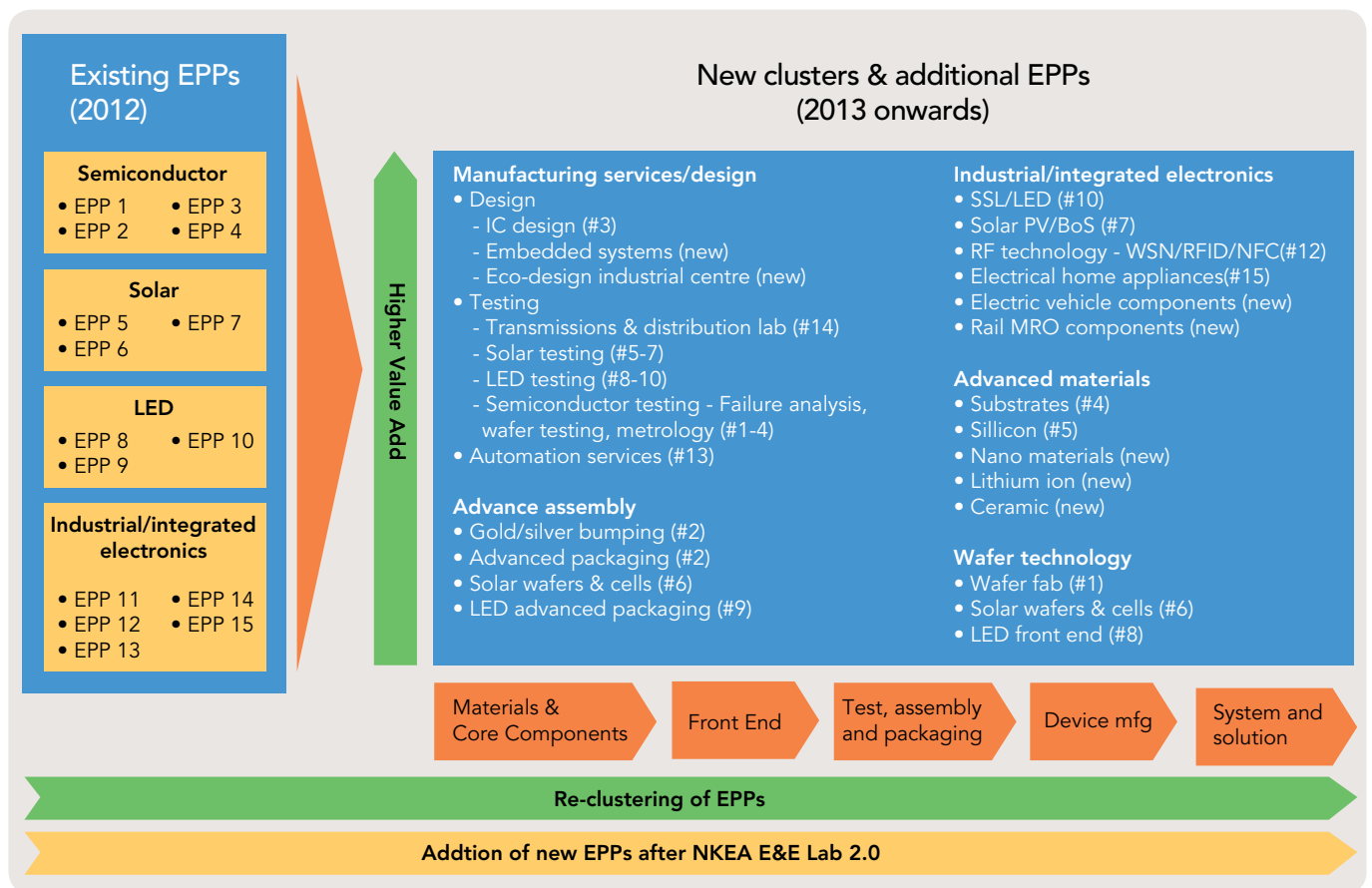


Exhibit 7.1: Re-clustering of EPPs and new EPPs

2012 Key Performance Indicators

Electrical and Electronics NKEA		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Wafer fabrication project. Completion of wafer fab projects (new/expansion).	2	1.8	90	●	90	●	0.5	●
EPP #2	Implementing 2 R&D Centres for Advanced Packaging	2	0.8	40	●	40	●	0.0	●
EPP #3	Number of new/expansion of IC design companies (i) Approved.	10	11	110	●	100	●	1.0	●
	Additional IC design firms (b) Implemented	5	7	140	●	100	●	1.0	●
EPP #4	Substrates manufacturer approved (formal acceptance of offer)	1	0.6	60	●	60	●	0.5	●
EPP #5	Progress completion of the approved silicon producers (a) Land clearing (1 Company)	100%	50%	50	●	50	●	0.5	●
	Progress completion of the approved silicon producers (b) Begin construction (1 Company)	100%	100%	100	●	100	●	1.0	●
EPP #6	Progress completion of the Cell producers (a) In operation (1 Company)	100%	100%	100	●	100	●	1.0	●
	Progress completion of the Cell producers (b) Begin construction (1 Company)	100%	100%	100	●	100	●	1.0	●
	Production of solar cell capacity (GW)	2.08	2.6	125	●	100	●	1.0	●
EPP #7	Progress completion of Solar Module Plants (a) In operation (1 Company)	100%	100%	100	●	100	●	1.0	●
	Progress completion of Solar Module Plants (b) Begin construction (2 Companies)	100%	100%	100	●	100	●	1.0	●
EPP #8	1 LED Wafer Fabrication plant approved (a) Approved	100%	100%	100	●	100	●	1.0	●
	1 LED Wafer Fabrication plant approved (b) Complete construction	100%	100%	100	●	100	●	1.0	●
EPP #9	Set up of 1 R&D Centre for LED packaging	100%	100%	100	●	100	●	1.0	●

(more on next page)

(continued from previous page)

Electrical and Electronics NKEA		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #10	1 local SSL company in operation	100%	100%	100	●	100	●	1.0	●
	Establish MS for solid state lighting products	100%	83%	83	●	83	●	0.5	●
	Develop Government procurement policy for local SSL product	100%	90%	90	●	90	●	0.5	●
EPP #11	Implement vendor development programme	100%	100%	100	●	100	●	1.0	●
EPP #13	Number of automation solutions for manufacturing	15	15	100	●	100	●	1.0	●
EPP #1 – EPP #4	Setting-up of Failure Analysis Lab - Complete level 2 Failure Analysis - Embedded Defects Failure Analysis	100%	100%	100%	●	100%	●	1.0	●
				95%		91%		83%	

Exhibit 7.2

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score#2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

ENTRY POINT PROJECTS

EPP 1

Executing a Smart Follower Strategy for Mature Technology Fabrication

This EPP, championed by MIDA and the newly-formed Semiconductor Fabricator Association of Malaysia (SFAM), focuses on establishing fabrication plants (fabs) that utilise mature technology, promoting the growth of smaller companies specialising in selected niche technologies such as analogue and power. Mature technology, defined as 90 nanometer or larger transistor feature size, can earn attractive returns, which include operating margins of between 10-80 per cent. Aside from its demanding logic, memory, graphics and field-programmable gate array applications, mature technology fabs are competitive in a wide range of applications, representing 65 per cent of global semiconductor revenue.



Photon Emission Microscope Upgrades dan IR Lock-In Thermal Emission Microscope



Dual Beam System



3D X-ray

Achievements and Challenges

SFAM was established in December 2012, and comprises three sub-committees which will share training resources and market intelligence with members. This is targeted to provide Malaysian companies with insights to spur efficiency and productivity. Among the enablers supporting the first four EPPs include the power quality upgrade with the installation of Uninterruptible Power Supply (UPS) at critical facilities in July 2012 and the set-up of the metrology lab to provide Ecosystem Support for 0.18um Wafer Fabrication Technology in October. The main benefit of having a UPS system in place is to prevent spikes or dips in power supply which will affect manufacturing. In December, MIMOS's Failure Analysis and Wafer Testing Shared Service Lab was upgraded to Level 2, covering gross defects, and buried/embedded defects. The upgrade will facilitate wafer fabrication, integrated circuit (IC) design and package assembly and testing. It will enable MIMOS to better play its role in enabling research and development for the rest of the local industry.

The semiconductor market has however seen slowing demand due to global economic conditions, causing existing fab players to adopt a wait-and-see approach towards increasing capacity. This, in turn, has led to a loss of some market share. The sector's foundry players meanwhile, which manufacture chips for third parties, must seek ways to generate more value and extend their longevity by exploring the solar and light-emitting diode (LED) market.



Transmission Electron Microscope

Moving Forward

Proposals from E&E 2.0 include a shift for this EPP from building five new fabrication plants as proposed in the 2010 ETP Roadmap, towards building capacity that is equivalent to five wafer fabs. The current target production for each fabrication plant is 30,000 to 40,000 wafer starts a month, therefore the accumulative additional capacity will increase to 210,000 wafers per month. This will be done by

maximising capacity to achieve one fabrication plant by 2013, expanding all existing fabrication plants to achieve another two by 2015 and attracting two new fabrication plants by 2016. The new strategy under E&E 2.0 will allow MIDA more time to search for quality investors to build their fabs in Malaysia while existing players continue to expand their capacity.

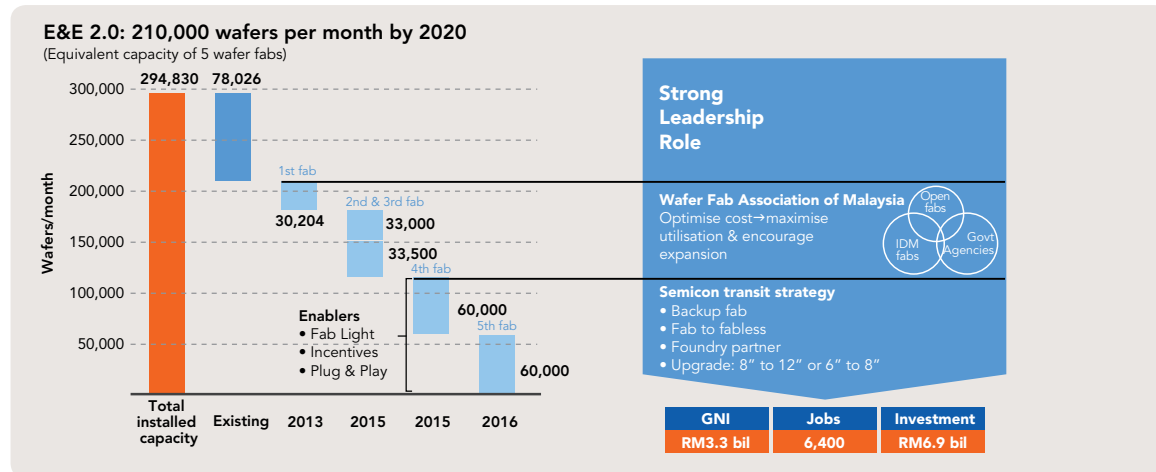


Exhibit 7.3

EPP 2

Developing Assembly and Test Using Advanced Packaging Technology

Malaysia's large semiconductor assembly and test operations base makes it well-positioned to become a hub for more advanced semiconductor packaging services, such as bumping or wafer-level packaging. Given the domestic demand for such services, this EPP focuses on attracting foreign companies providing such services to set up in Malaysia. This EPP is led by the NCIA with the support of MIDA, who are currently in the process of attracting foreign players to serve the domestic market while contributing to exports. One of the initiatives undertaken is to encourage companies to focus on R&D amid any delay in investments in mainstream production due to the prevailing economic climate.

Achievements and Challenges

ON Semiconductor has established its R&D centre whilst Infineon is in the midst of setting up an R&D centre which will be completed in 2013. This will result in high value products being manufactured and will increase the number of high-income jobs.

The progress of this EPP however remains impeded by significant challenges, such as the lack of skilled workers across the board which can be resolved through training programmes.

The local ecosystem must also consider shifting from their traditional assembly-type operations towards catering to rising market trends like miniaturising products. This will require manufacturers to quickly respond to the market's ever-changing needs.

Moving Forward

During lab sessions held for this NKEA, it was highlighted that EPP 2 must strengthen the infrastructure for advance packaging to cater for growing demand. Advance packaging represents a strategic play which the local industry must start developing its capability in. This will equip local players with in-house expertise in preparation for the eventual decline of traditional packaging material.



ON Semiconductor®

EPP 3

Developing Integrated Circuit Design Firms

Integrated Circuit (IC) design firms require highly-skilled employees who are constantly creating intellectual property, thus fitting well into the nation's ambition of creating an innovation-led and high-income economy. However, with just 15 active local and multinational IC design firms in Malaysia, there is a need to grow the number of design firms in the country.

Through initiatives led by MIDA and the Malaysian IC Design Association (MICDA), this EPP aims for Malaysia to be home to 50 more IC design firms by 2020. In addition, Batu Kawan in Penang has been designated as a hub for high-value E&E including IC design services, while support areas for this EPP comprise talent, IP protection and acquisition, Electronic Design Automation (EDA) and Project Design Kit (design library).

Achievements and Challenges

In collaboration with MIMOS and the Selangor Human Resource Development Centre, MICDA has set up an EDA tool shared service centre on a pay-per-use basis to benefit small IC design firms. At the time of writing, seven IC design firms have commenced operations and another 10 new firms have been approved.

In order to ensure the continued development of this sector, human capital concerns must be addressed, such as the lack of skilled workers in this field. The Government's continued drive to promote science and engineering subjects among primary and secondary school students is one way of overcoming this challenge.

Furthermore, the reluctance of Malaysians to buy local products represents a major stumbling block for the growth of the IC design market. Thus, market acceptance must be created and there is a need to address procurement policies which do not support local players.

Moving Forward

Future plans for this EPP will focus on encouraging the growth of IC design companies by offering shared facilities such as EDA tools and labs. This will help to lower the barriers to entry into this market and thus encourage the emergence of new IC design firms.

EPP 4

Supporting the Growth of Substrate Manufacturers and Related Industries

Under initiatives spearheaded by MIDA, EPP 4 aims to spur the development of substrate manufacturers and their related industries which play a support role. This is a key industry because it supplies substrates that are used to manufacture integrated circuit chips. To meet this ambition, this EPP targets to attract at least two more wafer substrate manufacturers to Malaysia, which is already home to leading wafer substrate manufacturers Shin Etsu and MEMC.

It is also expected that as Malaysia moves up the core semiconductor value chain and in adjacent industries such as equipment and epitaxy manufacturing, so will the country's attractiveness as a substrate manufacturing location grow.

Achievements and Challenges

Penchem Technologies Sdn Bhd won two awards in 2012 - SME Innovation Award and Most Innovative SME for their silicone synthesis plant. This award is significant for the local industry because silicone can now be produced in Malaysia for application in the LED and medical manufacturing sector. Prior to this, silicone had to be imported, which increased the cost of production.

A major impediment to the growth of this field however, is the high capital outlay required, thus discouraging the entry of manufacturers. This has thus posed a challenge in securing companies to expand to Malaysia.

Furthermore, Malaysia still lacks the high-energy intensive facilities required to support substrate manufacturing on a large scale. Currently, there is only one industrial park in Malaysia which can do so, located in Sarawak. However, the development of this industrial park is proceeding slower than expected as it requires co-ordination from the State and Federal Governments, which are responsible for the park's implementation and funding, respectively.

Moving Forward

This EPP will be re-clustered into advance material production, which encompasses substrate manufacturing, with companies in this field able to supply to solar industry players as well. Therefore, this EPP will be consolidated with LED and solar EPPs to allow the casting of a wider net in terms of securing and optimising more investments.

EPP 5

Increasing the Number of Silicon Producers

Initiatives under this EPP aim to help Malaysia increase its domestic silicon production from 6,000 tonnes to 115,000 tonnes by 2020. A key thrust will also be to establish one multinational corporation and develop two domestic silicon players each year until 2020.

To support this EPP, which is championed by MIDA, initiatives will also focus on providing a steady supply of high-grade silica and large amounts of cost-efficient, reliable energy to process raw silica. This is to meet requirements of solar silicon ingot manufacturers. To this end, Sarawak has been identified as an ideal location for silicon production plants, due to its deposits of high-grade silica and guaranteed supply of renewable energy, such as hydropower, at attractive rates.

Achievements and Challenges

Elpion Silicon Sdn Bhd, a subsidiary of South Korea's OCI Co Ltd, has committed to investing up to RM700 million for a manufacturing facility to produce metallurgical grade silicon (MGS), a component for solar panel production. Backing their global number 1 polysilicon market share ambitions, OCI's 1Q 2011 financial results presentation detailed the investment by subsidiary Elpion Co Ltd in a 100,000 MT per year capacity silicon metal (metallurgical silicon, mg-Si) plant being built in Banting, Malaysia, "to diversify supply sources". Construction of the MGS plant in Banting begun in 2012 and will be divided into phases with expected completion in 2014.

Meanwhile, Japan's Tokuyama Corp, which is investing RM2.98 billion to build its first foreign polycrystalline silicon plant in Sarawak, will invest an additional RM3.72 billion to build a second plant in the state. Tokuyama's second plant located in Samalaju Industrial Park in Bintulu will have an annual production capacity of 13,800 tonnes.

With growing investment in this sector, however, the Government must ensure that physical infrastructure requirements stay apace with demand for space and utilities. It has also become increasingly imperative for Malaysian manufacturers to stay abreast with the sector's shifting dynamics, where market leaders remain at the forefront in responding to economic and technological developments.

Moving Forward

The completion of Elpion's MGS plant will create some 600 new jobs and spur the multiplier effect in the area.

Tokuyama's first plant is scheduled to begin production in 2013, while the construction of its second plant will commence in April 2013. The plant is expected to be operational by January 2015.

EPP 6

Supporting the Growth of Substrate Manufacturers and Related Industries

The fabrication of silicon wafers and photosensitive cells are the intermediate processes along the production chain from silicon feedstock to solar modules. The country already has in place an attractive environment to attract multinational solar companies to Malaysian shores. This includes an established semiconductor industry with a value chain similar to that of solar cells as well as LEDs. Through this EPP, which is led by MIDA, Malaysian production of wafer and cell producers is targeted to be increased 10 times, from 2.4GW to 23.3GW in 2012.

Nano Malaysia Bhd

Nano Malaysia Bhd was incorporated in August 2011 to take the lead in the commercialisation of nanotechnology products. A lab was conducted in 2012 to identify projects aligned with its mandate and the four projects are:

1. Production of Li-ion batteries for electric vehicles in Malaysia
2. Graphene wafer production, a new technology in semiconductor production
3. Conductive composites production
4. Advance nanomaterials production

Achievements and Challenges

During the year, the Malaysian market has seen existing solar wafer and cell producers grow their total maximum production capacity to 2.6GW. This was supplemented by Tek Seng Holdings Bhd subsidiary, TS Solartech Sdn Bhd's start of production of one line for 60MW solar photovoltaic cells.

A challenge that the Malaysian market must contend with, however, is a downturn in foreign demand due to the removal of Government subsidies in major markets. Companies must therefore implement more design and development activities to cater to demand in new/emerging niche areas, while reducing their dependence on mature and saturated markets.

Moving Forward

Following its start of operations during the year, TS Solartech will invest a further RM596 million over the next five years. By 2016, the company is expected to have eight more production lines for solar photovoltaic cells.

To ensure the Malaysian market keeps abreast of current developments in the wafer and cell market, Nano Malaysia Bhd, a special purpose vehicle set up by MOSTI, will facilitate R&D into creating new nanointermediate products using advance nano materials.

EPP 7

Increasing Solar Module Producers

As with wafer and cell producers, Malaysia's cluster of module producers are operating in a crowded space where fundamental technologies are still competing for leadership. The target of this EPP is to secure more multinational module producers and to facilitate another five joint ventures to create the required critical mass for the Malaysian market to maintain a significant global presence in specialised fields, be it in mono/poly crystalline or in thin film technologies.



Glass is required to produce thin film solar modules

Achievements and Challenges

This segment, however, faces several challenges in its continued growth. MIDA needs to maintain the flow of high quality/high impact investments into this space, Malaysia needs to also create a conducive environment for incumbent companies to conduct the R&D necessary to maintain their market positions. Manufacturers must also improve end-to-end services, such as installation to ensure end-customer demands are met, while seeking to enhance the competitive advantage of locally produced goods by moving downstream and conducting R&D.

Moving Forward

As demonstrated by Malaysia's semiconductor/IC experience, the focus on component manufacturing must be complemented by an equally strong focus on producing higher value parts. This can be achieved through better coordination between the different players of the entire value chain and downstream activities.

The next phase of development of Malaysian solar/PV will necessarily be focused on retail/consumer applications, products and services. These downstream activities will provide the impetus for other growth opportunities, such as in the maintenance, repair and overhaul (MRO) and Balance of Systems (BOS) businesses.

EPP 8

Developing LED Front-End Operations

The LED sector possesses the potential to contribute a significant proportion to GNI, having showed double-digit compounded annual growth rates since 2002. A review of the Malaysian LED cluster profile also revealed that the segment is represented by at least two companies along its value chain, creating a well-rounded cluster in comparison to the semiconductor/IC cluster.

This, in turn, has created opportunities for the Malaysian market to establish itself as a regional and global player in this segment. However, as in any high-volume component market, scale, costing and efficiency are essential to its continued progress. Therefore, this EPP is focused on two main objectives, comprising:

- Tripling LED wafer fabrication capacity via organic growth of current players and attracting at least one new global player to Malaysia
- Further increasing local "share of wallet" by introducing at least two substrate manufacturers and/or epitaxy companies which can provide more high-value added products

Achievements and Challenges

In 2012, initiatives from this EPP helped facilitate Osram Opto Semiconductors (M) Sdn Bhd's expansion of its LED chip production plant in Bayan Lepas, Penang. Its operations will support demand for LED lighting from the Chinese market.

To promote high quality production of LED products, MMS Ventures Bhd commenced manufacturing customised LED test equipment in 2H2012. This will help Malaysian companies ensure products meet the required standards.

During the year, ELSOFT Research Bhd commenced the construction of a 90,000 sq ft facility in Bayan Lepas for LED test and process handling to meet the ever increasing demand from the tablet, smartphone, and automotive markets.

While this EPP recorded various developments in 2012, concerns which remain to be addressed include the need to foster an R&D landscape. This would help in the innovation and fabrication of core components or direct materials, thereby producing new opportunities for investment in the LED front end. The need for innovation remains an essential challenge for the local market, with further specialisation and investment required to help develop Malaysia's competitive advantage in this area.

Moving Forward

To help the LED segment extract further value from manufacturing, MOSTI agencies and research institutions will further define specific initiatives to leverage the availability of domestically produced and economically priced advanced materials. This will help the market expand into new classes of intermediate products, such as OLEDs.

EPP 9**Expanding LED Packaging and Equipment**

This EPP emphasises on stimulating organic growth within the packaging and application design landscape by developing local manufacturers and attracting multinationals to invest and commence operations in Malaysia. With the growing solid state lighting (SSL) market, new local companies are expected to emerge to meet the demand of niche services required by the industry.

Achievements and Challenges

The Malaysian LED packaging and equipment market witnessed encouraging developments in 2012, including the establishment of Philips Lumileds Lighting's LED manufacturing facility in Bayan Lepas, Penang, in June.



LED lights

Additionally, local player Globetronics Technology Bhd began working with three US customers on high-brightness LED modules to be used for greenhouse lighting, in which the company is involved in commercial-stage production.

A major concern faced by this market comprises the lack of national environmental and social policies which can help add momentum to industry development initiatives. Therefore, there is a need to leverage the various local green technology movements to catalyse demand and incentivise further investment in this market by Malaysian players.

Moving Forward

Following the introduction of 12 new Malaysian Standards for the LED/SSL sector in 2012, due diligence on making the adoption of the standards mandatory will continue in 2013.

Meanwhile, the Government via the Ministry of Energy, Green Technology and Water (KeTTHA), will roll out pilot programmes for the mass conversion of lighting in Government-owned buildings to LED lighting. This will be completed through vendor-funded programmes, aimed at creating critical mass to attract private sector investment.

EPP 10**Creating Local Solid State Lighting Champions**

This EPP is focused on developing a solid state lighting (SSL) cluster in Malaysia, which is envisioned to drive local SSL companies towards international competitiveness and renown. Four of the largest global SSL companies presently either operate or contract a sizeable portion of work to companies in Malaysia. This EPP, championed by KeTTHA, SME Corp and the Energy Commission, aims to leverage this factor to nurture and grow at least five Malaysian SSL companies into global brands.

Another area that has been identified to help develop the sales and recognition of Malaysian-made SSL products is the establishment of a certification system. This will verify the compliance of these products to global standards. Therefore, this EPP has identified the need for a LED certification centre to carry out this function, while helping to increase global awareness and assurance in Malaysian LED products.

The Government and private sector are also undertaking collaborative efforts to improve Malaysian standards and eliminate sub-standard products. These initiatives are coupled with public awareness campaigns on energy efficiency and to promote the capabilities of local manufacturers.

Achievements and Challenges

Standards Malaysia developed Malaysian Standards on LED, which were approved and implemented in March 2012. However, Malaysian Standards are currently only adopted on a voluntary basis, with mandatory adoption expected for implementation within one year of the launch of standards.

Due to the narrowing gap in production quality between Malaysia and markets such as China, however, the mandatory adoption of Malaysian Standards has become increasingly essential. This is to ensure Malaysian products remain competitive

against Chinese products, especially as the Chinese Government has introduced standards for LED products manufactured in Malaysia. This may eventually lead to China being able to sell better quality LED products at a lower cost.

Nonetheless, Malaysia continues to undertake efforts to improve the standards of locally-made products. This will be complemented by the start of operations of SIRIM's LED testing lab in July. The facility will help ensure the quality of Malaysian-made products, although efforts now must also focus on aligning testing with internationally recognised methods.

Furthermore, LED players received additional impetus with the launch of SME Corp's Green LED Programme, designed to help SMEs increase their scale, provide them with assistance in purchasing equipment, and to apply for product certifications required for export.

These efforts towards improving the quality of Malaysian products must however be supplemented with measures to address the unwillingness of Malaysians to buy local products. A further pressing issue comprises the differing tariff structures for various LED components. Therefore, measures should be taken towards harmonising the structure to help cement stability in the LED market.

Moving Forward

In 2013, the focus will be on encouraging the mandatory adoption of Malaysian Standards for the LED market within the first year of its implementation. Additionally, the Green LED Programme managed by SME Corp aims to grow local SSL/ LED champions to support the objectives of this EPP.

Solid-state lighting products including LEDs have been receiving considerable attention due to potential advantages over conventional lighting technologies. Therefore, the scope of assistance under this programme includes funding for development or improving activities of commercially viable SSL products. It also provides partial/ matching grant for purchasing or improvements in manufacturing equipment testing, processes or monitoring techniques, to obtain international certifications.

Significant progress is also expected in the development of a local LED champion, with SME Corp, MIDA and MATRADE in collaboration to implement a three-phase programme in view of this goal. Under Phase One, SME Corp will select six SMEs to help upgrade their skills. Phase Two will be undertaken by MIDA, which will provide training and R&D incentives, while MATRADE will execute Phase Three by helping these companies penetrate the global market.



A range of AVIALITE's aviation warning lighting products



EPP 11

Building a Test and Measurement Hub

Following investments by US-based Agilent and National Instruments in manufacturing and R&D of electronics test and measurement facilities in Penang, the foundation has already been laid for Malaysia's emergence as a hub in this area. This EPP will capitalise on the existing test and measurement knowledge landscape in the country to cement the country's position as a test and measurement hub. This will, in turn, provide a key enabler for numerous other sectors and expedite the expansion of the electronic industry as a whole.

Agilent, whose products account for 30 per cent of the global market of electronics measurement, continues to view Malaysia as a strategic location for its manufacturing activities. This has created a vibrant testing and measurement ecosystem in Malaysia. Additionally, in collaboration with the Government, National Instrument has set up a shared-service lab facility at Technology Park Malaysia; allowing local companies to utilise the facilities for design and development. The facilities also serve as a training hub for engineers to obtain and upgrade their proficiency of the LabView system design platform under the certification process.

Achievements and Challenges

Agilent launched a local SME vendor development programme with two vendors (CEEDTec and Myreka) and a talent development programme with two education providers i.e. HAT and Dream Catcher. The vendor development programme which was introduced in 2012 allows both vendors to benefit from Agilent's common test lab facility and has resulted in valuable knowledge transfer which will benefit the industry as a whole.

The ongoing establishment of the National Instruments Academy and Innovation Nucleus will seek to nurture innovation, develop the local talent pool and promote intellectual property rights creation in the local SME community.

Some challenges faced by this market however represents the disparity between the skill sets of Malaysian E&E engineering entrepreneurs and the expertise required to maximise commercial success. Furthermore, the need has also arisen for the creation of a common platform to integrate multiple Government innovation initiatives and to encourage collaboration between industry players.

Moving Forward

In the next development phase of the National Instruments' shared-service facility, the company will appoint local SMEs with potential to become their High Value-Add System Integrators via this initiative. The lab, which can cater for up to 10 different sectors, is ultimately set to become a regional facility.

Expanding Wireless Communications and Radio Frequency Identification (RFID)

This EPP, led by the Malaysian Communications and Multimedia Commission (MCMC), seeks to grow Radio Frequency Identification (RFID) in Malaysia by supporting the growth of local companies. The Government has undertaken various initiatives to expand the domestic RFID industry, including establishing an RFID Centre of Excellence, supporting international RFID standards and creating a National RFID Roadmap.

This will supplement existing competencies of Malaysian engineers in design and development which have been built up over the last 30 years, which provides the necessary foundation to grow local design houses. While the cost of entry into design work for wireless communications is exorbitantly high, the private sector and the Government will collectively jump start this industry.

Achievements and Challenges

UPM, MIMOS, Intel and Kontron are currently working on systems integration for the commercialisation of Wireless Sensor Networks (WSN) in precision agriculture at three local sites in Sabah, Terengganu and Penang.

Despite strides already taken in this segment however, the Malaysian RFID market requires further integration between the E&E and Communications Content and Infrastructure NKEA. This is envisioned to involve the use of the Digital Malaysia platform to provide a holistic development/commercialisation facilitation framework to help companies convert business opportunities into commercial projects.

Moving Forward

RFID is used in a broad range of industries and tourism is one of the focus areas because of the sheer amount of luggage and other items that accompany travellers. In this area, local player Senstech and TH Travel & Services Sdn Bhd aim to grow their market presence abroad, especially in Muslim nations like Indonesia, by providing e-Hajj services to pilgrims which ties back to this EPP through their luggage and people tracking service.

This NKEA will also collaborate with potential "technology consumer" NKEAs, such as Palm Oil/Rubber and Agriculture, which is targeted to expand the available market for wireless technology adoption and create new business opportunities.

Did you know?

Motorola designs and manufactures a significant proportion of its two-way subscriber radio products in Penang. With support from the Government, the company's presence can help grow local outsource design partners and Malaysian-based original design manufacturers. This would eventually assist in developing a holistic wireless communication ecosystem, given that Motorola's products serves the critical communications needs of its customers globally.

RFID uses radio waves to identify people or objects, with applications in contactless payment, asset management, trusted identification (ID) and document tracking. As of 2009, the global market size for RFID was RM19.9 billion and is expected to grow to RM54 billion in 2020.

EPP 13

Growing Automation Equipment Manufacturing

Automation equipment is used to automate processes, and includes manufacturing plant automation equipment as well as complex equipment such as robotics. ABB, the global leader in automation equipment, only assembles automation equipment in Malaysia and does not manufacture its core components in the country.

This EPP aims to leverage ABB's presence in Malaysia to build new capabilities in the country through an automation equipment and manufacturing site. MIDA will take the lead in this EPP with a target of attracting two more multinational automation equipment manufacturers in Malaysia by 2015.

Achievements and Challenges

MIDA has approved 15 automation projects in a range of product segments, ie. test equipment, semiconductors, automotive, medical etc. and have moved into the final stages of the implementation timeline for the Machinery & Engineering (M&E) Outsourcing Hub initiative intended to drive the transition/consolidation of Malaysian M&E players from small bespoke solution makers into credible large-scale global competitors.

Moving Forward

The focus for this EPP going forward will be to continue providing learning and business opportunities to SMEs through co-development programmes with MNCs, such as the NCIA-AMD automation programme in Penang.

Automation cluster players will also be integrated in the design-development facilities programme. The programme was originally developed by National Instruments for the test and measurement sector, but will now be expanded to the automation equipment manufacturing segment. This EPP will continue working with MIDA to develop the M&E Hub Programme implementation plan.

EPP 14

Building Transmission and Distribution Companies

This EPP targets to attract MNCs to set up their transmission and distribution manufacturing operations in Malaysia, in a bid to capture the market for complex high-voltage transmission and distribution equipment.

Transmission and distribution equipment are used in the generation, transmission and distribution of electricity. Such equipment includes transformers, cables, conductors, control panels and distribution boards. While a significant portion of the manufacture of these products is carried out in Japan and Europe, these markets represent high-production cost nations, thus creating an opportunity for Malaysia to offer more cost-efficient facilities.

A key enabler of this EPP will comprise the establishment of a high-power testing lab to test high-value, high-voltage equipment. This will allow Malaysia to offer the accredited Short-Circuit Testing Liaison (STL) lab services required to certify products for export. As most of these labs are currently based in Europe, manufacturers have no choice but to conduct prototyping and testing in Europe, resulting in higher costs for them. Therefore, a high-voltage test lab in Malaysia will help attract transmission and distribution of MNC manufacturers, given the cheaper cost of new product development and turnaround time made available in Malaysia.

Achievements and Challenges

Tenaga Switchgear is in the process of signing and working on a memorandum of understanding (MoU) with several global players for the setting up of a high-voltage power lab in Malaysia.

Additionally, two other STL certified labs have conducted feasibility studies to expand to Malaysia, and are currently reviewing their business plans to do so. One of these labs is exploring a joint venture with a Malaysian company, which will allow for the accreditation of the local lab as a STL member. This lab is expected not only to capture new opportunities in the regional market, but also excess demand for existing labs in the region.

Tenaga Switchgear's proposed joint venture to establish a high voltage test lab for the R&D industry was unable to be successfully concluded in 2012 due to late changes in partners and discussions are ongoing with progress expected to resume in 2013. TopRank Corporation, a local manufacturer of

transmission and distribution equipment was acquired by Toshiba Corporation and re-launched as Toshiba Transmission and Distribution Asia to be the conglomerate's global supplier of medium voltage products in December 2011. Attempts in 2012 to further expand the activities of this global hub did not meet the target milestones due to a mix of administrative issues and will be addressed in 2013.

Despite the long existence of the transmission and distribution industry, it remains under constant transformation. Thus, players must keep pace with market trends and continuously update their skills to meet changing market patterns.

Moving Forward

The joint-venture with STL accredited lab will allow the local lab based in Malaysia to be recognized as an accredited member. This lab will be able to capture the regional market as well as the excess demand for their existing labs in the region.



Building an Electrical Home Appliance Manufacturing Hub and International Distribution Network

Malaysia, which is already home to a number of local home appliance manufacturers, seeks to leverage opportunities from this EPP to strengthen players' international distribution network. Through this EPP, Penang-based Pensonic Holdings Bhd plans to expand abroad by partnering with Malaysian sovereign funds to merge or acquire smaller-scale home appliance firms and enhance its international distribution.

Pensonic will lead this EPP by targeting fast-growing ASEAN and Middle East markets, as expanding sales in these high potential markets are expected to create significant spillover growth for the Malaysia SME supply chain via outsourcing opportunities. Opportunities in original equipment manufacturing (OEM) and original design manufacturing (ODM) will also be explored as top Asian and European electrical appliance brands actively look for outsourcing partners outside China.

Another key initiative of this EPP is the setting up of a manufacturing hub to host the entire supply chain. This will help support the projected surge in local and international sales.

Achievements and Challenges

This EPP marked significant progress with tax incentives developed by MIDA for Pensonic to establish a virtual manufacturing hub providing R&D and training for their workforce. The tax breaks are aimed at expediting the progress of this EPP.

A key element to ensuring the continued development of this EPP is to identify local companies that have similar muscle as Pensonic in terms of its distribution network, branding and comprehensive supply chain system.

Moving Forward

For 2013, the main initiative is to assist companies that can tie-up with Pensonic and leverage its marketing abilities. As the creation of an international distribution network is capital intensive, smaller local players stand to benefit from collaborating with Pensonic, utilising their supply chain economies of scale and localisation programmes as a stepping stone towards international ventures.

E&E 2.0

In the first half of 2012, members of the original 2010 ETP, along with several new participants, were invited to convene the E&E 2.0 Lab. The new lab was conducted using the standard lab format for a six week period, and was chartered to identify solutions to bolster the implementation rate of the original EPPs, as well as to define programmes to exploit opportunities in new sectors that have emerged since 2010.

This review represented a logical progression of the E&E NKEA, which is based on one of the fastest-growing industries globally, and was set in the context of the 10-year ETP period.

The lab identified and designed a number of programmes in which the core of the E&E industry would be used to unleash synergies from various disparate megatrends including electric/electrified railways, energy efficient vehicles, wireless computing, and advanced materials. A number of new EPPs were identified of which the bulk will kick off and be reported in 2013.

The GNI impact of the new initiatives is estimated at RM9.7 billion with 56,800 high-income jobs. For the moment, these new opportunities will be positioned to cushion the impact of the expected slowdown in the E&E 1.0 focus sectors. This will, in turn, help in the achievement of the original targets under E&E 1.0.



Development of Balance of Systems for Solar Photovoltaics (PV)

Amid a decline in demand for PV as a result of the Eurozone crisis and rapid expansion of China's PV producers causing oversupply of the products, PV prices have experienced a downtrend. While this has led to consolidation and re-alignment in the marketplace, the industry's prospects remain bright, with Asian and Middle Eastern markets seeking to harness solar energy as an alternative energy source in place of coal and oil.

On the home front, the Malaysia Photovoltaic Industry Associations (MPIA) consisting of members from the both mid-stream and down-stream, are exploring opportunities from the Feed-in Tariff (FiT) and PV adoption by the public.

As a result of these developments, this EPP seeks to explore opportunities in the Balance of Systems (BOS) for PV. BOS encompasses all components of a PV system other than the panels i.e. wiring, switches, support racks and more.

Moving Forward

System integrators and suppliers in conventional AC cables and switch breakers are encouraged to explore opportunities in converting to DC systems. Additionally, MPIA and SEDA are working on training programmes for system integrators to provide training and certification to PV system integrators.

EPP 17

Grow the Embedded Systems Industry

This project aims to develop the embedded systems industry as a new source of growth by leveraging Malaysia's established electronics ecosystems and skilled local enterprises.

Embedded systems are intelligent solutions with tightly integrated hardware and software, designed to perform a dedicated function. These systems are currently represented in over 80 segments including wireless infrastructure, enterprise storage, in-vehicle infotainment and factory automation.

The global embedded systems market is estimated to grow at six per cent to reach US\$75 billion by 2020. Having established an electronics eco system with skilled local enterprises, Malaysia must now focus on moving up the production value chain towards high-margin finished embedded products. This EPP aims to facilitate this transformation by partnering technology firms and other embedded systems-related industry eco system parties.

Opportunities for local enterprises to participate in this project include technology access, training, funding for embedded systems product development and opportunities to work with technology leaders.

Moving Forward

This EPP calls for capturing a larger portion of the global embedded systems market by developing local capabilities and securing projects both locally and internationally.

Moving forward, the project will develop pilot projects to produce locally developed embedded systems products that are globally competitive or fulfil certain niche markets. Further, a cohesive embedded systems industry ecosystem will need to be established to develop the capabilities of the local industry.

EPP 18

Enabling Electric Vehicle Component Manufacturing

This EPP aims to fast-track the implementation of the Electric Vehicles policy and regulations for public and private transportation. The adoption of electric vehicles will help reduce carbon footprint emissions by 40 per cent and help the Malaysian Government save on its fuel subsidy moving forward. As global natural resources continue to deplete over time, the utilisation of electric vehicles will provide cost-savings for end-users owing to its lower operating costs in terms of maintenance.

The target is to have some 2,000 electric buses and 100,000 electric cars on the road by 2020. One of the initiatives implemented under this EPP includes the setting-up of local Lithium Ion (Li-Ion) battery manufacturer given that the battery accounts for 40 to 60 per cent of the electric car's costs. This initiative aims to ensure that Malaysia becomes the manufacturing and export hub for electric cars in ASEAN.

This EPP is private and public sector-led, with the Malaysia Automotive Institute and the Malaysian Green Technology Corporation (MGTC) taking on key roles on the Government's behalf. Aside from encouraging vehicle manufacturers to produce electric buses and cars locally, another objective under this EPP is to ensure the implementation of the necessary EV infrastructure.

Moving Forward

The initial objective for 2013 is to consider regulations for electric buses on the road and how to fund the infrastructure required for electric buses. A number of companies are under evaluation for the Green Technology Financing Scheme, which is in place to support the development of green technology in Malaysia. These companies are seeking an additional 15 per cent grant, which will also be taken into consideration.

Meanwhile, regulations such as road tax structure and carbon emission laws, as well as enablers for the usage of electric cars will also be formed. This will be coupled with the expansion of R&D support for Li-Ion battery manufacturing. Aligning this EPP with the National Automotive Policy will also help Malaysia's efforts in becoming a regional energy efficient vehicles hub by 2020.



Electric car charging facility in KLCC

EPP 19 Supporting Regional Rail MRO Services via Electrical and Electronics Component Manufacturing

Malaysia currently has the potential to provide E&E MRO services to more than 1,000 train sets within the ASEAN region. With the strong growth in the ASEAN rail market, especially from rolling stock in E&E parts and system, coupled with local demand for electrical trains moving forward (i.e.: LRT expansion, MRT development and electric train commuter revitalisation), Malaysia must position itself as a regional MRO services provider.

Under this EPP, a consortium will be set up for the ownership of the E&E Rail MRO, which will provide maintenance and repair services for the ASEAN region by 2017.

The implementation of this EPP includes executing R&D on obsolete E&E rail parts, sub-systems and components while also developing local players and SMEs through vendor development programmes.

This EPP is private and public sector-driven, and is led by the Land Public Transport Commission (SPAD). The project will also allow significant opportunities in human capital development, as local engineers will be attached to rail multinationals under the offset programmes co-ordinated by the Malaysian Industry-Government Group for High Technology (MIGHT).

Moving Forward

The establishment of the E&E rail MRO consortium will be preceded by a feasibility study on the E&E rail MRO market. This will lay the foundation for the growth of the E&E component industry for MRO, allowing the entry of vendors to provide repair services, product development and reverse engineering for related E&E components.

The consortium is targeted to be set up by 2013, which will facilitate the development of local E&E rail MRO services by 2014 and regionally by 2017.

BUSINESS OPPORTUNITIES

Sector 1: Semiconductors

For too long, Malaysia was content to be a provider of assembly services for various players in the E&E industry. Large numbers of Malaysians were gainfully employed and received levels of training and cross-cultural awareness that money could never buy. Semiconductor products made up a very large proportion of Malaysia's exports.

Sadly however, the impact of those exports was also balanced out by almost equally large imports of core components to be assembled and/or tested. Hence the GNI impact, except for domestic players, was mainly in the form of employee salaries. To increase the value add from this sector, there is a need to increase the contributions via premiums from intellectual property (domestically designed), as well as the additional income / savings via import substitution programmes (domestically produced direct materials), and to enable Malaysian incorporated companies to increase their top-line numbers by enhancing their global competitiveness.

Viewed in this context, the True North of the EPPs in this sector is to balance the value chain and create critical mass in segments that were hitherto less developed. The key to unlocking native value from this sector is to have a robust ecosystem of component fabricators, and wafer foundries which can then enable local chip designers to market themselves effectively in their targeted niches.

Sector 2: Solar Photovoltaics

In 2010, when the ETP Lab was conducted, the solar PV industry was one of the hottest investment targets in the world. Demand for cells and modules were sky-high driven largely by proactive environmental sustainability policies among the advanced economies of the world. Widespread government subsidy programs encouraged large-scale investments in an area which was still in relative infancy. Inherent inefficiencies were subsumed by the push for quick deployments – a common result of subsidy-driven programmes.

By this time, Malaysia had already become the home of many of the major players in the world. Up to 15 per cent of the world's production of solar cells/modules is produced in Malaysia, making the nation the world's number three producer (after Germany and China). Moreover, demand projections up to 2020 showed that in order to maintain that 15 per cent share of market, Malaysia would require several times the current capacity in absolute terms (in all forms - wafers, cells, modules and panels). Therefore the EPPs in this sector seeks to create conditions for the country to grow industry volume in a sustainable manner.

As it stands today, the industry is going through its inevitable growth pains, and a shakeout is happening – both from commercial and technological aspects. Some of the projects that made up MIDA's record -breaking approved investments in 2010-2011 are among those affected by the industry re-set. The slowdown is a Godsend in a manner of speaking because it gives Malaysia the opportunity to redirect its energies to the same kind of value chain rebalancing that the semiconductor sector is undergoing. More emphasis will be put into higher value-added upstream activities (core components/materials) and downstream services.

Sector 3: Light Emitting Diodes (LEDs)/Solid State Lighting

Like the solar photovoltaic industry, the impetus for the growth in this sector lies in growing global awareness of environmental and sustainability concerns. The ~95 per cent energy loss via heat generated by traditional incandescent light bulbs, and the mercury vapour disposal issues of fluorescent tubes, have become matters of serious concern for Governments all over the world. Most advanced economies and many emerging ones including Malaysia, have announced policies to eliminate environmentally unfriendly lighting solutions from their markets.

Many companies will join the rush to fill the supply vacuum when the old technologies go out of production. Malaysian companies also need to be developed so that they can compete with the best in the world for their fair share of the growing LED market.

Unlike the Malaysian semiconductor ecosystem, however, the Malaysian LED industry is a relatively complete one. Both local and multinationals co-exist to make up a total value chain including product design, LED wafer fabrication, component fabrication, packaging and assembly, testing and certification, marketing and distribution. It is a very exciting area. Despite its similarities to semiconductor manufacturing, its relatively simpler processes allow for low entry hurdles for innovative companies to stake positions in the marketplace.

Towards that objective, the aim of the LED sector is to create a foundational layer of enabling services (including design, technical, manufacturing, and financial) to allow more Malaysian companies to take their solid state lighting products into the global marketplace.

Sector 4: Industrial Electronics

Without a doubt, the preceding sectors have played significant roles in the Malaysian economy, and the programmes under the NKEA will hopefully grow them further. However, one must take cognisance that the value-add potential from component level sectors like semiconductors, solar cells and LEDs, are limited. To realise additional value from Malaysia's component expertise, the country must find ways to integrate locally manufactured components into locally designed and produced end user products.

Leading the Malaysian pack in this space are the test and measurement systems, automation solutions, and electrical appliance makers to name a few. Malaysia designed and manufactured products are being sold to (industrial and retail) consumers all over the world and thereby increasing the GNI contributions of the original component production via design, marketing, distribution, and post-sales services premiums.

The objective of this sector's programme is to create a conducive ecosystem where supply and demand players can be successfully integrated, and synergies unleashed through excellent product design, software integration, excellent distribution and service networks.

Summary of Electrical and Electronics NKEA

	2020 Target
Incremental GNI impact	RM53.4 billion
Additional Jobs	157,000
Critical targets for 2013: <ul style="list-style-type: none"> • 15 high-impact projects • Approval of one company manufacturing batteries for electric vehicles • Usage of Failure Analysis lab Level 2: 20 companies that sign service agreement/collaboration research/MoU • IC Design/Green Motion Controller: Commercial agreement to market the prototype (Green Motion Controller) • Five associations to sign a MoU to utilise the Industrial Design Centre of Excellence 	



Business Services



Datuk Seri Dr S. Subramaniam

Minister of Human Resources

The Business Services NKEA represents an important catalyst in Malaysia's development towards high-income nation status. It focuses on accelerating the growth of selected, specialised economic sectors in which the country can carve a sustainable and competitive global niche.

In 2012, this NKEA documented achievements which put it well on track for a target contribution of RM78.7 billion to Gross National Income (GNI) by 2020.

Among key highlights during the year include the establishment of Malindo Airways by home-grown aviation pioneer, NADI (National Aerospace and Defence Industries), and Indonesia's Lion Air. The aviation maintenance, repair and overhaul (MRO) services industry also saw the emergence of a new domestic player AIROD Aerospace Technology. Both these moves are seen to help Malaysia's MRO services industry further take flight.

Fruitful efforts were also witnessed in drawing new foreign direct investment, with global research and consulting firm Frost & Sullivan setting up its Global Innovation Centre for Excellence in Iskandar Malaysia. Other foreign firms, AIG, Chartis and AIA, also expanded their shared services centres in Malaysia during the year, providing continued momentum for the growth of the outsourcing sector.

In areas such as aerospace and automotive engineering services, local champions Strand Aerospace Malaysia and DreamEdge Sdn Bhd strengthened their businesses through expansion in France and Vietnam, while also diversifying their service offerings.

The developments in 2012 bode well for this NKEA going forward. With these accomplishments and further efforts underway in creating new areas and sustainable economic growth, it is envisioned that Malaysia will not only achieve developed-nation status by 2020, but emerge as a global leader in a diverse range of sectors and segments.

BUSINESS SERVICES

Business Services represents a critical sector in Malaysia's goal towards becoming a fully developed nation by 2020, expanding the country's areas of specialisation into new, untapped sectors.

Human capital represents an integral component in achieving this goal, and Business Services plays a major role in nurturing innovation and broadening the country's knowledge and skills base. This is essential to the development of a high-income and high-value economy. It also extends Malaysia's export portfolio beyond traditional commodities and manufactured goods to include Maintenance, Repair and Overhaul (MRO), Business Process Outsourcing, and Knowledge Process Outsourcing services as well as other offshoring activities.

As Business Services cut across various industries and professions, it is also central to efforts in raising productivity and enhancing overall economic competitiveness. In Malaysia, Business Services has been the second-fastest growing sector in the past decade, expanding at an average annual rate of 7.9 per cent. IT services and outsourcing formed the largest sub-segment, accounting for 37 per cent of the sector's GNI contribution.

Initiatives introduced under this NKEA are intended to grow the sector's GNI contribution by fourfold to RM78.7 billion by 2020, through six Entry Point Projects (EPPs) categorised under two themes: "accelerate the growth of differentiated sectors", and "develop future segments".

The first theme focuses on areas where Malaysia has existing capabilities and comparative advantage, and covers MRO services, Outsourcing in Business, IT and Knowledge Processing and Data Centres.

The second exploits opportunities in segments that boast high potential for future growth, exports and job creation. These encompass Pure-play engineering design services and Green Technology. In 2012, the NKEA added another sub-sector, shipbuilding and ship repair.

While this NKEA recorded significant achievements in 2012, the increasingly competitive global environment and slowing economic growth in many markets, place emphasis on the need to redouble efforts under Malaysia's Business Services offerings.

However, with strong foundations already laid, the outlook remains positive for this NKEA to continue with its momentum going forward.

2012 Key Performance Indicators

NKEA Business Services		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Revenue from Fleet Technical Management – RM million	300	286	95	●	95	●	0.5	●
	Revenue from training centers – RM million	18	20.7	115	●	100	●	1.0	●
	Revenue from Airframe MRO (Line and Base maintenance) – RM million	1,200	1,238.6	103	●	100	●	1.0	●
	Revenue from Engine MRO – RM million	1,600	750	47	●	47	●	0.0	●
	Revenue from Components MRO – RM million	1,227	1,404	114	●	100	●	1.0	●
EPP #2	Overseas sales revenue – RM million	1,011.2	1,252.9	124	●	100	●	1.0	●
	Number of jobs created	8,000	9,512	119	●	100	●	1.0	●
EPP #3	Increment rack-space: Data Centre White Floor Space – square feet	150,000	150,600	100	●	100	●	1.0	●
	Data Centre Organizational Certifications	11	8.8	73	●	73	●	0.5	●
	Total DC services revenue – RM million	395	450	114	●	100	●	1.0	●
EPP #4	Number of jobs created	4,000	7,696	192	●	100	●	1.0	●
	Revenue generated from main sources of segmentation e.g. RE/EE/SWM/GTFS – RM million	1,788.8	3,657	204	●	100	●	1.0	●
	Establishment of accreditation framework for ESCOs	100%	100%	100	●	100	●	1.0	●

(more on next page)

(continued from previous page)













NKEA Business Services		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #5	Revenue for Strand Aerospace Malaysia Sdn Bhd (SAM) – RM million	19.15	16.18	84		84		0.5	
	Investments for Strand Aerospace Malaysia Sdn Bhd (SAM) – RM million	3.5	3.5	100		100		1.0	
	Revenue for DreamEdge Sdn Bhd (DESB) – RM million	14	16.28	116		100		1.0	
	Investments for DreamEdge Sdn Bhd (DESB) – RM million	2.16	2.98	138		100		1.0	
				114%		94%		85%	

Exhibit 8.1

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score#2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

ENTRY POINT PROJECTS

EPP 1

Growing Aviation Maintenance, Repair and Overhaul Services (MRO)

The goal of this EPP is to develop Malaysia into a regional aviation MRO services hub, capitalising on global market growth projected to reach RM205 billion in 2020 at a compounded annual growth rate (CAGR) of 3.9 per cent.

Malaysia is well-positioned to be a competitive regional MRO hub in view of the many new aircraft purchased by local airlines. This creates a demand for the MRO sector as these aircraft are serviced in Malaysia. In addition, there is an increasing number of new MRO players to match demand, coupled with an expansion of Tier 2 and Tier 3 supplier and airframe MRO capabilities.

There is also greater development of Malaysia's airport infrastructure with growing air traffic, availability of land and the creation of a more conducive operating environment through improved tax and civil aviation regulations which continue to make the country a preferred MRO destination.

To further improve industry structure and regulations, the Department of Civil Aviation Malaysia (DCAM) has embarked on adopting the European Aviation Safety Agency (EASA) standards. In this regard, DCAM has engaged a consultant to review any civil aviation regulations to be replaced, aimed at keeping abreast with international standards.

DCAM is also in the process of introducing an E-exam platform to expedite licensing, such as for new aircraft engineers. This will allow some 1,500 aircraft engineering students to be tested and receive their results faster, while helping to ensure there is ample supply of talent to fill human capital needs in a timely manner. Additionally, the online exams will be prepared and updated frequently, utilising EASA standards as a reference.

On the industry's part, an Industry Working Group (IWG) meets on a monthly basis to discuss issues including domestic and international business developments and human capital needs. Established in August 2011, the IWG is led by MAS Aerospace Engineering (MAE), with AIROD as Deputy Chair and another six MRO and MRO-related companies as members.



Sepang Aircraft Engineering (SAE) hangar in Sepang

Achievements and Challenges

This EPP marked a number of achievements in 2012 by both market players and regulators. These achievements led to improvements in the industry's structure and its regulation, expansion of the MRO ecosystem and its geographic reach, and the offering of higher value-added services.

Sepang Aircraft Engineering (SAE), an MRO service provider owned by EADS (European Aeronautic Defence and Space Company), secured EASA 145 certification, a standard for the certification and operation of an aircraft maintenance organisation. The certification will allow SAE to expand its service to more airline operators, further boosting third-party business revenue. It also creates potential for the company to establish a regional presence and ability to compete in servicing A320 and A330 aircrafts and potentially, A380s.

NADI, a pioneer of Malaysia's aviation industry and the parent company of Malaysia's flagship MRO service provider AIROD, teamed up with Indonesian budget carrier Lion Air to establish Malindo Airways, Malaysia's second low-cost airline.

NADI also established a new domestic MRO service provider, AIROD Aerospace Technology (AAe). AAe is seen to strengthen the market's large-scale MRO operations, complementing other local players and boosting Malaysia's profile as a MRO location. Meanwhile, AIROD secured a contract to provide its services for overhauling helicopter engines belonging to the US' AAR Airlift Group, which provides aviation services to Government and defence customers.

In spite of these positive developments, this EPP still saw its share of challenges during the year. For one, the reversal of the MAS and AirAsia share swap has led to some uncertainty in MAE's operations, impacting procurement of third-party business and future expansion plans, including potential joint ventures. Nonetheless, it is envisaged that MAE's current cost rationalisation exercise and existing strategic partnerships with target companies in key business segments will provide further business opportunities going forward.

Further challenges faced by the MRO industry include new engine options for next-generation aircraft and competition from original equipment manufacturers (OEMs), with increasing competition from OEMs in aftermarket sales seen as a risk to MROs' market share. Rising labour costs is also seen as a challenge to the industry.

Moving Forward

The introduction of new incentives and the enhancement of the regulatory framework will help enhance MRO players' capabilities in key business segments and create niche markets, thus boosting their competitiveness. Coupled with the expected entry of two new foreign MRO players in the first half of 2013, the industry is also projected to see improved margins, especially in the area of composite materials repair.



AIROD Aerospace Technology hangar in Subang

Additionally, Eurocopter's MRO facility at the Malaysia International Aerospace Centre will expand current fixed-wing MRO services to include rotary wing services, putting Malaysia on the regional map of Eurocopter's products.

As part of efforts to meet manpower demand and promote human capital development, the MRO IWG has proposed to improve students' access to education financing through loans or scholarships. In addition, MAE is ramping up its regional training centre to enhance the capabilities of aircraft engineers and technicians. For 2013, this EPP targets RM380 million in revenue from fleet technical management and almost RM2.4 billion in revenue from airframe MRO (line and base maintenance) and training centres in 2013.

AIROD Aerospace Technology (AAe)

AAe will provide a range of MRO services to third-party operators, such as General Electric Capital Aviation Services, Sriwijaya, whose significant fleet size and existing orderbook will help increase AAe's revenue and provide substantial opportunities to leverage international third-party business.

This will in turn extend Malaysia's capabilities for MRO services to next-generation aircraft. It also expands Malaysia's MRO global footprint.

EPP 2 Building Globally Competitive Outsourcers

While the global outsourcing industry has emerged as a crucial component in increasing business efficiency, Malaysia has only captured 3.9 per cent of the Asian outsourcing market (excluding Japan); missing out on the projected 12 per cent annual growth of the Asia-Pacific outsourcing industry.

Nonetheless, Malaysian companies are in the midst of developing a competitive advantage in a number of areas in outsourcing, namely financial services, oil and gas, and logistics. This EPP will focus on the areas of business process outsourcing (BPO), IT process outsourcing (ITO) and knowledge process outsourcing (KPO), with the view of creating a globally competitive outsourcing industry and establishing Malaysia as an offshoring and outsourcing hub.

The initiatives under this EPP are both Government- and industry-led, aimed at enhancing industry capability and credibility and fostering greater competitiveness. MAMPU, an agency under the Prime Minister's Department, has been entrusted with leading the consolidation of the Government's IT and non-core business processes, targeting 30 per cent in cost savings by 2020.

Local outsourcing industry leaders Multimedia Development Corporation (MDeC) and Outsourcing Malaysia (OM) also play a role in ensuring Malaysia's continued attractiveness as a global outsourcing and offshoring hub. This will support the activities of foreign multinationals and Malaysian companies with regional and global ambitions. Together with efforts under the Human Capital Development SRI, upskilling programmes were developed to ensure the necessary industry-related competencies are fulfilled.

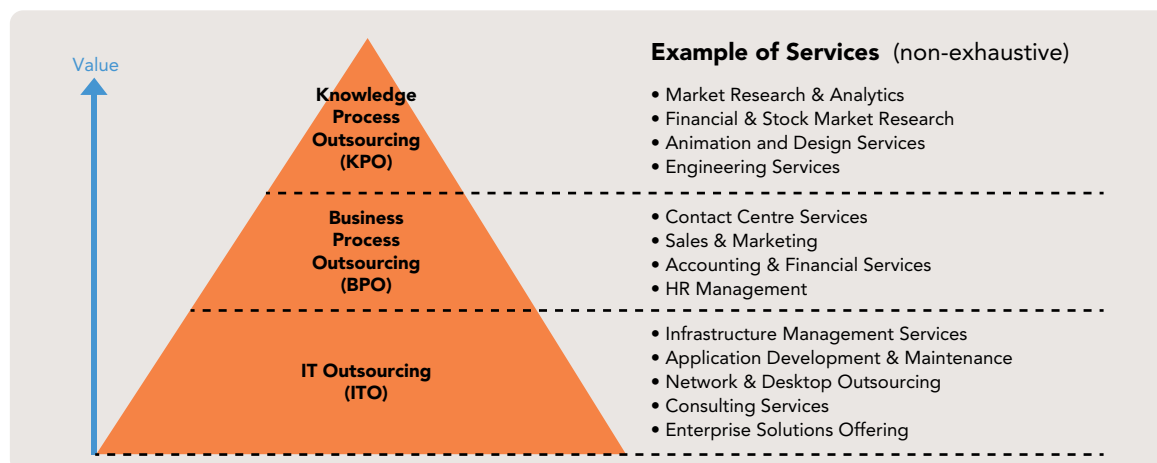


Exhibit 8.2: The target outsourcing services from basic ITO to KPO

Achievements and Challenges

The measures undertaken for this EPP delivered encouraging results in 2012 from both Government- and industry-led initiatives.

Government Outsourcing

The 1GovUC (Government Centralised Unified Communication System) project was launched in April, in which TM Bhd will implement a two-year effort to consolidate Government communications. This will improve service delivery while reducing information, communications and technology (ICT) operational costs.

The launch of 1GovUC was followed by the start of operations of Government Data Centre (GDC-1) in May. The facility is aimed at consolidating Government ICT infrastructure. Under the same initiative, the contract for GDC-2 was awarded to Strateq Sdn Bhd, which will manage a Government data and disaster recovery centre under a two-year contract.

Industry Growth

In 2012, the industry saw the entry of new foreign direct investment from Frost and Sullivan and the expansion of shared services by AIG, Chartis and AIA. The companies' establishment and expansion of shared services centres in Malaysia will create over RM100 million in investments and over 2,000 new jobs, in addition to raising Malaysia's profile as a world-class centre for outsourcing services.

These investments are significant as it comes in the face of the global economic downturn, which has threatened the Asia-Pacific outsourcing industry as growth remains sluggish in Europe and the US.

Despite these achievements, while Malaysian players have established themselves in the market and built expertise in their field, they still lack the scale and scope required to compete with traditional industry powerhouses, such as those from India.

Moving Forward

MAMPU, which is developing the blueprint and framework for the outsourcing of Government's non-core business processes, has commissioned a study to identify the scope and scale of the initiative, which is expected to be completed by the end of 2Q2013.

MDeC and OM will focus its ongoing industry initiatives on two key thrusts: Maintaining a competitive environment in Malaysia to attract foreign investment in outsourcing; and increasing the competitiveness of local companies by enhancing their scale, credibility and market reach.

As part of these initiatives, leading local companies will be benchmarked against global standards set by the International Association of Outsourcing Professionals (IAOP). This will be used to strengthen their profile and develop enhancement programmes.

Efforts will be taken in 2013 to help the local outsourcing players build scale via a mergers and acquisitions programme in addition to increased promotions to international markets.

Positioning Malaysia as a World-Class Data Centre Hub

The Asia-Pacific region has demonstrated promising growth in the data centre (DC) market, with revenue projected to rise by 16.3 per cent annually to reach US\$3.4 billion in 2014. EPP 3 aims to capitalise on this opportunity by making Malaysia the preferred destination for DC investors and increasing the supply of internationally certified DC space in Malaysia.

Initiatives undertaken through this EPP aim to address the supply and demand of DC services. On the supply side, EPP 3 has attended to the cost of doing business by engaging with stakeholders such as telecommunication firms, energy firms, landowners, regulators and the DC players themselves. A key area of focus here included addressing bandwidth costs to enhance the operational efficiency of DC firms.

In order to increase awareness of the local DC industry and thus drive demand, media campaigns have been implemented, while a study has commenced in an effort to better understand customer needs.

Currently, DC facilities are undergoing an international certification process, with eight data centres obtaining International Data Centre Organisational Certifications in 2012. These are aimed at adding value to the DC facilities as well as increasing the capabilities and credibility of these data centres.

Achievements and Challenges

A number of data centres were launched in 2012, adding more than 150,000 square feet in new DC capacity spread across Cyberjaya, Petaling Jaya and Mont' Kiara.

As at December 2012, Malaysian DC facilities obtained eight more DC certifications, including the Uptime Institute Tier III Design Certification, Green Building Index certification and ISO 27001: Information security management system. In October 2012, the Maxis/HDC Uptime Institute Tier III certified DC was launched, representing the first facility in Malaysia and only the second in ASEAN to achieve the Uptime Institute Tier III Design certificate.

Additionally, efforts to engage telco providers to offer competitive bandwidth costs have led the telcos to offer a special pricing model for DCs. This is expected to boost the global competitiveness of local players.

Project By	White Space	New Built-up Capacity
CSF CX5, Cyberjaya	67,000 sq ft	201,000 sq ft
CJ1 Centre by MyTelehaus, Cyberjaya	38,100 sq ft	38,100 sq ft
NTT MSC Cyberjaya3, Cyberjaya	17,500 sq ft	17,500 sq ft
CRF Disaster Recovery Data Centre, Petaling Jaya	20,000 sq ft	20,000 sq ft
Safehouse Data Centre, Mont' Kiara	1,000 sq ft	5,000 sq ft
AktifNet Data Centre, Bandar Utama and KL Sentral	3,300 sq ft	3,300 sq ft
Patimas Data Centre, Technology Park Malaysia	2,700 sq ft	2,700 sq ft
Finexus Data Centre	1,000 sq ft	1,000 sq ft
Total	150,600 sq ft	288,600 sq ft

Exhibit 8.3: List of data centres launched in 2012 and their capacity

In November 2012, the Malaysian DC Alliance was established, representing a unified voice for the DC industry. The Alliance is expected to further drive the creation of a conducive environment for the growth of Malaysian DC services.



CSF Group's CX5 data centre in Cyberjaya, launched in January 2012 with over 200,000 square feet of sellable data centre space



NTT MSC's 'Rimba Digital' data centre launched in April 2012, with 17,500 square feet of sellable data centre space

In September 2012, the Malaysian Data Centre Directory was officially launched (<http://datacentre.my/>), representing a one-stop guide to Malaysia's data centre providers. The guide has been well-received and translated into Japanese to attract clients from Japan.

The focus on drawing Japanese clients is part of a wider goal to attract more foreign investors and customers to the Malaysian DC market. This is to address the lower take-up of Malaysia's DC services by international customers compared to that of local customers. This represents a key concern for this EPP, and is coupled with the need to create a more efficient operating environment which minimises business costs, such as for Internet bandwidth and electricity.

Moving Forward

In the year ahead, this EPP will spearhead the establishment of DC Parks, with Iskandar Malaysia and Cyberjaya earmarked as locations for the facilities. The main objective of the establishment of these facilities is to aggregate bandwidth utilisation in an effort to lower data centre operational costs.

While efforts will be taken to nurture the local DC market, ongoing measures to market Malaysia's DC services abroad will also continue. International conferences are being planned for 2013 in partnership with globally recognised event partners, starting with the Second Data Centres Malaysia Summit by BroadGroup UK in January.



Jump-Starting a Vibrant Green Technology Industry

As the way forward in resolving global energy needs, the green technology industry is an important area in which Malaysia must harness an early-mover advantage. Representing a multi-billion dollar industry globally, there remain tremendous opportunities for growth in this market. It is therefore imperative for Malaysia to tap its vast potential to develop sustainable green technology solutions.

Recognising the importance of this industry going forward, Malaysia took early steps to spur the local industry, including by establishing the Ministry of Energy, Green Technology and Water (KeTTHA) in 2009 and creating the Green Technology Council, chaired by the Prime Minister. The focus now is to raise Malaysia's profile as an Asian green technology hub and increase local industry capabilities.

Achievements and Challenges

The International Green Technology and Eco Products Exhibition and Conference (IGEM) is an annual event by KeTTHA. First held in 2009, IGEM 2012 is aimed at creating awareness amongst consumers and industry players on the importance of green technology. The event also targeted to encourage the rapid adoption of green technology to help achieve sustainable economic growth while addressing environmental and energy security issues.

366 companies comprising 214 local and 152 foreign companies participated in IGEM 2012. RM1.32 billion in potential business opportunities arose through Business Matching Sessions held at the exhibition, while seven Memoranda of Understanding in various fields of green technology were signed.

The Green Technology Funding Scheme (GTFS), which was established by the Government in 2009 to kick-start and offer companies to access financing, has now been extended beyond 2012 to 2015. Since its implementation, 251 applications have been processed and 219 companies have received Green Certification. Out of this number, a total of 76 projects have been approved loans from related financial institutions with a total funding of RM1.02 billion. These figures show that more local companies, especially small and medium industries (SMIs), are embarking on and benefiting from green technology-based businesses. The fund is now worth RM2.6 billion, and offers a 60 per cent loan guarantee and a two per cent rebate from the Government on total interest rates.

To further improve the fund's uptake, Malaysian Green Technology Corporation (MGTC) has embarked on measures including updating GTFS criteria for paid-up capital, standardising investment templates and increasing promotions of this fund to both users and producers.

IGEM 2012

The exhibition focused on eight sectors, namely energy, transportation, water management and solid waste management, building, eco-products and services, green financing, ICT and manufacturing. Among other events held during the exhibition were international business matching, green career matching, and seminars and workshops.

This EPP also saw the implementation of the Energy Service Companies (ESCO) accreditation framework by the Energy Commission, aimed at improving the quality of services offered by green technology firms, increasing consumer confidence and regulating the industry.

These achievements however do not imply that the green technology industry is fully prepared to take off in Malaysia. For one, pricing and business viability remain a concern in offering sustainable energy solutions. Furthermore, the implementation of the Energy Efficiency and Conservation Act remains uncertain, resulting in the absence of strategic policy tools and regulatory oversight to help achieve energy efficiency.

Benefits of ESCO accreditation framework:

- Develop professional and qualified ESCOs and energy auditors or managers
- Enhance the standing of ESCOs, particularly energy auditing services
- Support services procurement and selection procedures
- Support public sector incentives to promote energy efficiency
- Reduce waste and false claims against industry players

Moving Forward

In 2013, KeTTHA and MGTC will focus on ensuring that the value of loans disbursed under the GTFS surpasses RM300 million. KeTTHA, via the Electrical and Electronics NKEA, will also facilitate the implementation of the electric vehicle roadmap, creating tremendous spillover effects to the services sector.

Additionally, in collaboration with PEMANDU, KeTTHA will target foreign investment in waste water treatment and management to help create alternative water resources for current and future demand. In the area of solid waste management, the Government via the Ministry of Housing and Local Government will issue tenders for the construction of new solid waste treatment plants. This is to reduce the amount of waste destined for landfills, thus reducing the impact of greenhouse gases.

The Malaysian Industrial Group for High Technology (MiGHT) will continue considering potential companies for offset projects. These companies have been referred to it by MGTC, following the signing of a Memorandum of Understanding (MoU) between MGTC and MiGHT in July 2012. The MoU allows green technology start-ups unable to access financing through financial institutions to tap offset contracts administered by MiGHT.

EPP 5

Nurturing Pure-Play Engineering Services

EPP 5 aspires to create globally competitive aerospace and automotive engineering services companies by promoting market conditions that attract high-value engineering services to Malaysia. This is to capitalise on the rapidly growing global market value of the aerospace and automotive engineering services industry, which is forecast to surpass RM960 billion by 2020.

Efforts from this EPP have seen the development of Strand Aerospace Malaysia (SAM) and DreamEdge Sdn Bhd (DESB). These companies have grown their engineering workforce to over 100 each, from less than 10, since the start of the ETP. Both are now considered Tier 2 companies for design engineering and have expanded their reach to Europe and Japan.

Achievements and Challenges

In 2012, SAM signed resourcing agreements with two French aerospace companies, Snecma and AKKA Technologies, to provide services including aircraft engine and structural components design. The company has also been approached by major firms such as Atkins, the sixth-largest global engineering services firm, to explore opportunities in strategic long-term collaboration.

In its bid to diversify its expertise, SAM has also begun providing engineering services to oil and gas firm SBM Offshore. SAM has also teamed up with Dassault Systèmes and Khazanah Nasional Bhd to develop a smart city in the Iskandar region and commenced discussions with Boustead Engineering to offer maritime product life-cycle management solutions.

DESB meanwhile has consistently delivered strong results, with revenues of over RM24 million in just two years. The company continues to engage its strategic partnership with NISSAN Japan, and has signed an agreement with NISSAN Techno in Vietnam, which will offer more design engineering work to DESB.

In the field of CAD/CAM dentistry, DESB has emerged as the first company outside of Japan to be awarded with an outsourcing project for a dental CAD/CAM system. This follows the establishment of its Digital Dental Solutions Centre, underlining its ability to diversify into other engineering verticals. The centre is the first purpose-built facility of its kind in Malaysia, facilitating research and development, fabrication and human capital development.

DESB also received renewed commitments from PROTON and Scomi Rail for more resourcing projects, such as for SCOMI's monorail projects in Mumbai, India; Sao Paulo, Brazil; and Kuala Lumpur, Malaysia. DESB is also working closely with Siemens to provide capability on mass rapid transit (MRT) works. Its diversification strategy, meanwhile, has resulted in the company working with Boustead Heavy Industries Corporation Bhd in shipbuilding and ship design, focusing on product life-cycle management solutions.

SAM and DESB's increasing expertise and growing scope of work however mean that both firms must strive for competitiveness, sustainability of their business models and continued growth and diversification in their capabilities.

SAM, which is exposed to the European markets, will also need to ensure that its business model remains flexible and resilient against external shocks, while both SAM and DESB must ensure responsiveness towards the potential of new entrants to the market. DESB in particular will also need to bolster its current capabilities to differentiate and protect itself in an increasingly competitive market.



DreamEDGE CAD room and training centre in Taiping, Perak

Moving Forward

SAM is expected to penetrate new markets such as France and Germany as it elevates itself to Tier 2 vendor status. It will also hire experienced trainers and develop a more cogent training syllabus for engineering services, while offering specialised solutions in new industries including oil and gas, rail transport, and maritime and urban management to counter thinning margins and cyclicity.

DESB, in partnership with Tokyo R&D Japan, will develop motorsport R&D capabilities for racing cars, with a prototype to be shipped to Malaysia by early 2013. The company has also developed its own electric vehicle, with its first prototype set for rollout in February 2013.

EPP 6

Developing Malaysia as a Shipbuilding and Repair Hub

This EPP was introduced in 2012, following the rapid growth of Malaysia's local shipbuilding and repair industry. In 2011, the industry generated turnover of about RM7.05 billion and about 32,500 jobs. It has also attracted investments worth RM6 billion.

Through initiatives led by Boustead Heavy Industries Corporation Bhd (BHIC) and Boustead Naval Shipyard Sdn Bhd, Malaysia's growing market share of the industry off the Straits of Malacca and in the offshore vessel market off East Malaysia is expected to increase the country's 1.11 per cent share of the global market for shipbuilding and repair.

Among initiatives that have been undertaken under this EPP include the development of in-country design capabilities for Offshore Support Vessels (OSV), with BHIC and Boustead Naval Shipyard to train up to 160 engineers and technicians in shipbuilding and ship-repair. This measure seeks to develop the first Malaysian-designed OSV.

This EPP will also focus on providing competitive pricing, enhanced facilities and increased capabilities for the shipbuilding and MRO market to cater to the growing industry.

Achievements and Challenges

Although this is a new EPP, in 2012, BHIC and Boustead Naval Shipyard recruited over 80 engineers and technicians to help develop future capabilities in catering to external contracts.

A challenge for this industry, however, is for local shipyards to upgrade their capability and capacity to satisfy shipowners' quality, cost and delivery expectations. Local players will also need to improve their capabilities to aid their expansion into new markets.

Moving Forward

The target is for Malaysia to be a global shipbuilding player in niche products and services. The enhancement of design capabilities will catalyse the growth of a new market for local design houses, and more importantly, phase out Malaysia's dependency on foreign designs or brands.

BUSINESS OPPORTUNITIES

Business Opportunity 1:

Multi-Disciplinary Practice Construction

During the year, PEMANDU worked closely with HSS Engineering, a prominent Multi-Disciplinary Practice (MDP) Construction firm involved in the MRT project as an independent consulting engineer. While it could take some time before other MDPs are established in Malaysia, there are endless opportunities in the construction industry for the establishment of such firms in the near future.

Business Opportunity 2:

Accounting Sector

Efforts are underway to increase the capability and credibility of human capital in the accounting sector. Together with the Competition, Standards and Liberalisation SRI, the Malaysian Institute of Accountants has implemented multi-pronged initiatives to enhance the standards of the accounting practice.

Among key initiatives undertaken is a review of the curriculum of local higher level institutions listed under Part I of the First Schedule of the Accountants Act 1967. This is the first time since the introduction of the Act that it has undergone a review. The assessment is in line with market and regulatory changes in finance and accounting, and is aimed at enhancing the field's human capital capabilities in line with global standards.

Summary of Business Services NKEA

	2020 Target
Incremental GNI impact	RM78.7 billion
Additional Jobs	245,000

Critical targets for 2013:

- 10 per cent revenue growth on overseas sales for Shared Services & Outsourcing
- Four new companies performing Knowledge Process Outsourcing (KPO) services
- 25 per cent revenue growth on Data Centre services
- RM2 billion investment realised for Green Technology initiatives
- RM300 million approved in loan value under Green Technology Financing Scheme (GTFS)
- 140 new specialist consultant engineers in Pure-Play Engineering Services



Communications Content and Infrastructure



Dato' Seri Utama Dr Rais Yatim

Minister of Information,
Communications and Culture

As the Minister responsible for the Communications Content and Infrastructure (CCI) National Key Economic Area (NKEA), I am pleased to share with you what we have accomplished during the second year of its implementation.

The NKEA is key to realising the ambitions of Malaysia to becoming a fully developed country by 2020. As a developed nation, access to the Internet is not merely a privilege afforded to the affluent, but a necessity available to all.

Under the NKEA, we have worked hard to reduce the digital divide between urban and non-urban areas through initiatives like *Kampung Tanpa Wayar* and *Pusat Internet 1Malaysia* (PI1M) that provides Internet access in non-urban areas. Urban areas, meanwhile, continue to see an aggressive demand for Internet connectivity, which we plan to boost through the implementation of WiFi-enabled payphones and Connected@City programmes.

When we planned for this NKEA, we very well knew that getting Malaysia connected was not the end goal – rather it is to enable what Malaysians can do once online access is readily available. In that regard, we are encouraging more Malaysian small-and medium-sized enterprises (SMEs) to get online and carry out e-commerce activities through initiatives like Get Malaysian Business Online (GMBO).

Creative content is another major component of the NKEA, and I am especially pleased that we continue to not only produce more films and animations, but also establish a strong and lucrative demand for them both here and abroad. For a while now, many have seen the creative content field as a less attractive industry compared to others, but the numbers tell the story. In 2012, the creative content field contributed close to RM13 billion through a combination of sales figures of film, television, animations and handicrafts.

Even more pleasing is the quality of content produced, exemplified by the NKEA-supported animation feature *War of the Worlds: Goliath*. This is a Malaysian production that was named the Best 3D Animated Feature Film in Los Angeles, United States – the very home of Hollywood. One can imagine how marquee achievements like these can further encourage young Malaysians to pursue their dream in this field.

The NKEA's ultimate goal is for Malaysians to experience the full potential of a digital lifestyle, where information is literally available at your fingertips. From there, we can move forward together in realising Malaysia's potential in today's knowledge-based world.

COMMUNICATIONS CONTENT AND INFRASTRUCTURE

The Communications Content and Infrastructure (CCI) NKEA spans content, network applications, services and devices. These elements combine to form a truly digital lifestyle for Malaysians as they move into an Internet-connected age where knowledge-sharing is vital to succeed in the increasingly competitive global marketplace.

Much has been said about the transformative power of a networked world to enhance the quality of life, empower knowledge sharing, open new channels of commerce and expand the media landscape.

The CCI NKEA plays a major part in making the digital lifestyle a reality for all Malaysians. A digital lifestyle is not only one that allows for easier access to the Internet for all Malaysians, but also enables them to experience the socio-economic benefits of an interconnected life.

In the past, the country worked hard in reducing the digital divide by improving broadband penetration across the country, regardless of race or class. At 66 per cent of broadband penetration in households, Malaysia is believed to be at the tipping point of ushering a digital lifestyle that would see the *rakyat* having access to information at their fingertips.

The CCI NKEA comprises two main components:

1. Improvement of communications infrastructure and the uptake of services among the *rakyat*
2. Enrichment of the content space in terms of value and quality of content produced

Both aspects have progressed well in the past year, although not without their challenges and lessons learned. With respect to infrastructure, the number of broadband users almost reached saturation, aided by new measures to reduce the cost of broadband and international bandwidth by 18 per cent. There has also been a large expansion of infrastructure both at network level and access points into rural areas with 2,825 new *Kampung Tanpa Wayar*, *Pusat Internet 1Malaysia* sites and Time3 wireless towers built.

A promising development has been in the growth of content, built on the successful implementation of the communications infrastructure. This past year, the Entry Point Projects (EPPs) under this NKEA have facilitated growth in the monetisation of creative content, helping to create a paradigm shift amongst Malaysia's creative community to be more entrepreneurial in their approach to the creative arts.

This is evident from the export figures of creative content. Exported content of film, television programmes, and animation has grown from more than RM300 million to more than RM500 million this year, while handicraft (*Kraftangan*) sales surpassed RM300 million. Overall, the contribution of creative content to the national economy has reached close to RM13 billion and is well-placed to grow further.

2012 Key Performance Indicators

Communications Content and Infrastructure NKEA		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Revenue of export from creative content (RM million)	406	547.291	135	●	100	●	1.0	●
	Number of hours of digitised content (hour)	22,000	157,584	716	●	100	●	1.0	●
EPP #3	Telepresence Sites/end points (unit)	80	125	156	●	100	●	1.0	●
EPP #4	Number of urban schools connected up to 10Mbps (4 – 10 Mbps range) (unit)	3,231	1,995	62	●	62	●	0.5	●
	Number of non-urban schools connected up to 4Mbps (2 – 4 Mbps range) (unit)	3,978	1,233	31	●	31	●	0.0	●
	Percentage of backhaul connectivity to school node using fiber (unit)	3,000	3,165	106	●	100	●	1.0	●
EPP #5	Health facilities connected with broadband (minimum of 2 Mbps) (%)	2,000	2,319	116	●	100	●	1.0	●
	Health facilities using ICT systems (%)	1,000	1,254	125	●	100	●	1.0	●
EPP #6	Online services (%)	50	56.45	113	●	100	●	1.0	●
	Agencies adopting Digital Document Management System (unit)	2	2	100	●	100	●	1.0	●
EPP #7	Household broadband Penetration (%)	65	66	102	●	100	●	1.0	●
EPP #8	Number of program sites commissioned (unit)	1,904	2,825	148	●	100	●	1.0	●
EPP #10	Data-centre bandwidth revenue (RM million)	300	436.93	106	●	100	●	1.0	●
	Per centage of bandwidth wholesale price reduction (%)	10	18	180	●	100	●	1.0	●
EPP #11	Number of transaction (TEU/Container) being tracked using E-Tags (#)	66,000	64,629	98	●	98	●	0.5	●
				153%		93%		88%	

Exhibit 9.1

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score#2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

ENTRY POINT PROJECTS

EPP 1 Nurturing Malaysia's Creative Content

This EPP aims to enhance capacity, capability and competency in Malaysia's creative industry to produce world-class content and ultimately become a regional hub for digital content.

The focus of this EPP is to build the foundation for a thriving and lucrative creative content industry to optimise the mature development of the digital network. The sector is already well on target to achieve an annual growth of 20 per cent for export and 13 per cent in the domestic segment, as well as giving consumers more and better choice of content while crucially, preserving culture.

In the past however, the industry has been over-reliant on grants and subsidies, creating unsustainable business models that did not sufficiently attract talented Malaysians to make a career in the sector.

As part of efforts to address the needs of this sector, measures in 2012 focused on producing more local content, wooing foreign filmmakers to invest here, and re-strategising the marketing and sale of Malaysian-made content domestically and internationally.

The Creative Content Association Malaysia (CCAM) plays a key role in tapping new markets for exports of Malaysian content. Its other responsibilities include providing value-added services to its more than 30 members through up-to-date industry bulletins, master classes and new market research information.

Prior to the formation of the CCAM, it was left to individual production companies and Government agencies such as National Film Development

Corporation Malaysia (Perbadanan Kemajuan Filem Nasional Malaysia – FINAS) or the Multimedia Development Corporation (MDeC) to sell content on their own accord. However, the collaborative nature of CCAM, supported by FINAS and MDeC, has proven to be a more effective way to approach international sales, especially given CCAM's cost-effective annual operating budget of RM1 million.



CCAM animation workshop

Achievements and Challenges

During the year, this EPP recorded a number of achievements which have helped to strengthen the foundation for the creation of a self-sustaining industry.

Further incentives have been introduced to help attract foreign investments, such as through the Film-in-Malaysia Incentive that was approved in April 2012. The incentive has come into effect on 1 January 2013. Through this initiative, foreign production houses that spend a minimum of RM5 million in Malaysia will be offered a 30 per cent rebate. Local production companies which spend at least RM2.5 million will be entitled to the same benefit.

Apart from attracting investments, the drive to open up new markets for exports continues to grow with CCAM contributing close to RM100 million in export sales to the total RM500 million of creative content exports for the year.

In addition, another RM200 million from Budget 2012 was injected into the creative industry through MYCreative Ventures Sdn Bhd. MYCreative Ventures is a Government investment arm set up to spur Malaysia's creative industry via strategic and innovative equity or debt investments. Rather than financing projects, the funding will be used to drive entrepreneurship in the creative industry.



26 participants attended the CCAM Animation Workshop

The amount of revenue generated by creative content in 2012 – which includes Film, Television, Animation, Handicraft, Performing Arts, Music, Advertising and Printing – is estimated to have come close to RM13 billion.

	Sector	Total (RM mil)
1	Filem	268
2	Television	112
3	Radio	351
4	Animation, Games & Mobile Application	1,261
5	Music	439
6	Performing Arts	7
7	Handicrafts	310
8	Visual Arts	25
9	Advertising	8,020
10	Printing	2,000
	Total	12,793

Exhibit 9.2: Revenue generated by creative content in 2012.
Data compiled by Department of Creative Industry, Ministry of Information, Communications and Culture

Through the formation of the Creative Content Industry Guild (CCIG), an independent non-governmental organisation (NGO) that represents the industry's practitioners, EPP 1 has built a single voice for talent aggregation. This is envisioned to promote professionalism of the creative industry's human capital. It also provides a single validated database of all creative practitioners in Malaysia such as the actors/actresses, scriptwriters, production directors, production managers and crews. This will complement the effort in implementing the Film-in-Malaysia Incentive.

In 2012, this EPP also contributed to the creation of the award-winning animation, War of The Worlds: Goliath. The animation, which in part benefited from the RM11 million worth of funding made available for CGI animations this year, managed to beat Madagascar 3D to be crowned as Best 3D Animated Feature Film at the Los Angeles 3D Film Festival.

Efforts to preserve Malaysia's non-digital content also showed good progress. More than 100,000 hours of local content, inclusive of audio-visual arts, artefacts, documents and analogue movies/documentaries have been digitised by agencies under the Ministry of Information, Communications and Culture. These include National Archives of Malaysia (*Arkib Negara Malaysia*), *Filem Negara Malaysia*, Radio and Television Malaysia (RTM), FINAS and Malaysian National News Agency (BERNAMA).



War of the Worlds Goliath – Malaysia's first 3D animation feature

Meanwhile, SelectTV IPTV by SelectTV Sdn Bhd, an initiative kickstarted in 2011, continues to grow well overseas. It is now the second largest provider of IPTV content for hotels and resorts in Bali, Indonesia.

To further showcase that the Performing Arts can be a lucrative pursuit, the Government also catalysed the Royal Arts Gala to encourage performing artists to organise more of such events. A premium iconic event, the Gala aims to spur collaborative partnerships for the creation and development of new arts ventures in Malaysia. Funds raised from the Gala will be used to promote Malaysian talents, encourage and facilitate performing arts productions, provide funding to develop technical and managerial skills, as well as to undertake research and documentation projects in the performing arts.

Despite the numerous successes of this EPP, there remain challenges and room for growth in the coming year, with efforts to promote a more entrepreneurial approach to creativity making up the most immediate concern going forward.

Domestically, one of the main issues to be addressed is the small marketplace in which content can be sold. Nonetheless, although dominated by three major stations, namely Media Prima, RTM and Astro, the marketplace has shown signs of expansion as a result of the entry of new internet protocol television (IPTV) players such as Telekom Malaysia (TM) for HyppTV, REDtone and Maxis.



Harith Iskander, Master of Ceremony for The Royal Arts Gala

Moving Forward

It is hoped that the success of CCAM will encourage key players in the creative industry to work together and reduce the current fragmentation in the market.

Additionally, while the sales of handicrafts have been encouraging thus far, the coming year will require more focus on the sale of more premium products, such as high-quality batik, to increase revenue growth in this sector. Strategies to increase domestic consumption of locally-made handicrafts as daily-use items available at local supermarkets and further plans to drive an export culture for this industry would also be undertaken.

MYCreative Ventures is in the process of evaluating applications for its equity or debt financing in potential viable Malaysian creative businesses. The first tranche of funds is expected to be disbursed in the first quarter of 2013.

EPP 2 Deploying 1Malaysia Payments

As of 2011, this EPP has been transferred to the Financial Services NKEA for smoother execution.

EPP 3 Connecting 1Malaysia

With the aim of fast-tracking the adoption of new value-added communication services for business, household and Government use, this EPP is focused on getting more Malaysian companies online, enhancing telepresence services and enhancing telecommunication infrastructure.

Among initiatives that have been undertaken through this EPP include the Get Malaysian Business Online (GMBO) drive launched in collaboration with Google Malaysia. The effort aims to address the less than 15 per cent of Malaysia's 700,000 active small- and medium-sized enterprises (SMEs) which do not have an online presence. GMBO offers SMEs a user-friendly website-building kit, as well as training on how to maximise their online business potential.

Another initiative involves PERNEC Corporation Bhd, who together with its partner French media agency Kaatchi is looking into modernising payphones in urban areas. The plan is to install new PayPoint booths which, aside from making phone calls, may also provide other capabilities such as a WiFi platform on which the public can use to access the Internet and mobile phone reload services. These booths will be sustained by revenue from advertising and 200 PayPoint booths have been targeted to be established.

Achievements and Challenges

The telepresence sector marked a significant milestone in 2012, reaching a point where it can be industry-led, independent of Government involvement. The market has reacted positively to telepresence facilities and services, boosted by the partnership between VADS Bhd, a leading managed ICT service provider owned by TM, and networking firm Cisco to build the telepresence exchange network, establishing over 100 telepresence sites across Malaysia. Furthermore, an agreement was signed with American telecommunications giant, AT&T in December 2012 to expand the number of interconnected sites across the world.

Separately, GMBO has to date helped more than 9,000 businesses set up their online presence. However, these numbers fell short of the targeted 50,000 sites for 2012. Nonetheless, there remain positive prospects for the set-up of more websites for businesses, with close to 30,000 individuals having registered their interest in participating in the programme.

It is believed that the reluctance of many entrepreneurs to register their companies with the Companies Commission of Malaysia, a prerequisite to bringing businesses online, is the main hindrance to their signing up for the programme.



Signing of Global B2B Telepresence agreement between VADS and AT&T Corp on 11 December 2012

As at the end of December 2012, 158 work permits were granted by local authorities nationwide for the construction of new PayPoint booths. However, slow approvals by some local authorities have delayed the progress of the PayPoint project. In most cases, these

issues have been overcome, with new insights on how to improve the process uncovered. As a result, the targeted establishment of 200 booths is strongly expected in the coming few months.

Moving Forward

In order to improve the response rate for the GMBO programme, the programme will be rebranded to reach out to a wider base of potential users. Under Budget 2013, it was announced that to encourage more online Malaysian businesses, especially for women entrepreneurs, a RM1,000 incentive will be offered to those who will transfer their businesses online. The target is to have an online presence of 50,000 micro-entrepreneurs in 2013.

This EPP has also been tasked with enhancing location-aware services and fleet management, with some new services in this area targeted to be launched in 2013.

EPP 4

Establishing e-Learning for Students and Workers

This EPP plays a key role in educating future generations of Malaysians to become digital natives adept at using the technology and information at hand. The main objective of this EPP is to establish a common knowledge platform for students and professionals to enhance teaching methods, and help the general population enter a knowledge-based economy.

One focus for this EPP has been on ensuring connectivity at all schools nationwide, at a level that can support the above objective.

For this EPP to succeed, it is vital that the private and public sector work together in laying the fibre infrastructure necessary to connect schools, libraries, museums, universities and other learning institutions. This should be followed by the creation of a virtual learning environment.

To achieve its goals, the EPP has targeted for all 10,000 Government primary and secondary schools to have new and upgraded connections. This will enable high-speed Internet access to six million students and educators across the country through the 1BestariNet programme. Organised by the Ministry of Education (MoE), the project seeks to provide state schools with 4G connectivity and access to Frog's Virtual Learning Environment (VLE). The improved connectivity will provide speeds of at least 4Mbps nationwide or 2Mbps for schools that are not covered by 4G connectivity.

Through VLE, 671 teachers, students and administrative staff can connect with each other, thus extending the classroom into the digital sphere that can be accessed through laptops and other Internet-connected devices.

This EPP also seeks to ensure children of low-income households are equipped with the hardware needed to access to the Internet for education. The Netbook 1Malaysia programme by the Malaysian Communication and Multimedia Commission (MCMC) gives the chance for children of families who earn less than RM3,000 a month to own a Netbook.

Achievements and Challenges

The year saw the award of the tender for the 1BestariNet programme to YTL Communications Bhd. A total of 3,238 of the 7,209 schools targeted for connection in 2012 were connected to the virtual learning network during the year. YTL is on track to reach its targets by the end of 2013, and the goal of connecting 10,000 schools is expected to be completed by the end of the two-year rollout timeline.

A challenge for the 1BestariNet initiative, however, is familiarising schools, teachers and students with the programme and integrating the new technology with existing learning methods.

Another challenge is to ensure there is adequate ICT equipment at schools to utilise this connectivity. In part, the Netbook 1Malaysia programme designed to support the poorer students can help alleviate this. To date, more than 800,000 Netbooks (from the 2012 target of 1 million) have been distributed.

Moving Forward

The focus in 2013 will be to ensure the successful completion of the 1BestariNet network rollout to all 10,000 schools. This will be completed by ensuring infrastructure such as telecommunications towers are built according to the guidelines set out by MCMC and the respective local authorities.

In order to optimise the utilisation of 1BestariNet, teachers and students will be educated on how to use the system to complement their daily schoolwork and populate the VLE with content.

This EPP will also aid MCMC's efforts in distributing adequate computers and to ensure there is sufficient bandwidth in schools.

EPP 5 Launching e-Healthcare

The e-Healthcare EPP intends to connect all medical institutions to the Healthnet platform, which will provide a gateway for information sharing among healthcare providers and insurance companies. The platform will also offer patients better access to healthcare-related services and education.

This EPP is focused on upgrading the Internet connectivity to 500 hospitals and 8,000 clinics, and providing five million patients with direct access to the system. In 2012, the EPP aimed to connect 2,000 health facilities nationwide.

In addition to connecting public healthcare facilities with broadband Internet, the facilities will also be connected to MedikTV, the Ministry of Health (MoH)'s official broadcast channel. Launched in 2011, MedikTV is screened in medical institutions nationwide, as well as on IPTV and online channels. The initiative has received private sector investment and aims to educate the rakyat on major healthcare issues, including general care, disease prevention and maintaining a healthy lifestyle.

The MedikTV project initiative is now driven by Medic Media Network Sdn Bhd, which has taken over the operations from Vaseti Datatech, and has been tasked to revamp the approach and content for MedikTV.

Achievements and Challenges

Where the Healthnet platform is concerned, this EPP has surpassed its targets, with 2,319 healthcare institutions connected/upgraded to high-speed Internet (or 116 per cent above target), while 1,254 facilities utilised the e-Healthcare network for various transactions during the period, 125 per cent over the target set for 2012.



Dato' Sri Liow Tiong Lai officiating MedikTV Live Now!

170 hospitals have agreed to screen MedikTV content, which is also available for viewing at MedikTV.com. MedikTV, however, is undergoing a transitional period as it looks to redefine its content, approach and distribution network.

The challenge faced by this EPP, however, is the slow progress in rolling out various applications that further enhance the Healthnet. This has been due to various constraints, including lack of funds.

Moving Forward

Going forward, PEMANDU and MoH will continue to foster cooperative ties and understanding to ensure the successful deployment, management and utilisation of the e-Healthcare network within the budget allocated. With close to 3,000 health facilities now connected, the rollout of cloud-based health applications will enable Malaysians from all walks of life to enjoy a higher standard of service at all these facilities. 3,000 public health facilities are targeted for connection to the Healthnet platform by 2015.

EPP 6 Deepening e-Government

A networked Government is an efficient Government, which in turn would help foster a better business environment, broaden public participation and strengthen good governance. This EPP is focused on building an information structure for the Government that is centralised and outsourced, as well as ensuring that all Government facilities are connected to access necessary information.

Beyond laying the foundation for an interconnected Government, in 2012, this EPP targeted for 50 per cent of all intra-Government transactions, such as job applications and internal circulars, be completed online. A “zero face-to-face” target was also set, aiming for 90 per cent of counter services involving Government services be made online, with the remaining 10 per cent to be completed via e-forms by 2020.

Achievements and Challenges

Following the completion of infrastructure outsourcing, efforts have also been taken to move Government transactions from hard copy to digital files. Currently, two agencies; PEMANDU and Malaysian Administrative Modernisation and Management Planning Unit (MAMPU), have successfully made the transition, with a further five agencies earmarked for the same in 2012.

The Government’s first fully open-source software project, MyMeeting, was successfully rolled out to 28 agencies in 2012. This cloud-based web application was designed to help users better manage meetings, saving time and improving the efficiency of the public sector.



Transformation of the Government is online services and ICT infrastructure open day

To increase the accountability and feedback of service standards provided by agencies, e-Rating, a system for the public to perform instant online rating at the counter, is now available across nine additional agencies. These comprise the Employees Provident Fund (EPF), National Registration Department of Malaysia, Inland Revenue Board of Malaysia (IRB), Royal Malaysian Customs Department, Social Security Organisation, Road Transport Department (JPJ), Immigration Department of Malaysia, Malaysia Department of Insolvency and Kuala Lumpur Hospital.

In addition, a platform for the sharing of teachers’ service information online was set up during the year. The network is expected to improve the appointment and management of teachers.

Another initiative under this EPP is the MyEmail project, launched in 2011. This project has however seen slow take-up, with 23,000 registered to use the service to date. This may be due to the general lack of awareness about the objective of the MyEmail project, which is to create an authenticated online identity through which the *rakyat* can securely carry out their transactions with the Government. This differs from the normal free email services which are not secured and can be abused. In addition, negative publicity on the company which runs the service, Tricubes Bhd, may also have contributed to the limited take-up of this project. Nonetheless, Tricubes has so far invested more than RM5 million on the project and created 35 jobs.

Moving Forward

Moving forward, this EPP will continue to focus on its “zero face-to-face” initiative, while another five Government agencies have been identified to digitise their standard files. They are the Ministry of Human Resources, Ministry of Youth and Sports, Ministry of Domestic Trade, Cooperatives and Consumerism, Ministry of Natural Resources and Environment, and Ministry of Defence.

As Government services become increasingly digitised, this EPP will also focus on addressing digital security concerns.

Wide broadband penetration is a prerequisite for making the digital lifestyle a reality, especially now that most Internet-based services require a high-speed connection for optimum effectiveness.

Although the term broadband refers to a communication bandwidth of at least 256Kbps, the Government aims for a connection speed of at least 2Mbps when strategising broadband rollout/implementation in Malaysia. This is a more accurate reflection of what is required in ushering Malaysians into the digital age.

In 2012, the Government set a target of 65 per cent broadband penetration, with this EPP primarily focused on easing the provisioning of cables (fibre optic/copper) through readily available ducts. This initiative is aimed particularly at new residential/commercial developments. This EPP also focused on gazettement landed and rooftop sites for wireless infrastructure during the planning stage.

Among the initiatives carried out in 2012 include the push to gazette the amended Uniform Building By-laws (UBBL, or *Undang-Undang Kecil Bangunan Seragam*) 1984 Act. The Act requires all developers to provide communication infrastructure (e.g. internal ducting with copper/fibre cable, external ducting without cables and manhole without cable) for all new housing/commercial developments.

To increase the ease of accessibility to the Internet, this EPP also introduced the Connected@City programme, which aims to make WiFi highly available in areas such as food and beverage outlets, waiting areas and lobbies, and other places where people congregate. This programme encourages premise owners to provide the WiFi services either for free/paid.

The EPP also looks at ensuring the One-Stop Centre (OSC) processes introduced by the Ministry of Housing and Local Government are adhered to. The process governs telecommunications providers who wish to build telecommunication infrastructure.

Ultimately, the goal of this EPP is to make broadband service a basic utility for all Malaysians, similar to electricity and water.

Achievements and Challenges

This EPP achieved a 66 per cent broadband household penetration across the country in 2012, surpassing its target for the year and enabling the majority of the *rakyat* to enjoy the benefits of a fast Internet connection.

As of the end of 2012, six states have gazetted the UBBL Amendment. These are Kelantan, Malacca, Perak, Selangor, Terengganu and Johor.

On the other hand, all states except Selangor have committed to implement the Connected@City programme, with the implementation of this initiative differing from state to state. To date, more than 11,000 premises have been identified as possible locations for WiFi connectivity. Of these, close to 4,000 provide WiFi to their patrons.

The implementation of the OSC however had some challenges, as many states had previously agreed with third-party agencies to provide this service. To date, Malacca, Selangor, Penang and the Federal Territories have fully committed to implementing the OSC.

Moving Forward

To ensure that the *rakyat* can experience the digital lifestyle and eventually make broadband a basic utility, this EPP will shift its focus from pushing broadband penetration rates to improving quality. This will be undertaken by delivering better connectivity speeds. The push to increase the availability of WiFi across populated centres will also continue.

In 2013, this EPP will be looking at improving access to broadband for 80 per cent of the populated areas in Greater KL and 30 per cent of seven state capitals, namely Kuantan, Seremban, Bandar Melaka, Ipoh, Georgetown, Kota Kinabalu and Kuching. This initiative targets a minimum speed of 2Mbps in those areas.

In relation to the UBBL, the remaining states are in the process of gazetting the amendment. This is expected for completion in the first half of 2013. States which have not implemented the OSC will await the end of their third-party contractual agreements.

EPP 8 Extending Reach

While much of the focus on the previous EPP was on increasing broadband penetration for the urbanised population, analysis completed during the NKEA Lab in 2010 showed that sub-urban, rural and remote areas have only achieved penetration rates of 25 per cent, 20 per cent and 15 per cent, respectively. Therefore, this EPP aims to reduce the digital divide in non-urban areas by 2020 through greater industry participation and public private collaboration.

Two major initiatives taken in 2012 to bridge the digital divide comprised the *Kampung Tanpa Wayar* initiative, which aims to provide free wireless access to selected villages across the country, and the establishment of *Pusat Internet 1Malaysia* (PI1M), formerly known as Community Broadband Centres (CBC).

The five-year project initiated by the MCMC is fully funded via the Universal Service Provision (USP) fund. Besides providing broadband Internet access with a minimum speed of 2Mbps, each centre will have facilities such as desktop computers, printers and scanners, and training programmes.

Achievements and Challenges

In 2012, a total of 2,489 *Kampung Tanpa Wayar* sites, 36 PI1M sites and 300 Time3 Wireless towers were built. However, bridging the digital divide between the urban and non-urban areas has proven to be difficult. This is because private sector telecommunications companies may not see expansion into these areas as economically viable, given the high infrastructure cost versus the projected revenue from these lower-income areas.

Recently, the minimum speed for broadband services under the *Kampung Tanpa Wayar* initiative has grown from 2Mbps to 4Mbps. This is in-line with the Government policy to improve the quality of broadband services nationwide.

To highlight the various success stories of Malaysians that have made it on the Internet, a book titled “Connected at the Roots” was also launched by the Ministry of Information, Communication and Culture together with MCMC. The various success story are also available on YouTube and aired on television in an effort to promote broadband usage amongst entrepreneurs especially in rural areas.



Kampung Tanpa Wayar in Kampung Telakong, Sri Aman, Sarawak



Time3 wireless towers

Moving Forward

Given the difficulty of balancing the provision of free wireless access while avoiding potential market cannibalisation, in the future, Internet access at *Kampung Tanpa Wayar* sites will no longer be free. Usage costs will however remain reasonable. This is to ensure the *rakyat* will continue to have access to high-speed Internet at affordable rates.

In 2013, this EPP aims to add an additional 689 new *Kampung Tanpa Wayar* sites, 336 new Time3 wireless towers and launch 162 new PI1M.

Offering a Smart Network

This EPP aims to address the affordability and quality of Malaysia's Internet services by creating tiered broadband price plans based on priority of service and usage caps. Service operators are encouraged to develop differentiated packages that cater to a wide variety of users, from the high-end segment which is willing to pay for faster speeds to the more price-conscious users who desire lower barriers to entry and functionally sufficient services.

Through these measures, it is hoped that both the service operators and *rakyat* will be given a fair deal based on their usage patterns, as opposed to availing to a flat-cost structure. The service providers have responded by offering several competitively priced tiered packages now available in the market.

In 2012, this EPP was expanded to include initiatives for the use of Smart Applications in everyday lives. In order to achieve this, service providers are encouraged to collaborate and provide applications that will be useful to the *rakyat*. This is also envisioned to attract investment.

Achievements and Challenges

In September 2012, the *Pakej Mampu Milik Jalur Lebar 1Malaysia* was launched to offer broadband packages from as low as RM 20 per month in five states: Sabah, Sarawak, Kelantan, Terengganu and Pahang.

Under this package, users willing to pay RM20 to RM25 a month can enjoy minimum broadband speeds of 512Kbps with a capacity of 1GB. Alternatively, those who are eligible for fixed-line connections can pay RM38 a month to have a minimum speed of 384Kbps and unlimited data capacity.

Local network providers have also offered the public differential pricing based on service priority and application-driven demands. These packages are listed in the consumer forum website at www.cfm.org.my.

The challenge for this EPP is to make the *rakyat* understand their rights and requirements in subscribing to the various broadband packages available. Affordable packages should not be construed as cheap, but rather provide consumer satisfaction that they are getting the full amount of the service they paid for.

Under the Smart Application initiative, a major achievement for 2012 was the announcement of the Malaysian Public Transportation System (MYPUTRAS) project. This is a smart portal and mobile application designed to assist public transport commuters in providing information on bus routes, bus stop locations, fares, transit schedules and other useful travel information. Some buses will also be equipped with WiFi services and other services such as CCTV.

Moving Forward

This EPP will continue to monitor the number of Smart Packages offered by service providers. Guidelines on what is defined as a Smart Package are available on the Malaysian Technical Standards Forum website (www.mtsfb.org.my). The guidelines will be further enhanced to include affordability as a criterion.

Additionally, the Ministry of Information, Communication and Culture and MCMC will further work with service providers to launch more affordable packages or *pakej mampu milik* to address the needs of those who cannot afford current broadband subscriptions.

Meanwhile, the MYPUTRAS project is expected to be launched in the first quarter of 2013. MYPUTRAS will also be expanded to include information on rail, taxis and parking spaces. The service will also cover other major cities outside the Klang Valley. At the moment, 200 stage buses are targeted to be equipped with free WiFi.

EPP 10

Extending the Regional Network

Approximately 80 to 90 per cent of Internet traffic in Malaysia goes outside the country, requiring Malaysia to access a significant amount of bandwidth via international submarine cables. There is approximately 200Gbps of capacity being used in Malaysia currently, and this must be increased rapidly to reach 7Tbps by 2020.

This EPP aims to encourage the establishment of advanced data network centres to move Malaysia up the value chain of Internet services provided.

Among the initiatives focused on in 2012 was the Batam-Dumai-Malacca Cable System, the latest high bandwidth optical fibre submarine cable system that directly connects Malaysia and Indonesia. The project is a collaboration between Telekom Malaysia Bhd (TM) and its Indonesian unit, PT XL Axiata Tbk (XL), and PT Mora Telematika of Indonesia.

Another initiative announced was the Konsortium Rangkaian Serantau Sdn Bhd – a consortium comprising 24 telecommunications companies that is targeted at addressing bandwidth capacity and cost between consortium members via a two-stage approach. The first is to reduce the cost of the bulk purchase of bandwidth, and the other is to collaborate on building an undersea cable network.

Also announced was the Cahaya Malaysia Cable System, in which TM will build a two-fibre pair cable system linking Malaysia to Japan and Hong Kong. When completed, the system will add another 5Tbps of capacity.

Achievements and Challenges

The Batam-Dumai-Malacca Cable System, which was completed in 2011, began operations in 2012, while the Cahaya Malaysia Cable System to Japan was completed in August 2012.

Konsortium Rangkaian Serantau has achieved an 18 per cent reduction in bandwidth cost, while negotiations among the consortium members for financing of the undersea cable construction are ongoing.

Moving Forward

Going forward, it is hoped that members of the Konsortium Rangkaian Serantau demonstrate continued commitment to investing in the undersea cable construction, as this will help to further drive down bandwidth costs. Additionally, the Cahaya Malaysia Cable System to Hong Kong is expected to be complete in March 2013.



The Batam-Dumai-Malacca Cable System, completed in 2011

EPP 11 Track and Trace

This EPP focuses on the use of Radio Frequency Identification (RFID) technology to generate economic gains through two main projects.

The first is by employing it within Security and Trade to facilitate a more effective and secure clearing process within domestic ports and selected high volume routes. The project, a venture led by Smartag Solutions Sdn Bhd (Smartag) in collaboration with Royal Malaysian Customs Department (Jabatan Kastam Diraja Malaysia – JKDM) and Malaysian Communication and Multimedia Commission (MCMC), was announced in April 2011.

The second project is the Swiftlet Nest tracking and traceability system, jointly led by MCMC and the Department of Veterinary Services. Under this project, RFID technology is used to track and trace high quality and sustainable swiftlet nest production from Malaysia to high value markets in China, Japan and Taiwan.

Achievements and Challenges

Following the signing of Smartag and JKDM's agreement on the Container Security and Trade Facilitation System RFID in August, commercial operation of the system was successfully launched in September. Despite a delay in implementing the system, as at 31 December 2012, 64,629 transactions were processed compared to the target of 66,000 transactions.



RFID container tracking system



An RFID tracking system at a Customs checkpoint

This service, however, is currently only offered as an option for freight forwarders, as the system and processes are being improved. In order to reap the full benefits of the system, especially to reduce leakages and curb illegal smuggling, the system should be implemented completely by all freight forwarders in all JKDM locations.

Meanwhile, close to 4,000 companies have registered their interest to participate in the Edible Birds' Nest (EBN) tracking and traceability system. However, due to the import ban by China on swiftlet nest imports from Malaysia, the project's progress was initially stalled. Nonetheless, the project can now move into the operational stage following a memorandum of understanding signed between Malaysian and China to resume the import of birds' nest in 2013.

Moving Forward

The Container Security and Trade Facilitation project will continue to be monitored over the next year to ensure that levels of security and effectiveness are achieved. For 2013, as the Container Security and Trade Facilitation and EBN tracking projects have reached their respective operational stages, tracking of their respective Key Performance Indicators (KPIs) will be done at the GNI, investment and jobs level to measure the contribution of these projects to the economy.

BUSINESS OPPORTUNITIES

Business Opportunity 1:

Fixed Services

As the country moves forward with modern communications technology, demand for data services, particularly high-speed broadband in urban areas, is expected to grow in tandem. It is here that the High-Speed Broadband (HSBB) project, a public-private partnership, realises a supply driven deployment of fibre infrastructure. By doing so, 1.38 millions premises are now available for connection. The available infrastructure is then offered to the wholesale and retail markets. TM, the prime mover of this project offers both. On the retail end, TM has secured 485,000 subscribers by end 2012. It also offered its network to other service providers mainly Maxis, YTL, P1 and Celcom which in turn also has retail offerings for the market. This allows for healthy competition without duplication of infrastructure.

As the market is liberalised and responds to market demand, other licenced providers such as Maxis, Digi and TdC have also invested in the deployment of fiber infrastructure in other parts of Malaysia, fortifying the country's total fibre infrastructure.

Over the past year, due to the phenomenal growth in smartphones, tablets and also even more powerful notebooks and laptops, increasing consumers' need for faster Internet speeds, mobile players have extended their service package by bundling it with fixed-line services which can also access WiFi hotspots. Broadcasters, too, see the need to enter the IPTV business where only a wired/fibre infrastructure can provide the best solution.

Through consistently strong market competition, the popularity of Internet-connected devices and increasing demand by the end-users for more data will continue to give rise to the trend of consumers demanding more data services over voice.

Overall, fixed data lines are expected to achieve a compounded annual growth rate (CAGR) of 2.6 per cent as more companies require their own internal networks, contributing RM1.7 billion in incremental GNI and creating 3,250 new jobs by 2020.

Business Opportunity 2:

Mobile Services

Subscriptions to mobile services are expected to increase across all segments – voice, data and broadband – in the coming years, contributing RM3.6 billion in incremental GNI and creating 5,788 new jobs by 2020.

Malaysia's increasing population will continue to drive the CAGR of new subscribers to voice lines up by 2.7 per cent. Mobile data – inclusive of SMS, content and services that do not require Internet connections – are also expected to grow in tandem with new subscribers.

The biggest opportunity for telecommunications providers lies in mobile broadband subscription, as smartphone penetration grows and the population becomes increasingly adept at using data-connected services. Mobile broadband subscription is projected to record an increase up to 10.5 per cent CAGR in the coming year.

As at the first half of 2012, the mobile penetration rate stood at 135.3 per cent, or 39 million subscribers, of which 81 per cent are prepaid users. Meanwhile, 3G subscriptions are at 12 million.

The mobile segment will see a substantial increase in investment with the issuing of spectrum licenses for Long-Term Evolution (LTE) by MCMC, as successful players start to roll out or upgrade their network for LTE.

Business Opportunity 3:

Courier, Post and Broadcast

Courier, post and broadcast GNI contribution is expected to grow by 5.2 per cent annually over the next 10 years, contributing RM1.6 billion in incremental GNI and creating 7,563 new jobs by 2020.

This sector will also offer a broader range of services including commercial transaction fulfilment, warehousing, inventory management, demand planning for manufacturers and assembly services.

With the rise of e-commerce in the country, the post and courier sector is expected to benefit by offering services specifically designed to meet the needs of an increasing number of online merchants. Other new services such as Islamic pawnbroking (Ar Rahn) shows that Pos Malaysia continues to diversify its services to the *rakyat*.

In broadcasting, the spectrum license for Digital Terrestrial Television Broadcasting (DTTB) is expected to be given out in 2013, with the service expected to start by the first half of 2014. This will further add competition to an industry which has seen incumbents upgrading their broadcasting facilities from analogue to digital as well as offering High-Definition (HD)

channels. Telecommunication companies have also started offering IPTV services as part of their broadband package to add to the dynamics of this industry.

Business Opportunity 4:

Regional Operations

Malaysian companies in this sector continue to seek opportunities to grow their business regionally. Apart from potentially accessing a slice of markets such as Indonesia, India and Bangladesh, countries such as Myanmar, Vietnam and Cambodia also offer new opportunities for growth. With the liberalisation of the Malaysian telecommunication sector as announced by the Prime Minister, a major stumbling block for regional expansion has been removed as companies can now negotiate on equal terms with their counterparts in the target country.

For example, Axiata Group Bhd, through its wholly-owned Cambodian subsidiary Hello Axiata, has merged with Smart Mobile, making it the second-largest mobile telecommunications company in Cambodia with five million subscribers. Regional opportunities such as these are estimated to generate an additional GNI of RM4.8 billion with 664 new jobs by 2020.

ENABLERS

The past year has seen established players in the market strengthen their operations and further add to the Malaysian economy through profits gained from their existing regional operations.

These companies will continue to grow in the coming year through increasing subscribers, improving efficiency and strengthening margins. Furthermore, new services are also expected to be introduced, depending on regulatory frameworks within the different territories.

The Communications Content and Infrastructure sector will require 43,162 jobs by 2020. Of these, 25,899 employees will be required to support the EPPs while existing business opportunities require an additional 17,263 employees.

The sector will continue to encourage the growth of professional development in the industry. In telecommunications, a consolidated approach between PEMANDU, TalentCorp and the Ministry of Higher Education was initiated to ensure that the number of graduates in relevant telecommunications and engineering fields would be met by 2020.

From the creative content and multimedia perspective, the Ministry of Science, Technology and Innovation (MOSTI) has implemented the Creative Industry Lifelong Learning Programme (CILL) in collaboration with several key stakeholders such as MDeC, Ministry of Information, Communications and Culture and the Public Services Department.

This initiative helps selected students to pursue tertiary programmes in creative content at local or foreign universities or educational centres. It also provides financial assistance for professionals in the creative content sector to pursue masterclasses, which are helmed by the industry's best.

Further within the content sector is the accreditation of creative talents led by the CCIG to boost the standard of professionalism and quality of the creative content practitioners. It is hoped that these efforts would shift the industry into a higher income bracket level, and thereby, encourage more to consider this industry as a viable career option.

Summary of Communications Content and Infrastructure NKEA

	2020 Target
Incremental GNI impact	RM35.7 billion
Additional Jobs	43,162

Critical targets for 2013:

- To record RM500 million of revenue from the export of creative content
- To digitise 28,000 hours additional content
- To make available 5,000 content titles for online market access
- To reach RM350 million revenue from handicraft sales
- To achieve 50,000 new online businesses
- To connect all primary and secondary schools totalling more than 10,000 with broadband
- To connect a total of 3,000 health facilities nationwide with broadband
- To provide 60 per cent online Government services
- To ensure additional five agencies adopt the Digital Document Management System
- To provide a minimum speed of 2Mbps; 80 per cent of Greater KL area and 30 per cent of areas in seven state capitals
- To commission 1,187 new programme sites i.e. Kampung Tanpa Wayar, Pusat Internet 1Malaysia and Time3 Tower
- To reduce an additional 10 per cent of wholesale bandwidth price

A SPECIAL NOTE ON SPECTRUM

BY THE MALAYSIAN COMMUNICATIONS AND MULTIMEDIA COMMISSION (MCMC)

The progress of the Communications Content and Infrastructure NKEA has seen the adoption of broadband reach 66 per cent of households in 2012. Whilst this is positive, the next phase of infrastructure investment and development will be dependent on user behaviour, which has shown increasing preference for mobile applications. This has resulted in tremendous growth in data traffic demand.

Much like managing the growing number of cars on the road, the next step is to expand the road/highway. Hence, for broadband, the infrastructure capacity, i.e. the highway, must be expanded to cater for growing data traffic.

In the communications industry, broadband is delivered through fixed-lines or wireless means. However, users now prefer to remain connected on-the-go; anytime and anywhere.

To support this on-the-go lifestyle, wireless infrastructure is required. The ability for wireless infrastructure to support huge data traffic however depends on the topology of the network and the availability of radio spectrum – the entire range of frequencies of electromagnetic waves corresponding to radio frequencies, also known as radio waves.

It must be highlighted that spectrum is a national asset, and must be managed efficiently for it to provide the best impact to both the economy and the rakyat.

In Malaysia, the function of spectrum management is entrusted to the Malaysian Communications and Multimedia

Commission (MCMC, a statutory body which has both development and regulatory functions), and governed by the Communications and Multimedia Act 1998 (CMA). Through the CMA, MCMC makes spectrum available to users and licensed operators, allowing such operators to utilise spectrum to deliver communications services to end users via wireless means.

The type of spectrum offered will determine the nature of services it can support and the number of users it can serve concurrently. The CMA's Spectrum Regulations allow the MCMC a variety of ways to manage the spectrum.

Spectrum can be provided by way of a direct allocation or award, sale, "beauty contest", auction or any combination thereof. While historically spectrum was allocated directly to applicants or service providers, Malaysia over the years began to adopt a "beauty contest" approach based on competitive bids. The rationale for this approach is to ensure that winning bidders possess adequate financial strength to expedite the infrastructure rollout upon being awarded the spectrum block. As a developing country, Malaysia still has numerous developmental agendas to fulfil, namely the broadening of service coverage areas for wireless services and further upgrading and improvement in quality of service. Such developmental agendas require heavy capital investment on the part of operators.

Malaysia has to-date not chosen to auction spectrum due to its focus on the developmental agenda. Typically, auctions are used in situations where

there is already a mature network of infrastructure and services in place with full geographic coverage. Auctions are also used in situations where the market is mature and service providers have achieved some level of parity to ensure fair play. The concern in auctions, is that financially stronger players can afford to pay a high price for spectrum, while those who are starting out may face a high financial barrier to entry.

In some countries, the exorbitant cost of auction led to delays in the rollout of spectrum infrastructure. This has been due to heavy investments in spectrum, leaving little else for infrastructure investment. This in turn, tends to lead to a high preponderance towards network rollout in highly populated areas which would naturally provide quicker returns on investment. Such a situation could potentially create a digital divide between urban and rural populations.

By contrast, the MCMC has always tried to ensure healthy and balanced industry growth.

In order to ensure that spectrum is used optimally, the regulator allocates spectrum to service providers for specific periods of time not exceeding 20 years. This is to allow service providers sufficient time to recover the investment required to put up networks to enable wireless service provision. Such allocations are refreshed from time to time in line with global and regional technology and regulatory trends as well as international multilateral treaties, resulting in re-purposing or re-farming of radio spectrum.

In recent months, the need for spectrum re-farming and reallocation has yet again descended upon the Malaysian landscape. MCMC has announced its intention for the future use of the 2600MHz spectrum and the migration of analogue television services to that of digital television services. The 2600MHz spectrum is for wireless broadband services, while the specific spectrum for television or broadcasting services used in this particular instance is 470-742MHz.

Over time, the 2600MHz spectrum was identified as suitable for use for a globally harmonised technology standard: Long-Term Evolution (LTE), or 4th Generation (4G), mobile services. It is also important to note that other bands such as the 1800MHz, 2100MHz and 2300MHz spectrum band will also move from the current 2G and 3G, including 3.5G and 3.75G, technologies towards LTE.

For the 2600MHz spectrum in Malaysia, MCMC announced the selected winners of specific blocks of spectrum on 9 December 2012. They are CelcomAxiata, Maxis, Digi.com, U-mobile (existing mobile operators), YTL Communications, Redtone International, Packet One (existing Wimax operators) and Puncak Semangat Sdn Bhd. The allocation was based on the rebalancing of available spectrum to create a more level playing field and on an equitable basis.

The strategy of granting each player a small amount of spectrum was intended to encourage infrastructure sharing and consolidation amongst the service providers, thereby reducing the

duplication of physical networks whilst continuing to allow each operator the opportunity to maintain their respective brand positions.

The winners are expected to begin deploying the shared LTE networks in 2013. Many have already announced their LTE plans, with each player to invest between RM400 million to RM500 million in 2013-2016.

The MCMC has also carried out an open tender exercise for the migration from analogue to digital broadcasting. By the closing date, eight out of the 66 companies which bought tender documents had submitted their bids. Out of the eight companies, only three made the cut to proceed to the second round of evaluations, with the tender conditions requiring them to submit detailed execution plans on their proposed digital television migration strategies. The digital television migration initiative is expected to be fully funded by the private sector with no recourse to the Government.

MCMC is expected to announce the winning bid in 2Q2013. Subject to border coordination commitments with neighbouring countries, it is possible that there will be some analogue spectrum "freed up" as a result of the introduction of digital broadcast technology. This "freed up" spectrum is typically referred to as the "digital dividend".

Whether there will be a meaningful digital dividend which may be then repurposed for other uses will largely depend on the success of the migration of analogue

television services to digital broadcast. It is expected that the migration may take five years or more from the date of the first introduction of digital transmission. Factors influencing this migration include the ability for homes to receive the new digital television transmission.

Only after the last homes are "digital enabled" can analogue transmitters be switched off, and only thereafter can the MCMC then look at re-farming the "digital dividend" and repurpose the recovered spectrum for broadcast or other purposes.

The fixed-line sector, too, is seeing a high level of activity. Telekom Malaysia (TM) and Time dotcom (TdC) have been busy laying fibre in areas of high demand, and this is expected to continue into 2013.

TM has announced further investment in Iskandar Malaysia and other states including Malacca, Sarawak and Sabah, leveraging their earlier investment in the High Speed Broadband project.

TdC, on the other hand, has focused its investment in high-rise dwellings in areas such as Mont' Kiara in Kuala Lumpur, and Penang. With the open access approach taken by TM and TdC, wireless operators will also benefit as they deploy the LTE infrastructure.

As a result of all these activities and investment in the communication sector, consumers can only look forward to better, faster options in the multimedia landscape, bringing Malaysia closer to its ultimate goal of becoming a high-income nation.



The graphic is a vibrant pink and white illustration. In the top left, a large pink circle contains a white graduation cap. To its right, a larger pink shape features a dark pink graduation cap, several white gears, and silhouettes of four graduates. Below these, a white rectangular box contains the word 'Education' in bold pink text. To the right of the box, a teacher silhouette stands next to a laptop on a desk, pointing at a whiteboard. In the foreground, three student silhouettes are shown from behind, with one raising their hand. The background is decorated with a pattern of grey dots in the top left corner.

Education



**Tan Sri Dato' Hj. Muhyiddin
Mohd. Yassin**

Minister of Education

The Education National Key Economic Area (NKEA) has managed to keep the momentum generated from the first year of the ETP's implementation in place even as we embarked on to the second year. The last 12 months have been a productive one for our NKEA as a whole, but more so for the more ambitious Entry Point Projects (EPPs). We have also seen the institution of new EPPs while existing ones, such as the hospitality cluster, early childhood education, vocational education, private and international schools showed significant progress.

We have also reviewed existing EPPs to better reflect market realities and taken significant steps in transforming our education model into a performance-based system. But what was most heartening was the active participation of the private sector in these EPPs, signalling its alignment of vision with the Government in transforming Malaysia into a major education hub. The numbers speak for themselves; private sector involvement accounted for RM17.4 billion of Gross National Income (GNI) in 2012.

I look forward to a more fruitful 2013 where even greater strides are made in the NKEA. Together, we can ensure that Malaysia becomes one of the foremost destinations for education in the future.



Dato' Seri Mohamed Khaled Nordin

Minister of Higher Education

We are well on our way towards creating an environment of academic excellence in Malaysia, and 2012 has been a year of great achievements. The Ministry of Higher Education has imposed stringent standards to attract only the top Tier One foreign institutions to establish campuses in Malaysia. One such example is Heriot-Watt University (HWU), which established its campus in Putrajaya last year, its fifth in the world.

The establishment of HWU in such a short period of time was due to the cooperative efforts of various Government agencies and ministries. Moving forward, we will need more seamless integration between the Immigration Department, Ministries of Education and Higher Education, and other Government entities to make it easier for both students and education providers to study and operate in Malaysia.

In ensuring the quality of our higher education institutions, the SETARA '11 rating exercise was conducted between March 2011 and July 2012. Students now have greater information when deciding where to study with the publication of the SETARA results.

The work we are doing in the Education NKEA will not only create a vibrant service sector in Malaysia, but will also ensure that Malaysia's future is secure. I look forward to greater improvements in the coming year.

EDUCATION

The Education National Key Economic Area (NKEA) has made great strides. Some key examples are early childcare and education (ECCE), basic primary and secondary education, technical education and vocational training (TEVT), and tertiary education for both domestic and international students. The achievements here are a healthy indication of greater future growth.

The tertiary education front is the most exciting in Malaysia's bid to become a global education hub. Most of the EPPs associated with higher-education initiatives such as online distance learning, Islamic finance specialisation, early childcare teacher education, and hospitality and tourism education have shown clear signs of progress.

Furthermore, with top tier foreign universities moving to establish Malaysian branch campuses across the country, future prospects for tertiary education in Malaysia remain bright. This is especially true at locations such as Educity@Iskandar, where globally recognised institutions including Newcastle University Medicine Malaysia (NUMed), Netherlands Maritime Institute of Technology (NMIT), Raffles University Iskandar, University of Southampton Malaysia (USMC) and Reading University Iskandar have set up campuses.

Finally, to fully round off education offerings in Malaysia, the Education NKEA has also encouraged expansion of private TEVT institutions, which will train an important segment of the workforce. The ETP expects some one million holders of vocational certificates or diplomas by 2020 if it is to fulfil its goals, and hence TEVT remains a vital educational component.

Towards this end, the EPPs involving TEVT are encouraging public-private partnerships where the Government buys seats in technical and vocational schools to help fund students. The Skills Development Fund (*Perbadanan Tabung Pembangunan Kemahiran* or PTPK) has allocated additional funds based on a Star Rating Exercise, which disburses funds based on the performance level of the TEVT institutions to provide more access to high quality TEVT education and also to spur improvement in quality of offerings among TEVT providers.

High-quality education infrastructure in Malaysia therefore plays a dual role: To transform the education sector in Malaysia into a vibrant economic sector, and to provide the training required for the country's own needs.

The introduction of new EPPs which include the likes of developing a games development cluster, establishing foreign branch campuses and setting up non-profit education institutions, will bring in an additional RM146 million in GNI and create an additional 660 jobs when fully operational.

There remain clear opportunities for growth for other existing EPPs. For example, although enrolment numbers in pre-schools and childcare centres still fall short of targets despite steady year-on-year increases, this suggests that more can be done to encourage enrolment: Greater awareness, continuation of incentives for the private sector such as launching grants and fee assistance, as well as improvement of pre-school teacher skills.

As for the international school sector, an unprecedented increase in issued licences has led to over-supply in Malaysia in the mid-tier segment of the market. Two solutions present themselves currently: Boost enrolment by tapping into the influx of expatriates drawn to Greater Kuala Lumpur and Iskandar, and upgrade the quality of educators to make international schools a more attractive option.

2012 Key Performance Indicators

Education NKEA		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Student enrolment for pre-school and childcare	387,300	420,318	109	●	100	●	1.0	●
	Number of students benefited from the government fee assistance scheme	6,000	13,969	233	●	100	●	1.0	●
	Number of pre-school centres set up	1,000	561	56	●	56	●	0.5	●
	Number of childcare centres set up	800	1,030	129	●	100	●	1.0	●
EPP #2	Number of pre-school teachers trained	6,000	6,717	112	●	100	●	1.0	●
	Number of childcare minders trained	4,000	5,411	135	●	100	●	1.0	●
EPP #3	Number of students enrolled	4,240	6,828	161	●	100	●	1.0	●
	Number of new schools in operation	10	10	100	●	100	●	1.0	●
EPP #4	In service teachers upskilling by private providers	2,500	2,500	100	●	100	●	1.0	●
EPP #5	Number of SKM qualified students (including successful PTPK funding) (private students only)	26,900	28,903	107	●	100	●	1.0	●
	Percentage of skills programs accredited which are compliant to using Code of Practice Skill Program Accreditation (COPSPA)	100%	100%	100	●	100	●	1.0	●
	Number of foreign TEVT students studying in Malaysia	1,000	703	70	●	70	●	0.5	●
EPP #6	Number of international online students	4,000	6,733	168	●	100	●	1.0	●

(more on next page)

(continued from previous page)

Education NKEA		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #7	Number of students enrolled under institutions involved in the cluster contacts	6,000	7,801	130	●	100	●	1.0	●
	Total percentage of employability (job within six months)	80%	63.8%	80	●	80	●	0.5	●
EPP #8	Total number of medical and allied health students in IPTS	85,000	54,629	64	●	64	●	0.5	●
	Total percentage of employability (job within six months)	80%	64.8%	81	●	81	●	0.5	●
EPP #9	Number of engineering students enrolled in IPTA/IPTS with cluster contact	60	168	280	●	100	●	1.0	●
	Total percentage of university (IPTA/IPTS) income from R&D	2%	3%	150	●	100	●	1.0	●
EPP #10	Number of students enrolled in IPTS with cluster contact	21,000	14,911	71	●	71	●	0.5	●
EPP #11	Number of tertiary students enrolled in Iskandar	675	455	67	●	67	●	0.5	●
EPP #12	Number of international students enrolled	100,000	97,419	97	●	97	●	0.5	●
EPP #13	Target number of new public-private partnership (PPP) schools	1	2	200	●	100	●	1.0	●
EPP #14	Number of students enrolled in IPTS with cluster contact	30	34	113	●	100	●	1.0	●
EPP #15	Establishment of branch campuses for foreign universities (newly launched in 2012 with KPIs set for 2013)	-	-	-	-	-	-	-	-
EPP #16	Establishment of not-for-profit education institution (newly launched in 2012 with KPIs set for 2013)	-	-	-	-	-	-	-	-
				121%		91%		83%	

Exhibit 10.1

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score #2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

ENTRY POINT PROJECTS

EPP 1

Scaling up Private Early Childcare and Education (ECCE) Centres

A child's most formative years are from birth to age five, and hence must be exposed to early education to help the child realise his or her maximum potential. This EPP thus aims to boost pre-school enrolment and early childcare participation levels to that of developed nations.

Under the Government Transformation Programme (GTP), the Ministry of Education (MoE), in collaboration with the private sector, looks to increase preschool (4+ and 5+ years in age) enrolment to 87 per cent in 2012 and 97 per cent by 2020. The Ministry of Women, Family and Community Development (MoWFC) also works in partnership with the private sector to increase childcare enrolment (0-4 years) from four per cent currently to 25 per cent in 2020.

To achieve these targets, the Government, together with the private sector, has established 6,642 new pre-schools over a three-year period ending 2012 under the GTP's National Key Result Area (NKRA), of which approximately 35 per cent were established by private sector operators. The goal of this EPP is to see greater participation from the private sector covering both pre-school and early childcare centres to keep the momentum going.

Achievements and Challenges

To date, the number of students enrolled in private pre-schools and childcare centres has reached 420,318 children, a 20.48 per cent increase from 348,874 children reported in 2011. A total of 561 new private pre-schools and 1,030 new private childcare centres were established in 2012 to accommodate the increase in enrolment.

In a bid to lift the enrolment and support demand for pre-school education, the MoE has provided fee assistance to lower-income families who would otherwise not have the opportunity to start education at such an early stage. In 2012, 13,969 students from low-income households were enrolled in private pre-schools and received fee assistance totalling RM11.6 million. In the same year, 356 private pre-school operators received a total of RM3.56 million worth of grants to launch operations.

The MoE also embarked on a national roadshow from April to July 2012 to raise awareness on ECCE with the cooperation of the Welfare Department, ECCE Council and local council authorities. Teams were deployed to eight regions - Perak, Kuala Lumpur, Penang, Pahang, Malacca, Sarawak and Selangor - to encourage private operators to use the Government's pre-school information system and to provide information on training opportunities for private pre-school teachers. Some 20,172 private pre-school teachers received funding from the MoE in GTP 1.0 (2010-2012) to attend training.

The roadshows were a key project for the ECCE Council, which has been tasked with the responsibility of setting standards to boost the quality of ECCE educators and offer certification for childcare centres and pre-schools, resulting in clearer career paths for educators and enhancing the quality of ECCE offerings.

One of the key challenges faced by this EPP pertains to the division of roles between two ministries: The MoE and the MoWFC. The former oversees the pre-school segment while the latter oversees early childcare. The separation of the two has led to a lack of alignment and collaborative effort.

It is also unlikely that the 2015 target of 92 per cent pre-school student enrolment will be met since the 2012 target of 87 per cent has fallen short, coming in at 82 per cent. Meanwhile, childcare enrolment only stands at four per cent. This is mainly due to numerous unregistered private pre-schools and centres that operate illegally, having failed to meet the MoE and MoWFC guidelines. Greater efforts including media campaigns have commenced to encourage parents to enrol their children in registered pre-schools and childcare centres.



Presentation ceremony of the launching of grants to pre-schools

Moving Forward

Under the GTP 2.0, fee assistance and grants disbursed totalling approximately RM36.4 million will continue to be given to pre-schoolers enrolled in registered private and non-governmental organisations (NGO) run pre-schools. Out of the RM36.4 million, RM5.3 million is allocated for special needs children. To also encourage growth of registered private childcare centres, similar fee assistance and launching grants totalling about RM11 million will be disbursed to private or NGO-operated childcare centres.

To assess the quality of pre-schools with the objective of providing information for parents to make the right decision for their children, the MoE has engaged with the International Islamic University Malaysia (IIUM) to formulate a set of quality standards known as SKPK (*Standard Kualiti Pra-sekolah Kebangsaan* or National Pre-school Quality Standards). The SKPK self-assessment online system will be rolled out in 1Q2013 to all Government-owned pre-schools and private-owned pre-schools. The objective is to allow centres to gauge their own standing in terms of quality and plan for improvement measures. A total of 500 public and 500 private pre-schools will be verified by the MoE.

Improving Early Childcare and Education Training

ECCE standards are largely dependent on the quality of its educators, and hence improving the latter will similarly see improvements in the former. The project team estimates that, at present, 93 per cent of private teachers in this segment do not possess formal training.

The 10th Malaysia Plan aims to change the status quo by encouraging ECCE teachers to obtain a minimum diploma-level qualification. There is, therefore, a need to enhance the skill level of existing teachers and provide pre-service training. The private sector is expected to take the lead with developing high-quality ECCE programmes that will be recognised by the Malaysian Qualifications Agency (MQA).

Some 93 per cent of private pre-school teachers have no certification at present as certification is not mandatory, according to findings by the EPP project team. In contrast, pre-school teachers in MoE-owned pre-schools are degree holders while the majority of teachers in pre-schools operated by Government agencies, namely KEMAS and JPNIN are diploma holders.

The EPP 2 Consortium- comprising SEGi College, *Kolej Perkembangan Awal Kanak-Kanak*, DiKa College, CECE Institute, Alfa International College, Kirkby International College and Taj International College, has set up a working group with the Ministry of Higher Education (MoHE) to develop a diploma programme that can be offered part-time and online, providing flexibility to in-service pre-school teachers. The online programme will also provide a cheaper alternative to the teachers who wish to upgrade their skills.

The Government plans to partially subsidise living allowances of private ECCE teachers who wish to study for diplomas as part of the overall plan to raise the level of professionalism in the sector. To this end, the Government has set aside RM1.5 million under the GTP 2.0, to provide living allowance to teachers wishing to enrol in the diploma programme.

Achievements and Challenges

The private sector conducted a three-week course for 3,494 private pre-school teachers in May 2012 and trained another 3,223 teachers in November 2012. SEGi Education Group, which champions this EPP, has pledged RM398 million to build an ECCE hub in Section 14, Kota Damansara, Selangor, and is currently finalising a proposal for the land with the MoE.

The Government has agreed to offer Federal Land at an agreed price, which will also see the construction of a District Education Office (*Pejabat Pendidikan Daerah* or PPD) by SEGi. As of December 2012, the proposal is awaiting approval from the Public-Private Partnership Unit (*Unit Kerjasama Awam Swasta* or UKAS) within the Prime Minister's Department.

Moving Forward

The consortium is working with the MoE and the MoHE to upgrade the skills of in-service private pre-school teachers through a three-pronged approach:

- Creating a minimum qualification standard for all pre-school teachers with the support of the Teachers' Training Division under the MoE
- Conducting a media campaign to encourage private pre-school educators and childcare minders to upgrade their skills
- Working with the MQA to introduce a blended diploma programme, with a distance learning module to enable in-service pre-school teachers to obtain certification

EPP 3

Scaling up International Schools

Malaysia needs to expand its international schools, particularly in Greater Kuala Lumpur and growth Corridors like Iskandar as these areas are expected to see heavy expatriate growth owing to the ETP initiatives. At the same time, international schools will also cater to school-aged children of Malaysians returning from overseas under Talent Corporation's Returning Experts Programme and other initiatives.

This EPP will provide a wider choice of schools for Malaysians looking to send their children abroad for education. At the same time, this EPP will attract parents from overseas who are looking to Malaysia as a school destination for their children. For instance, there has been an increase in the number of Korean families who send their children to Malaysian international schools to obtain an English education.

It is estimated that every international school student generates 20 to 30 times more foreign exchange income when compared with a tourist. At present, the international school system is fast approaching its target of 87 international schools with an enrolment of 75,000 students by 2020.

Achievements and Challenges

To date, there are 81 international schools in operation throughout the country. This represents a growth of 18.67 per cent in the number of international schools over the past five years. The Government has granted new licences to 29 school operators that have yet to commence operations. There are 18 new set-up applications which are pending approval from the MoE. The total number of students enrolled in international schools stands at 33,688; 17,234 are foreign students while 16,454 are local.

The expansion in the international school segment has been driven by three factors:

- The Government's policy to grant a 100 per cent investment tax allowance on qualifying capital expenditure incurred by new and existing international schools within a period of five years
- The removal by the MoE of the 40 per cent quota on Malaysian student enrolment in international schools as well as deregulation of the tuition fees
- The lifting of limits on foreign ownership of international schools

Nonetheless, the rapid expansion of international schools also poses challenges to the regulatory authorities. For example, the MoE will need to strengthen its oversight of these institutions.

The growth of new schools has also been accompanied by correlating growth in the number of students, which has increased at an average of 22.1 per cent over the past five years, with 2012 seeing the most significant growth of 45.46 per cent increase from the total of 23,159 students in 2011.

Despite the impressive numbers, there remains a disparity in the pace of growth of new schools and new students. The large number of licences issued in the last two years has created excess capacity at schools, making it necessary to enrol more international students to fill the gap.

To achieve this, representatives from MoE, the National Association of Private Educational Institutions (NAPEI), PEMANDU and the Education Malaysia Global Services (EMGS) have set up the International School Task Force to promote Malaysia as an international education destination for basic education.

Moving Forward

International schools will invest an additional RM777.8 million between 2013 and 2015 to set up and expand campuses, according to a survey conducted by PEMANDU in 2012. With this expansion in place, the MoE will look at strengthening the inspection and regulatory framework on international schools in 2013.

To meet this growth in school capacity, the International School Task Force is conducting promotional efforts including roadshows, recruitment drives and exhibitions to drum up interest. With the support of the MoE, NAPEI and EMGS, Malaysia embarked on its first global marketing campaign for international schools in November 2012 targeting South Korea and Indonesia. Other key markets include China, India and Singapore.



NAPEI, MoE and PEMANDU at the Education Exhibition at Seoul, South Korea in October 2012

EPP 4 Expanding Private Teacher Training

Teachers are key determinants of student performance, but high quality teachers are in short supply everywhere. This EPP aims to remedy this by encouraging the development of high-quality teachers in critical subjects such as Bahasa Malaysia, English, Maths and Science in Malaysia and across Asia.

The EPP is presently looking at various options, including the “Open System” for teacher training proposed in the 10th Malaysia Plan. The “Open System” calls for the liberalisation of pre-service training of public school teachers in private teacher training institutions, and for private operators to offer in-service training via the Internet and classroom.

Achievements and Challenges

Currently, some 200 pre-service English teachers are being trained in four higher education institutes (HEI), namely SEGi University College, UCSI University, University Tunku Abdul Rahman (UTAR) and Kirkby International College. The foundation programme ended in 2012, and students are now in the first year of the degree programme.

The MoE carried out inspections of these HEI in April and August 2012 to ensure that these HEIs complied with the MoE's requirements on training. In addition, the MoE required that all the English pre-service teachers in the HEI take the Cambridge Placement Test (CPT) to assess their proficiency in English.

A pressing concern raised by the testing results is that only 30 per cent of the 200 teachers met the minimum proficiency standard in English. The four HEIs were subsequently directed to put in place a remedial plan to improve the proficiency of teachers that will see all teachers proficient by the end of the programme in 2016.

In addition, last year, the MoE also outsourced the training of 2,500 in-service English option teachers to the British Council as part of the continuous professional development of these English teachers.

There is an excess of teachers in the Malaysian public school system, according to a MoE study. Hence moving forward, the MoE is unlikely to outsource teacher training to private HEIs as there is enough capacity from existing teachers' training institutes under the MoE and demand for teachers in public schools is expected to slow down.

Moving Forward

Although opportunities for the private sector to train teachers for the Malaysian public school system are limited, there are new opportunities to train teachers for the international or private schools as these sectors are growing strongly.

As the landscape matures, there will be greater demand from various international schools for teachers to meet different market segments. For instance, international schools that target the middle-income market will recruit more local teachers, who will need to be trained to teach international school curriculums. In turn, this provides an opportunity for private teachers' training institutes to expand their business.

EPP 5

Scaling Up Private Skills Training Provision

This EPP aims to help reduce the percentage of low-skilled and semi-skilled workers to 50 per cent of the workforce in 2020 from 76 per cent in 2009. It will do so by providing post Sijil Peperiksaan Malaysia (SPM) students or school-leavers with greater opportunities to pursue vocational education. To this end, the Government has allocated RM200 million in 2012 and RM232 million in 2011 to the Skills Development Fund (Perbadanan Tabung Pembangunan Kemahiran or PTPK).

To ensure that students benefit from high-quality training and that they meet industry demands, funds will be channelled to private accredited centres that conduct programmes which have been assigned three stars and above for Peninsular Malaysia and two stars and above for Sabah and Sarawak under the Star Rating Exercise conducted by the Department of Skills Development (Jabatan Pembangunan Kemahiran or JPK).

Result of JPK Star Rating

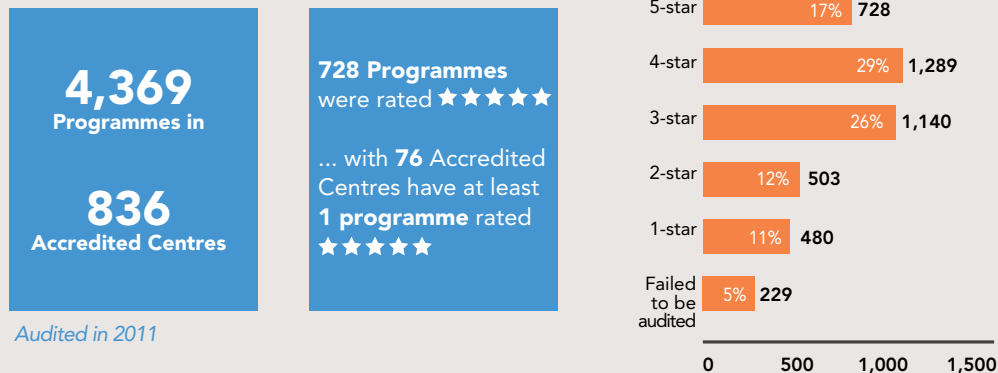


Exhibit 10.2

Achievements and Challenges

JPK, a department under the Human Resources Ministry, conducted a Star Ratings Exercise on 4,369 programmes at 836 private accredited centres across Malaysia. Of the 4,369 programmes, 728 were rated five-star, or excellent.

Based on the results, PTPK allocated RM200 million to 127 eligible private centres, that in turn trickled down to 15,529 students in 2012. While Star Ratings were assigned to the various programmes, the system has yet to grade the training providers themselves.

Moving Forward

To achieve greater impact and encourage training providers to remain competitive, JPK is currently developing a new improved Star Ratings system and criteria, with a higher weightage on outcomes. The improved system is expected to be launched in 1Q2013 and will be used in the next rating exercise scheduled for mid-2013. In 2013, PTPK will allocate another RM200 million for distribution.

EPP 6

International Expansion of Distance Learning

The global distance learning sector has grown significantly with Asia alone registering an annual growth of 12 per cent over the past decade. This EPP aims to tap Malaysia's competitive advantage in pricing, language and accreditation to turn the country into a leading distance learning centre in Asia.

The Government appointed Asia e-University (AeU) in 2010 as the main gateway for distance learning in Malaysia due to its accredited status in all Asia Co-operation Dialogue (ACD) countries. Meanwhile, the MoHE has launched the Malaysian Education Online (MEdO) website (<http://www.medo.my>) set up by AeU in 2011 to provide a platform for local public and private universities to market their programmes online.

Following the launch of this EPP, the MoHE also issued a circular to all public sector universities to encourage the utilisation of the MEdO platform. Public universities were encouraged to put on a minimum of two programmes on this platform.

In addition to local university programmes, MEdO also offers programmes by DLC Worldwide (United Kingdom's leading specialist provider of distance learning in logistics, purchasing and supply chain courses), the Islamic Banking and Finance Institute Malaysia (IBFIM), Kuala Lumpur Infrastructure University College (KLIUC) and the Malaysian Insurance Institute (MII).

As of November 2012, MEdO offers 24 programmes ranging from Bachelor's, Master's, and PhD to professional certifications in the areas of education, business administration, management and logistics.

Achievements and Challenges

AeU signed a memorandum of understanding with five local universities in 2012 to launch programmes on the MEdO portal. These include Universiti Malaysia Sabah (UMS), Universiti Sains Islam Malaysia (USIM), Universiti Utara Malaysia (UUM), Universiti Sultan Zainal Abidin (UniSZA) and Universiti Tun Hussein Onn Malaysia (UTHM).

Despite making good headway, this EPP faces a major structural challenge in the slow uptake from public universities. For instance, public universities lack the resources to translate content from traditional classroom lectures into relevant digital format. In addition, a lack of remuneration and financial support has discouraged the participation of lecturers. There were also concerns of quality and accountability over training students in a digital format that delayed utilisation.

To facilitate the digitisation of content for the MEdO platform, AeU will be developing generic modules digitally that can be customised by universities as part of their programme content.

Moving Forward

In 2013, MEdO will seek greater partnerships with global education partners to cater for lifelong and professional learning as a way to lift future revenue. To remove overlaps and duplication with the MoHE's efforts, this EPP will consolidate with the MoHE's National Higher Education Strategic Plan as both initiatives share the same purpose of exporting Malaysian education through an online platform and are both led by AeU.

EPP 7

Building an Islamic Finance and Business Education Centre

Despite Malaysia's status as a leading Islamic finance centre, the country lags behind as a provider of Islamic Finance and Business education. A lack of national consensus on what should constitute a standard curriculum for an Islamic Finance and Business education has hindered Malaysia from developing a globally recognised professional certification, which is key to gaining greater access to major markets in the Middle East.

Achievements and Challenges

Bank Negara Malaysia (BNM) and IIUM have set up EPP 7 Task Force, a consortium that aims to set benchmarks and standards in Islamic Banking and Finance education. The EPP 7 Task Force launched a new curriculum and training task force on 18 September 2012 during the Global Islamic Finance Forum.

The task force comprises the MoHE, BNM, the International Centre for Education in Islamic Finance (INCEIF), the Asian Institute of Finance (AIF) and local universities led by IIUM.



Rafe Haneef, CEO of HSBC Amanah Malaysia Bhd speaking at the EPP 7 Curriculum Workshop held on 8 December 2012 at Kuala Lumpur

In December 2012, a workshop was held to develop a standard curriculum framework of international standards for Islamic Finance education. The framework covers the five domains of Islamic Finance education, namely Islamic Economics, Syariah Law, Banking and Finance, Islamic Management and Islamic Accounting.

Moving Forward

This EPP aims to increase the number of students enrolled in Islamic Finance education institutes to 54,000 students by 2020 from 6,000 students currently. It also seeks to ensure that 80 per cent of its graduates are employable by 2015. The figure currently stands at 64.8 per cent. The EPP also aims to develop Malaysia as a hub for Islamic Finance and Business education.

However, achieving these targets will require a major transformation of local practices. First, the development of a curriculum based on international standards that prepare graduates to meet the requirements of the global Islamic finance industry is crucial.

The EPP 7 Task Force's Training and Curriculum team, led by IIUM alongside UUM, University Teknologi Mara (UiTM), USIM, Kolej University Islam Selangor (KUIS) and several other accredited institutions are working hand-in-hand to develop a globally recognised curriculum standard.

This effort is supported by the MoHE's MQA, which is responsible for the development of local minimum standards for Islamic Finance education. In parallel to these academic efforts, BNM along with AIF and the Association of Chartered Islamic Finance Professionals (ACIFP) are also working on initiatives to ensure that Malaysian graduates in the areas of Islamic finance and banking are well received in the global market.

EPP 8

Building a Health Science Education Discipline Cluster

Established in 2010, this EPP targets to establish a cluster of institutions and industry players to increase quality and number of healthcare professionals in Malaysia and Southeast Asia. In addition, this cluster aims to help resolve insufficient teaching places in hospitals with a private sector consortium providing solutions. As part of this EPP, the UCSI Premium Health Cluster initiative in Bandar Springhill has included the development of a teaching hospital to provide practicum for health sciences students.

Due to changes in the health science education landscape and the current oversupply of medical and nursing students, there is a need to focus on preparing graduates for specialised fields within the industry where there is insufficient talent, for example, geriatric care providers and rejuvenation medicine specialists, to name a few.

Achievements and Challenges

The establishment of UCSI's Premium Health Cluster in Bandar Springhill, Negeri Sembilan in 2012, which includes the development of a teaching hospital, aims to resolve the issue of insufficient practicum places in public hospitals. This underscores the Ministry of Health's (MoH) view that private sector education institutions should resolve the lack of practicum places through other means rather than further utilising limited practicum places in Government hospitals.

The Premium Health Cluster encompasses a four-phase development: Teaching hospital, international school, medical faculty and convention centre. The UCSI International School commenced operations in September 2012 and offers International Baccalaureate programmes for primary to diploma levels.

This cluster's main challenge lies with the oversupply of medical science professionals, in particular doctors, which has led to the MoH issuing a moratorium on new medical college licences. At the same time, there has also been an oversupply of nurses in the market and therefore the original intent of this EPP has been revised to only focus on medical science disciplines which are in short supply.

Moving Forward

This EPP will be reviewed to focus only on medical science specialisations, such as geriatric care, that are in short supply but are in high demand in Malaysia and regionally. With regard to the UCSI Bandar Springhill project, it is expected that the medical faculty from the UCSI Cheras campus will move to its new Springhill campus by end 2014 while the teaching hospital is targeted to be operational by 2015 with 800 beds.

EPP 9 Building an Advanced Engineering, Science and Innovation Discipline Cluster

Academic silos in universities can reinforce insularity, making it less likely for researchers to work together with industry and investors to forge interdisciplinary collaborations and commercialise research. It becomes an uphill task with the lack of vital resources such as cutting-edge facilities and industry linkages and support to commercialise findings. This EPP attempts to change this by bringing together researchers and the industry to boost the quality of research that will lead to more commercialisation opportunities.

Achievements and Challenges

The Indus Entrepreneurs (TIE) Malaysia, Cradle Fund, Agensi Inovasi Malaysia (AIM) and Technology Park Malaysia collaborated to introduce a pilot Lab2Market (L2M) Commercialisation Programme in May 2012 to spur the marketability of high potential innovations from local universities and research institutions.

The objective of this initiative is to identify commercially viable innovations from among Malaysian universities and subsequently ensure that selected researchers receive mentoring and coaching to enhance the commercialisation potential of their projects.

Two cycles of the L2M Commercialisation Programme were conducted in 2012. A total of 72 projects put forward by public universities and research institutions were screened by Cradle Fund and AIM for commercial readiness.

Following the screening, 32 projects were put through for an evaluation session, also termed as a "shark round" by a panel made up of individuals from private and public sectors. Potential investors such as PE Funds were also invited to participate at the evaluation panel event. Following the two evaluation panel events, ten innovations were selected for further commercialisation assistance.

One of the key findings from both cycles of the L2M programmes was that many researchers were interested in commercialisation of their research, only if funding was guaranteed. The elements of coaching and potential for investor participation were often viewed by these researchers as secondary to the commercialisation of their inventions.

This is a concern as this EPP's main purpose was to coach researchers to present their best inventions to potential investors who may be interested in bringing the products to the marketplace.

Moving Forward

In 2013, this EPP will conduct three cycles of the L2M Commercialisation Programme. In addition to public universities and research institutions, innovations will also be sourced from private universities.



Presentation by L2M funding recipient, Dr Yeong of UTM, L2M Cycle II, October 2012

EPP 10

Building a Hospitality and Tourism Cluster

The Tourism NKEA plans to grow the sector threefold by 2020 and this can be complemented with a corresponding increase in hospitality personnel. This EPP plans to increase the annual output of hospitality workers to 50,000 people by 2020, more than double from 20,000 people in 2009. With this, the share of graduates with diplomas and degrees needs to be lifted to 50 per cent from 13 per cent over the same period.

Achievements and Challenges

Since its official launch in August 2011, the Malaysia Centre for Tourism and Hospitality Education (MyCenTHE) has been the champion of this EPP by aggressively promoting its work-based learning programmes.

In addition to the Sarawak cluster managed by UCSI University which has been in operation since May 2011, MyCenTHE has established and launched a cluster in Penang, which is headed by KDU University College, on June 2012 and another cluster in Sabah, managed by INTI University College, on August 2012.

The Johor cluster, headed by KFCH International College, will be launched in 2Q2013. There are currently a total of 14,911 students enrolled in the clusters. MyCenTHE has managed to gather the experts residing in different institutions to collaborate and develop MQA-accredited programmes. The Diploma in Hotel Management course is currently being offered by the clusters, while the Diploma in Culinary is being finalised.

MyCenTHE also held its first Education International Conference in August 2012, launched by MoHE, with participation from renowned tourism and hospitality education experts and industry specialists from Malaysia and across the world who gave their insights on the use of the University-Industry-Collaboration (UIC) model.

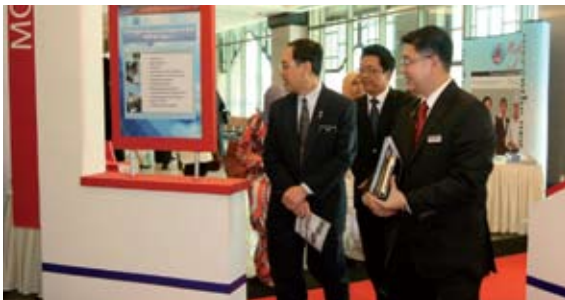
The registration of MyCenTHE with the Registrar of Society (ROS) is crucial so that MyCenTHE is deemed a legal entity with recognition to carry out its activities and conduct financial transactions. Registration with ROS was completed on 7 December 2012.

Additionally, efforts were taken to gain Human Resource Development Fund's (HRDF) recognition for MyCenTHE's work-based learning programmes so that industry players can claim from HRDF to pay for the wages of the students undergoing practical training.

Finally, students will be eligible to obtain *Perbadanan Tabung Pembangunan Kemahiran* (PTPK) loans for registered hospitality and tourism educational institutions that have been operating for at least two years. Applications for student loans to registered hospitality and tourism educational institutions must comply with PTPK's criterion for consideration.

Moving Forward

By 2015, the target is to have 10 clusters with each cluster with an average enrolment of 3,000 students. MyCenTHE will also expand its work-based learning programme by offering additional curriculums in culinary arts, tourism, retail and event management through partnerships with vocational and community education institutions.



Human Resource Ministry Director-General of Skills Development Dr Phang Chew Leong, UCSI Founder and Group Chairman Dato' Peter Ng and Chairman of Education NKEA EPP 10 Associate Professor Dr Wong Kong Yew browsing around the exhibition booths before the MyCenTHE launch at Putrajaya



MyCenTHE Launch: (From left) UCSI Group Chairman Dato' Peter Ng, Minister of Tourism Dato' Sri Dr Ng Yen Yen, Minister of Higher Education Dato' Seri Mohamed Khaled Nordin, Human Resource Ministry Director General of Skills Development Dr Phang Chew Leong and Chairman of Education NKEA EPP 10 Associate Professor Dr Wong Kong Yew

Iskandar Malaysia aims to become the most developed region in the south of the Peninsular, creating a vibrant metropolis that integrates living, entertainment and business. EduCity@Iskandar is a key component of this turnkey development and aims to be a well-established education hub for the region by 2020, fulfilling part of the MoHE and the MoE's agenda to draw in a targeted 200,000 international students by 2020.

Since its inception, EduCity@Iskandar has drawn renowned institutions namely Newcastle University Medicine Malaysia (NUMed), Netherlands Maritime Institute of Technology (NMIT), Raffles University Iskandar, University of Southampton Malaysia (USMC), Reading University Iskandar, Raffles American School and Marlborough College Malaysia (MCM).

The presence of these education institutions contribute significantly towards the MoHE aspiration in positioning Malaysia as a regional hub in the global education network while at the same time providing Malaysians with the opportunity to study at renowned global institutions at a significantly lower cost.



Marlborough College Malaysia at EduCity@Iskandar

Achievements and Challenges

In 2012, institutions which have pledged investments in EduCity@Iskandar commenced operations, namely MCM, Raffles University and USMC. MCM commenced classes in August 2012 with 352 students. At least 95 per cent of the student population are non-Malaysians with the majority coming from the United States, Australia, Britain, Canada, India, Indonesia, Japan, Thailand and Singapore.



Newcastle University Medicine (NUMed) Malaysia at EduCity@Iskandar

Raffles University opened its doors at its temporary Menara Kota Raya campus on May 2012 and offers a variety of Bachelor's and Master's programmes in the areas of design, education, psychology and accounting, among others. Southampton University commenced operations in October 2012 with its engineering programmes, where the first two years will be taught in the Malaysian campus and the last two years will be conducted in the United Kingdom campus.

In September 2012, NUMed commenced its third intake with a total of 118 students. The medical school anticipates an enrolment of 900 students by the year 2017, from the 100 students it first started out with in 2011.



Newcastle University Medicine Malaysia (NUMed) at EduCity@Iskandar

Many of these institutions faced delayed processing of student visas, which inhibits their ability to recruit international students. In addition, several institutions in EduCity rely heavily on the Malaysian Government, MARA and FELDA scholars to meet their target student numbers. There is, however, a limit to the number of scholars and scholarship funds available and the expectation to provide students to support these institutions has put increasing pressure on the Government.

Moving Forward

Development will continue for new institutions invested in the EduCity@Iskandar region, such as the University of Reading, which target to commence operations in 2013. Further streamlining of immigration processes will take place with the formation of Education Malaysia Global Services (EMGS).

EMGS will also play a key role in coordinating international marketing initiatives for private institutions in Malaysia in a bid to reduce reliance on scholarship students and to ensure that international student number targets set by the MoHE are achieved.



EPP 12 Championing Malaysia's International Education Brand

International student mobility across the globe is expected to triple to nearly six million by 2020 from 2.1 million in 2003, which makes it important to transform Malaysia as a regional hub of choice in the world's education network. This EPP aims to make this a reality through various initiatives to raise awareness of Malaysia's education opportunities, make it easier for students from high priority countries to gain access and improve international student experiences in this country.

To this end, Malaysia targets to double foreign student enrolment to at least 200,000 and with an increase in international school fees by about 50 per cent by 2020 in tandem with higher demand for Malaysian education.

Achievements and Challenges

The EMGS was established in 2012 under the MoHE as a company limited by guarantee to serve as a one-stop centre to market Malaysia's education sector for schools, institutions of higher education and technical and vocational training centres, as well as to manage key student services such as visa processing and student welfare.

The EMGS has been tasked to work with the Immigration Department on behalf of the MoE, MoHE and Ministry of Human Resources (MoHR) to improve processing of international student visas. To date, EMGS has collaborated with the NAPEI to hold one marketing roadshow in Surabaya, Indonesia.



The pavilion of Education Malaysia at the Gramedia Expo, Surabaya, Indonesia featuring booths for international schools and tertiary institutions

In the past, international students were allowed to convert their Social Pass visa to a Student Pass after making the decision to stay on in Malaysia to pursue an education. This has led to abuse of the system. Therefore, the Immigration Department has replaced this with a one-tier system which requires international students to apply for their student pass prior to entering the country.

While this policy change serves to protect against fraudulent student cases, it has also slowed international student enrolment since these students preferred to visit potential educational institutes in Malaysia before making their final choice.

In addition, there have been challenges with integrating data in the MoHE's e-Student system that is used by higher education institutes and MyImmS (Malaysian Immigration System), which was implemented this year. A working committee has been set up by the Immigration Department to address this issue.

Moving Forward

In 2013, EMGS will play a key role in working with the Immigration Department to streamline the Student Pass application process as well as to address issues related to the e-Student System and MyImmS.

EMGS will also be responsible for marketing Malaysian education and ensuring that the international student experience in Malaysia is superior if not comparable with that of those in the United Kingdom and Australia – the home campuses of many of these foreign institutes that have invested in this country.



Group picture featuring participants at the Surabaya Education Exhibition. Sitting in the centre (sixth from right) is Pn Yahurin Mohd Yassin, the Director/Counsellor of Malaysia Education Promotion Centre in Jakarta. On her right is En Yazid Abdul Hamid, the CEO of Education Malaysia Global Services (EMGS). Behind them standing is Associate Professor Elajsolan Mohan, President of NAFEP

EPP 13

Introducing Public-Private Partnerships in Basic Education

Under the blueprint to transform TEVT in Malaysian schools, the MoE is aiming to increase the number of students enrolled in secondary schools who will subsequently pursue TEVT education to 10 per cent in 2015 from five per cent currently.

To ramp up the student numbers, the MoE plans to collaborate with the private sector in buying seats in private technical and vocational schools where the programmes are highly technical and require specialised and expensive equipment. In this respect, the MoE has called for tender exercise for buying of seats in TEVT institutions for highly specialised programmes such as aviation and mechatronics.

Achievements and Challenges

A public-private partnership (PPP) was established in August 2012 for vocational secondary education. Here, the Malaysian Aviation Training Academy (MATA) has inked an agreement with the MoE to train 100 students for diplomas in aircraft maintenance. In December 2012, another PPP with the Malaysian Institute of Technology Academy (MIT) was established where 75 students were sent to study mechatronics.

The MoE has received several proposals for PPPs, including plans from the private sector to operate under-enrolled schools and build-operate-transfer (BOT) of TEVT schools for the MoE. The MoE is presently evaluating the financial and operational implications of these proposals.

For the time being, the MoE is open to buying seats in private technical and vocational schools as well as collaborate with industry-led bodies such as Malaysian Hotel Association and industry partners to strengthen the curriculum and delivery of TEVT programmes in MoE-owned technical and vocational schools.

Moving Forward

The MoE has set aside RM34 million in 2013 to buy more seats in private TEVT institutions and plans to explore buying seats in private TEVT institutions for special needs children.

EPP 14

Building a Games Development Centre

The global games market hit US\$70 billion levels in 2010 and is expected to grow at eight per cent over the next four years. This provides significant opportunity for Malaysia to strengthen its capabilities, enhance its presence and increase its global footprint in the global game development industry.

This vision may be realised by becoming a leading Game Development Centre in the Asian region with a reputation as an incubator for high quality, creative and independent game developers while also attracting foreign game developers and investors.

For this purpose, the Games Development Cluster, led by KDU University College, was created in 2012 to bring together educational institutions, industry players, regulators, associations and the Government to develop talent in this sector.

Achievements and Challenges

KDU University College and Codemasters Studios Malaysia signed a memorandum of understanding in January 2012 to collaborate on the creation of a curriculum for game development that ensures students graduating from the programme are sufficiently prepared for the competitive job market.

The MyGameDev 2020 Games Development Cluster was launched in March 2012 where the group decided to focus on two areas, namely creating awareness for Malaysia as a games development hub as well as developing talent to meet industry demand.

Several roadshows were conducted to raise awareness for educational and career opportunities in game development among public schools such as SM Damansara Jaya and SM Subang Jaya in Selangor, drawing positive response from the students.



KDU University College's exhibition at the Comic Fiesta 2012

Another highlight for the year was the SieMyCity game development competition held in November 2012, sponsored by Siemens. Here, student teams were tasked to create a game based on Kuala Lumpur city which focused on elements such as sustainable development and resource management. Winners of the competition will be rewarded a cash prize and get an opportunity to go to University of Berlin for a course on sustainable development. The winners were announced in February 2013.

To enhance the talent pool in this sector, the three-month MyGameDev2020 Codemasters Accelerator Programme commenced in October 2012 with the aim of training industry-ready talents who can readily join a game development sector. Soon after, the MyGameDev2020 Train-the-Trainer Programme started in December 2012, focusing on enhancing the capabilities of lecturers in public and private educational institutions.

Malaysians, students and parents alike, are generally not aware of the educational and career opportunities in this fast growing, dynamic sector, making it essential to hold more roadshows and educational fairs.

In addition, there are shortages of sufficient and skilled teaching talent in educational institutions, making it crucial to expose tertiary education lecturers to games industry studios, techniques, quality assurance methods, art creation tools and skills.

Moving Forward

The MyGameDev2020 Cluster will continue to focus on raising the level of awareness among Malaysians as well as continue to work on developing talent for the industry. Initiatives will focus on further collaboration between industry players and private and public educational institutions.



Sample design artwork by students of KDU University College

EPP 15

Establishment of Branch Campuses for Foreign Universities

Foreign universities have shown increasing interest in setting up campuses in Malaysia thanks to efforts by various Government agencies to market Malaysia as the best destination for business and education with good access to the wider Southeast Asian region. This EPP looks to get foreign universities to set up their campuses in Malaysia through facilitating assistance from the relevant Government ministries and agencies.

Achievements and Challenges

As the first institution under this EPP, Heriot-Watt University (HWU) established its second international branch campus in Putrajaya in 2012. The university commenced operations in September at a temporary site in Putrajaya for an MBA programme, while work on HWU's 20,000 square metre campus site began.

The new campus, which can accommodate 4,000 students, is expected to be ready in September 2014 and will offer a range of undergraduate and Master's programmes in the areas of business, energy, construction, psychology and fashion, among others. As part of their business plan, HWU has also included investments in research in 2017/18 with the target of 35 per cent of the university's revenue to come from research.

No major challenges have been reported for this EPP since its implementation.

Moving Forward

All parties interested to set up foreign branch campuses in Malaysia will have to follow guidelines set by the MoHE. The Ministry only allows Tier One institutions to be established in the country.

EPP 16

Establishment of Not-For-Profit Education Institutions

In addition to establishing branch campuses of foreign universities in Malaysia, there has also been demand to set up non-profit education institutions in the country. This EPP was conceived in 2012 to meet this need.

Achievements and Challenges

The Asian Women Leadership University (AWLU) project was proposed as Malaysia's first liberal arts institution, which aims to attract talented women from Asia and the Middle East with scholarships given to those from conflict-ridden countries.

The project has been established by international social entrepreneurs providing free professional services and includes a partnership with Smith College, one of the seven liberal arts colleges for women colleges in the United States.

In March 2012, the Global Private Fundraising Campaign for this project kicked off in Malaysia, United States, United Kingdom and Hong Kong with funds successfully raised for the initial RM21 million. Licence application to establish the education institution was initiated in May 2012 with the MoHE. In July 2012, Smith College and Project representatives participated in a first workshop for curriculum planning.

By August 2012, the AWLU Malaysia Foundation had been registered as a tax-exempt, not-for-profit company limited by guarantee to facilitate the establishment of the AWLU in Malaysia. It will serve as the legal entity that will own the assets of the AWLU and collect tax-exempt donations from Malaysian nationals.

Moving Forward

The AWLU Project team presented their proposal to a panel set up by the MoHE on 7 August 2012, comprising local public and private institutions as part of the licensing application process. As of the end of 2012, the Project awaits news of the Ministry's decision.

BUSINESS OPPORTUNITIES

Business Opportunity 1:

Discipline Clusters to Support NKEAs

The Education NKEA began with EPPs that were centred on four discipline clusters – Islamic Finance and Business, Health Sciences, Advanced Engineering and Hospitality and Tourism.

In 2012, the Education NKEA focused on a new cluster for Animation and Game Technology, presenting Malaysia with the opportunity to compete with countries such as South Korea, Singapore and China.

In 2013, there will be opportunities to develop other discipline clusters such as Accountancy or Oil & Gas, to support the demand for human capital in these sectors.

Business Opportunity 2:

Centre for Excellence in Language Learning

This business opportunity capitalises on Malaysia's unique position as a multicultural, multilingual country and a leading tourist destination to develop a language hub. So far, there has been little demand for new language centres and the focus of the Education NKEA centres on existing EPPs and developing opportunities in other areas.

ENABLERS

Raise Quality through Regulatory Reforms

This enabler aims to amend existing policy frameworks to provide a platform for all private sector colleges and institutions to enhance performance of student outcomes. One way of doing this is via the Malaysia Quality Evaluation System (MyQuest). Developed under the purview of the MoHE, MyQuest has evaluated 210 private colleges which qualified to be audited based on the criteria set by the Ministry and which agreed to be audited.

In the latest evaluation round in 2012, 60 per cent of these private colleges have been rated as satisfactory or higher according to MyQuest with a score of four stars and above. The Ministry has suggested that colleges rated with three stars and below implement capability-building programmes.

Following the results of the ranking, the Ministry plans to work with private colleges which are ranked weak to help them with improving quality and performance. The MyQuest ranking would also be used as a reference point for National Higher Education Fund Corporation (PTPTN) loan approvals and requests to be upgraded to university college status.

The Rating System for Higher Education Institutions in Malaysia (SETARA) is another survey conducted by the MoHE which assess universities and university colleges. In October 2012, MoHE issued the results of the third SETARA rating. The results showed 35 institutes out of 52 surveyed achieved Tier Five or "Excellent" rating. Out of this 35, 13 were public universities such as Universiti Malaya and Universiti Kebangsaan Malaysia.

Another 16 institutions were classified as Tier Four or "Very Good" while one achieved Tier Three or "Good" status. Among the Tier Four universities are UCSI University and HELP University.

These assessments on higher education institutions conducted by the Ministry serve to ensure that the quality of higher education institutions in Malaysia is maintained.

Shift to Demand-Side and Performance-Based Financing

The objective of this enabler is to increase the amount of demand-side financing through various initiatives such as a fee assistance scheme for pre-schools, performance-based funding. For private TEVT, additional funding has been disbursed by PTPK from 2011 onwards to provide students with more opportunities to pursue TEVT.

In 2012, the allocation of these funds via PTPK is based on a Star Rating Exercise conducted by the Department of Skills Development, which rated the performance of private training institutions registered with PTPK.

Also in 2012, the MoE worked together with private TEVT providers via a public-private partnership model to buy places in private sector TEVT institutions to supplement the number of seats available in public vocational schools as part of the Ministry's Vocational Transformation Programme.

Remove Barriers to Entry for Foreign Students

This enabler facilitates the increase of international students in the private higher education sector, which goes a long way in meeting the MoHE's target of 200,000 international students in Malaysia by the year 2020. The Education NKEA Steering Committee has agreed that high-performing post-graduate international students in Malaysia will be given the opportunity to pursue jobs in the country upon completion of their studies.

Through the efforts of Talent Corp and the MoHE, international students who graduate with excellent academic achievements are allowed to work in certain strategic industries where talent is in high demand. In 2012, the Education NKEA focused on streamlining immigration processes, in particular, the issuance of student visa passes for foreign/international students, including harmonising the Student Pass and *Pass Ikhtisas* previously issued to TEVT students to improving processes to enable international students to pursue TEVT courses in Malaysia.

Improve Ease of Doing Business

The focus of this enabler is to improve the process for which private sector educational institutions may set up business. In 2012, the private education sector has been liberalised and foreign entities are allowed to operate businesses in Malaysia without the requirement to have a certain percentage of Malaysian ownership.

Summary of Education NKEA

	2020 Target
Incremental GNI impact	RM31.8 billion
Additional Jobs	319,550

Critical targets for 2013:

- Increase enrolment in childcare and pre-school centres
- Rollout the National Pre-school Quality System (SKPK), a self-assessment online system, to Government-owned pre-schools and participating private-owned pre-schools
- Establish at least one new foreign branch campus in Malaysia
- Implement coordinated marketing initiatives to achieve target of 110,000 international students in Malaysia in international schools, institutions of higher education and technical and vocational institutes



Agriculture



Datuk Seri Haji Noh Omar

Minister of Agriculture
and Agro-based Industry

With many of this NKEA's Entry Point Project (EPP) initiatives well underway this year, we have achieved a material shift in our efforts to create an agribusiness industry from an agriculture-centric sector in the past. Private sector players, in the form of anchor or participating companies, have been appointed for most of the EPPs, functioning as key engines of growth for the agribusiness industry and the economy as a whole. With these EPPs in place, the Agriculture NKEA is set to achieve an incremental Gross National Income (GNI) of RM28.9 billion to bring its total GNI contribution to RM49.1 billion, as well as create 109,335 job opportunities by 2020.

To date we have achieved 130 per cent of the Agriculture NKEA's targets for the year 2012, with the private sector committing to invest up to RM8.9 billion to implement projects identified under the EPPs. Out of the 16 EPPs under this NKEA, ten have commenced production, five are at the implementation stage and one is a work in progress.

Although there are a number of challenges in moving the industry upwards by way of value and Gross Domestic Product (GDP) contribution, the results from various EPP initiatives that are slowly, but surely, materialising pushes us forward in our journey of transformation. We remain committed in seeing that the *rakyat* benefit from the initiatives under this NKEA. We are also working out incentives to move farmers, smallholders and small- and medium-sized enterprises (SMEs) up the value chain, placing contract farmers under the umbrella of highly capable anchor companies, and encouraging the adoption of good agricultural practices to ensure that only safe and nutritious food are distributed to the *rakyat*.

Going forward, the wave of agricultural transformation to agribusiness will continue to be spearheaded by the private sector, while the Government will continue striving for greater development and economic impact to the country in accordance to the promise of "People first, performance now".



AGRICULTURE

The Agriculture NKEA is focused on transforming a traditionally small-scale, production-based sector into a large-scale agribusiness industry that contributes to economic growth and sustainability. This transformation is based on an integrated and market-centric model that focuses on economies of scale and value chain integration.

The transformation strategy comprises four key themes:

- Capitalising on competitive advantages
- Tapping premium markets
- Aligning food security objectives with increasing GNI
- Participation in the regional agriculture value chain

The four themes are captured in the 16 EPPs and 11 Business Opportunities (BOs), which have been tailored to spur growth in the industry.

The first stage of implementation in 2011 saw foundations laid and incentives designed to attract private sector participation. Having completed that, much of 2012 was spent implementing the initiatives under the various EPPs by way of attracting anchoring firms.

A notable highlight for the year - the Department of Fisheries (DoF) broke new ground by appointing Lobster Aqua Technologies Sdn Bhd, a subsidiary of US-based Darden Aquasciences to develop the world's first integrated lobster aquaculture park in Sabah under EPP 4: Integrated Cage Farming. The park will bring in investment of about RM2.03 billion, which represents a significant income boost in this sector. DoF also made headway when it secured its targeted number of companies to participate in two of its EPPs – EPP (4) Integrated Cage Farming and EPP (6) Replication of IZAQ, which represents a significant milestone for the NKEA as a whole.

Progress was being made in the areas of policy and regulation development, as well as in the area of cultivating and developing high-value food and medicinal products. The focus placed in both these areas will help develop these areas into high-income generating fields for farmers and distributors alike.

For example, six anchor companies were appointed for EPP 7 (Premium Fruits and Vegetables), to help develop small farmers obtain Good Agriculture Practices certification.

As for policy and regulation development, the Department of Agriculture (DoA) has drawn up the draft Seed Act and is currently holding consultation meetings with State Departments, with the target of producing the final draft by end of 2013. The Seed Act aims to regulate the quality of seeds that will be sold and ensure the propagation of high-yielding, high-quality agriculture products via import and export.

To date, the NKEA incentives procedure saw the approval for 107 companies, with committed private investments of up to RM8.9 billion to generate RM13 billion in GNI (46 per cent of 2020's target) and a cumulative of 55,936 jobs (51 per cent of overall target by year 2020) by the end of each project's completion date. Committed private investment for EPPs outweighed public investment 71 per cent to 29 per cent, surpassing the initial 2020 ratio estimate of 60:40.

There were some movements within the Agriculture NKEA in the past year in the EPPs. EPP 15: Participation of MNCs was transferred to the Ministry of Science, Technology and Innovation's (MOSTI) Bioeconomy Programme in March 2012 and will be monitored by MOSTI henceforth.

In addition, the *Pasar Komuniti* (PAKAR) EPP was moved from the Wholesale and Retail NKEA into the Agriculture NKEA in 2012. This EPP aims to transform the diverse offering of neighbourhood markets such as *Pasar Tani*, *Pasar Malam*, *Pasar Minggu* and *Pasar Tamu* into a much larger initiative known as *Pasar Komuniti*. Aside from presenting the *rakyat* with a more modern and varied offering, PAKARs are expected to help boost traders' revenue by up to 30 per cent.

2012 Key Performance Indicators

NKEA Agriculture		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Total number of clinical trial started for herbal products (nutraceutical/ cosmeceutical/botanical drugs)	5	4	80	●	80	●	0.5	●
	Total number of pre-clinical trial conducted for herbal products (nutraceutical/ cosmeceutical/botanical drugs)	5	8	160	●	100	●	1	●
	Total number of pre-requisite research started by university and research institution for companies	15	19	126.67	●	100	●	1	●
	Establishment of Herbal Cultivation Park in Pasir Raja & Chegar Perah (Phase 1)	100%	62%	62	●	62	●	0.5	●
	Total revenue generated from sales of herbs from 7 herbal clusters in Penang, Perak, Selangor, N. Sembilan, Malacca and Johor set up in 2011 (RM)	1,000,000	1,058,572	105.86	●	100	●	1	●
EPP #2	Total production of EBN product by registered premises (MT)	100	122	122	●	100	●	1	●
	Total number of newly registered premises	3,000	2,745	91.5	●	91.5	●	0.5	●
	Total number of newly certified EBN premises (SALT)	1,100	1,141	103.73	●	100	●	1	●
EPP #3	Tonnage of dried seaweed produced (MT)	35,000	33,146	94.7	●	94.7	●	0.5	●
	Total new mini estate operationalised	20	15	75	●	75	●	0.5	●
	Total products to be developed from R&D activity	15	23	153.33	●	100	●	1	●
	Total land areas gazetted for seaweed farming	3,000	2,718	90.6	●	90.6	●	0.5	●
EPP #4	Total production of farmed fish (MT)	30,258	32,900	108.73	●	100	●	1	●
	Total number of cages in operation	1,000	950	95	●	95	●	0.5	●

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NKEA Agriculture		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #5	Total number of cows inseminated	8,500	7,650	90	●	90	●	0.5	●
	Total overall conception (AI) and pregnancy rate (NM)	70%	28%	40	●	40	●	0	●
	Total population of cattle integrated into palm oil plantation	15,000	12,821	85.47	●	85.47	●	0.5	●
	Total production for complete feed (MT)	124,750	154,178	123.59	●	100	●	1	●
EPP #6	Total production of shrimps (MT)	10,464	9,700	92.7	●	92.7	●	0.5	●
	Total area earmarked for IZAQ replication (ha)	1,000	1,344	134.4	●	100	●	1	●
EPP #7	Total export value for premium fruits and vegetables (RM mil)	304	292	96.05	●	96.05	●	0.5	●
	Establishment of new area for planting of premium fruits (ha)	5,000	4,836	96.72	●	96.72	●	0.5	●
	Total investment by private companies (RM mil)	395	353	89.37	●	89.37	●	0.5	●
EPP #8	Total investment by anchor companies (RM mil)	70	46	65.71	●	65.71	●	0.5	●
	Total revenue generated from sales of products from participating companies (RM mil)	1	14	1,400	●	100	●	1	●
EPP #9	Total tonnage of fragrant rice produced (MT)	2,500	807	32.28	●	32.28	●	0	●
	Total area planted (ha)	750	567.6	75.68	●	75.68	●	0.5	●
	R&D activity conducted for production of new Jasmine and Basmati-type varieties and agronomic packages for both type by 2013	40%	40%	100	●	100	●	1	●
EPP #10	Total new land area amalgamated (ha)	5,000	5,000	100	●	100	●	1	●
	Total land areas approved to be acquired for infrastructure	77	79.13	102.77	●	100	●	1	●
	Completion of construction for irrigation infrastructure	20%	0%	0	●	0	●	0	●
	Average yield per hectare in amalgamated area (MT/ha)	6.75	6.43	95.26	●	95.26	●	0.5	●

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NKEA Agriculture		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #11	Total land area amalgamated (ha)	1,540	1,250	81.17		81.17		0.5	
	R&D conducted to improve local seed variety to be planted in Batang Lupar	25%	20%	80		80		0.5	
EPP #12	Total number of cattles feedlotted in satellite farms	33,700	15,411	45.73		45.73		0	
EPP #13	Total fresh milk produced from cluster under NKEA (million liters)	10	15	150		100		1	
	Average production of milk per cow per lactation from clusters under NKEA (liters per day)	15	12	80		80		0.5	
EPP #14	Total number of seeds validated by CMDV	2,000	7,029	351.45		100		1	
	Total production of seed validated by CMDV (MT)	4,500	15,593	346.51		100		1	
	Total types of certified seeds produced through MAS	10	9	90		90		0.5	
	Formation of Seed Act	30%	24%	80		80		0.5	
EPP #16	Total revenue generated from overseas ventures (RM mil)	42	47	111.9		100		1	
EPP #17	Total PAKAR sites operational by end of 2012	7	1	14.29		14.29		0	
				130%		83%		63%	

Exhibit 11.1

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score#2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

ENTRY POINT PROJECTS

EPP 1 High-Value Herbal Products

According to Global Industry Analysts report, the global herbal supplements and remedies market is projected to reach US\$93.15 billion by 2015. This provides Malaysia, which is one of the most biodiverse countries in the world, with a good opportunity to become a supplier for high-quality nutraceuticals products meeting the global standards.

Investment in this EPP emphasises on improving product quality and marketing efforts to tap the global demand in the dietary and herbal supplements as well as the botanical drugs. It addresses the supply chain comprehensively by ensuring that there is sufficient supply of raw materials before relevant research and development (R&D) and clinical trials are undertaken to produce higher-value herbal products. As a start, the EPP will focus on five main herbs – *Tongkat Ali*, *Misai Kucing*, *Hempedu Bumi*, *Dukung Anak* and *Kacip Fatimah*. To realise this goal, the Herbal Development Office has been set up under the Ministry of Agriculture to be responsible for the creation of strategic directions, and appropriate policies and regulations to spur the industry's growth.

Meanwhile, to ensure sustainability of raw materials, Herbal Cultivation Parks were established in Pasir Raja in Pahang, Chegar Perah and Durian Mentangau in Terengganu. The East Coast Economic Region Development Council is presently leading the upstream initiative for commercial production of raw materials. The Department of Agriculture has also embarked on 11 projects across the country since 2011 which includes contract farming and the formation of model farms. The herbal cluster areas can be found in Perlis, Kedah, Pulau Pinang, Perak, Johor, Selangor, Negeri Sembilan, and Johor.

Meanwhile, the Ministry has also overseen the formation of five specialised R&D clusters, which is aimed at facilitating greater co-ordination between research institutions and research universities. The clusters are categorised in five main areas, namely discovery, crop production and agronomy, standardisation and product development, toxicology/pre-clinical and clinical studies, and processing technology.

In the downstream part of its supply chain, the Ministry has appointed eight anchor companies that are undergoing pre-clinical and clinical trials of herbal products. These companies are to spearhead the marketing and branding of nutraceuticals and botanical drugs with scientifically backed claims. The result of the trials as well as compliance to international health standards and certifications will enable the companies to market Malaysia's locally developed high value products to international markets.

To date, eight anchor companies have been appointed under EPP1.

Anchor companies

Aning Resources Sdn Bhd
Biotropics Malaysia Berhad
Bioalpha International Sdn Bhd
Nova Laboratories Sdn Bhd
Natureceuticals Sdn Bhd
Natural Wellness Biotech (M) Sdn Bhd
The Mitomasa Sdn Bhd
Phyto Biznet Sdn Bhd



Novalab's retail outlet in IOI Mall



Phyto Biznets' retail outlet in UTMFaces

Achievements and Challenges

The last 12 months has seen a number of achievements in this area including the introduction of new products to the market. Two companies, Novalab and Natureceuticals, has commenced clinical trials with two products whilst another four companies – Aning Resources, Natureceuticals, Phyto Biznets and Natural Wellness - commenced pre-clinical trials for eight naturally-sourced products to determine their efficacy and safety.

The EPP has also seen greater research conducted on traditional herbal products by research universities in collaboration with botanical product companies. Some 18 such collaborative efforts were conducted last year to provide supporting data to the companies. At the same time, the Monograph Committee has published the monographs for traditional local herbs such as *Tongkat Ali*.

Malaysia has applied for the OECD Mutual Acceptance Data (MAD) status for GLP lab compliance and was audited in November 2012. The final decision by the OECD Council is expected to be announced in the early part of 2013. Three agencies have been identified for funding under EPP1 to upgrade their lab facilities in compliance with GLP status, namely the Institute of Medical Research (IMR), SIRIM, and Melaka Biotech Corporation.

On the upstream side, the construction of a 327ha Herbal Cultivation Park in Chegar Perah, Pahang and a 406 ha facility in Pasir Raja, Terengganu commenced in January and is to be completed by July 2013.

Meanwhile, the herbal cluster programme conducted by the Department of Agriculture managed to raise the revenues of 126 farmers by more than RM1 million through the cultivation of targeted products.

One of the challenges faced by the industry is the acceptance of herbal-based products by the regulatory bodies, industry and consumers. The anchor companies are expected to adhere to stringent guidelines and put in greater effort to market the products to both local and global buyers. However, regulatory agencies will be facilitating the smooth implementation of clinical studies and ensuring that regulations are complied with.

Moving Forward

In 2013, this EPP will continue its efforts to move Malaysia up the high-value chain for herbal products with another five new products stated to start pre-clinical trials.

The EPP will also focus on transforming two related Business Opportunities (BO) into EPPs: BO 1 (Nutraceutical Products) and BO 2 (Foreign Distributor) with the aim of expanding the nutraceuticals list to include other targeted herbs and establishing a distributor overseas.

Other initiatives going forward include releasing prototypes for five products approved under the NKEA Research Grant Scheme for commercialisation, planting of high-value herbs in the Herbal Cultivation Park in Chegar Perah and Pasir Raja, and commencement of construction for the Park in Durian Mentangau.

Furthermore, another 10 monographs for identified herbs will be published, while existing laboratories in SIRIM, Institute of Medical Research and Melaka Biotechnology Corporation (*Perbadanan Bioteknologi Melaka*) will be audited to become GLP-compliant. This will reduce the local industry's dependence on foreign labs to conduct pre-clinical and toxicology studies.



EPP 2 Edible Bird's Nest Swiftlet Farming

Malaysia is one of the largest producers and exporters of edible bird's nests (EBN). While the local industry has seen a steady growth of about 20 per cent annually since early 2000, future prospects of this industry remain uncertain due to poor regulation, depleting wildlife population and limited research in improving productivity.

This EPP, led by the Department of Veterinary Services (DVS), strives to increase upstream production by building an additional 2,000 new farms yearly and six collection centres while simultaneously guiding the industry towards developing downstream, value-added products. This initiative is already underway with four companies having committed investments to develop processing capacities.

The EPP also intends to regulate the industry and improve traceability via the registration of EBN premises. Incorporating tracing systems will improve monitoring and enforcement of Good Animal Husbandry Practices (GAHP) and Good Manufacturing Practices for swiftlet premises and processing plant will improved production quality.

Anchor companies

Golden Silver Processing Sdn Bhd

PT Swift Marketing Sdn Bhd

Yanming Resources Sdn Bhd

Duta Sialin Biotechnology Sdn Bhd



Edible Bird's Nest. Photo courtesy of Star Publications (Malaysia) Bhd

Achievements and Challenges

In March last year, Golden Silver Processing completed its new facility for producing EBN in Klang. Meanwhile, Yanming Resources completed the renovation of its new processing plant in April to meet the Veterinary Health Mark¹ (VHM) requirements, becoming one of ten VHM certified plants in Malaysia that may export EBN directly to China.

As at November, 2,745 new bird houses were registered with the DVS, achieving 91.5 per cent of the targeted 3,000.

The biggest challenge faced by this EPP was an eight-month moratorium on the export of EBN to China due to product quality concerns. A series of discussions were conducted between the Government and the private sector to renegotiate terms and conditions to uplift the ban. The export protocol was eventually signed by the MoA and the Chinese Government on 19 September 2012, effectively lifting the moratorium. Ongoing efforts are still being made to ensure that the current processing plants will fully comply to the requirements under the protocol.

Moving Forward

Going forward, another 3,000 premises are targeted to be registered with the DVS and more processing plants are to be established. This move will help eliminate the number of premises that are operating under the radar and improve the standard of their products. The department aims to certify 2,500 swiftlet premises in 2013 with *Sijil Amalan Ladang Ternakan* certification.

¹ VHM Certification is a qualitative standard governed by local government agencies.

EPP 3 Mini-Estate Farming for Seaweed

The core emphasis of this EPP, led by the DoF, is to transform the seaweed farming industry into a high-yielding commercial-scale business. By clustering farms under the seaweed mini-estate initiative, yields and total production of seaweed are expected to rise to 150,000 metric tonnes in 2020, compared to 13,500 metric tonnes in 2010.

The mini-estate concept improves production methods through its technology-intensive land-based farming approach. Emphasis will be placed on strengthening the downstream infrastructure and R&D efforts in processing dry seaweed into high-value products (e.g. semi-refined carrageenan and alkaline-treated chips) as well as exploring further uses of seaweed.

Anchor Companies

Pertubuhan Peladang Kawasan Semporna
Avanova Group Sdn Bhd
Perdana Seaweed Farm
SALS Agriculture
NIZH Goodwill Sdn Bhd
VC United Sdn Bhd
Madesjaya Sdn Bhd
Sebangkat Reef Eco-Plant
UMS Link Sdn Bhd
Ko-Nelayan Negeri Sabah
Kluster Look Butun
Kluster Gelam-Gelam
Kluster Koperasi Bajau Laut
Kluster Kuala Merotai
Permata Sekitar Sdn Bhd



Processing dry seaweed. Photo courtesy of BERNAMA Images

Achievements and Challenges

The 11 mini-estates and four clusters approved in 2011 had begun work to secure land for their seaweed farming operations in Semporna, Sabah. In January last year, anchor company Permata Sekitar agreed to expand its deep-water seaweed farming project in Semporna.

Although initiatives under this EPP generally progressed smoothly, overlapping “inherited” land claims in Sabah waters made land acquisition and mini-estate construction for seaweed farming difficult. Mobile platforms are being utilised as an interim measure while waiting for land approval.

Moving Forward

Commencement of operations for the 11 mini-estates and four clusters are expected to increase total national production for seaweed to 50,000 metric tonnes (MT) from the current 35,000 MT. The project team is also targeting the production of 8,640 MT of alkaline treatment chips and semi-refined carrageenan, both of which are downstream value-added seaweed products.

To further facilitate growth of the seaweed farming industry, the Sabah State Government plans on gazetting another 3,000 hectares of land for seaweed production. Meanwhile, three universities – The National University of Malaysia (UKM), Universiti Malaysia Sabah (UMS) and Universiti Sains Malaysia (USM) are in the midst of commercialising eight seaweed products.

EPP 4 Integrated Cage Farming

The implementation of integrated cage farming initiatives by the DoF under this EPP looks to increase the production of high-value fish species such as sea bass, grouper, tilapia and lobster to account for 28 per cent of total aquaculture production by 2020.

An anchor company will manage the operations of its farms and provide support services such as training, and the setting of standard operating procedures and guidelines to its contract farmers. The processes by the anchor companies are aimed at creating an integrated approach for large-scale production through the entire production chain, from hatchery to processing.

Achievements and Challenges

The last 12 months was a busy year for this EPP's project team. The key investment under this EPP was an agreement by Lobster Aqua Technologies, a joint venture company with US-based restaurant giant Darden Inc. listed in the Fortune 500. Lobster Aqua Technologies will be the appointed anchor company to produce live lobsters in Semporna which will see an injection of over RM2 billion in private investment.

Anchor Companies

Y.S Inno Fisheries Sdn Bhd
Trapia Malaysia Sdn Bhd
Plentiful Harvest Sdn Bhd
Prima Bumisetia Sdn Bhd
Darvel Bay Hybrid Aquaculture Sdn Bhd
Organic Aquaculture Sdn Bhd
Lobster Aqua Technologies Sdn Bhd.

On 9 July, Trapia Malaysia signed an agreement to procure fish farming cages for its 20 participants under the DoF's Synergy Farming module, where the participants are trained by the department and Fisheries Organisation Authority. The entrepreneurs are now selling their products to Trapia under a buy-back guarantee agreement.

Initiatives to expand hybrid grouper farming also saw significant development in 2012 from the following companies:

Company	Location	Activity	Investment
Plentiful Harvest	Sandakan and Lahad Datu	Expansion of hybrid grouper farm	RM73.6 million
Prima Bumisetia	Tuaran and Silam	Expansion of hybrid grouper farm	RM23.9 million
Darvel Bay Hybrid Aquaculture	Kunak	Expansion of hybrid grouper farm	RM17 million
Organic Aquaculture	Kota Tinggi, Johor	Expansion of hybrid grouper farms	RM9 million

Exhibit 11.2: Hybrid grouper farming projects
Source: PEMANDU 2012

One of the key challenges faced in this EPP was to ensure that the operations under this EPP are carried out as smoothly as possible. Examples include the implementation of good aquaculture practices such as maintaining the accurate water pH for breeding high-value fish species. Continuous improvements will need to be made on the NKEA's procedures, to allow for a smoother implementation of its initiatives in the long run.

Moving Forward

The production of caged fish in 2013 is expected to total 37,000 Metric Tonne (MT), a 22 per cent increase from this year's target of 30,258 MT. The number of anchor companies required to achieve its 2020 targets have been reached. Therefore, the DoF will focus on monitoring the progress of existing companies to ensure successful implementation and ensuring its production targets are met.

EPP 5

Cattle Integration in Oil Palm Estates

This EPP, led by the DVS, focuses on integrating and rearing an additional 300,000 heads of cattle in large oil palm plantations by 2020. As part of the integration process, estate owners will implement cattle breeding and rotational grazing programme for the cattle, in compliance with GAHP.

Two additional programmes have been incorporated to support the project:

1. Feed programme - increase supply of locally developed feed to address the rising cost of production

2. Breeding programme through artificial insemination - fast-track the breeding of good quality cattle

In 2012, DVS and PEMANDU recognised the need to integrate the upstream side of production (i.e. the rearing of cattle) with the downstream side (i.e. producing beef-based products). A model was then developed to incentivise downstream players to move upstream and vice versa through collaboration with players under EPP 12 and EPP 16, coined EPP Livestock: Full Value Chain.

Anchor Companies		
FELCRA	Espek Livestock Sdn Bhd	Laka Temin Silaj Sdn Bhd
Aqil Berjaya Enterprise	Kulim Livestock Sdn Bhd	YPJ Plantation Sdn Bhd
Pertubuhan Peladang Negeri Johor	FELDA Plantation	Johor Corporation
Felda Farm Products Sdn Bhd	Sawit Kinabalu Sdn Bhd	Ladang Dafa Sdn Bhd
Nurinfra Mutiara Feedmill Sdn Bhd	Nakasia Dagangan Sdn Bhd	Kris Biotech Sdn Bhd
Rimbunan Hijau Sdn Bhd	Sarawak Land Consolidation and Rehabilitation Authority	Sarawak Plantation Agriculture Development Sdn Bhd
Ladang Rakyat Terengganu Sdn Bhd	Pertubuhan Peladang Negeri Pahang	Narajaya Enterprise
Ar-Raudhah Bio-tech Farm	VAM Incorporated	

Achievements and Challenges

On 22 May 2012, some 17 companies operating in 25 sites signed an agreement to integrate 210 heads of cattle within each plantation. In addition, two companies were appointed under the feed programme.

Livestock players faced a high rate of calf mortality as a result of non-compliance to good husbandry practices. Therefore, the Department is imposing a stricter requirement that limits participation in the EPP to anchor companies with sufficient experience.

To address the high mortality rate of cattle, the Department is offering an incentive for each head that survives and matures into adulthood and transferred into the feedlot.

The EPP has also taken steps to boost cattle productivity by engaging specialist firms to advise and improve the production chain. As of June 2012, three companies with artificial insemination expertise were engaged to help increase the breeding rate of quality progeny.

The single greatest obstacle in implementing this EPP was the lack of companies willing to participate in the upstream side of beef production. Companies are reluctant to pursue upstream activities due to high costs and relatively low margins of return. This resulted in the launch of EPP Livestock: Full Value Chain. To date, three anchor companies - Ihsan Permata Sdn Bhd, Espek Livestock Sdn Bhd and FELCRA - have been appointed in October to help develop beef production.

Moving Forward

DVS will continue to monitor the programme to ensure successful implementation of the initial 25 sites and promote the EPP Livestock: Full Value Chain to attract more private sector participation. In 2013, the aim is to see an additional 17,300 heads of cattle integrated in palm oil plantations. Simultaneously, an additional 5,400 heads of cattle are to undergo the artificial insemination programme to increase the cattle population with an expected success rate of 70 per cent. Under the feed programme, the Department aims to increase production of complete feed to 35,500 metric tonnes (MT) by identified local players.

EPP 6

Replicating Integrated Zone for Aquaculture Model (IZAQs) to Tap Market for Premium Shrimp

Led by the DoF, this EPP focuses on improving the export quality of shrimp production by establishing an Integrated Zone for Aquaculture Models (IZAQs) comprising networks of industrial scale and land-based aquaculture zones. Each IZAQ, championed by an anchor company, includes an integrated infrastructure consisting of hatcheries, grow-out areas, a processing plant and feed-mills. Smallholders and SMEs are expected to participate in this project through contract farming or profit-sharing agreements with the anchor company.

This aquaculture park is dedicated to the organised production of high-quality, fully-certified shrimp meant for the premium market. A target of 10,000 hectares of IZAQs will be established by 2020.

Anchor companies

JEFI Aquatech Resources Sdn Bhd
Hannan Corporation Sdn Bhd
Pegagau Specialty Farming Sdn Bhd
Blue Archipelago Bhd
LKPP Corporation Sdn Bhd
Sunlight InnoSeafood Sdn Bhd
Asia Aquaculture Sdn Bhd
QL Aquamarine Sdn Bhd
KB Aquaculture Sdn Bhd
BioDesaru Sdn Bhd

Achievements and Challenges

In March 2012, JEFI Aquatech Resources completed the construction of its processing plant and R&D facility in Penang, which required an investment of RM90 million. The firm is currently collaborating with BioDesaru to develop land to be used for shrimp production.

Pegagau Specialty Farming is presently setting up the basic infrastructure needed for the expansion of its farm in Kalabakan, Sabah. Meanwhile, Hannan Corporation, a specialised shrimp and aquaculture firm, has begun operations in Selinsing, Perak.

The last 12 months also saw two companies appointed as anchor companies to produce shrimp in Sabah. QL Aquamarine and KB Aquaculture were appointed in June and October respectively. These two companies will implement the project in Kudat and Kota Belud, Sabah.

One of the main challenges in this project is finding the right location to set up the shrimp production facility to ensure that there are no adverse effects on the surrounding environment. Moreover, shrimp breeding is an extremely risky venture as the crustaceans are highly fragile creatures.

Refinements are presently being made to the EPP's procedure, to prevent implementation delay. The process is expected to run much smoother in 2013 as a result of these refinements.

Moving Forward

The total production from anchor companies that have completed construction is expected to weigh in at 23,000 MT in 2013. Companies that have been recently appointed will be monitored on the basis of their construction schedule.

The Department will continue monitoring the progress of existing companies to ensure success. Additionally, they will work towards turning three aquatic Business Opportunities (BOs) into EPPs. These BOs are BO 3 (Ornamental Fish Farming), BO 4 (Aquaculture Feed Mill) and BO 5 (Aquaculture Export Centre).



Blue Archipelago farm

EPP 7 Premium Fruits and Vegetables

This EPP, led by the DoA, looks to gain access to the premium fruits and vegetables market in the Middle East and Europe, which imports more than 50 per cent of the global production of tropical fruits, by increasing production of higher quality local fruits and vegetables that comply with food safety standards. To this end, up to 3,000 farmers will be involved and placed under anchor companies who will manage the integrated supply chain model and gain market access and export side. Six high-value non-seasonal tropical fruits (rock melon, starfruit, papaya, banana, pineapple and jackfruit) and three high-value highland vegetables (lettuce, tomato and capsicum) have been identified as target produce for this EPP.

The project team plans to leverage on existing Permanent Food Production Zones (*Taman Kekal Pengeluaran Makanan* – TKPM) to boost production of these types of fruits and vegetables.

Anchor companies

Exotic Star Sdn Bhd

K.C Kwang & Sons Sdn Bhd

JTP Trading Sdn Bhd

Fresh Momentum Sdn Bhd

Pertubuhan Peladang Negeri Pahang (PASFA)

Far-East Import Export Sdn Bhd

Achievements and Challenges

In 2012, the Department of Agriculture opened 4,436 hectares of land (34 per cent of 2020's target) for the production of premium fruits and vegetables. Meanwhile, The Pahang Farmer's Agriculture Association (*Pertubuhan Peladang Negeri Pahang*) was appointed as an anchor company for the production of jackfruit in Gambang, Pahang last June, while Far-East Import Export Sdn Bhd was appointed as an anchor company for the production of premium fruits in Temerloh, Pahang in November.

Following limited private sector participation in the programme, the DoA held an industry consultation in October and proposed a revamp of existing incentives, which were seen to be insufficient in attracting the desired level of private sector participation. The proposal has been approved at the MoA level and will be rolled out in 2013.

Moving Forward

As an anchor company, Exotic Star Sdn Bhd will expand its production of premium fruits in TKPM and upgrade its packaging for export. The DoA will also work with more states to expand the production of premium fruits to reach a value of at least RM40 million in more TKPMs by establishing additional 1,000 hectares of land for this purpose. Additionally, the Department will collaborate with the Ministry of Rural and Regional Development to provide land for private companies' expansion while increasing the income of rural communities under the 21st Century Village initiative.

The MoA also aims to continue negotiations with existing trading partners to open more markets for Malaysia's fruit and vegetable exports to increase the total export value for premium fruits and vegetables to RM400 million. To better coordinate processes between various stakeholders in obtaining land for the production of premium fruits and vegetables, one-stop centres will be established in the respective states to facilitate and expedite the land approval process.



TKPM Lanchang

EPP 8 Food Park

The rapidly increasing demand for ready-to-eat meal market and packaged food represents another platform for local producers to distribute value-added agriculture products. Yet, the local processed food industry remain fragmented, comprising more than 4,600 companies of which 77 per cent have a revenue of less than RM10 million a year.

To consolidate this industry, an integrated food park facility was proposed for producing ready-to-eat packed food by SMEs, which are marketed and distributed by an anchor company. Anchor companies will be responsible for obtaining product certification, packaging, branding, and marketing as well as manage suppliers. These companies will create a network of various food providers (raw material, ingredient or end product) within the food park. Anchor companies are also tasked with consolidating and raising small fragmented players through apprenticeship training.

The MoA takes the lead on this EPP, working together with the appointed anchor companies on implementation.

Anchor companies
Rukun Saksama Sdn Bhd
Duria Resources Sdn Bhd
Pertubuhan Peladang Negeri Johor
Sunlight Seafood Sdn Bhd



Rukun Saksama's operation selling local SME products at Malaysia Agro Exposition Park in Serdang



Ready-to-eat products by SMEs ready in the market

Achievements and Challenges

In January, Duria Resources was appointed as a participating company under this EPP. Duria produces durian-based products, which are sold at local hypermarkets as well as in international markets. In September, the company secured an agreement with a major Chinese retail outlet to supply its durian-based product to China.

In March, Rukun Saksama began operations in Malaysia Agro Exposition Park Serdang selling various local SME products. Meanwhile, Sunlight Seafood was appointed as a participating company in June. Sunlight produces value-added shrimp products and operates in Manjung, Perak. Finally, Pertubuhan Peladang Negeri Johor was appointed as the fourth participating company producing chicken-based products in the south of Malaysia.

Garnering greater participation from private companies has been a challenge this year, as they were reluctant to do so due to a lack of incentives. In response, the MoA has collaborated with Agrobank to create a soft-loan scheme for participating companies.

Moving Forward

The Agrobank soft loan scheme to address the lack of incentives will be launched in 2013. In addition, a trade network comprising all participating companies will also be established. This nationwide network aims to encourage and strengthen the sales and marketing of all products produced by participating companies. This will holistically boost the production and revenues of such products, limiting dependence on outside buyers. In 2013, the Ministry aims to attract RM70 million in investment by anchor companies and to help them generate RM20 million in revenue.

EPP 9

Fragrant Rice Varieties in Non-Irrigated Areas

Malaysia Agricultural Research & Development Institute (MARDI) has developed a new fragrant rice variety (MRQ76 and MRQ74) to cater to the higher-end rice market. This project will focus on planting fragrant rice (e.g. Jasmine-type and Basmati-type) on rain-fed areas to increase the average national paddy yield.

The goal is to reduce the country's dependence on imported rice as well as to break into the premium organic rice market. In order to meet this target, anchor companies are appointed to undertake the planting and commercialisation of the fragrant rice varieties developed by MARDI. Meanwhile, MARDI will continue in its research efforts to further develop and produce new rice varieties.

Anchor companies

Infoculture Sdn Bhd

Paddytech Resources Sdn Bhd

Bionic Agro Sdn Bhd

Birinbaru Enterprise

Achievements and Challenges

Infoculture, one of the EPP's anchor companies, planted 168 hectares of MRQ74 and has harvested 413 MT of rice from the planted area to date. In April, Paddytech was appointed an anchor company and planted 30 hectares of land, which yielded 100 MT of rice. In June, Bionic Agro and Birinbaru were appointed anchor companies. Bionic Agro has planted 60 hectares while Birinbaru will plant 103 hectares starting 2013.

Scale is an issue for this EPP as the industry is presently dominated by smallholders, which are traditionally not profitable and require constant subsidies. The challenge here is to identify companies that are keen to undertake paddy farming on a commercial scale, expand into downstream product development and to market these products.

Moving Forward

In 2013, MARDI plans to plant 750 hectares of fragrant rice varieties, bringing total production to 2,500 hectares. To this end, MARDI will identify more anchor companies to commercialise the fragrant rice varieties produced while facilitating and supporting the existing four players in their production and marketing efforts. MARDI will also continue R&D efforts to produce new fragrant rice varieties as well as agronomic packages to support the commercialisation of these products.

EPP 10

Strengthening Productivity of Paddy Farming in MADA

To establish long-term food security in Malaysia and increase the income of paddy farmers, this EPP, led by Muda Agricultural Development Authority (MADA), promotes the adoption of an estate farming approach under a single management in the Muda vicinity, which will see the introduction of a land amalgamation scheme for 50,000 hectares (51 per cent of the total 96,558 hectares) of paddy fields by the year 2020. Under the amalgamation scheme, traditional farmers will be given incentives to exit their individual farming operations.

Another initiative is to intensify the adoption of technologies across the production chain of the paddy and rice industry, such as the introduction of new varieties of seed, use of new nano fertilisers, improved irrigation and larger scale farm mechanisation. Collectively, these initiatives aim to raise the yield of paddy to 8.0 MT/hectare by 2020 from the existing 5.0 MT/hectare.

MADA and BERNAS are finalising the establishment of a special purpose vehicle (SPV) to implement initiatives in order to capture the whole value chain of the industry, from seed production to the sale of rice. The Muda granary area accounts for 37.1 per cent of national rice production and 24.1 per cent of the total rice cultivation area in Malaysia.

Achievements and Challenges

Over the past 12 months, some 3,028 farmers agreed to participate in the centralised farm management scheme, fully achieving the annual target of 5,000 hectares. Survey work for the acquisition of another 79.13 hectares of land to be used in the construction of tertiary irrigation infrastructure was also completed in the same timeframe. Meanwhile, tender for the construction of irrigation infrastructure in two blocks were completed in November, with construction commencing in December.



Amalgamated paddy fields in Muda area

Paddy's susceptibility to diseases poses a challenge to the EPP to meet and maintain paddy yield to 8.0 MT/hectare. For example, 2012's paddy yield was on track to achieve its 6.75 MT/hectare target but a sudden outbreak of disease just prior to the harvesting season caused the average yield to decline to 4.79 MT/hectare.

Moving Forward

MADA will amalgamate another 5,000 hectares of land in the Muda area, bringing the total to 15,000 hectares of land amalgamated under the estate farming model by 2013. The amalgamated land will then be undertaken by central management to increase the income of participants by five per cent. The construction of infrastructure for seven irrigation blocks will also commence at Tambun Tulang, Pendang, Kepala Batas, Kubang Sepat, Pengkalan Kundur and Tajar.



Strengthening Productivity of Paddy Farming in Other Granaries

The estate-farming approach used in the Muda district will be replicated in seven other granaries around the country to increase the national productivity of paddy as well as ensuring steady income for ageing farmers who plan to exit paddy farming. The scheme will also be implemented in an identified area of 5,100 hectares of land in Batang Lupar and 5,000 hectares in Kota Belud respectively. This initiative will ensure that flood mitigation and water management systems up to the tertiary level are put in place. Meanwhile, this EPP will see the establishment of a R&D programme studying the drought tolerance and pest/disease resistance of rice crops to improve the yield of Sarawak traditional rice varieties.

The project lead for this EPP is the MoA's Paddy and Rice Division, and sees the participation of the following development authorities: Kemubu Agricultural Development Authority (KADA), IADA Barat Laut, IADA Seberang Perak, IADA Kemasin-Semarak, IADA Kerian Sg Manik, IADA Penang, IADA KETARA, the Ministry of Modernisation of Agriculture, Sarawak (MOMA), and the Ministry of Agriculture and Food-based Industries, Sabah (MAFI).

Achievements and Challenges

To date, 1,250 hectares has been identified to join the land amalgamation scheme in five granaries all over Malaysia. An initial difficulty, however, was to secure farmers' participation in the land amalgamation scheme as they were uncertain of the project's viability.

Moving Forward

In 2013, another 5,400 hectares will be amalgamated in the seven IADAs as well as in Kota Belud and Batang Lupar, Sarawak. Following MADA's model, the respective IADAs will facilitate the farmer's co-operatives to go into downstream production to generate better returns for the farmers.

No	Project Lead	Project Location	Achieved (ha)
1	IADA Barat Laut Selangor	Parit 5 Sg. Besar	148
		Simpang 5, Sg. Nipah	147
		Tanjung Karang	132
2	IADA Kerian	Parit Gabis	118
		Batu 6/7	14
		Kg. Baru	144
3	Kementerian Pertanian dan Industri Makanan Sabah	Kg. Taun Gusi Keranjangan	46
		Kg. Taun Gusi Padang	12
		Kg. Jawi Jawi	51
4	IADA Penang	PPK Kampung Pelet	147
		PPK Balik Pulau	81
5	IADA Seberang Perak	Rancangan Tanah Belia	210
Total			1,250

Exhibit 11.3 Achievements under each development authority

Source: MoA

*The full results for KADA, KETARA and IADA Kerian Sg Manik is still in the process of finalization at time of publication

EPP 12 Expansion of Cattle in Feedlots

This EPP aims to establish 300 satellite farms to support anchor companies involved in feedlot operations, with the aim of improving the national self-sufficiency level for beef. The anchor companies are tasked to oversee operations of the entire value chain involved in providing feedlot services while managing the integration and consolidation of downstream processes.

In the downstream side, further improvements are made through the enforcement of abattoir certification, cold-chain delivery of chilled cuts, promotional exercises to create market awareness of imported buffalo meat versus beef and the development of other beef by-products.

This EPP, led by the DVS, integrates with two other livestock EPPs (EPP 5 and EPP 16) to establish a fully integrated livestock value chain. At present, FELDA Gedung Makanan Negara represents the sole champion of this EPP.

Achievements and Challenges

15,411 cattles have been transferred to feedlots in the satellite farms to date, representing 45.73 per cent out of the targeted 33,700 cattles to be feedlotted. A significant challenge in implementing this EPP is in identifying experienced companies that have the capacity to participate throughout the entire livestock value chain and take up existing satellite farms.

Moving Forward

The DVS will continue to monitor existing farms while focusing its attention on incorporating the feedlots into the EPP Livestock: Full Value Chain to ensure a complete integration of the value chain. In 2013, the target is to have additional 20,000 cattle feedlotted in existing satellite farms.

EPP 13 Dairy Clusters



Allied Dairy bottling facility

This EPP, led by the DVS, aims to reduce the country's dependency on imported fresh milk, which currently accounts for 32 per cent of total fresh milk in the Malaysian market and projected to grow at a CAGR of 13 per cent until 2020. To achieve this goal, anchor companies will set-up dairy clusters to produce milk on a large-scale basis.

These companies will oversee all aspects of the dairy cluster operations, from production to marketing. Individual farms will be engaged by anchor companies, with a deal to guarantee purchases at a pre-determined price. Steps will also be taken to upgrade existing cold-chain milk facilities to ensure that milk quality is maintained during shipment from farm to marketplace.

Anchor companies

Evergreen Livestock Sdn Bhd

Allied Dairy Sdn Bhd

Golden Difference Sdn Bhd

Achievements and Challenges

Evergreen Livestock, appointed as an anchor company in 2011, has engaged 92 dairy farms in Sabah to be included in its dairy cluster. Meanwhile, Allied Dairy, appointed at the same time, has identified 35 farmers to date, mainly from Johor, to participate in its cluster programme to support its processing plant in Kluang. The Farmers will receive support from these companies in the form of equipment and expertise. In October, Golden Difference, a subsidiary of Susu Lembu Asli Sdn Bhd, was appointed as another anchor company operating in Johor.

The challenge in 2012 was the lack of companies interested in participating in this EPP. The target in 2012 was to secure two additional anchor companies but only one company was eventually recruited to anchor smaller farmers. In addition, the dairy clusters appear to be concentrated in Johor due to the existing base of dairy farmers and suitability of location. The clusters were originally planned to be located in the eastern and northern regions.

Moving Forward

The DVS aims to find another anchor company to spearhead the development of dairy clusters in the northern and eastern regions. It will also ensure that the existing clusters achieve their respective targeted milk production of 15 million litres in 2013. Concurrently, the anchor companies will strive to increase the average production of milk per cow per lactation in their clusters to 15 litres per lactation per day from the current 10 to 11 litres.

EPP 14 Seed Industry Development

The local agriculture industry is extremely reliant on imported seeds as the local seed industry remains underdeveloped. The initiative under this EPP, led by the MoA's Industry Support Division, will look at ways of producing high quality seeds and genetic material by using Marker-Assisted Selection (MAS) technology.

MAS technology, which was introduced in MARDI's Centre for Market Discovery and Validation (CMDV) in 2011, helps select seeds with desired traits, significantly reducing the number of breeding years and guesswork required to develop high quality progeny.

A National Seed Council has been established to oversee the development of the local seed industry and to reduce Malaysia's dependency on imported seeds and breeding material. Anchor companies will spearhead the growth of this industry by expanding production to cater for both domestic and export markets.

Anchor companies

RB Biotech Sdn Bhd

Green World Genetics Sdn Bhd

Achievements and Challenges

In 2012, CMDV validated 3,625 samples in its labs, exceeding its 2012 target of 2,000 samples. It has also expanded its operations and is now able to cater to big corporations in the agriculture and palm oil industry.



Ongoing research to produce high quality seeds and genetic material by using Marker-Assisted Selection (MAS) technology

Meanwhile, the DoA has used MAS technology to support the implementation of the Seed Certification Scheme for rice and fruit clonal planting materials. On the regulation front, the DoA has commenced the drafting of the Seed Act to regulate the local seed industry, ensuring the production of quality genetic material or seedling. In addition, DVS has submitted the Animal Rules (Licensing of Breeders and Breeding Service Providers) to the MoA legal advisor for review, which will be subsequently submitted to the Attorney General's Chambers for endorsement. New clauses and interpretations have also been included into the Inland Fisheries Rule (Aquaculture) 2012 to regulate and standardise the aquaculture broodstock production in all states.

The lack of awareness on the part of Malaysian industry players of the role played by seed screening is one of the challenges faced when implementing this EPP. Prior to this EPP, the seed industry development scene in Malaysia was non-existent. Thus, the Ministry needs to increase its efforts to create awareness and push for innovation to help build this industry into a fully self-sustaining agricultural model.

Moving Forward

The DoA has completed the draft Seed Act, which will be tabled at consultation meetings with Government agencies, private companies such as seed producers, seed retailers, seed importers and exporters as well as non-governmental organisations, before the final draft is submitted to the MoA's legal advisor by end of 2013.

Meanwhile, CMDV will start developing markers for selected commodities covering disease resistance in tilapia, drought tolerance in rice, papaya dieback resistance, bacterial heart rot resistance in pineapple, milk production in Sahiwal and Sahiwal-crossed cattle. These markers will be available to the industry so that seeds with desired markers will be selected to be planted or bred. The MoA will roll-out the incentive scheme to aid local seed players in further developing high-quality seeds locally.

EPP 15 Participation of MNCs

In March, this EPP was transferred to the Bioeconomy programme under the purview of Ministry of Science, Technology and Innovation (MOSTI).

EPP 16 Overseas Acquisition/ Joint Venture of Cattle Farms

Led by the DVS, this EPP represents the last component of the fully integrated livestock value chain with two other livestock EPPs (EPP 5 and EPP 12) towards achieving a sustainable local beef industry. It aims to secure a consistent and affordable source of live animals required for breeding, feedlotting and dairy operations over the next decade. The scope of this initiative has also been expanded to look at potential areas in agriculture that could bring in additional income into the country.

Under this EPP, participating companies appointed are given the first rights to supply live animals to companies under livestock EPPs. For instance, if the Government needs to procure cattle for companies under EPP 5, participating companies under EPP 16 will be offered the first bid to supply the cattle.

Anchor companies

SEDC Sarawak

Ternakan Kamran Sdn Bhd

Bumi Yadanar Sdn Bhd

Huzaifah Farm Sdn Bhd

Achievements and Challenges

In 2012, Huzaifah Farm Sdn Bhd was appointed a participating company in October to supply cattle from its farm in Australia. The lack of incentives under this EPP appears to be a barrier in attracting more companies to participate.

Moving Forward

The DVS will continue monitoring the existing anchor companies within this EPP while focusing its resources on incorporating the feedlots into EPP Livestock: Full Value Chain to ensure a complete integration of the value chain. The target is to achieve RM60 million in revenue generated from this project in 2013.

EPP 17 Pasar Komuniti – PAKAR

This EPP aims to transform and modernise various markets as well as integrate local markets such as *Pasar Tani*, *Pasar Malam*, *Pasar Minggu* and *Pasar Tamu* into a much larger market known as *Pasar Komuniti* (PAKAR). PAKARs will be outfitted with amenities that will facilitate cleanliness and help traders increase their revenue.

Federal Agriculture Marketing Authority (FAMA), which is leading this initiative with the cooperation of the relevant Government agencies to monitor the PAKARs, is currently identifying suitable sites and engaging market traders to establish the markets.

Achievements and Challenges

The first PAKAR in Manjung was put into operation on 9 September 2012. Another six PAKARs situated in Bera, Mersing, Kota Belud, Jengka, and Paroi were supposed to be in operation by the end of 2012. However, there were delays in construction and obtaining the Certification of Completion and Compliance from the local authorities.

Moving Forward

Another nine PAKARs will be constructed in Miri (Sarawak), Datin Halimah (Johor Baru), Puchong (Selangor), Kuala Kedah (Kedah), Keningau (Sabah), Simpang Ampat (Perlis), Grik (Perak), Kerteh (Terengganu) and Chini (Pahang) in 2013. Aside from establishing PAKARs, the project team is also evaluating the introduction of another type of market, *Pasar Karavan*, to further increase the country's GNI.



Pasar Komuniti (PAKAR) under construction in Kota Belud

BUSINESS OPPORTUNITIES

Business Opportunities (BO) are growth areas identified as potential EPPs in the lab in 2010. As specified in the Roadmap, there are 11 Business Opportunities defined under this NKEA:

- Business Opportunity 1: **Nutraceutical Products**
- Business Opportunity 2: **Foreign Distributor**
- Business Opportunity 3: **Ornamental Fish Farming**
- Business Opportunity 4: **Aquaculture Feed Mill**
- Business Opportunity 5: **Aquaculture Export Centre**
- Business Opportunity 6: **Snacks Industry**
- Business Opportunity 7: **Free-range Chicken Rearing**
- Business Opportunity 8: **Button Mushroom Farming**
- Business Opportunity 9: **Packaged Fruit Production such as Jackfruit**
- Business Opportunity 10: **Foreign Direct Investment in Herbal Products**
- Business Opportunity 11: **Snack Food Industry (SFI)/ County Food Facilities**

In 2012, BO 9 was converted into an EPP, and incorporated into EPP 7: Premium Fruits and Vegetables.

Business Opportunities 1 - 5 will be converted into EPPs in 2013. Two Business Opportunities (BO 1, BO 2) related to herbal products will be incorporated into an existing EPP while three aquatic Business Opportunities (BO 3, BO 4 and BO 5) will be potentially developed into one EPP.

ENABLERS

Five key enablers to support the implementation of the EPPs and BOs:

1. Provide incentives for anchor companies - implemented through the introduction of NKEA Agriculture procedure in 2011.
2. Strengthen the adoption of Good Agricultural Practices (GAP) and Good Manufacturing Practices (GMP) to enhance market access - all anchor companies are encouraged to do so as part of their agreements, enforced in 2012.
3. Change regulations and policies - the development of the Seed Act under EPP 14 is one such example.
4. Strengthen logistics infrastructure - to be further strengthened in the next phase.
5. Ensure sufficient pipeline of human capital - to be further strengthened in the next phase.

Summary of Agriculture NKEA

	2020 Target
Incremental GNI impact	RM28.9 billion
Additional Jobs	109,335

Critical targets for 2013:

- Five pre-clinical trials started for herbal products (nutraceutical/cosmeceutical/botanical drugs)
- Total production of Edible Bird's Nest product by registered premises (MT) – 150
- Tonnage of dried seaweed produced (MT) – 50,000
- Total production of farmed fish (MT) – 37,000
- Total production of shrimps (MT) – 23,000
- Total export value for premium fruits and vegetables (RM mil) – 400
- Total revenue generated from sales of products from participating companies (RM mil) – 20
- Total tonnage of fragrant rice produced (MT) – 2,500
- Percentage increase of income for participants under the project – 5%
- Total land area amalgamated for paddy farming in other granary areas (ha) – 5,400
- Average production of milk per cow per lactation from clusters under NKEA (litres per day) – 15
- Formation of Seed Act – 70% completed
- Total revenue generated from overseas ventures and acquisition (RM mil) – 60
- Total PAKAR sites operational by end of 2012 – 9

Enabling Change

NARROWING DISPARITY

ON THE GROUND WITH THE CIVIL SERVICE

The Narrowing Disparity SRI was carefully tailored to correct the imbalance between the Bumiputera share of the economy in relation to its population and other groups, in an exercise which has seen TERAJU take the lead.

"The Majlis Tindakan Agenda Bumiputera (MTAB) was formed to lead, coordinate and drive Bumiputera economic participation through existing and new initiatives, formulating policies to achieve results with regard to the Bumiputera Development Agenda. The role of MTAB in aligning the Bumiputera agenda led to the inception of the Bumiputera Economic Transformation Road Map (BETR), a blue print launched on 26 November 2011 which sets the targets and goals towards Vision 2020.

"Hence, TERAJU, the Secretariat of the MTAB, geared towards the goals of the BETR, facilitates Bumiputera entrepreneurs in taking full advantage

of the Government's initiatives in this area to enhance their business competitiveness at home and abroad," says En Husni Salleh, CEO of TERAJU.

TERAJU's main role has been to facilitate collaboration among various parties to help provide funding and growth opportunities for companies under the TeraS programme. "Through collaborations with various agencies, we have enhanced the delivery system and promoted the competitiveness of Bumiputera companies," says En Husni.

These efforts to catalyse the Bumiputera transformation agenda has since paid off, delivering RM14 billion worth of business and financing opportunities to Bumiputera entrepreneurs in the past two years. More importantly, the most successful companies in TERAJU's stable have moved on to create their own ecosystem to help other Bumiputera companies become specialised vendors in their own right.

"Professionalism and expediency are key to effective implementation. One example of the strategic intervention by TERAJU was the MRT project, of which 47 per cent was carved out for Bumiputera companies to enable qualified and competent companies to compete under the principles of the Bumiputera Economic Transformation," says En Husni.

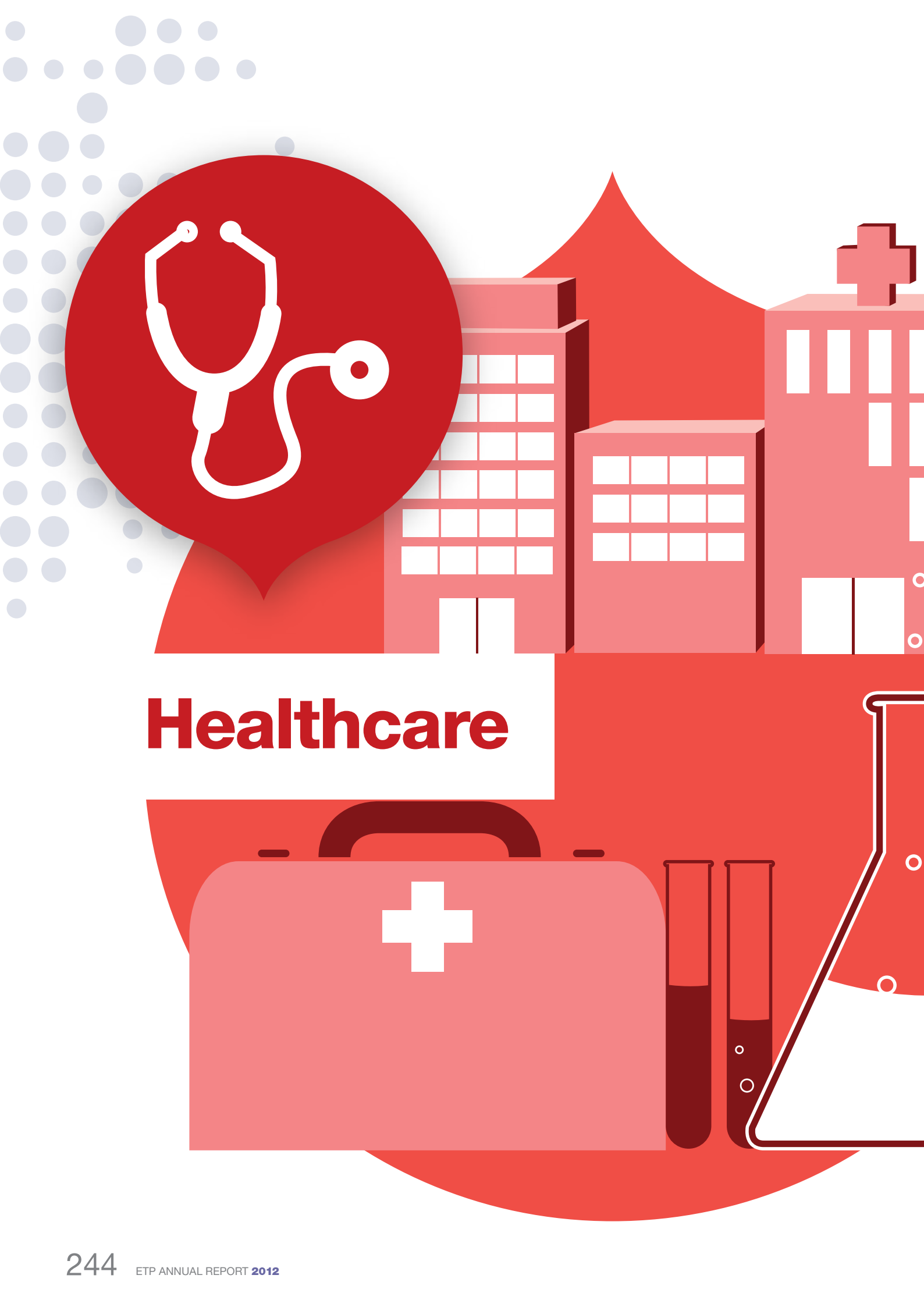
"We know we are on the right track when other government agencies, financial institutions and investors want to be part of this programme. This is proof that we are aligning the Bumiputera economic transformation to the nation's own mainstream economy.

"There cannot be a separate Bumiputera economy versus the nation's true economy. Once this becomes one, perhaps our work will be done," says En Husni.

“*Through collaborations
with various agencies, we
have enhanced the delivery
system and promoted
the competitiveness of
Bumiputera companies*”

En Husni Salleh,
CEO of TERAJU





Healthcare



Dato' Sri Liow Tiong Lai

Minister of Health

The Healthcare National Key Economic Area (NKEA) has continued to deliver commendable results on top of an outstanding 2012. The goal of the NKEA is to stimulate economic growth in the healthcare industry and I am pleased to note that the Entry Point Projects (EPPs) have shown encouraging progress, with most of the planned initiatives implemented and producing good results.

The Economic Transformation Programme (ETP) has attracted the interest of many private sector companies in its catalytic EPPs, and the Healthcare NKEA has seen similar private participation. Under this NKEA, a total of 22 projects covering 10 EPPs and one Business Opportunity (BO) have been announced by the Prime Minister. They are expected to contribute RM4.6 billion to the Gross National Income (GNI), while generating investments totalling RM3.7 billion. The NKEA is also expected to create 18,316 jobs by 2020.

The last 12 months saw a number of significant developments under this NKEA including the corporatisation of Clinical Research Malaysia (CRM), a unit under the Clinical Research Centre of the Ministry of Health. The exercise will enable CRM to efficiently perform its role as a business unit, in working closely with the pharmaceutical industry to bring industry-sponsored clinical trials into the country.

I am also pleased to report that the Medical Devices Act 2012 and the Medical Devices Authority Act 2012 were gazetted last year. The gazettement of the Acts and their regulations will ensure that the medical devices industry is better regulated in Malaysia.

It is my firm and sincere belief that we are now in a better position to respond to the expectations of our nation to develop an effective and responsive healthcare system, which is safe, effective, and equitable. We are indeed well on our way to becoming "A Nation Working Together For Better Health".

HEALTHCARE

The primary role of any healthcare delivery system is the same: To deliver the highest quality of care to the greatest number of people in a sustainable manner. Though these principles are shared by all, specific differences exist from one region to the next. In all cases, healthcare involves the participation of multiple stakeholders ranging from Government authorities and agencies to non-governmental organisations and private healthcare providers.

In Malaysia, the sector is, in addition to being the key deliverers of healthcare, also one of the leading drivers of economic growth. Changing demographics, a more affluent society and more health-conscious lifestyles have led to the creation of a robust domestic industry. There are clear signs that indicate that the advancement and development of the healthcare industry in Malaysia is necessary and compulsory with a vast potential for greater development, setting in motion, the Healthcare NKEA.

The primary goal of the Healthcare NKEA is to facilitate the development of Malaysia's healthcare sector by identifying and supporting collaborative efforts between the public and private healthcare providers. These initiatives are further supported by the Ministry of Health (MoH), which is directly responsible for the growth of the industry. In doing so, the MoH will expand beyond its current roles of being the main healthcare service provider and sector regulator.

Both the Government and private sector providers play important roles in the nation's healthcare sector.

While the Government, with its commitment to universal access, subsidises Government hospitals and clinics throughout the nation, enabling affordable quality healthcare to all, the private sector, meanwhile, runs the gamut in terms of affordability, and helps by providing access to more healthcare services for those who can afford to pay and thus, reducing the burden of the Government. The public and private sectors thus work together to offer a comprehensive range of medical services, while ensuring that all the community has equitable access regardless of background.

Private sector healthcare is a significant driver of economic growth in this sector, and has quickly become a crucial segment in Malaysia's overall economy. The NKEA thus places special emphasis on encouraging greater private sector participation in healthcare to further drive growth.

The healthcare sector is targeted to generate RM35.5 billion in GNI and create 181,000 jobs by 2020. To achieve these numbers, the NKEA introduced six EPPs and two BOs at the start of the ETP.

One of the BOs pertaining to medical devices was converted into seven EPPs, bringing the present total to 13 EPPs and one BO. Another lab was held last September 2012 to convert the remaining BO pertaining to Senior Living into implementable EPPs. Fifty representatives from the public and private sectors participated in the five-week lab held in Kelana Jaya, expanding it into three potential new EPPs.

These EPPs are expected to further transform the healthcare industry in Malaysia into a vibrant and holistic sector, emphasising quality service and comprehensive delivery for all Malaysians.

2012 Key Performance Indicators

Healthcare NKEA		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
EPP #1	Percentage of foreign workers with health insurance	100%	143% Remarks: 1) 1,607,683 2) 100% (Baseline - exclude domestic maids in Peninsular Malaysia, Sabah and Sarawak and plantation workers in Peninsular Malaysia)	143	●	100	●	1.0	●
EPP #2	Number of research conducted	300	319 (140 ongoing + 179 new)	106	●	100	●	1.0	●
EPP #3	Export growth of pharmaceutical products (RM mil)	641.8	512.21 (Data until end November 2012)	80	●	80	●	0.5	●
EPP #4	Revenue generated from healthcare travel (RM mil)	548	558.59 (Data until end November 2012)	102	●	100	●	1.0	●
EPP #5	Number of MoH hospitals that subscribe to the Diagnostic Service Nexus services	4	4	100	●	100	●	1.0	●
	Number of private facilities that subscribe to the Diagnostic Service Nexus service	5	6	120	●	100	●	1.0	●
EPP #6	Completion of 5.5% of UMHM by end of 2012 (Milestones: Construction starts in June 2012 and piling work to commence in December 2012)	5.5%	5%	91	●	91	●	0.5	●
EPP #7	Medical Device Authority set up	May 2012	100%	100	●	100	●	1.0	●
	Effective date of Medical Devices Act	October 2012	100%	100	●	100	●	1.0	●
				105%		97%		89%	

Exhibit 12.1

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score #2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

ENTRY POINT PROJECTS



Mandating Private Health Insurance for Foreign Workers

Some 3.1 million foreign workers in Malaysia were employed in low-technology, labour intensive jobs in 2012, with recent data showing that half were either uninsured or under-insured. Over the last five years, approximately RM71 million in unpaid bills were incurred by foreigners at Government hospitals, putting additional strain on Malaysia's healthcare costs.

This EPP, is led by MoH and calls for mandatory private health insurance for foreign workers, which will help relieve stress on Malaysia's healthcare system and provide better protection for the foreign workers. Under this EPP, the Hospitalisation and Surgical Scheme for Foreign Workers (SPIKPA) was introduced and is a mandatory medical scheme designed for foreign workers. With an annual premium of RM120, the scheme provides hospitalisation and medical coverage to foreign workers with a total coverage of RM10,000 per annum for all sickness and injuries requiring admission into MoH hospitals.

This scheme came into effect on 1 January 2011, targeting 1.2 million workers in the initial stages. This figure was surpassed as over 1.4 million workers were insured. Twenty-five insurance companies and two Third Party Claims Administrators (TPCA) were registered as participants of the SPIKPA by the end of 2011.

Achievements and Challenges

The scheme was extended into Sabah last July and provided coverage for 1.6 million foreign workers as at 31 December 2012. While the SPIKPA has successfully insured almost all foreign workers in Malaysia, there have been challenges in some specific job areas including domestic maids and plantation workers. The MoH is currently addressing these areas to further strengthen the healthcare system and safeguard foreign workers.

Moving Forward

Having reached the target of launching the insurance scheme and making it mandatory, the project team will continue to work with organisations to ensure that most, if not all, foreign workers in all sectors are covered under the SPIKPA.

In addition, MoH is planning to further expand the programme into Sarawak by February 2013, following approval by the Sarawak State Government. The scheme in Sarawak will cover all foreign workers, except plantation workers in the palm oil industry.

EPP 2

Creating Supportive Ecosystem to Grow Clinical Research

The contract research industry for new drug development grew at an annual rate of 15 per cent globally to exceed US\$20 billion in 2009. Asia, meanwhile, outpaced that rate, posting an annual growth rate of 30 per cent to reach US\$1.6 billion. However, Malaysia has lagged behind its peers, including Thailand, Singapore and the Philippines, based on data from ClinicalTrials.gov.

By 2020, this EPP's target is to conduct at least 1,000 clinical trials and develop a supportive clinical research ecosystem that allows for more efficient and higher quality trials.

Achievements and Challenges

In driving this agenda, Clinical Research Malaysia (CRM), under MoH, was established to stimulate the growth of clinical trials in Malaysia. On 15 June 2012, CRM was corporatised, enabling it to function independently and be less constrained by bureaucracy.

Since the launch of CRM and in consultation with the public and private hospital industry and MoH, seven new MoH Hospitals CRCs (HCRCs) were established in the last two years, bringing the total number to 27 HCRCs. Ten of them are equipped to be Centres of Excellence for research. Meanwhile, the MoH Medical Research Ethics Committee has increased its reviews to twice a month, which has helped speed up approval timelines.

CRM is also undertaking a number of additional initiatives to support the development of this sector including:

- strengthening sites that are actively involved in industry-sponsored research (ISR)
- developing the clinical research management systems
- engaging with MoH hospitals through roadshows
- meeting with private and universities hospitals to increase the number of research sites
- working with the pharmaceutical industry to raise ISR rates

Owing to the rapid pace of achievements, the key performance indicator (KPI) for this EPP was revised upwards, raising the number of clinical researches targeted to 300 by the end of 2012 from 270. By the end of 2012, 319 clinical trials were conducted, thus surpassing the target.

One of the key obstacles to the development of this sector is a lack of available skilled workers owing to Malaysia's status as an emerging market in the area of clinical research. Plans are being put in place to build a talent pool of clinical research associates for international Clinical Research Organisations (CROs) in Malaysia, as well as site coordinators to assist in the conducting of ISR and other research-related teams.

Moving Forward

The CRM, with the cooperation of MoH and all hospital networks, aims to draw more clinical trials to the country by functioning as a one-stop business centre to facilitate and enable speedy, quality trials. The CRM will also encourage local researchers to enhance their competencies with the necessary training and resources.

In terms of specific initiatives, CRM aims to accomplish the following:

- streamline and strengthen ethical and governance submission and approvals
- promote centres of excellence emphasising service, research and teaching
- complement health tourism, local pharmaceutical and medical technology industries
- build on the strengths of MoH's integrated network and information system to enable transparent payments

Malaysian Pharmaceuticals: Increasing Local Generic Manufacturing for Exports

With the patents on many major drugs poised to expire in the coming years, Malaysia can position itself to exploit this opportunity by boosting its generic drug manufacturing capacity. Some US\$132 billion in patents is set to expire between 2010 and 2014, which will open up significant opportunities for the generic drug manufacturing sector.

In order to make the most of this opportunity, the Malaysian industry needs to transform itself in three areas:

- It needs to create an export platform:**
 The Organisation of Islamic Conference (OIC) countries and other developing countries are potentially lucrative markets for the export of generic drugs. Malaysia, which is a member of the highly regarded Pharmaceutical Inspection Convention and Pharmaceutical Inspection Cooperation Scheme (PIC/S), can leverage its position to export to these countries.
- It needs to drive the localisation and upgrading efforts of local manufacturing plants:**
 Local manufacturing plants presently do not have the capacity to produce en masse, thus forcing them to seek out foreign manufacturers. A localisation and upgrading drive will help build the necessary capacity.
- It needs to develop strong collaboration between Multinational Corporations (MNCs) and local manufacturers:**
 Local manufacturers can benefit from the expertise of MNCs and acquire best practices associated with the manufacture of generics. This will in turn help build local capacity and develop strong local champions in this sector.

Achievements and Challenges

The industry benefited from the Hovid Objective Pharmaceutical Excellence (HOPE), an agreement to develop two generic drugs between Sanofi Aventis Group's subsidiary Winthrop (M) Sdn Bhd and Hovid. The deal, which was valued at RM5 million for the first three years, was extended at the end 2011 to include four new generic medicines.

In September 2012, Ranbaxy Laboratories Limited, India's largest pharmaceutical company in a joint venture with local partners, are investing RM125 million to set up a second manufacturing plant in Malaysia which will become one of Ranbaxy's eight global manufacturing hubs for the export of generic drugs. This project is managed by Ranbaxy Malaysia Sdn Bhd.

In December 2012, Biocon Limited entered into an agreement with Chemical Company of Malaysia (CCM) Pharmaceuticals Sdn Bhd to exclusively distribute Biocon's insulin products in Malaysia and Brunei.

The Government has also agreed to let local manufacturers producing new pharmaceutical products contract an Off-Take Agreement (OTA) with MoH for three years. This means that MoH will agree to be the buyer of the manufacturer's future production.

If the manufacturer demonstrates that the product can be registered and marketed in other countries, the OTA may be extended for another two years. The MoH expects to sign the first OTA in early 2013.

One challenge facing this EPP is import barriers in countries such as Indonesia that adopt protective market stances. For example, in Indonesia, generic drugs cannot be distributed unless they were manufactured within its shores. The project team for this EPP is currently working on opening up these markets through diplomatic and trade channels.

Moving Forward

This EPP is targeting a GNI of RM13.8 billion by 2020, and the creation of 12,440 jobs. In 2013, the focus will be to continue working with MoH to optimise local facilities, as well as review and address issues relating to pharmaceutical patent law and policy in Malaysia.

The Healthcare NKEA team will be collaborating with MNC pharmaceutical companies and local players to take into consideration the impact of and changes in healthcare regulations in local and international markets. Strategies that were put in place during the 2010 lab to drive generics opportunities will also be reviewed.

Additionally, the construction of the first phase of Biocon's facility in BioXcell, Iskandar, is currently underway and expected to be completed by 2014.



Biocon's facility site in BioXcell, Iskandar

EPP 4

Reinvigorating Healthcare Travel

The ETP Roadmap expected global health travel to reach US\$75 billion in 2010 with ASEAN countries contributing US\$3 billion to the total. Despite an average of 22 per cent per annum growth, Malaysia's healthcare travel receipts are small with a US\$100 million contribution to Malaysia's economy in 2010.

While the sector shows strong potential, competing countries such as Singapore and Thailand have shown stronger growth and are now perceived as leaders in the high-value healthcare business. The Malaysian healthcare travel industry thus needs to establish a clear position, and transform its industry by broadening its patient base in two phases.

In the first phase, patient volume needs to grow and expand through extensive marketing, cross-border alliance and enhanced customer experience. The second phase will require the construction of better infrastructure and specialist capacity in niche specialisations to drive a shift towards more profitable in-patient care.

The primary agency responsible for the development and promotion of the healthcare travel industry is the Malaysia Healthcare Travel Council (MHTC), designed to be a one-stop centre for all matters related to healthcare travel.

Achievements and Challenges

The efforts to boost the sector's development have resulted in increased commitments from the Sime Darby Healthcare and Kumpulan Perubatan Johor (KPJ) groups to establish new hospitals catering to increased demands from the local population and healthcare travellers.

In March 2012, Sime Darby Medical Centre (SDMC) Ara Damansara, a 220-bed hospital facility, opened its doors to the public. Sime Darby has constructed another facility specialising in women's and children's healthcare, which was completed in December 2012. Meanwhile, KPJ announced that it will build five different hospitals nationwide by 2014, including the newly-completed Klang Specialist Hospital. The Amanjaya Specialist Centre Green Hospital with 108 beds is currently under construction in Sungai Petani, Kedah, and is expected to be completed by early 2014.

As of November 2012, a total of RM558.59 million was generated from healthcare travel. Since MHTC's official website launch on 5 April 2012, 62 new hospitals and 10 ambulatory centres have registered with the Council.

As for its promotional efforts, MHTC has undertaken vigorous marketing activities overseas to promote Malaysia as a healthcare destination. Patients from Indonesia appear to be particularly attracted to the facilities offered in Malaysia, making up 70 per cent of the total number of healthcare travellers to Malaysia.

The first Malaysia International Healthcare Travel Expo (MIHTE) was held in November 2012 at the Sunway Pyramid Convention Centre to further boost Malaysia's profile on the healthcare travel map. The three-day conference and expo attracted 1,300 delegates from 34 countries around the world and saw 94 booths set up by 84 organisations involved in the healthcare travel value chain. The expo received an additional 500 visitors, and secured business prospects of at least RM500,000.

The last 12 months also saw the establishment of a medical concierge in the Kuala Lumpur International Airport (KLIA) attending to enquiries and promoting healthcare in Malaysia to tourists.



Sime Darby Park City Medical Centre



Amanjaya Specialist Centre Green Hospital current site progress

A new tax incentive by the Government was put in place to encourage local investors to take part in the health travel business, and for existing operators to expand and upgrade their facilities to further attract foreign patients.



KPJ Pahang Specialist artist impression



KPJ Pasir Gudang artist impression

One of the main challenges of this EPP is to place Malaysia on par with the rest of the countries involved in health travel. While competitive in service, Malaysia has lagged behind its neighbouring ASEAN countries which developed their health travel markets much earlier.

Moving Forward

The MHTC will develop and continue to carry out intensive promotional efforts to existing and new target markets. The MIHTE will now be an annual affair as an important event in the healthcare travel industry. The MHTC will be working extensively with the relevant organisations to develop outreach programmes for healthcare travel as well as continue to create awareness on Malaysia's advancing healthcare infrastructure.



KPJ Bandar Baru Klang

EPP 5 Creating a Diagnostic Services Nexus

Public hospitals are facing steep challenges in coping with demand in radiology diagnostic services as only 25 per cent of them have radiologists on-site. With 45 per cent of radiologists concentrated in the Klang Valley and in larger cities, the uneven distribution of radiology workload leads to longer turnaround times for proper diagnosis. This is also true for privately-owned health facilities in smaller towns that lack radiologists.

The Diagnostic Services Nexus (DSN) aims to reduce these wait times by coordinating and distributing workload using a teleradiology system that connects with both the public and private sectors. The ultimate goal is to create scale and scope in domestic radiology and to then leverage the experience internationally.

Achievements and Challenges

DSN is a private consortium of strategic technology, telecommunications and operations partners. General Electric (GE) Healthcare is the technology partner for DSN.

In September 2011, the Kuala Lumpur and Selayang Hospitals participated as pilot sites, and were fitted-out with the relevant infrastructure. Hospital staff were also given special training sessions and a trial transmission period of images conducted during the first phase. The second phase saw the first of 50 images officially transmitted from Hospital Selayang to DSN and read by UMMC radiologists on 27 March, 2012.

DSN then went live in Hospital Kuala Lumpur on 16 April, 2012. An additional two public hospitals and six private hospitals will be hooked up to DSN by the end of 2012. More than 6,000 images have been transmitted and reported to date.

Moving Forward

DSN will continue to roll out and improve upon the DSN technology to provide services to private and public hospitals, as well as work on the goal of exporting teleradiology services to other countries. In 2013, DSN will focus on building capacity and branding its services by linking radiologists throughout the country to ensure the system is sustainable.

DSN will also market itself regionally, and seek in-sourcing services from other countries. DSN will recruit more radiologists to the pool and continue to work with GE Healthcare to improve the technology and infrastructure.

EPP 6

Developing a Health Metropolis: A World-Class Campus for Healthcare and Bioscience

The University of Malaya Health Metropolis (UMHM) is a flagship project spearheading a unique project that will see the creation of a unique metropolis. The metropolis will combine with urban renewal efforts to deliver better education, research and clinical care.

Together with the Faculty of Medicine, University of Malaya Medical Centre (UMMC) and UM Specialist Centre (UMSC), UMHM will become Malaysia's biggest cluster for medical education, healthcare, medical and bioscience research.

When complete, it will house a 320-bed hospital, a 338-room healthcare hotel, a medical research centre, convention and exhibition facilities, and other supporting retail facilities. UMHM is expected to commence development work upon receiving Planning Approval, and be fully operational by 2017.

UM Holdings Sdn Bhd (UMH), which is wholly-owned by the University of Malaya, has been entrusted with the task of developing and positioning the UMHM as Malaysia's premier medical hub, and as one of the centres of excellence for health, medical care and bioscience in Malaysia.

UMHM is designed to serve both local and regional needs, and will spearhead efforts in nurturing quality medical and healthcare professionals in education, research and other supporting healthcare services.

Achievements and Challenges

On 30 September, 2011 UM Holdings submitted the application for Planning Permission (*Kebenaran Merancang*) to MBPJ, and was identified as the key owner spearheading the development of UMHM.

The application for Planning Approval is presently being processed, and PEMANDU has intervened to expedite the process through critical stages such as making decisions on the provision of Mass Rapid Transit (MRT) services and the location of MRT stations.

The tax advisor for UMHM, KPMG has also finalised a paper on the proposed tax incentives for UMHM, which is being studied by the Ministry of Finance.

Moving Forward

Upon receiving the Planning Permission, site clearing and earthworks will commence and the entire construction programme for the facility is targeted to be ready by 2017. UMHM will also continue discussions and engagements with strategic business partners towards realising the potentials and opportunities at UMHM.

Medical Devices EPP

The medical devices industry in Malaysia is at a critical turning point. It is relatively young and constitutes approximately 20 to 25 per cent of Malaysia's healthcare spending today. Given Malaysia's low-cost factor, high quality assurances, strong and relevant capabilities from large electronics and electrical industry (E&E), skilled English-speaking and multilingual workforce, strong IP protection regulatory framework and access to Asia, Malaysia is well-positioned to increase the size and profitability of its medical devices industry.

The EPP project team has identified seven EPPs as well as their champions, which will further forward the work undertaken by the Healthcare NKEA. These EPPs are:

- Upscale Malaysia IVD Industry (EPP 7)
- Build Malaysian Showcase on Next Generation of Core Single Use Device (SUD) Products (EPP 8)
- Become the Hub for High-Value Medical Devices Contract Manufacturing (EPP 9)
- Create Malaysian Clinical Devices Champions (EPP 10)

- Medical Equipment Supply Chain Orchestration (EPP 11)
- Medical Equipment Refurbishment Hub (EPP 12)
- Build Medical Hardware and Furniture Cluster (EPP 13)

Achievements and Challenges

The Medical Device Authority (MDA) was set up in August 2012 as a statutory body entrusted to enforce and implement the Medical Device Act 2012 (Act 737) which will in turn draft the Medical Device Regulation 2012 to support the implementation of Act 737.

As most of the manufacturing companies in Malaysia are small to medium enterprises (SMEs), they will require incentives from the Government to further expand their businesses to support this industry.

EPP 7

Upscale Malaysia's IVD Industry



Mediven's product packaging

In November 2012, Medical Innovation Ventures Sdn Bhd (Mediven), a medical diagnostics company, announced a total investment of RM8.92 million in its In-Vitro Diagnostic (IVD) project. Focusing on commercialising local technologies to combat tropical infectious diseases, this investment will form the basis to upscale Malaysia's IVD industry and eventually raise Malaysia's profile in IVD globally, beginning with developing countries.

EPP 8

Build Malaysian Showcase on Next Generation of Core Single Use Device (SUD) Products

In November 2012, the Prime Minister announced Vigilenz Medical Devices Sdn Bhd as one of the first local medical devices manufacturers to help position Malaysia as the preferred supplier for high-quality contract manufacturing of SUDs.

Vigilenz will invest RM25.8 million under Project EXDEV to conduct R&D to extend its current product-line. This includes completing the entire line of suture (including cardiovascular and ophthalmic) and the expansion of a hernia range of sutures with composite/bioresorbable materials. In addition, Vigilenz is planning to introduce interventional cardiovascular products, and develop new wound management material and bio-material for tissue reconstruction. The project is expected to start in 2013, and looks to export 65 per cent of the products overseas.



Vigilenz factory in Bukit Minyak

EPP 9

Become the Hub for High-Value Medical Devices Contract Manufacturing

In September 2012, Medical Devices Corporation Sdn Bhd (MDC) announced that it will set up a Contract Manufacturing Hub for medical devices and pharmaceuticals. MDC will be able to help more Malaysian entrepreneurs participate in growing the domestic industry now that the company is a part of the ETP.

By 2020, MDC plans to invest a total of RM88.55 million to develop manufacturing capacity to produce DEHP Free Medical PVC Granule, Medical Tubings and Sheets, IV Administrative Sets and Haemodialysis Blood Lines, Peritoneal Dialysis (CAPD and CCPD) and Blood and Plasma Collection Bags.

Meanwhile, Straits Orthopaedics (Mfg) Sdn Bhd, a local company specialising in manufacturing, cleaning, and packaging orthopaedic devices and accessories, announced plans in November 2012 to expand its product offerings to include spinal implants and joint replacement products.

The combination of machining, forging, casting and all other surface finishing capabilities will make Malaysia a one-stop hub for a comprehensive range of orthopaedic devices for MNC orthopaedic companies. By 2020, Straits plans to invest a total of RM76.38 million in this area.



Straits Orthopaedics factory at Teluk Kumbar, Bayan Lepas

EPP 10

Malaysian Clinical Device Champions

Throughout 2012, this EPP focused on preparing three potential project owners to launch their projects announced in 2013. All three projects are related to the orthopaedic implant manufacturing industry.

This EPP is still in its early stages of implementation and updates are scheduled to be included in the ETP Progress Update Announcement in early 2013.

EPP 11

Medical Equipment Supply Chain Orchestration

UWC Holdings has invested in the construction of an 80,000 square feet facility in Bukit Minyak, Penang, dedicated to manufacturing medical equipment, including hospital beds, trolleys, stretchers, immobilisers and pre-filled humidifiers. This facility became fully operational in September 2012. By 2020, UWC will invest RM40.14 million.



UWC's new manufacturing facility at Bukit Minyak

EPP 12

Medical Equipment Refurbishment Hub

As a first step towards establishing a local medical equipment refurbishment hub, representatives from the Medical Devices Bureau, which has now been re-designated the Medical Devices Authority, were sent on a four-day training course to Siemens Refurbished Systems Headquarters in Forcheim, Germany.

The training on OEM Refurbishment in Germany helped the representatives get a better understanding of the actual refurbishment process, and the participants were exposed to an overview of the entire process.

The next step is for the Medical Devices Authority to launch an awareness programme on refurbished systems and introduce regulations for the sub-sector in order to generate interest in the industry. This EPP will enable lower purchasing costs and maintenance costs for quality medical equipment.

EPP 13

Build Medical Hardware and Furniture Cluster

In 2012, LKL Advance Metaltech Sdn Bhd expanded its premises, workforce and manufacturing capacity. The construction of a new 70,000 square feet factory in Sri Kembangan, Selangor, will expand LKL's capacity as a medical furniture manufacturer specialising in a broad spectrum of products including hospital beds, patient transport trolleys, birthcare tables, medical treatment carts, peripheral support equipment and the fabrication of steel/wooden products.

With an investment of RM16 million, the new factory is expected to be fully operational by end 2012, giving LKL a production capacity over 68,000 items in 2013 compared to 34,000 currently.



Wisma LKL in Sri Kembangan, Selangor

Moving Forward

These EPPs that are working on developing medical devices in the Healthcare NKEA are still very much in their infancy, having only been converted from BO status a year ago. At present, anchor companies have been identified and they have all taken the first steps towards developing nationwide clusters and hubs.

Medical devices are important components of almost all medical procedures, and the sector can stand to gain a lot if the manufacture of the devices can be localised. However, it is important to keep in mind that quality cannot be sacrificed for the sake of localisation. It is the intention of the NKEA to retain quality even as the various hubs ramp up over time.

Moving forward, the EPP teams will continue to find more players to participate in the EPPs as well as continue to improve enablers to help local players move up the value chain.

BUSINESS OPPORTUNITIES

Seniors' Living is the only remaining BO for the Healthcare NKEA after the Medical Devices BO was converted into seven EPPs last year. Malaysia will be classified as an ageing nation by 2020 when 10 per cent of its population will be aged 60 years or older.

The impending demographic shift will spark new challenges for the healthcare sector including issues such as capacity and access, funding for long-term care and the provision of adequate income streams for retirees. These issues raise serious challenges for the future, but they also represent opportunities for growth.

In September 2012, the Healthcare NKEA conducted a Seniors' Living (Aged Care) lab to look at the Aged Care Industry and to develop EPPs that could spur the growth of the industry. This will in turn transform the industry into a recognised part of the healthcare industry, which will also see the development of an ecosystem for senior citizens in high- and middle-income brackets.

The outcomes of the lab were segregated into the workstreams: Retirement Villages, Mobile Healthcare Services and Institutional care.

- **Retirement Villages:** This workstream looks into developing communities for seniors premised on the concepts of active ageing and ageing in place. Potential EPPs from this workstream include the development of retirement villages, high-density residences and even retirement resorts. The integration of age-friendly designs and support services within a retirement village will allow senior citizens to maintain themselves in their own homes even with increasing disabilities.
- **Mobile Healthcare Services:** This workstream looks at the possibility of provisioning care services in the comfort of existing homes. The rollout of such services nationwide will also help improve the turnaround time of hospital beds and lets the elderly recover in their own homes. Currently, Love On Wheels is the first company providing the service that has been announced under this BO.

Delivering care straight to the home

Love On Wheels was part of the Seniors' Living (Aged Care) lab held last September. K.A.S.I.H. (*Kasih Atas Sumbangan Ikhlas dan Hemat*) project is an initiative by Love On Wheels Healthcare Services Sdn Bhd (LOWHS), which provides fully-integrated mobile healthcare services to 2.5 million senior citizens above the age of 60 in the country.

An integral part of the national healthcare system, K.A.S.I.H. bridges the gap in post-hospitalisation care by providing senior citizens with accessible nursing and rehabilitation services. They are assisted in their own homes by certified and qualified healthcare professionals.

K.A.S.I.H. was announced by the Prime Minister on 16 November, 2012, and is currently being rolled out in the Klang Valley. LOWHS is expected to expand nationwide in 2014. This project will require investment of RM68.56 million by 2020.



LOWHS staff pledging to care for you in the comfort of your home, workplace and wherever you will be

- Institutional Aged Care:** There are presently 15 licensed Nursing Homes and 144 Old Folks' Homes regulated separately by MoH and the Welfare Department under the Ministry of Women, Family and Community Development. Because of this overlap, responsibilities can sometimes be blurred. In addition, there are thousands of unregulated centres that possess varying degrees of standards of care and infrastructure. This workstream seeks to transform this industry by introducing a single standard for nursing homes and old folks' homes called the "Integrated Residential Care Centre" (IRCC). This new standard will be solely regulated by MoH and will provide varying levels of care. There are two initiatives in this BO, one of which is to develop a new IRCC that is equipped with a proper standard and guideline, and another to transform existing care centres into IRCCs by adopting the new standards.

Summary of Healthcare NKEA

	2020 Target
Incremental GNI impact	RM35 billion
Additional Jobs	181,000

Critical targets for 2013:

- To fully implement SPIKPA, or mandatory foreign worker insurance, in Sarawak. As almost all foreign workers are being covered under this insurance plan, expansion into the East Malaysian will be the next phase of EPP 1
- To draw greater participation in the form of key players and strong champions to participate in the Medical Devices Industry EPPs
- To work on the initiatives under the Seniors' Living BO, and convert them into an EPP as caring for the elderly will see a significant development in 2013
- To commence the registration of unregistered nursing homes and to cultivate the Seniors' Living (aged care) industry
- To review and recalibrate the Malaysian Pharmaceutical EPP
- To assess other potential growth areas within the healthcare industry space

INVESTKL: AT THE HEART OF ATTRACTING MNCS

The InvestKL office stands tall at Kuala Lumpur Sentral, and overlooks some of the most ambitious development projects to be undertaken in the capital under the auspices of the country's Economic Transformation Programme (ETP). While the Government is presently footing the bill for these initial forays into the plan's execution, the private sector is expected to foot up to 92 per cent, or RM1.28 billion, of the bill.

InvestKL's location choice for its office may be coincidental, but the agency is certainly expected to play a central role in bringing foreign multinational companies (MNCs) who will be responsible for a significant portion of these investments. This means bringing in MNCs that will spur talent and income growth, and innovation—no mean task as InvestKL's CEO Zainal Amanshah will attest.

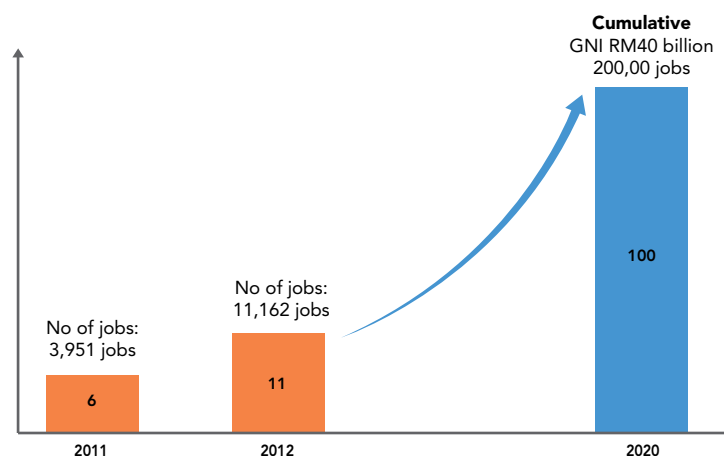
"When we first started InvestKL, MNCs that didn't already have operations in this region just didn't know who Greater Kuala Lumpur was," Zainal says. "We didn't have a 'story' that we could tell. Singapore, for example, had a services-hub story; Hong Kong's was access to China. What's the Greater Kuala Lumpur story?"

The challenge, Zainal adds, was to re-brand the Greater Kuala Lumpur/Klang Valley (GKL/KV) proposition, which was then mainly known internationally for its manufacturing and shared-services sectors. "We

wanted to position GKL as a regional hub for business, innovation, talent and access to Asia," he says. "Investors, wherever they were, wanted to be part of the Asia story."

innovation and supply the talent and resources MNCs needed, and prove that Malaysia was an easy place to do business.

InvestKL Progress – On Track to Attract 100 MNCs by 2020



Graph not to scale

According to the Asian Development Bank's 2011 Asia 2050: Realising the Asian Century report, Asia will capture 51 per cent of global GDP by 2050 assuming current growth levels can be sustained.

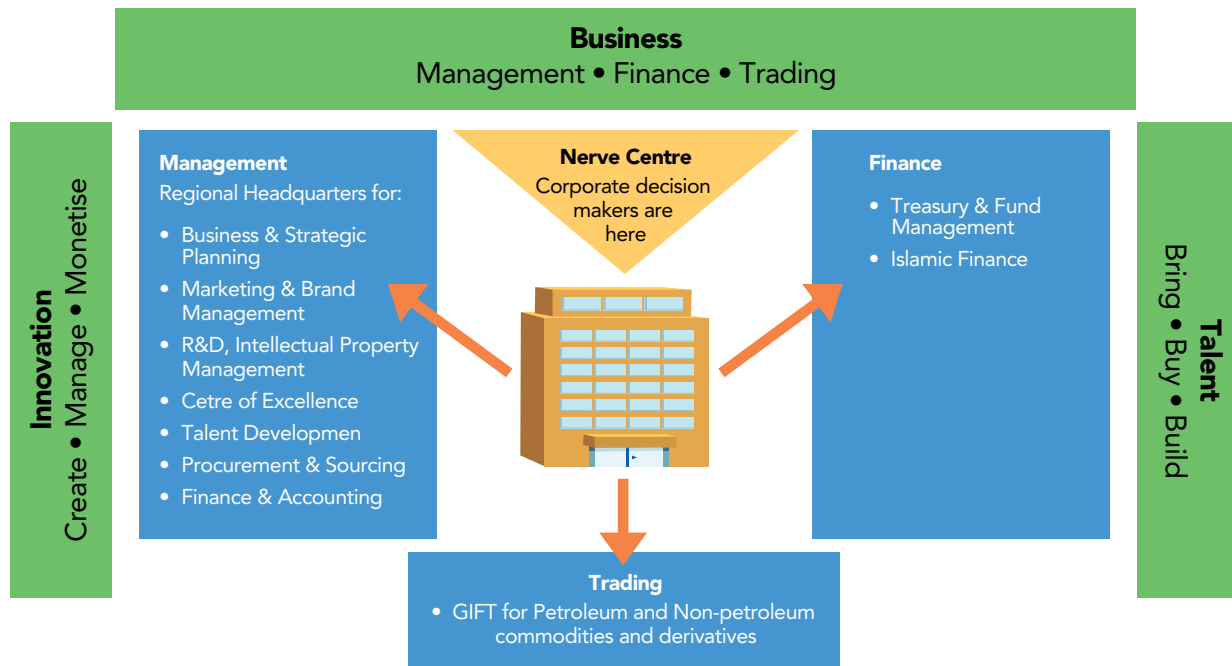
That, it turned out, and convincing investors of the GKL/KV brand, would prove to be the biggest challenges for InvestKL in its first two years. How do you convince an MNC with operations throughout Asia that Malaysia, GKL/KV specifically, was the ideal location for its headquarters?

For Zainal and his team, the challenge lies in showing that GKL/KV could provide integrated business service solutions, become a hub for

For InvestKL, the timing couldn't be better as both Government Transformation Programme and ETP initiatives had started breaking ground and did much to convince investors that Malaysia was serious about its commitment to transform.

Moreover, reports from independent parties such as The Economist's survey of investment destinations in Southeast Asia is helping put GKL/KV on the map. GKL/KV, as it turns out, leads the

Kuala Lumpur as the Regional Control Tower - Hub for Business, Innovation and Talent



With the announcement by the Prime Minister in Budget 2013 that the Government will be extending the Global Incentives for Trading (GIFT) programme to non-petroleum based commodities, Malaysia can now position itself as a regional control centre by providing incentives for management, finance and trading.

region in terms of cost competitiveness and infrastructure, and in areas where it lags, i.e. sourcing talent, panaceas are already in place through agencies such as TalentCorp and the Human Capital Development SRI.

But what turned out to be the most effective weapon in Zainal's arsenal was the testimony of other MNCs that have already set up shop in Malaysia. Building relationships and bridges with the Big Four consulting firms and investment banks have also helped as these firms are often hired on an advisory level.

"The MNCs appreciate our close attention to detail," Zainal says. "We are with them throughout the entire consultation process—in assessing the feasibility of GKL/KV, building their business case, talent assistance, identifying incentives, what we can offer: the whole gamut. Because of their help—they are now telling our

story for us—it is getting easier to talk to other companies and convince them to come to Malaysia."

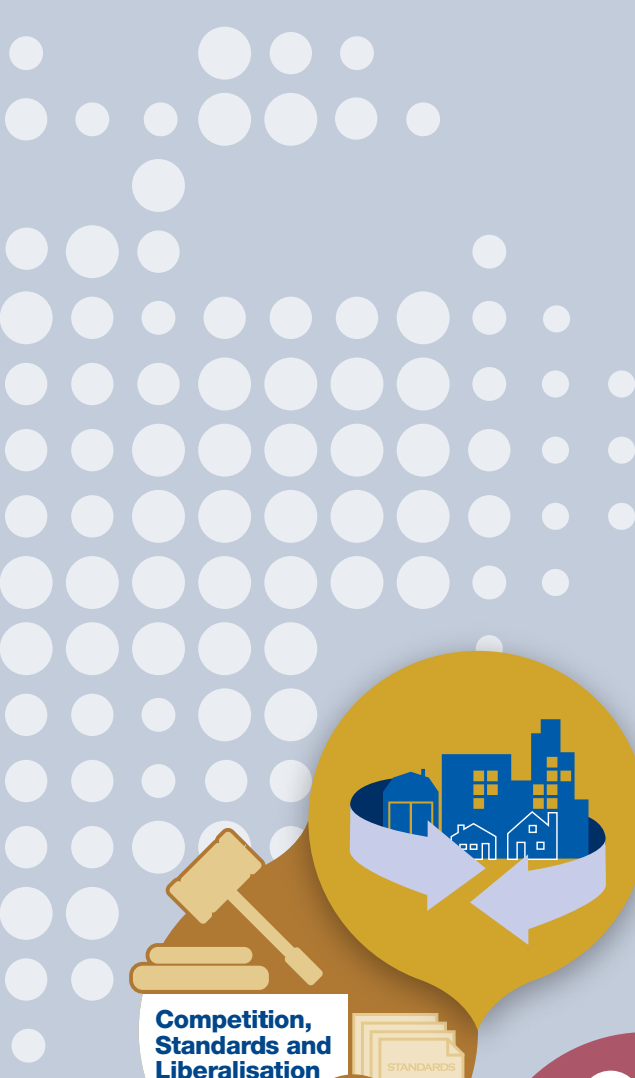
InvestKL now has several feathers in its cap including helping bring US-based Darden Restaurants Inc to Malaysia to develop the world's first lobster aquaculture park in Sabah as well as a regional management centre in GKL/KV. The value of that deal has been pegged at RM2 billion.

Over the last two years, InvestKL has brought on board 17 MNCs, mainly in the business services sector. This is a significant progress towards achieving the target of creating 200,000 high skilled jobs and GNI impact of RM40 billion by the year 2020.

Zainal says he is "reasonably satisfied"; 2012 numbers outperformed the annual target of 10 per year although for him, the bigger milestone is to hit 50, or half its mandate, as soon as possible.

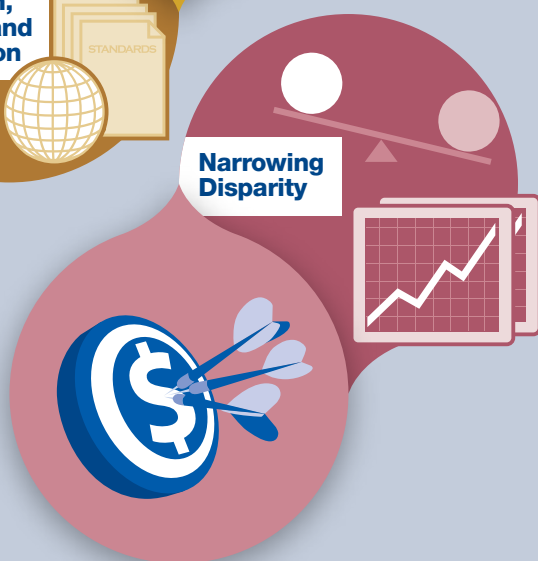
"But our work doesn't end there," he says. "Once they (the MNCs) are established in GKL/KV, we are then responsible for helping the MNCs develop their businesses, ensuring that they carry through on the investment commitments they have made, and to also ensure that their investments materialise.

"Our real work starts now."

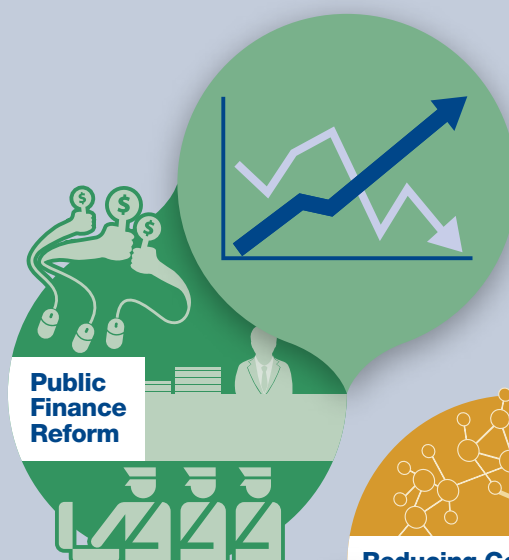


**Competition,
Standards and
Liberalisation**

STANDARDS



**Narrowing
Disparity**



**Public
Finance
Reform**



**Reducing Government's
Role in Business**



STRATEGIC REFORM INITIATIVES

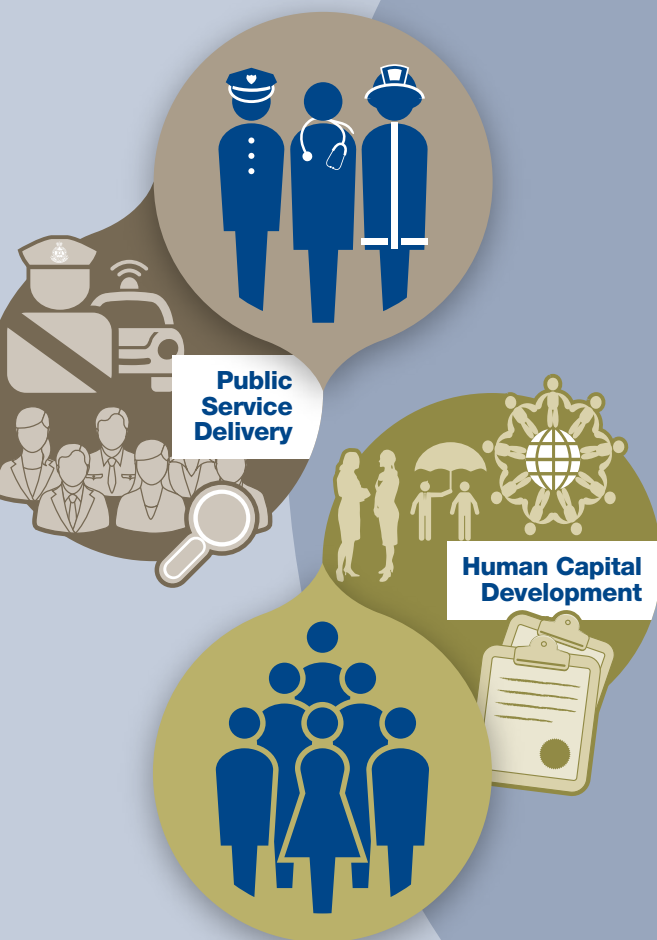
Boosting the Nation's Competitiveness

On 5 July 2011, the Malaysian Government announced six Strategic Reform Initiatives (SRIs), the second critical component of the Economic Transformation Programme (ETP) in addition to the 12 National Key Economic Areas (NKEAs), to boost Malaysia's global competitiveness. The ETP was conceptualised with two key thrusts, to boost GNI, jobs and investment through the 12 NKEAs and strengthen Malaysia's competitiveness, to be delivered by the SRIs.

The six SRIs comprise Public Finance Reform; Reducing Government's Role in Business; Human Capital Development; Public Service Delivery; Competition, Standards and Liberalisation; and Narrowing Disparity.

These six SRIs are based on 37 policy measures recommended by the National Economic Advisory Council (NEAC) from a total of 51 policy suggestions. The remaining measures are now part of the NKEAs and National Key Result Areas (NKRAs) under the Government Transformation Programme.

The SRIs are the result of six weeks of consultation held within six labs in 2011 that involved 500 public and private sectors representatives.





Competition, Standards and Liberalisation

COMPETITION, STANDARDS AND LIBERALISATION

The objective of the Competition, Standards and Liberalisation (CSL) SRI is to develop an efficient and competitive business environment and culture that support Malaysia's goal of becoming a high income nation by 2020.



Dato' Sri Mustapa Mohamed
Minister of International Trade and Industry

The services sector is targeted to be the main engine of future growth for Malaysia. Going forward, action is being taken to facilitate the growth of this sector by creating more competitive and vibrant market conditions. This includes the autonomous liberalisation of 15 services sub-sectors which was implemented in 2012 with another three to be implemented in 2013. Such measures are expected to enhance foreign direct investment, while promoting a more conducive and competitive environment for the domestic industry that will and contribute further to Malaysia's economic growth. To facilitate access to information on the services sector, I am pleased to inform that MITI has developed a dedicated services webpage <http://myservices.miti.gov.my> to provide among others, information on the various services initiatives, both under autonomous liberalisation and under the free trade agreements. As the largest contributor to Malaysia's economic growth, it is imperative for the services sector to remain competitive and resilient, especially amid prevailing challenges in the global economy. Hence, the Government will continue to advocate an open and competitive market to ensure that this is achieved.



Datuk Seri Panglima Dr. Maximus Ongkili
Minister of Science, Technology and Innovation

The usage and development of standards have key roles to play in boosting Malaysia's competitiveness. Taking cognisance of this, the Ministry of Science, Technology and Innovation through the Department of Standards Malaysia in partnership with the various Ministries and agencies, have been strengthening programmes that emphasise the development and use of standards. We have amended legislation to allow the appointment of additional Standards Development Agencies and implemented new timelines that will expedite standards development. We are also working with various Ministries to strengthen standards usage in farms and industry that ensure the country's products and services are in line with international standards and are able to compete in the increasingly competitive global market. Through initiatives which reach across NKEAs, it is envisioned that this emphasis on standards will strengthen and enhance Malaysia's position as a competitive exporting country, helping to raise national income.



Dato' Sri Ismail Sabri Yaakob
Minister of Domestic Trade, Co-operatives and Consumerism

It has been an active and busy year on the competition front. Malaysia's business environment marked a major milestone with the enforcement of the Competition Act 2010 on 1 January 2012. This Act helps Malaysia to reach its goal of becoming a high-income nation by 2020 by ensuring a competitive and efficient business environment. Rapid results have been achieved with the first Decision of the Malaysia Competition Commission on 6 December 2012. The Government has also set up the Competition Appeal Tribunal to hear appeals. Emphasis will continue to be placed on promoting public and industry advocacy to ensure awareness and understanding of the Act. It is crucial that businesses and industry equip themselves with the necessary knowledge in order to ensure compliance so as to allow the full benefits of competition to be felt.

2012 Key Performance Indicators (KPI)

Competition, Standards and Liberalisation SRI		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
1	Development of Malaysia standards on production of pineapple planting material 2012-2013	Complete draft ready for review by Technical Committee	MS 2527:2012 approved by Minister on 14 December 2012	200	●	100	●	1.0	●
	Development on Malaysia standard on International Standards for Phytosanitary Measures (ISPM No. 15) for regulation of wood packaging materials in International trad	Draft standard approved by Technical Committee	Draft standards approved by TC and available for public comment	120	●	100	●	1.0	●
	Establish standards on seaweed cultivation and manufacturing (i) Raw dried seaweed (ii) Manufactured carrageenan	Completion of R&D on seaweed drying	R&D on seaweed drying completed	100	●	100	●	1.0	●
2	Amendments of Standards of Malaysia Act 1996 (Act 549)	Gazetted	Gazetted on 9 February 2012	100	●	100	●	1.0	●
3	Removal of foreign equity restrictions in: (i) International Schools (ii) Secondary Vocational & Technical Schools (iii) Secondary Vocational & Technical Schools for students with special needs	100% by May	100%	100	●	100	●	1.0	●
	To allow the validity period to teach to be up to 5 years (through an insertion on the regulations on Act 550 (Education Act for 1996)	By May 2012	99%	99	●	99	●	0.5	●

(more on next page)

(continued from previous page)

Competition, Standards and Liberalisation SRI		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
4	Amendment of the Medical Act 1971 to allow the setting up of a National Specialists Registry	Parliament's approval by December 2012	Gazetted on 20 September 2012	100	●	100	●	1.0	●
5	Removal of foreign equity restrictions in private higher education institutions	100%	Procedures available to operationalise the new foreign equity limits	100	●	100	●	1.0	●
6	Amendment of the Architects Act 1967 for further liberalisation of equity conditions and removal of citizenship requirements	Parliament approval	Draft amendments pending approval	90	●	90	●	0.5	●
	Amendment of the Engineers Act 1967 for further liberalisation of equity conditions and removal of citizenship requirements	Parliament approval	Draft amendments pending approval	90	●	90	●	0.5	●
				110%		98%		85%	

Exhibit 13.1

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score#2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

In 2012, the focus of this SRI centred on:

- implementing competition legislation
- enhancing the adoption and usage of standards and best practices
- liberalising services sub-sectors as announced in the 2012 Budget.

The three co-ordinating Ministries championing this SRI are the Ministry of Domestic Trade, Cooperatives and Consumerism for Competition (MDTCC), the Ministry of Science, Technology and Innovation (MOSTI) for Standards and the Ministry of International Trade and Industry (MITI) for Liberalisation.

Competition

A strong culture of competition is key towards promoting efficient production of goods and services at competitive prices, while supporting innovation and development. In an effort to strengthen the competitiveness of the Malaysian industry, the Government has enacted the Competition Act 2010 and is committed to enforcing the new law. Initiatives falling under the umbrella of Competition are undertaken by the Malaysia Competition Commission (MyCC).

Malaysia Competition Commission

A major milestone in 2012 was the enforcement of the Competition Act on 1 January 2012. The MyCC, since its establishment in April 2011, has started putting in the building blocks for the implementation of the Act.

A key aspect of MyCC's role during the initial stage of the Act's enforcement has been to focus on public and stakeholder advocacy. This is to enhance the industry's understanding of competition legislation. In addition, given that the Act is already in force, the Commission has received a number of complaints and is undertaking investigations into several of these complaints. Investigations will take into consideration whether the complaints fall within the jurisdiction of the Act, occurred before the Act came into force or possess sufficient information for an investigation to proceed.

Competition Appeal Tribunal

The Competition Appeal Tribunal represents another component of the competition process and is the appellate body that will hear appeals on MyCC's decisions. Its establishment was announced by the Prime Minister in May 2012 with the appointment of its President and seven Members of the Tribunal. The Tribunal is composed of experts from the legal, business and economic fields.

The Competition Appeal Tribunal has exclusive jurisdiction to review any decision made by MyCC. Similar to a subordinate court under the Subordinate Courts Act 1948, the Tribunal is empowered to summon parties to its proceedings, and procure and receive evidence. The Tribunal's decisions are final and binding.

Achievements and Challenges

The Commission delivered rapid results within the first year of the implementation of the Competition Act, completing its first case and issuing its Final Decision on the case on 6 December 2012.

The case involved the Cameron Highlands Floriculturist Association (CHFA), which was found to have contravened Section 4(2) of the Act in respect of engaging in an anti-competitive agreement to increase the prices of flowers by 10 per cent. The CHFA has since agreed to comply with the Decision of MYCC.

MyCC undertook a market review of the domestic broiler (chicken) market. The review focused on the current structure of the market, the interaction between enterprises and suppliers in the industry, at the ex-farm, wholesale and retail levels as well as price movements.

During the year, MyCC also conducted 36 advocacy sessions for various stakeholders, including SMEs. In addition, it issued four guidelines as public reference on how the Act should be interpreted. These are:

1. Guidelines on Market Definition
2. Guidelines on Anti-Competitive Agreements
3. Guidelines on Complaints Procedures
4. Guidelines on Abuse of Dominant Position

While MyCC has so far delivered swift action, public expectations for the Commission to continuously demonstrate quick results may prove a challenge. This is because investigations can be time-consuming as they involve substantial research and review.

Moving Forward

There is a need for industry players to have a better understanding of anti-competitive practices under the Competition Act. The market must also be more aware of the requirements and the implications of the Act.

As inculcating a culture of competition amongst industry players will take time, emphasis will continue on conducting advocacy programmes to better acquaint industry and the public with competition law requirements. Nonetheless, MyCC will continue to pursue action on complaints received, and will focus on bid-rigging as part of its enforcement activities. MyCC will also endeavour to complete at least one market review in 2013.

On its part, the Competition Appeal Tribunal will complete the appeal procedures for adoption in 2013.

Standards

The standards process chain covers the development, usage and enforcement of standards. The development of standards falls under the purview of STANDARDS MALAYSIA, which works with SIRIM as the standards development agency, and other standards writing organisations. Various agencies such as MITI, Ministry of Agriculture, Ministry of Health and MDTCC are involved in promoting standards usage, while the enforcement of mandatory standards is undertaken by the respective regulatory bodies.

Measures on standards are undertaken through i) cross-cutting initiatives and ii) across NKEAs (sectoral initiatives).

Cross-cutting Initiatives

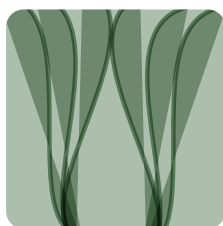
Cross-cutting initiatives focus on developing an appropriate ecosystem for the development and implementation of standards across industry. The initiatives covered during the year are detailed in the table below:

Acceleration of Timelines for Standards Development	New timelines have been applied to all new standards developed in 2012.
Appointment of Standards Development Agencies (SDAs)	Amendment of the Standards Malaysia Act 1996 in 2012 to support the appointment of more SDAs. SDA Accreditation Criteria were drafted and endorsed by the Malaysian Standards and Accreditation Council.
Standards Utilisation Dashboard	The dashboard on standards developed for Entry Point Projects (EPPs) provides a comprehensive picture of the utilisation of standards across NKEAs.
Strategic Communications Plan	A three-year strategic plan on standards promotion and usage for STANDARDS MALAYSIA was completed in December 2012.
Standards Governance	STANDARDS MALAYSIA has commissioned a study on the standards governance processes, reviewing existing institutions and processes towards a more efficient standards mechanism. These will enable a review of the standards governance structure for more effective standards development, usage and enforcement initiatives.
Test Facilities	A study on the availability of testing facilities has been completed. The study found some gaps in the E&E, food and machinery sectors and recommended the establishment of national testing laboratories to meet some of the requirements for test facilities.
Usage of Malaysian Standards (MS)	A study on the usage of MS noted high utilisation of standards pertaining to quality management, <i>halal</i> and those used for certification purposes. Recommendations were made to further enhance the use of standards.

Exhibit 13.2

SRI Initiatives List: Competition, Standards & Liberalisation

Did you know?



The seaweed industry provides strong downstream potential for processed food and *halal* pharmaceuticals. However, production from raw dried seaweed (RDS) requires indigenous standards on cultivation methods, harvesting and manufacture of semi-refined carrageenan, a seaweed extract.

This will not only set benchmarks for the production of RDS products, but will also ensure consistent quality to enhance the export of RDS and carrageenan.

Sectoral Initiatives

Agriculture

To ensure that produce reaches the market in a safe and sustainable manner, standards play a key role along the agriculture value chain, involving a number of processes from farm to table.

The development and enforcement of standards for the Agriculture NKEA focus on benchmarking Malaysia's farm/industry practices against international standards such as Good Agriculture Practice (GAP) and Good Manufacturing Practices (GMP). These efforts are centred on standards usage in areas including seaweed, premium fruit production and processed food.

During the year, the CSL SRI on standards for the Agriculture NKEA undertook the following initiatives:

Standards Development	An indigenous standard was completed for seaweed cultivation (MS 2467:2012) together with the Seaweed Cultivation Manual. Research was conducted for the development of standards for raw dried seaweed (RDS) and the draft MS is currently before the Technical Committee. The research on RDS utilised a solar-powered prototype drying house, and sought to achieve the industry requirement of 40% moisture content for dried seaweed.
Research and Development (R&D) on Quarantine Treatment Protocols	MARDI undertook research on heat and cold treatment, irradiation and fumigation towards creating pest-free produce for export. Tests have begun on fruit fly tolerance levels, with the next stage moving on to small-scale trials on star fruit, papaya, pineapple, rambutan and jackfruit.
Rebranding of SALM to MyGAP	A mini-lab, held by the Ministry of Agriculture in November 2012 on farm certification recommended a rebranding of the Skim Amalan Ladang Malaysia (SALM) scheme to MyGAP. It also proposed to increase the number of certified test laboratories to four from one and the need to provide more resources to intensify farm certification efforts.
MeSTI	<p>MoH initiated the MeSTI (<i>Makanan Selamat Tanggungjawab Industri</i>) rebranding scheme in May 2012. The MeSTI scheme is developed based on Good Manufacturing Practice (GMP) requirements. The scheme aims to facilitate the compliance with Food Hygiene Regulations by the micro, small and medium-scale food industries. This is to ensure the maintenance of hygiene and process controls including food safety assurance and food traceability.</p> <p>Under the scheme, MoH-certified food production establishments will be allowed to use the MeSTI certification logo on their product labels. MeSTI is a stepping stone to eventual compliance with global standards such as GMP and Hazard Analysis Critical Control Points (HACCP).</p>
Review of Good Aquaculture Practice (GAqP) farm certification	This initiative is aimed at enhancing the GAqP certification to support efforts under EPP 4 of the Agriculture NKEA. The EPP focuses on the production of high-value species, such as sea bass, grouper, and tilapia for export.

Exhibit 13.3
Initiatives under the agriculture sector

Healthcare

The Healthcare NKEA places emphasis on areas such as healthcare travel, clinical research and the development of the medical devices industry, with standards cutting across healthcare facilities, healthcare professionals to the transport and hospitality industries.

The enforcement of standards represents a key component of the competitiveness of the healthcare sector, which not only depends on cost advantages, but also in the provision of quality services.

The aim of the CSL SRI for the Healthcare NKEA is to enhance the number of hospitals, laboratories and research facilities that are audited and certified and the maintenance of the accreditation status to sustain high quality standards. MoH has implemented an accreditation programme for Government hospitals, which is undertaken by the Malaysian Society for Quality in Health (MSQH). Currently, 60 government hospitals and 35 private hospitals hold MSQH certification while six private hospitals have obtained accreditation from the Joint Commission International, a US-based global healthcare accreditation body.

Emphasis has also been placed on benchmarking laboratories against Good Laboratory Practices (GLP). This is to ensure Malaysian labs are up to international standards and their test results are acknowledged and accepted.

In addition, the Medical Devices Act 2012 is targeted to ensure locally produced and imported medical devices meet recognised standards.

Business Services

The Business Services NKEA encompasses a large number of industries and professions that support the growth of the economy. The focus of standards work in this NKEA so far has been on establishing the governance framework for green labelling and the certification of cyber security facilities and products.

Green Labelling

The development of the green industry has been driven by growing awareness and demand for sustainably produced products. Green labelling certifies that a product meets quality and safety requirements while providing consumer assurance of sustainable production processes.

To this end, the Ministry of Energy, Green Technology and Water (KeTTHA) has spearheaded the development of the national eco-label scheme, the MyHijau Label. Initiatives are also focused on developing additional eco-labelling product criteria (standards) and enhancing the eco-labelling infrastructure for green label products.

Additionally, in November 2012, KeTTHA and the Malaysian Green Technology Corporation (MGTC) organised a mini-lab on green labelling, which focused on strengthening the governance of green label standards in Malaysia and increasing the number of product standards and green products.

Currently, the green labelling scheme covers:

- 37 product standards
- 40 licenses granted to companies producing green products
- 293 products green-labelled

Cyber Security

As Malaysia positions itself to take advantage of opportunities in the cyber security and digital business services, it will require a comprehensive and secure eco system. The CSL SRI for cyber security will initially focus on standards required to protect sensitive and valuable information and services.

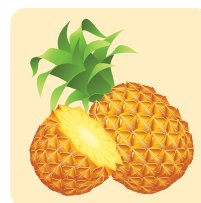
In an effort to address cyber threats, the initial thrust of this initiative is to ensure that Critical National Information Infrastructures (CNIIs) comply with information security standards such as ISO/IEC 27001 (Information Security Management System or ISMS). The lead agencies for this are the National Security Council (MKN) and Cyber Security Malaysia (CSM), an agency under MOSTI. Efforts are also being undertaken to have more IT security products certified to Common Criteria requirements.

Achievements and Challenges

The cross-cutting and sectoral initiatives undertaken through the CSL SRI on standards resulted in achievements across various sectors.

In the area of standards development, 336 new standards were established, including the Seaweed Cultivation Code of Good Practice (MS 2467: 2012) and the Pineapple Planting Material Standards (MS 2527: 2012). Six medical device standards as Malaysian Standard (MS) were also adopted as part of efforts under the new Medical Devices Act 2012.

Did you know?



The Pineapple (*Ananas comosus* L.) Vegetative Planting Materials – Specification (MS 2527) standard was finalised and approved in December 2012. This standard was developed to ensure the production of quality planting materials (seeds) for pineapple. This is important to fulfil strict import requirements of foreign markets (e.g. size and taste).

The MS 2467:2012 (Seaweed Cultivation Code of Good Practice) – a seaweed cultivation code, was developed and completed in January 2012 by the Department of Fisheries. This is an indigenous standard to ensure seaweed is cultivated according to specific standards. To ensure easy application by seaweed farmers, a manual was completed in June 2012 and so far, 150 farms have registered for certification by this standard.

In terms of standards governance, the enactment of the Medical Device Act 2012 is spearheading efforts to benchmark medical devices against international standards. This was supplemented by the establishment of the Medical Device Authority (MDA) in May. The MDA will address public health and safety issues with respect to medical devices. It will also undertake product registration and licensing of operators.

The green labelling governance structure was strengthened with the launch of a single national green logo – MyHijau - in October 2012 to consolidate the various green label schemes under a single umbrella. MGTC will be the central depository of green standards. It will be responsible for overseeing the framework for green standards development, bringing in more products under the MyHijau Label and targeting at least two scheme owners under the MyHijau Label scheme.

In respect of compliance with information security management systems (ISMS), a total of 43 of the 200 CNIIs have been certified under ISMS at end December 2012. Efforts are being put in place to have more products certified under Common Criteria Standard which is a mutual recognition of secure IT products in order to increase export potential. To date, 27 ICT security products have been certified under the Common Criteria Standard.

For Malaysia to be a major producer and exporters of food, ensuring food safety and quality is one of the critical steps in achieving the competitive advantage in the highly challenging food trade. In this regard, the Government launched the MeSTI scheme in May 2012 on food hygiene and safety requirements for food processing establishments to ensure quality food production.

There are a number of challenges in getting industry to use standards. Given that there is a range of industries, products and services covered by standards, efforts need to be prioritised based on industry needs. Furthermore, the costs involved in standards utilisation have led to reluctance to comply with standards, unless required to do so. Consumers, meanwhile, must increase their awareness on standards and certification to drive demand for high-quality products.

The development of standards is a time-consuming process involving a number of processes. These include data collection and research besides industry and public consultations to identify the standards and to get inputs and feedback before they can be adopted.

A further challenge which must be addressed is the fragmented regulatory framework. There is a need to ensure that the standards governance structure facilitates the implementation of an effective standards usage.

Moving Forward

The focus for 2013 will be on strengthening the standards governance structure and infrastructure requirements by implementing appropriate recommendations of the governance and test facilities studies. Additionally, promotion and usage of standards will be given priority by operationalising some of the recommendations of the usage study as well as through the design of a standards compliance programme expected to be completed in 2013.

Capacity-building to promote standards is also expected to continue increasing the utilisation of standards, especially among SMEs. STANDARDS MALAYSIA is also currently reviewing the four applications received for new SDAs to expedite standards development.

In addition, STANDARDS MALAYSIA's Strategic Communications Plan will be executed in 2013 to promote awareness on standards.

Under the Agriculture NKEA, the recommendations proposed during the SALM mini-lab on GAP farm certification will be implemented in 2013. Other standards initiatives to be undertaken through this NKEA include:

- MyGap certification for agriculture farms
- MyGAqP certification for farming of high-value species i.e. seabass, grouper and tilapia
- Standards to promote organised production of high quality, fully certified shrimps for the premium market
- Certification of seaweed farms with seaweed cultivation standards
- MeSTI certification for SME food manufacturing establishments

With regard to the Healthcare NKEA, 60 additional standards have been identified for adoption as MS in 2013 and mandatory device registration is being undertaken to ensure safety and quality of devices. The registration process is targeted to commence in October 2014.

Standards initiatives taken through the Business Services NKEA is expected to see the certification of the remaining 157 CNIIs in 2013. In addition, CSM will target an additional 5 products for compliance to Common Criteria standards up to Evaluation Assurance Level 2-4. The standards provide assurance of security functionality of an ICT product, evaluated and certified against ISO/IEC 15408 standards.

Liberalisation

In an effort to strengthen local capabilities and enhance capacity through greater foreign investment and technology, Malaysia has undertaken a policy of progressive liberalisation. The liberalisation process is co-ordinated, monitored and guided by the Malaysian Services Development Council (MSDC), chaired by the Minister of International Trade and Industry.

The Budget 2012 announced the autonomous liberalisation of 17 sub-sectors in stages in 2012. This was later increased to 18 with the inclusion of quantity surveying services.

To ensure effective liberalisation, the MSDC organised several roundtables to identify issues and challenges facing the services sector. Subsequently, the Malaysian Productivity Corporation (MPC) was tasked to map out the processes and procedures for business entry into these liberalised sectors in order to facilitate investment. These processes were then uploaded online to facilitate investors' understanding of the processes involved.

To further improve competitiveness in the services sector, a study on domestic regulations was undertaken in four sub-sectors: health travel, technical and vocational education, private higher education and renewable energy.

Achievements and Challenges In 2012

Liberalisation was completed for 15 of the 17 sub-sectors initially announced in Budget 2012. The 15 liberalised sub-sectors comprise:

- accounting/taxation services
- courier services
- dental specialists
- departmental and specialty stores
- incineration services
- legal services
- international schools
- technical and vocational schools
- technical and vocational schools for special needs
- skills training centres
- private higher education with university status
- private hospitals
- medical specialists
- telecommunications (Applications Services Providers)
- telecommunications (Network Services Providers/Network Facilities Providers)

Although liberalisation has largely remained on target, the process requires extensive preparation in some sub-sectors before it can be effected. For example, to facilitate the process, amendments had to be made to the Medical Act 1971 and the Legal Profession Act 1976. Additionally, liberalisation of the remaining three sub-sectors (architecture, engineering and quantity surveying services) was delayed due to the requirement to amend the Engineers Act 1967, the Architects Act 1967 and the Quantity Surveyors Act 1967.

Moving Forward

The architecture, engineering and quantity surveying services are expected to be ready for liberalisation in 2013, pending amendments to their respective legislation.

MPC will work with Ministries to undertake improvements to the processes and procedures for business entry, and these will be published on the websites of MITI and the respective Ministries. The MPC is also undertaking eight initiatives to improve regulatory processes including improving information accessibility, eliminating duplications in fire safety inspections, establishing administrative procedures e.g. guidelines, work process and information requirements for the setting up of technical and vocational schools, and improving the processes for the establishment of hospitals.

Following the study on domestic regulations to assess the impact of domestic regulations in health travel, technical and vocational education, private higher education and renewable energy, an action plan will be formulated to address regulatory concerns in the sectors and implementation will begin in 2013.

The Government will also consider the liberalisation of additional sub-sectors or increasing the depth of liberalisation within the existing sub-sectors. In this respect, the Government will continue engaging stakeholders to address their concerns to communicate the crucial role of liberalisation.

Sub-sectors that have been liberalised, meanwhile, will be tracked in terms of investment and jobs contribution through data collected by the Department of Statistics. This is to measure the outcome of the liberalisation.

The 15 Liberalised Services Sub-sectors



Accounting/
Taxation Services



Courier
Services



Dental
Specialists



Departmental
and Specialty
Stores



Incineration
Services



Legal
Services



International
Schools



Technical and
Vocational
Schools



Technical and
Vocational Schools
for Special Needs



Skills Training
Centres



Private Higher
Education with
University Status



Private
Hospitals



Medical
Specialists



Telecommunications
(Applications Services
Providers)



Telecommunications
(Network Services
Providers/Network
Facilities Providers)

Enabling Change

HUMAN CAPITAL DEVELOPMENT

ON THE GROUND WITH THE CIVIL SERVICE

For Mr Kua Abun, Secretary of the Policy Division at the Ministry of Human Resources (MoHR), the enforcement of the Minimum Wage Order on 1 January 2013 marked a major milestone following the first preparations for the new law which began in 2010.

"We actually started in this room," says Mr Kua, referring to his office at the MoHR in Putrajaya. "Here, we came up with the first paper [on the minimum wage policy], before moving on to write the draft law and passing it through Parliament," he says of the Order, which was gazetted on 1 July 2012.

Mr Kua, whose team is also currently working on amending the Industrial Relations Act 1967 and the Employment Act 1955 as part of initiatives under the Human Capital Development SRI to institute workplace transformation, describes a tireless effort in bringing the Minimum Wage Order to fruition. "My team and I have seldom taken leave in the last two years, even spending weekends here and holding weekly discussions with YB Datuk Seri Dr S. Subramaniam, the Minister of Human Resources, and YBhg Dato' Seri Zainal Rahim Seman, the Secretary General of the MoHR," says Mr Kua.

This level of commitment was especially required given the complexity of addressing Malaysia's minimum wage programme, which included tripartite discussions with parties include employers, employees, and members of the legal fraternity.

Preparations for the Minimum Wage Order also involved groundwork such as holding seminars, discussions, and dialogues with affected parties aimed at gaining feedback from the public on how the new law could be implemented.

The MoHR had also formed a technical committee and worked with the World Bank to evaluate the appropriate minimum wage level for Malaysia, in a pro-active step preceding the establishment of the National Wages Consultative Council and aimed at assessing the economic benefits of implementing the new law.

"It was very difficult to come to a consensus [on the new law], but we managed to achieve that, through the leadership of the Minister and the Secretary General of the MoHR. I am particularly satisfied that we have followed the milestones as planned and first presented to PEMANDU in 2010," he says, adding that the efforts undertaken to implement the Minimum Wage Order has embodied the very spirit of 'People First, Performance Now', forming a crucial element in taking Malaysia to high-income status.

“

It was very difficult to come to a consensus [on the new law], but we managed to achieve that, through the leadership of the Minister and the Secretary General of the MoHR. I am particularly satisfied that we have followed the milestones as planned and first presented to PEMANDU in 2010

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Mr Kua Abun,
Secretary of the Policy Division,
Ministry of Human Resources





Public Finance Reform



PUBLIC FINANCE REFORM

The Public Finance Reform SRI is aimed at strengthening the Government's finances to ensure stability and sustainability of public funds. Through this SRI, the Government is targeting a Federal Government budget deficit of three per cent by 2015 and near budget neutral by 2020. This is in line with objectives identified by the National Economic Advisory Council (NEAC) in the New Economic Model (NEM).

The list of initiatives under the Public Finance Reform SRI:

A.	Improve Tax Compliance and Administration
	<ul style="list-style-type: none"> • Widen field audit and investigation coverage • Widening the tax base • Improving efficiency in tax submission and tax collection • Revise depreciation rate of gazetted value of imported used cars (downwards by 10%) • Audit-based control on exporters and importers of liquor and cigarettes in duty-free islands and Free Commercial Zones • Enhanced Customs' enforcement/audit
B.	Rationalisation of Corporate Tax Incentives
	<ul style="list-style-type: none"> • "Step-down" (from full to partial) exemption for shipping income • Review incentives in Promotion of Investments Act 1986 • Review Single Deduction, Further Deduction, Double Deduction • "Step-down" of reinvestment allowances

(more on next page)



Dato' Seri Ahmad Husni Mohamad Hanadzlah Second Finance Minister, Malaysia

The Public Finance Reform SRI spearheaded by the Ministry of Finance and mainly carried out by the agencies namely the Inland Revenue Board of Malaysia, the Royal Malaysian Customs' Department and the Accountant General's Department has produced encouraging results. The implemented initiatives have enabled the government to secure higher revenue collection in 2012 and helped us to better manage our fiscal space with healthy economic growth.

In line with the objective of strengthening public finance and good GDP growth forecasted for 2013, I am confident that the work carried out by the Ministry of Finance and related agencies as well as the SRI initiatives will continue to contribute towards reining in the fiscal deficit to four per cent. Our long term targets remained the same, which is to achieve a fiscal deficit of about three per cent by 2015 and a near balanced budget by 2020.

(continued from previous page)

C.	Expenditure Control
	<ul style="list-style-type: none"> • Increase cess for rubber replanting • Cost effective funding mechanism (for public funded universities) • Optimise asset utilisation (for public funded universities) • Reduce Government travelling expenses by 15%
D.	Transparent Procurement
	<ul style="list-style-type: none"> • Widening E-bidding scope - reducing threshold value from RM200,000 to RM50,000 for the procurement of goods and services • Enforce procurement plan • Eliminate incompetent suppliers/ service providers • Capacity building (Certified training course for procurement officers) • Value Management (VM)
E.	Other Initiatives
	<ul style="list-style-type: none"> • Broad-based Tax (GST) • Accrual Accounting

Exhibit 13.4: List of Initiatives Proposed by the SRI Public Finance Reform Lab

To ensure the best outcome and impact on the country, this list of initiatives will be reviewed and revised periodically in tandem with the prevailing economic environment.

2012 Key Performance Indicators

Public Finance Reform SRI		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
1	Enhancement of tax administration and compliance - Direct Tax (Inland Revenue Board of Malaysia) (RM mil)	1460	1,795	122.95	●	100	●	1	●
2	Enhancement of tax administration and compliance - Indirect Tax (Royal Malaysian Customs Department) (RM mil)	166	244.72	147.42	●	100	●	1	●
3	Implementation of Accrual Accounting	Completion of initiatives planned for year 2012	64.2% of initiatives planned, completed in year 2012	64.2	●	64	●	0.5	●
				112%		88%		83%	

Exhibit 13.5

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score#2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

Improving Tax Compliance and Administration

Inland Revenue Board of Malaysia

The Inland Revenue Board of Malaysia (IRBM), managed to collect additional revenue of RM1.79 billion by working on three focus areas under the Improving Tax Compliance and Administration initiative in 2012. The actual impact of the initiative is larger than the tax collection.

Due to the Public Finance Reform initiative, not only has the additional staff recruited resulted in more audit and greater tax collection but taxpayers are also more compliant. This can be seen in the huge increase in the amount of direct tax revenue collected in 2012, estimated to be at RM116.825 billion as compared with the actual collection in 2011 of RM102.242 billion.

The initiatives implemented by IRBM are:

Widening field audit and investigation coverage	<ul style="list-style-type: none">• More field audit cases were performed resulting from:<ul style="list-style-type: none">- Filling vacant posts in IRBM- Employing more contract audit officers- Redeploying staff from desk audit to field audit <p>This generated a positive impact and strengthened awareness among the public and taxpayers on tax compliance</p> <ul style="list-style-type: none">• Mentoring programmes created more capable auditors in dealing with transfer pricing and specialised industries, specifically banking• Audit coverage was widened with the introduction of focus audit for the corporate sector in year 2012
Widening the tax base	<ul style="list-style-type: none">• Based on data acquired from the Companies Commission of Malaysia, a matching process was conducted against the IRBM database via the newly developed Case Management System. From this exercise, IRBM has identified approximately 70,000 companies as potential taxpayers. IRBM is in the midst of refining the list to weed out dormant companies• IRBM also conducts fieldwork to increase tax base through an on-ground business survey exercise
Improving efficiency in tax submission and collection	<ul style="list-style-type: none">• Increasing the number of banks equipped with tax payment facilities• The introduction of mobile filing (m-filing) created another avenue for taxpayers to submit their tax returns, thus increasing ease of tax compliance• IRBM has implemented the "auto-fill" of income into the e-filing form for all salaried workers, based on the information acquired from employers to facilitate tax filing• Auto reminders and phone calls to taxpayers with a large amount of outstanding tax also enhanced tax collection compliance

Exhibit 13.6

Royal Malaysian Customs Department

The Royal Malaysian Customs Department (RMCD) has been tasked with implementing the following initiatives:

1. Audit-based control on exporters and importers of liquor and cigarettes in duty-free islands and Free Commercial Zones
2. Enhanced Customs enforcement/audit

While legislative issues delayed the implementation of the first initiative, the implementation of the second initiative has resulted in an additional tax collection of RM244.72 million which is 47 per cent higher than the targeted RM166 million for 2012.

The enhanced enforcement initiative consists of:

Informing businesses of new audit requirements for:	<ul style="list-style-type: none"> • Special audit (joint operation) • Periodic audit
Increasing audit coverage on registered licensees and importers	<ul style="list-style-type: none"> • Reviewing audit targets • Enhancing competency of audit officers through capacity building
Improving audit mechanism	<ul style="list-style-type: none"> • Increasing the number of Computer Assisted Audit Techniques (CAAT) software licenses • Revising standard auditing procedures • Issuing internal guidelines on auditing • Enhancing e-Audit for audit report and risk assessment • Enhancing risk management system • Developing a networked system for information sharing • Enhancing tax compliance • Developing a systematic and efficient debt management system

Exhibit 13.7

Transparent Procurement

Since the Widening E-bidding initiative was implemented in April 2011, the Government has achieved total cost savings of RM26.01 million as at 31 December 2012. This represented 86.7 per cent of the RM30 million in savings targeted for 2012. The total value of e-Bidding completed in 2012 is RM150.88 million. This was implemented by reducing the e-bidding threshold for procurement of goods and services from RM200,000 to RM50,000.

E-bidding is a more transparent procurement method involving online bidding among qualified companies for:

- Generic goods with a standard set of specifications which do not require technical evaluation
- Goods and services which are managed under the panel system
- Generic types of services with a common set of scope and specifications

As part of an ongoing process at the Ministry of Finance (MoF), a capacity building programme for procurement officers is currently being developed with collaboration of the National Institute of Public Administration (INTAN)/ Public Service Department (JPA), Department of Works (JKR)/Ministry of Works (KKR) and other core Ministries. The training programmes will cover all aspects of Government procurement to ensure that officers are equipped with the necessary knowledge and skills related to procurement of goods and services.

In line with measures to promote transparent procurement, MoF will monitor procurement plans by Government agencies. However, a decision to incorporate procurement planning and value management for operating expenditure into the programme led to a delay in the implementation of this initiative, originally scheduled in 2012.

Broad-based Tax

The Goods and Services Tax (GST), a broad-based consumption tax is a taxation system will be replacing the current sales tax and service tax, which are set at 10 per cent and six per cent respectively. Broad-based tax enables the Government to plug loopholes in the current taxation system, especially on leakages through tax evasion as it will be levied on "value-added activities" along the delivery chain. However, most basic products and services such as rice, raw meat, fresh fish, vegetables, domestic public transportation and healthcare services will be tax exempt or zero-rated. The estimated additional revenue from implementing the GST in its first two years is between RM0-8 billion, depending on the proposed implementation rate of four to five per cent. Revenue neutral is expected if GST is set at four per cent.

The Government will continue engaging with the public sector, business community and *rakyat* to ensure the GST initiative will be accepted and implemented smoothly. In 2012, 73 awareness and training programmes were conducted involving 7,491 participants. These programmes provided important feedback on the concerns and issues raised by the business community and *rakyat* on GST. All concerns and issues raised will be taken into consideration by the Government and will be included in the revised GST bill. The new bill is expected to plug in the gaps found in the previous bill.

Target Group	No. of Programmes	No. of participants
Government	26	2,739
Industry	43	4,428
Consumers	4	324
Total	73	7,491

Exhibit: 13.8 GST Training and Awareness Programme conducted in 2012

Accrual Accounting

Based on recommendation from the NEM, the Government is implementing a new accounting policy, where the current accounting system will be revamped from cash to accrual basis.

In February 2012, the Accrual Accounting Steering Committee approved new accrual-based accounting policies drafted for the development of new accrual-based accounting system scheduled for implementation in 2015. These policies will enable the Government to produce a more detailed account as well as to enhance its transparency for better fiscal planning and execution.

The new policies have also been endorsed by the Government Accounting Standards Advisory Committee (GASAC), and the general provisions, policies on the recognition, measurement and disclosure of Revenues, Expenses, Assets, Liabilities and Net Asset/Equity have also been included into the new policies.

To date, nine Malaysia Public Sector Accounting Standards (MPSASs), which are based on International Public Sector Accounting Standards, have been drafted and endorsed by GASAC and so far, two MPSASs have been approved by the Accrual Accounting Steering Committee.

To prepare and educate officers on the standards and policies required for accrual accounting, comprehensive capacity building programmes have been developed for all staff in Ministries.

During the year, current business processes of all modules in the Government Financial Management and Accounting System (GFMAS) were also reviewed and new business requirements were identified.

Moving Forward

Towards the effort of reviewing incentives in Promotion of Investments Act 1986, the Ministry of International Trade and Industry, MoF, the Malaysian Investment Development Authority (MIDA), Attorney General's Chambers, and IRBM are reviewing the variations as well as the conditions and criteria for incentives under the Act. Amendments to the Act are targeted to be tabled to Parliament in the 2Q2013. Its tabling was delayed after the amendments were reassessed to take into account feedback from public and private sector stakeholders.

Under the Transparent Procurement initiative, MoF will ensure that the procurement plan initiative is implemented by Government agencies in 2013. The capacity training programme for procurement officers is expected to start in 3Q2013. As mentioned earlier, this programme will include the element of "Value Management for Operating Expenditure Procurement" and "Procurement Plan" in its syllabus. This is to enable the Government to further enhance its expenditure control programme.

Moving forward, initiatives to improve tax administration and compliance will focus on increasing the tax base as well as enhancing audit and enforcement. This is expected to generate an additional RM1.8 billion in revenue in 2013.

Through the same initiative, RMCD remains confident of overcoming delays in implementing the initiative regarding audit-based control on exporters and importers of liquor and cigarettes in duty-free islands and Free Commercial Zones.

Following progress in the accrual accounting system in 2012, design and development of the system is expected to start in 2013.

The graphic features a large, stylized brown silhouette of a person's head and shoulders. Inside the head area, there are several icons: a circular inset in the top left shows three blue figures (a police officer, a doctor, and a firefighter); the center of the head contains a police officer's cap, a Wi-Fi symbol, and a car; the bottom of the head shows a group of six people in business attire, with a magnifying glass icon positioned over them on the right side.

Public Service Delivery

PUBLIC SERVICE DELIVERY

The Public Service Delivery (PSD) SRI has two objectives: First, to accelerate the Government's efforts in becoming more efficient and facilitative in both business and public-related services; second, to transform the country's 1.3 million civil servants into a motivated, high-performing workforce. Efforts are ongoing to ensure continuous improvement of governance, promote efficiency and reduce rent-seeking behaviour.

Initiatives under Public Service Delivery SRI:

- **Business Process Reengineering (BPR)** to expedite business licensing processes
- **Business Licensing Electronic Support System (BLESS)**
 - Automating the newly revised process upon completion of BPR
- **Single Sign-On System** to enable access into all government agencies' online services through myGovernment Portal
- **Continuous performance monitoring of civil service**
 - Real-time performance monitoring system
 - Rating of Government counter service by public – via SMS or on-site touch screen rating system
- **Enhancing the role of Public Service Commission:**
 - Established a Joint Committee between Public Service Department and all Public Service Commissions to institute platform for human resources planning and policy-making
 - Established a Search Committee to identify HR specialist to become commission members to enable better selection of future civil servants
- Institutionalise the **portability characteristics of Government pension scheme** to encourage employment mobility of civil servants, between the private and public sector



Dato' Sri Dr Ali bin Hamsa
Chief Secretary to the Government

The Public Service Delivery Strategic Reform Initiative (SRI) is a programme of transformation designed to streamline the Government and create a high-performing civil service. This step forward is a vital component of the overall ETP plan to create a high-income nation by 2020 and a more globally competitive economy.

This SRI recorded a number of achievements in 2012, ranging from amending existing laws to consolidating licenses, which have resulted in streamlined processes and enhanced results. As a result, Malaysia has become an easier country to do business, as recognised by the World Bank, which has raised Malaysia's rank in the category of "Ease of Doing Business" to 12th in the world. I am confident that we can further improve on these results in the coming year.

2012 Key Performance Indicators

Public Service Delivery SRI		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
1	Percentage of implementation of BPR recommendations (To be process) by all Ministries	100 per cent by June 2012 (based on outstanding activities for 2012)	87 per cent 9 licenses abolished. Abolishment of 7 licenses was delay. Implementation of 115 licenses were delay. 6 licenses will not be incorporated into BLESS due to late implementation	87	●	87	●	0.5	●
2	Percentage of implementation of real-time performance monitoring in pilot agencies	100 per cent for 5 pilot agencies by December 2012	100 per cent completion for 5 pilot agencies by December 2012	100	●	100	●	1.0	●
	Percentage of implementation of feedback counter rating system for Police Station (KL, Penang and Johor)	100 per cent by December 2012	100 per cent SMS rating system was launched on 29 December 2012	100	●	100	●	1.0	●
	Average rating received by the service (1=Very satisfied, 4=Very Unsatisfied)	90 per cent rating at least at satisfied and above	99.8 per cent cumulative data (January – December)	111	●	100	●	1.0	●
3	Percentage of progress of Single Sign On project for 30 agencies	50 per cent complete development and ready to be used for 10 agencies	25 per cent Single Online Portal development is at tender award stage	25	●	25	●	0.0	●
4	Percentage of completion of BLESS implementation of Phase II and III	100 per cent completion of release 4 to 7 by December 2012	90.5 per cent release 4: 100 per cent release 5: 92 per cent release 6: 94 per cent release	91	●	91	●	0.5	●
6	Pilot in DPM's Cabinet Committee	100 per cent by June 2012	100 per cent have discussed with DPM office and so far all <i>Jawatankuasa Kabinet</i> who wants to hold a meeting will be using the PSM format. As such, after filtering, no meetings were held except for newly formed <i>Jawatankuasa Kabinet</i> on <i>Kos Sara Hidup SSL</i>	100	●	100	●	1.0	●
	Pilot in other Government Ministries /Agencies	Additional 2 Ministries or Agencies	100 per cent MOF and ICU have implemented PSM approach in their meeting	100	●	100	●	1.0	●
				89%		86%		71%	

Exhibit 13.9

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score#2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

Business Process Reengineering (BPR)

In its effort to improve the government's efficiency and facilitative role, the Business Process Reengineering (BPR) initiative aims to accelerate business licensing processes. Each business licensing processes will undergo the BPR initiative to reduce redundancies and overlaps, while adopting a clear governance structure to ensure execution and compliance.

Based on an intensive BPR clinic held in 2012, the number of licenses required to do business in Malaysia is expected to be reduced from 788 to 525 by 2015. The number of licenses may be further reduced following the completion of BPR Phase II which is currently ongoing. BPR Phase II looks at the status of 184 other licenses. Once the newly revised license processes are put in place, they will be incorporated into an online system via the Business Licenses Electronic Support System (BLESS).

Based on the BPR implemented so far, 548 licenses will be consolidated into 323 licenses by 2015, with the majority completed in 2012. Meanwhile, out of 28 licenses identified for abolishment, nine were successfully abolished in 2012.

No.	License	Ministry
1	Approval of Conversion of Land for Oil Station Construction (PDA6)	KPDNKK
2	Charter Busses License	SPAD, JPM
3	Cocoa Processing License	MPIC
4	Vegetable Export Permit	MOA
5	Grade Certification of Fruits	MOA
6	Supplier Registration	KeTTHA
7	Sweetener Without Substance License	MOH
8	Seasonings Import Approval	MOH
9	Registration of Public Work Contractor and Electric	PKK, KKR

Exhibit 13.10: Abolished Licenses

Type of changes	No. of licenses
Accelerating time taken for approval	265
Establishing/Enhancing client charter	252
Enhancing the ICT system	251
Enhancing the Application Forms	146
Reducing required supporting documents	99
Delegation of approval to other levels	93
Revising of Charge/Mode of Payment	55
Extending Validity Period	42
Compositing selected licenses	30
Reducing required reference to agencies	22

Exhibit 13.11: Expected outcomes when the revised licenses are implemented

Business Licensing Electronic Support System (BLESS)

Following completion of the BPR initiative, the newly revised business licenses applications and approval processes will be automated under the Business Licensing Electronic Support System (BLESS) to further improve ease of doing business in Malaysia.

Single Sign-On (SSO) System

For further efficiency and integration within Government's processes, a Single Sign-On (SSO) system will be put in place to enable a secured single access identity gateway for users to access into all Government agencies' online services through myGovernment Portal. The tender for the SSO System has been awarded and will be implemented with 20 Government agencies by 2013.

Continuous Performance Monitoring of Civil Service

Real-time Performance Monitoring System

The real-time performance monitoring system focuses on rating civil service performance and evaluating efficiency of the delivery system at an individual level by his or her internal stakeholders via an online system. This allows the management to respond faster towards reports of errant officers and execute immediate remedial actions as well as identify well-performing officers.

The performance monitoring initiative was implemented in five ministries in 2012:

- Ministry of Domestic Trade, Cooperatives and Consumerism
- Ministry of Transport
- Ministry of Agriculture and Agro-based Industry
- Ministry of Tourism
- Ministry of Plantation Industries and Commodities - Malaysian Cocoa Board

Rating of Government Counter Service by Public

The counter service rating system allows customers to rate individual officers manning Government service counters via SMS or on-site touch screen rating system.

The system was initially piloted at the Selangor Police Station in 2011. Since then, the counter service rating system has been made available at all police stations nationwide. This was further expanded to other Government departments and agencies namely Kuala Lumpur City Hall (DBKL), Putrajaya Corporation, Labuan Corporation and selected National Registration Department and Immigration Department.

Enhancing Role of Public Service Commission

One of the key success factors in transforming the civil service workforce is to adopt more strategic human resource practices to replace current conventional practice. There are two initiatives to this end: The establishment of a Search Committee led by the Public Service Commission and the set-up of a Joint Committee, led by the Public Service Department.

Establishment of Search Committee

The Search Committee is responsible to assist the Government in the recruitment of human resource specialists into the Public Service Commissions to address the quality of civil service hired moving forward. The Government is cognisant that better public service delivery requires better talent recruitment, and the appointed specialist Service Commissioners is expected to institutionalise this enhancement into the Commission for future hire of public servants. In August 2012, an improved remuneration package was introduced to attract top-notch HR specialist to become Service Commissioners.

Establishment of Joint Committee between Public Service Department and all Public Service Commissions

The Joint Committee intends to institutionalise a single platform to deliberate on policy matters concerning human resource management and planning between the various Public Service Commissions and the Public Service Department. The Joint Committee is currently operationalised, where Joint Committee members regularly congregate to discuss human resources planning and policies across Government agencies and departments.

Portability of Government Pension Scheme

This initiative aims to address the strict limitation and unclear policy with regards to the Government pension scheme. At the moment, should the civil servants choose to take up employment in the private sector in between serving the public sector; there is no guarantee that their pension for their past service can be transferred upon their return. In order to encourage employment mobility of civil servants between the private and public sector, the portability of Government pension scheme needs to be institutionalised.

To this end, the Pension Act 1980 has been amended to allow civil servants' pension to be calculated based on the total number of years he or she has served, regardless of any amount of time taken in between to work in the private sector. The amendment presently awaits gazettment.

Challenges

Due to the highly inter-related nature of the initiatives within this SRI, it is imperative to ensure that the implementation processes are conducted according to schedule.

For example, the implementation of the newly revised licenses can only be done in stages as some require amendments of laws and regulations before they can be put into force. Others require significant online system upgrades to ensure that the newly revised licenses application is operational.

The delay in the implementation of newly revised licenses has subsequently hampered other initiatives, such as incorporating licenses into BLESS and the development of the real-time performance monitoring system. Additionally, a large part of the BPR initiative also requires a change in mindset in the execution of work and processes. This poses a unique challenge to motivate the civil servants to aspire for continuous improvement.

Moving Forward

The focus in 2013 is to ensure that all newly revised processes are implemented according to the timeline in order to avoid delaying other initiatives. The initiatives of this SRI are designed to function as a whole, and any delay could cause a delay in the entire process chain.

Meanwhile, work is ongoing for the SSO and real-time performance monitoring systems, and is expected to be completed by 2013. The amendments to the Pension Act 1980 will also be completed once the changes have been gazetted. In addition, new areas for improvement will be identified and addressed under the PSD SRI to ensure the Government machinery remains efficient as Malaysia moves forward in its aspiration of becoming a high-income nation.

Enabling Change

ELECTRICAL AND ELECTRONICS

ON THE GROUND WITH THE CIVIL SERVICE

As a major contributor to Malaysia's economy, the electrical and electronics (E&E) sector represents an area in which the country has traditionally enjoyed success. Although largely a private sector-led initiative, the Government has however played an important role in providing a conducive environment for E&E manufacturers in the country, acting as an enabler for the sector's growth.

"With regard to the Ministry of Science, Technology and Innovation (MOSTI), we primarily focus on providing support and high-impact funding, especially to the E&E sector, our role is to ensure that all relevant enablers are put in place, while trying to remove all hurdles and process delays.

"We also play a major role in helping the relevant agencies to collaborate with the private sector to ensure productive partnerships are established," says En Mohd Khairul Adib Abd Rahman, Under Secretary, Industry Division, MOSTI, of the civil service's role under the Electrical and Electronics NKEA.

The Government also provides crucial support to the E&E sector in terms of incentives designed to guide the sector's growth. These include incentives to develop talent in strategic areas such as Centres of Excellence in industrial design. "We do help to develop supply chains, especially for the LED and solar sector. We also help to streamline

various sources of Government funding into strategic areas," says En Mohd Khairul Adib.

Such efforts have helped realise returns in advancing the sector higher up the value chain. "With regard to the E&E NKEA, we have managed to achieve good investment through public-private partnerships. We have also adapted good technology, developed good innovation and local intellectual property rights that are niche, specialised, and high value-add, increasing Malaysia's competitive advantage," he says.

A crucial contribution by the public sector in further developing the country's E&E sector has also been in supporting the efforts of small- and medium-sized enterprises (SMEs) involved in the sector, many of which form the backbone of the Malaysian economy.

"The local vendor ecosystem, including suppliers and contract manufacturers, has grown. Through the initiatives under the E&E NKEA, we have developed the talent pool and built technology shared services, which would make it easier for innovative, local SMEs to succeed," says En Mohd Khairul Adib.

“

With regard to the E&E NKEA, we have managed to achieve good investment through public-private partnerships. We have also adapted good technology, developed good innovation and local intellectual property rights that are niche, specialised, and high value-add, increasing Malaysia's competitive advantage

”



En Mohd Khairul Adib
Under Secretary, Industry Division,
MOSTI



Narrowing Disparity



NARROWING DISPARITY

To address the inequality between the Bumiputera share of the economy in relation to its population and other groups, the Narrowing Disparity SRI aims to improve Bumiputera representation in market equity, high value-added occupations, management positions as well as jobs.

As of 2010, Bumiputera ownership of share capital (at par value) of limited companies remained at 23 per cent, still short of the 30 per cent target for corporate equity ownership set for the macro-level. This concern is further magnified by the fact that Bumiputera households make up 65 per cent of total households in Malaysia, and represent a higher proportion of the country's low-income households.

The Narrowing Disparities SRI follows on from recommendations from the New Economic Model as introduced by the National Economic Advisory Council (NEAC). These recommendations build on the work of previous policies such as the New Economic Policy, which emphasises on developing Bumiputera small- and medium-sized enterprises (SMEs) and accelerating the development of Bumiputera Corporate Champions.

The policy measures under this SRI propose that Bumiputera transformation programmes should be market-friendly and transparent, and be granted on the basis of need and merit. The Bumiputera SMEs that are products of these programmes should be self-sufficient and able to compete in a liberalised environment.

Initiatives under the Narrowing Disparity SRI have been spearheaded by Unit Peneraju Agenda Bumiputera (TERAJU), the lead co-ordinator in driving the Bumiputera Economic Transformation Programme by helping Bumiputera companies to grow and develop capacities, improve competitiveness, and reduce their reliance on the Government for procurement contracts. TERAJU has introduced the TeraS (High Performing Bumiputera Companies) Programme, geared towards increasing Bumiputera participation in the economy.

TERAJU also manages the Skim Jejak Jaya Bumiputera (SJJB), a Government initiative introduced in 2007 providing "last-mile" support to eligible Bumiputera companies for listing on Bursa Malaysia. The initiative will consequently allow for greater Bumiputera corporate equity.



Tan Sri Nor Mohamed Yakcop
Minister in the Prime Minister's Department,
Economic Planning Unit

Inclusiveness is essential in the grand scheme of our transformation programme. While the Government is continuously reducing the poverty rate in the country, it is imperative that the economic growth be shared equitably among the *rakyat* to ensure social cohesion. To this end, there is a challenge to ensure the development of Bumiputera is at par vis-a-vis other groups in the country.

The Narrowing Disparity Strategic Reform Initiative (SRI) has been tailored to promote the expansion and growth of Bumiputera small- and medium-sized enterprises (SMEs), to help these companies on a needs basis. From these initiatives, the contribution of Bumiputera SMEs to the country's gross domestic product is expected to grow to 20 per cent by 2020.

I am confident that Bumiputera entrepreneurs will find the Government's initiatives in this area to be helpful, and will leverage on them to grow their businesses to compete on the global stage.

2012 Key Performance Indicators

Narrowing Disparity SRI		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
1	Percentage of growth in overall revenues of the TeraS companies	12%	17%	141	●	100	●	1	●
	Number of TeraS companies venturing overseas	30	37	123	●	100	●	1	●
	Number of TeraS companies receiving financial assistance under the TeraS Fund	15	22	146	●	100	●	1	●
	Number of TeraS Fund partners	2	2	100	●	100	●	1	●
2	Number of companies in the TeraS program	300	300	100	●	100	●	1	●
	Number of potential Bumiputera Corporate Champions implementing Vendor Development Program	2	3	150	●	100	●	1	●
	Number of companies listed under the Skim Jejak Jaya Bumiputera program	2	1	50	●	50	●	0.5	●
3	Amount of TeraS Funds being raised from banks and non-banks (RM mil)	500	1,020	200	●	100	●	1	●
	Amount of Facilitation Funds approved (RM mil)	300	223.8	75	●	75	●	0.5	●
	Number of institutions participating under the equity financing program	2	2	100	●	100	●	1	●
	Number of funding programs	3	5	167	●	100	●	1	●
	Number of companies participating under the equity financing program	5	6	120	●	100	●	1	●
4	Number of projects funded and facilitated through the Economic Corridors and central region	Setting Baseline	45	-		-		-	
5	Number of mega projects carved out for Bumiputeras	1	1	100	●	100	●	1	●
				121%		94%		92%	

Exhibit 13.12

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score#2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

TeraS Programme

The High-Performing Bumiputera Companies or TeraS programme, launched in July 2011, aims to identify a total 1,100 high-performing Bumiputera companies with potential for growth, and to help them grow beyond the Malaysian market.

The programme employs SME Corp's SCORE rating system to assess companies applying for admission as TeraS companies. The SCORE rating acts as a diagnostic tool to evaluate companies' performance and capabilities, and is a standard requirement for admission into the programme.

TeraS has undertaken a number of initiatives following its establishment, including providing funds for Bumiputera companies and projects, such as through the RM2 billion Bumiputera Facilitation Fund, the RM1.02 billion TeraS Fund and marketing TeraS companies to the global stage.

In particular, the programme has helped identify greater opportunities for Bumiputera companies in the MY Rapid Transit Project (MRT), through facilitation by TERAJU and endorsed by *Majlis Tindakan Agenda Bumiputera* (Bumiputera Agenda Action Council). Through this initiative, 43 per cent of the MRT project was targeted for allocation to Bumiputera companies. This model is anchored by the six principles of the Bumiputera Economic Transformation plan, namely market-friendly, needs-based, merit-based, transparent, pro-growth and sustainable competitiveness.

TeraS has also encouraged collaboration between Bumiputera companies. Through this initiative, construction company Ahmad Zaki Resources Bhd (AZRB), which has been identified as a Bumiputera Corporate Champion, has agreed to develop a construction industry supply chain and offer supply contracts worth RM500 million to Bumiputera companies in two years. Additionally, four Bumiputera companies have been initially appointed under the ECE Technologies Sdn Bhd (ECE) Vendor Development Programme as an effort to develop and provide opportunities for these companies.

TeraS Success Story

Advance Pact Sdn Bhd, a company that provides comprehensive healthcare consultancy services in Malaysia, Asia-Pacific, East Asia and the Middle East, represents just one of many companies which have benefited from the TeraS programme.

Through a RM600 million agreement signed with Peninsular Medical Sdn Bhd, a wholly-owned subsidiary of Bumiputera Corporate Champion AZRB, Advance Pact will participate in the provision of hospital facilities management services to the 300-bed International Islamic University Malaysia Teaching Hospital in Kuantan, Pahang, for 21-and-a-half years.

The services to be provided to the teaching hospital encompass facility engineering maintenance, biomedical engineering maintenance, housekeeping and security services under a contract that will commence in 2015.

Achievements and Challenges

This SRI recorded a number of achievements in 2012, including the approval of 300 companies for TeraS status, and the award of 47 per cent of total MRT packages, valued at RM9.1 billion, to Bumiputera companies. This exceeds the initial target set for the allocation of MRT projects to Bumiputera companies.

In 2012, TERAJU also obtained approval from the *Majlis Tindakan Agenda Bumiputera* to extend the Working Capital Guarantee Scheme (WCGS) to 31 December 2013, marking the second extension of the scheme from its planned end in 2011. The scheme, initially only available for SMEs, is also now open to all TeraS companies.

To help extend the reach of its initiatives, TERAJU has also established a presence in all five Regional Economic Corridors through the TERAJU@KORIDOR programme. Some RM100 million from the Bumiputera Facilitation Fund has been allocated to each corridor for high impact Bumiputera projects.

In addition, TERAJU has lowered the threshold value for qualifying projects for the fund to RM5 million from RM20 million. To date, the fund has approved RM223.8 million in funding for 35 Bumiputera firms, with RM1.64 billion worth of projects. Of the companies approved for funding, 11 are TeraS companies.

On 6 July 2012, TERAJU, together with SME Bank, introduced the RM500 million TeraS Fund. The fund comprises an Islamic financing facility offering TeraS companies with easier access to funding at attractive rates. As of December 2012, the fund approved 29 applications for financing valued at RM202 million.

A second TeraS Fund was launched in collaboration with RHB Islamic Bank on 10 December 2012, comprising a RM520 million Islamic financing facility which offers TeraS companies access to financing facilities to expand their business, with an emphasis on funding property acquisitions.

Under the SJJB initiative, meanwhile, TERAJU has helped seven companies list on Bursa Malaysia. These companies are: Datasonic Group Bhd; Prestariang Bhd; Century Software Holdings Bhd; Cypark Resources Bhd; Malaysian Genomics Resource Centre Bhd; Handal Resources Bhd and Theta Edge Bhd.

The Narrowing Disparity SRI has also seen spillover effects from initiatives under the Government's Role in Business (GRiB) SRI. Under the GRiB SRI, the Government has identified the divestment of 33 companies in an exercise that is partly aimed at helping increase Bumiputera equity share. To date, Khazanah Nasional Bhd and Permodalan Nasional Bhd have identified a total of 10 companies to be divested to Bumiputera companies. Eight of these have officially been tendered for divestment.

While TeraS achieved much in 2012, various challenges were faced in the initial stages of the programme. With a large number of Bumiputera companies applying for the programme, SME Corp was required to deploy additional resources to assist applicants in meeting the requirements of its SCORE rating system.

At the same time, some Bumiputera companies expected to receive “green-lane” treatment upon admission into the TeraS programme. This too posed some initial problems to TERAJU and the Bumiputera support agencies involved as the tailor-made programme requires time to develop. However, this has been progressively overcome with the introduction of various key initiatives by TERAJU.

A further challenge has been a lack of emphasis on growing the capital base of TeraS companies, which is key in supporting their business growth through capacity expansion. In the past three years, the 300 Bumiputera TeraS companies have shown a revenue growth of approximately 17 per cent a year. As a result, many of the companies have utilised most of their assets, thereby requiring further capital expansion. Through the TeraS Funds established with SME Bank and RHB Islamic, TERAJU is now working on promoting asset acquisition amongst these companies.

TeraS companies will also need to focus on expanding their reach to new markets. Although the total revenue of the 300 Teras companies was in excess of RM12 billion in 2012, it is estimated that only five per cent draw their income from foreign operations.

Moving Forward

Due to the strong take-up of the two TeraS Funds, with almost half of the first fund utilised for working capital and asset acquisition, this SRI will continue focusing on providing deserving Bumiputera companies with access to financing to fund their future growth. Moving forward, future collaborations with other banks are in the pipeline to ensure continued support in the development of Bumiputera firms.

More successful Bumiputera companies will be encouraged to play an anchor role in supporting the business growth of other TeraS companies, while Vendor Development Programmes will be further nurtured to assist the TeraS companies in building scale.

The MRT project allocation model will also be pursued for other mega-projects going forward to enable Bumiputera companies to compete under the principles of the Bumiputera Economic Transformation.



TERAJU set to increase higher Bumiputera participation in the economy in Sarawak and Sabah through roadshows like JEJAK 2012

TeraS Success Story

Gading Kencana Sdn Bhd (GKSB), a TeraS company, provides solar technology-based products. Its main objective and mission is to preserve the environment whilst building a sustainable and profitable business in Energy Conservation and Renewable Energy by providing innovative solutions.

The company's main business activities consist of Engineering, Procurement and Construction (EPC) of solar photovoltaic (PV) systems, supply of electrical and electronics components mainly related to solar PV systems. GKSB has established itself as a player in the local renewable energy industry with an outstanding performance track record.

GKSB's focus on producing quality products has allowed it to obtain numerous certifications, including:

- **ISO 9001: 2008**
- **OHSAS 18001:2007 Solar company**
- **Certified and approved PV Service provider (APVSP) by Ministry of Energy, Green Technology and Water**
- **CIDB Grade G7, which is the highest grade**

They are also registered with the Energy Commission and Pusat Khidmat Kontraktor (PKK) under Class A and Class 1 respectively.

As testament to its success, the company has won numerous awards such as the Enterprise 50 Award, Best Contractor Award G6, Special Award for Innovation and Power Brand Award.



JEJAK 2012 received overwhelming response from Bumiputeras in all five Economic Corridors

Enabling Change

PALM OIL AND RUBBER

ON THE GROUND WITH THE CIVIL SERVICE

The palm oil and rubber industries are undergoing an important paradigm shift as the two areas strive to move higher up the value chain. Representing two industries in which Malaysia has traditionally been a market leader, the civil service therefore plays a valuable role in catalysing change in the industries.

"To ensure the success of the Rubber NKEA, the Malaysian Rubber Board (MRB) has established a Working Group Committee with the aim to provide a venue for all parties involved.

"By placing the rubber industry under special focus under the NKEA, the MRB has been mandated to implement and monitor all of the Rubber NKEA's four EPPs," explains YBhg Datuk Dr Salmiah Ahmad, Director General of the MRB.

As a custodian of Malaysia's rubber industry, MRB also monitors the progress of the Rubber NKEA's other implementing agencies, namely RISDA, LIGS, and JPS. Together with MRB, these agencies work towards achieving the NKEA's overarching goals for the industry, which include bolstering rubber prices, clustering the industries' 400,000 smallholders into larger groups, and encouraging them to adopt new technologies.

This transformation of the rubber industry has nonetheless met its share of challenges, notes Datuk Dr Salmiah.

These include limited funding to implement the Rubber EPPs at the start, and slow take-up of clustering and new technologies by the smallholders. "However, stakeholders are increasingly beginning to understand and accept the industry's transformation, with the proven soundness of this new strategy for the industry helping us to move forward in achieving our goals," says Datuk Dr Salmiah.

The palm oil industry is likewise taking a new approach in its operations, helmed by bodies such as the Malaysian Palm Oil Board (MPOB), which focuses on increasing the industry's upstream productivity and enhancing its downstream value-add to generate job opportunities and contribute towards GNI.

"Innovation is an important driver of economic prosperity. We strive to create and promote an ecosystem for innovation, intellectual property creation and protection," says YBhg Datuk Dr Choo Yuen May, Director General of the MPOB, who oversees the implementation of seven out of the eight EPPs under the Palm Oil NKEA.

MPOB, together with MPIC, has also successfully implemented the 'B5' palm biodiesel/petroleum diesel blend programme in the central region of Peninsular Malaysia, utilising 110,000 tonnes of palm oil a year. This has helped to reduce palm oil stocks and strengthen the palm oil price.

"However, these initiatives face some challenges, such as the relatively slow rate of acceptance of the Cantas™ motorised harvesting pole and insufficient planting materials in certain states.

"MPOB has addressed these issues and when necessary formed task forces to resolve them in the shortest time possible," she says.

The civil service therefore plays a crucial link between the Government and the palm oil industry, formulating necessary projects, developing action plans, monitoring progress, providing funds and incentives, and advising on policy directions.

"It also provides expertise and manpower. For example, MPOB Tunjuk Ajar dan Nasihat Sawit (TUNAS) officers assist independent smallholders in improving productivity and best management practices.

"MPOB has mobilised about 350 officers to conduct field visits to process and approve applications for incentives under the replanting and new planting schemes, to deliver seedlings, fertiliser and provide technical advice," says Datuk Dr Choo, who adds that the ETP has energised a competitive and innovative environment for the Malaysian palm oil industry.

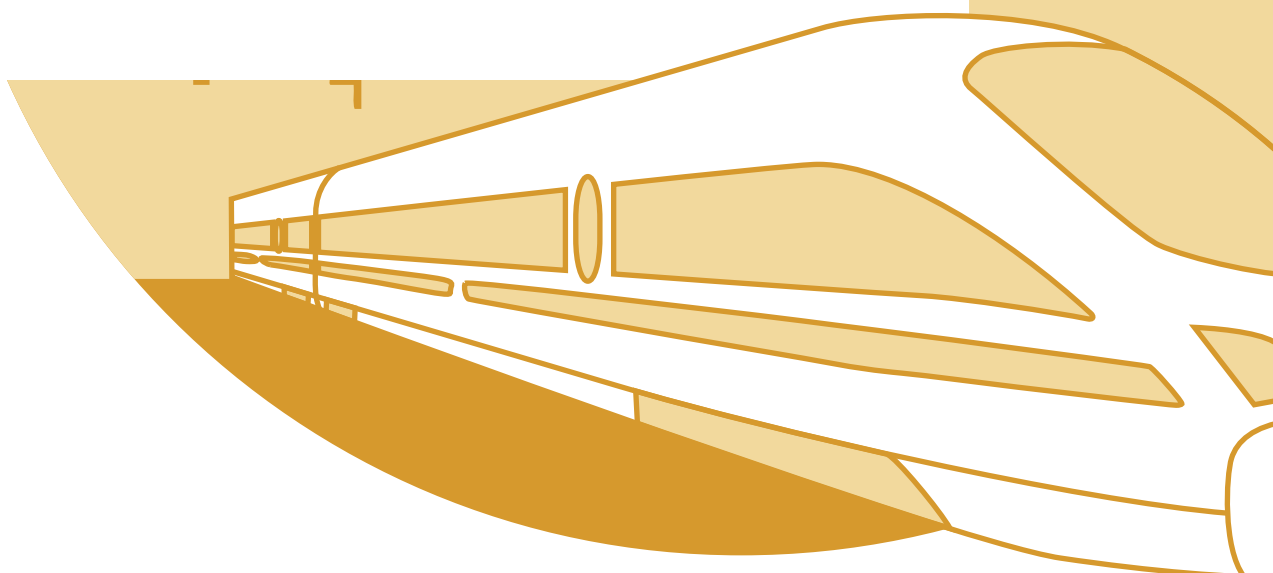
"With more concerted efforts by stakeholders, it is envisioned that the industry can achieve the targets set under the NKEA and contribute to transforming Malaysia to a high-income nation by 2020," she says.

YBhg Datuk Dr
Choo Yuen May,
Director General
of the MPOB





Reducing Government's Role in Business



REDUCING GOVERNMENT'S ROLE IN BUSINESS

This SRI aims to rationalise the Government's role in business to achieve three main goals: avoid crowding out the private sector, increase the liquidity of the capital markets and improve the Government's fiscal position.

The Government will take a three-pronged approach to attain these goals:

- Clearly establish the Government's role in business
- Develop a clear divestment plan
- Establish clear governance guidelines for Government and State-owned companies

Through this SRI, the Government is gradually looking to evolve its role in business from being an investor into becoming a facilitator, with the guidelines for Government participation in the private sector including:

- Co-investment with the private sector in projects that will boost gross national income such as regional corridor developments
- Being involved only in businesses directly related to issues of national security such as defence and food security

- Limiting investments to businesses that involve large capital investment and requires long gestation periods such as nano-technology, and which are deemed strategic businesses or those which are in the national interest
- National infrastructure projects such as renewable energy and public transport systems

In aid of the Government's divestment exercise through the sale of GLCs' ownership in various public-listed companies, the GLCs have identified appropriate strike-prices for sales to ensure maximum returns on Government investments. The divestment exercise is automatically triggered when the share price crosses the strike-price.

The SRI lab also determined a clear pathway for the divestment of Government or state-owned assets. Where they are owned by GLCs, they will be subject to a turnaround programme to ensure commercial viability before being divested or sold to the private sector.

Where assets are State or Ministry-owned, they will continue to be held by the Government should the assets be strategic to national interests or public service delivery. The potential proceeds to the Government from the divestment will be channelled to the Federal Government Divestment Account or a State account to service the country's fiscal deficit or to be reinvested in existing funds to facilitate economic growth.



YAB Dato' Sri Mohd Najib Tun Haji Abdul Razak
Prime Minister of Malaysia

The Reducing Government's Role in Business (GRiB) SRI emphasises on re-energising the role of the private sector in contributing to economic growth. This is to return the private sector to the driver's seat in Malaysia's journey towards high-income status. At the heart of this initiative is the privatisation of Government-linked Companies (GLCs) in areas where the private sector is operating effectively. In 2012, this SRI made significant strides in the Government divestment plan, moving beyond the initial list of 33 companies identified for sale. While market factors have hindered progress, the divestment plan will continue as and when required criteria are met, with the Government remaining committed to facilitating a competitive and open market for Malaysian companies.

2012 Key Performance Indicators

Reducing Government's Role in Business SRI		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
1	To establish Investment Performance Oversight Unit/ Monitoring Arm in Ministry (January 2012).	100%	100%	100	●	100	●	1	●
	To establish Divestment List - which strategic companies to keep and which non-strategic companies to divest (February 2012 - April 2012).	100%	100%	100	●	100	●	1	●
	To present Ministry's Divestment Plan to YAB Prime Minister (in May 2012).	100%	100%	100	●	100	●	1	●
2	Divestment of GLC companies: 33 companies	24	15	63	●	63	●	0.5	●
				91%		91%		88%	

Exhibit 13.13

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score#2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

Achievements and Challenges

Thirty-three companies under six Government-linked investment companies (GLICs) were identified in 2011 as ready for divestment either through a listing, pare-down or outright sale. Under the plan to rationalise the portfolio of GLCs, five have been identified for stake pare-downs, seven for public-listing and 21 for outright sale.

In 2011-2012, 24 companies were identified for the Government's divestment exercise. Eleven were divested in 2011, and four have been divested this year.

Some of the completed divestment activities (out of the 33 companies identified) include the Employees Provident Fund (EPF) paring down its stake in RHB Capital Bhd (RHBCap). As per Bank Negara Malaysia stipulations, the EPF was not allowed to hold more than 45 per cent of RHBCap's paid-up capital, and the provident fund manager has since pared down its stake to 40.7 per cent. EPF's reduced holding in RHB Cap was facilitated by its merger with OSK Holdings Bhd, in a RM1.95 billion deal creating the country's largest stockbroking firm and investment bank by assets.

As part of Felda's rationalisation programme and in line with this SRI's plan to streamline the Government's business holdings, Felda Global Ventures Bhd completed its initial public offering in June, with a market capitalisation worth RM16.6 billion. Felda's listing represented the world's third-largest listing in 2012 and the third largest-ever in Malaysia. The exercise saw the company combining both its upstream and downstream operations in logistics, fertiliser and palm oil.

The sale of a 97 per cent stake in Johan Ceramics Bhd by the Armed Forces Fund (*Lembaga Tabung Angkatan Tentera* or LTAT) to Boustead Holdings Bhd was another divestment under the 33 companies to be divested under this SRI. The sale of the ceramic tile-maker was completed in September.

In November, Ekuiti Nasional Bhd (Ekuinas) divested its 24 per cent stake in Tanjung Offshore Bhd and acquired an additional equity stake in offshore support vessel (OSV) company Kota Bayu Ekuiti Bhd bringing its total stake to 93.3 per cent, in its bid to fully focus on the OSV market. Tanjung Offshore was Ekuinas' second investment and represents the first divestment for Ekuinas since its inception in 2009.

Beyond this aspiration, some of the GLICs took additional initiative by divesting more companies than the agreed 33 chartered under the GRiB divestment programmes. These companies comprise a significant number of GLIC-held companies that were not included in the GRiB list but were nonetheless divested in 2012.

Amongst other key divestments were:

- Divestment programmes undertaken by Khazanah Nasional Bhd:
 - i. Listing of Integrated Healthcare Holdings Bhd (IHH) – Khazanah floated IHH on both the Malaysian and Singaporean exchanges in July, raising around RM6.3 billion from the exercise. Khazanah retained a 45.7 per cent stake in the healthcare company, whose public float was reportedly over-subscribed by more than 100 times.
 - ii. Sale of Proton Holdings Bhd – Khazanah undertook a second major divestment in 2012 by selling its entire 42.7 per cent stake in Proton to conglomerate DRB-Hicom Bhd. The total value of the sale came up to RM1.3 billion. The deal is expected to create greater synergies in the automotive sector as DRB-Hicom is already exposed to the motor segment. The divestment is a further example of Public-Private Partnerships, whereby strategic divestments are made with the aim of putting GLCs on a stronger and more competitive footing, while enhancing private sector participation and building the entrepreneurial capacity of Malaysian businesses in key economic sectors.
 - iii. STLR Sdn Bhd divestment – Khazanah announced in June its plan to divest the property investment company and has invited tenders for the purchase of STLR. The company is one of 10 identified for divestment divested by Khazanah and PNB to Bumiputera investors.
 - iv. Entire divestment of Time Engineering Bhd (TEB) – On December 2012, Khazanah announced TEB as the last of its five non-core assets to be hived off this year. Khazanah has proposed to divest its entire 45 per cent stake in TEB via a tender process. The divestment will involve a three-stage bidding process: A pre-qualification stage, an indicative bid stage and a binding bid stage. TEB was chosen for divestment as it could offer an opportunity for the acquiring party to tap into its expertise and participate in the potential extension of its concession with the Government, which was due to expire in 2014.
 - v. TNB divestment – Khazanah sold its 60 million shares worth RM406.8 million in TNB via a private placement exercise, reducing its stake in the utility to 34 per cent from 35.2 per cent previously.
- In August, MOF Inc sold its 40 per cent-owned Kedah Aquaculture Sdn Bhd to SKS Realty Sdn Bhd for RM45 million.
- In line with the Government's call to reduce GLIC holdings, state investment fund PNB aims to further devolve its ownership in mature companies to Bumiputera investors. To date, the investment fund has invited interested parties to tender for a number of its companies, including FEC Cables, U-Travelwide, U-Insurance and Inobel.

- Divestments by State Governments – Johor has been identified as a pilot state for this initiative, and PEMANDU and Johor Corporation (JCorp) have held preliminary discussions on streamlining JCorp's core businesses. This is also part of JCorp's rationalisation programme to focus on core businesses, namely: Palm oil plantations, healthcare, property and the food industry. To-date, the corporation has completed several corporate exercises, such as its privatisation of KFC Holdings (M) Bhd and QSR Brands Bhd, and Kulim (M) Bhd's exit of its retail food business. Kulim is also considering selling some of its hotel assets and reinvesting the money to drive earnings from its hospitality business.

Divestments under the scope of the GRiB SRI also covers rationalisation at the ministry level, with the Ministry-Level Divestment Plan established in 2012. Following concentrated efforts and rigorous discussions on this initiative, this SRI has identified nine companies under four ministries ready for divestment from 2012-2016.

The Ministry of Higher Education will amend guidelines to allow the rationalisation of public universities' involvement in business. This measure is aimed at, among others:

1. Ensuring the functions of the companies complement those of their universities' core-businesses
2. Implementing a standard reporting procedure for greater transparency
3. Limiting public universities' ownership of holding companies to two
4. Reviewing the membership of the boards of holdings companies for greater transparency and governance

In spite of positive developments in the GLIC divestment programme, factors such as companies not reaching their sale trigger price, low valuations and uncertain market conditions have hindered the sale of some of the companies under the plan.

The Government is also aware that these divestments must be completed at prices which are fair to shareholders. Nonetheless, the outlook remains positive for these divestments to continue once the market has sufficiently recovered.

Moving Forward

This SRI will continue to monitor the remaining 18 GLIC companies under the divestment programme. While challenges remain, the SRI is committed to achieving its targets under the programme, and is on track with the implementation of the ministry-level divestment plan. Additionally, State Governments are also expected to ramp up their divestments in the coming year.



Human Capital Development

HUMAN CAPITAL DEVELOPMENT

The Human Capital Development (HCD) SRI is a critical component of the Economic Transformation Programme (ETP) cutting across all NKEAs. A direct offshoot of the New Economic Model (NEM), the goal of this SRI is to enhance human capital capabilities and address human capital needs to support the execution of all 12 NKEAs and thus, contribute towards Malaysia's aspiration of achieving high-income nation status by 2020.

This SRI takes a two-pronged approach which addresses:

1. Workplace transformation
2. Workforce transformation

Workplace transformation represents elements recommended by the NEM essential to effective functioning of the workplace. Workforce transformation, meanwhile, focuses on initiatives which complement the Government's existing measures to enhance human capital. Measures to transform the workforce, therefore, stress on the need for comprehensive labour market data and upskilling and upgrading workers.

The initiatives and elements essential for workplace and workforce transformation are summarised in the following table:







NKRA and NKEA Education				SRI Human Capital	
Early Child Care & Pre-school	Primary School	Secondary School	TEVT Institutions, College & University		Workforce (Low to Highly Skilled)
Workplace Transformation			Workforce Transformation		
Modernise Labour Law	Labour Safety Net	Strengthen HR Management	Leverage Women's Talent	Labour Market Analysis	Upskilling & Reskilling
					
OBJECTIVES					
<ul style="list-style-type: none">Attract investors whilst protect workers' rightsConsolidate & streamline labour laws	<ul style="list-style-type: none">Protect workers during economic transition	<ul style="list-style-type: none">Upskill human resource capabilities to enhance business performance in SMEs	<ul style="list-style-type: none">Increase participation in labour market:<ul style="list-style-type: none">AttractRetainIncreaseIncrease women decision-making positions to 30%	<ul style="list-style-type: none">Provide comprehensive labour market data and analysisKey tool for national manpower planning	<ul style="list-style-type: none">Upskill to address skills and manpower of each NKEA sectors
INITIATIVES					
<p>Amendments to:</p> <ul style="list-style-type: none">Employment Act 1955Industrial Relations Act 1967Minimum Retirement Age	<ul style="list-style-type: none">Minimum wageUnemployment insurance	<ul style="list-style-type: none">Establish National Human Resource Centre (NHRC)Increase HR capabilities of SMEs	<ul style="list-style-type: none">Prepare potential pool of women for board levelUpskilling programmes for women	<ul style="list-style-type: none">Institute for Labour Market Analysis (ILMIA)Conduct sectoral talent demand and supply studies	<ul style="list-style-type: none">MyProCertNational Talent Enhancement ProgrammeMyUniAllianceTEVT Curriculum and Trainers' Programme

Exhibit 13.14



Datuk Seri Dr S. Subramaniam Minister of Human Resources

The Human Capital Development SRI recognises that the workforce represents an essential component in achieving economic growth. Initiatives undertaken through this SRI seek to cultivate Malaysia's human talent to create specialists in each sector of the economy, thus boosting labour productivity and ultimately contributing to higher incomes for the nation. In 2012, this SRI marked a major milestone in improving labour legislation to ensure effective worker protection while enhancing workers' productivity. The Government remains positive that the foundations laid through this SRI will foster skilled and competitive workers for the benefit of Malaysia's aspirations towards developed nation status by 2020.

2012 Key Performance Indicators

Human Capital Development SRI		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
1	Implementation of National Minimum Wage subject to recommendation by National Wages Consultative	Implementation of Minimum Wage by end of 2012	National Minimum Wage Order 2012 was gazetted on 16 July 2012 and MPGN Guidelines has been published on the MoHR website	100	●	100	●	1	●
	Establishment of a contributory Unemployment Insurance Scheme (UIS): (i) To complete final report on UIS. (ii) To complete interim report on UIS	Completion by December 2012	Interim report on UIS has been completed, achieving 50%. The additional 6% is due to the finalisation of the UIS model to be used for the completion of the first report	56	●	56	●	0.5	●
2	Employment Act 1957 (2nd Phase)	Engagement with Stakeholders by 4Q2012	All regional stakeholders engagement completed. Next step is to consolidate and evaluate all input and table to all stakeholders at a national level	100	●	100	●	1	●
	Minimum Retirement Age	Table Bill to Parliament for 1st Reading	Minimum Retirement Age has been approved by Dewan Negara on 17 July 2012. Date of the act coming to operation is 1st July 2013 (Gazetted on 26 Dec 2012)	100	●	100	●	1	●
	Industrial Relations Act 1967	Submission to Attorney General for review in 4Q2012	The draft has been amended and presented to NLAC in December 2012	93	●	93	●	0.5	●
3	In-depth labour market analysis	Four sectoral reports	Three sectoral reports completed. Fourth report has been reviewed and to be finalised once comments are incorporated	95	●	95	●	0.5	●
4	Tailored HR solutions to companies (users)	2,000	4,567	228	●	100	●	1	●
	HR Capability building programmes for SMEs (users)	5,000	7,301	146	●	100	●	1	●

(more on next page)

(continued from previous page)

Human Capital Development SRI		KPI (Quantitative)							
No.	KPI	Target (FY)	Actual (YTD)	Achievement					
				Method 1		Method 2		Method 3	
				%		%			
5	Provision of affordable and accessible childcare support (Number of centers)	800	1,099	137	●	100	●	1	●
	Number of child minders trained under <i>Jabatan Kebajikan Masyarakat</i> (JKM)	4,000	5,040	126	●	100	●	1	●
6	MyProCert Professional Certification for the Business Services and Communications, Content and Infrastructure NKEA	1,250	1,759	141	●	100	●	1	●
	NTEP Trainees for the Electrical and Electronics NKEA	650	512	79	●	85	●	0.5	●
	TEVT Curriculum for the Oil, Gas and Energy NKEA	TEVT Curriculum developed and ready for training delivery	Curriculum developed. Written instruction materials are being finalised	90	●	90	●	0.5	●
	Training for Oil and Gas, and Renewable Energy under the Oil, Gas and Energy NKEA	10 trainers, 100 trainees	10 trainers and 139 trainees trained (Solar PV)	136	●	100	●	1	●
	Tourism NKEA: Eco-Tourism	Policy, process and curriculum review approved	Final report was completed in December 2012 and will be submitted to the Ministry of Tourism in 2013	80	●	80	●	0.5	●
				105%		93%		80%	

Exhibit 13.15

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score#2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1

Modernising Labour Legislation

Championed by the Ministry of Human Resources (MoHR), this policy area focuses on transforming local laws in line with modern economies. This is to create a more globally competitive domestic economy and ensure continued economic growth.

Due to continued volatility in the external environment, the process of labour reform must remain dynamic and anchored on principles set in the NEM, namely of being inclusive and sustainable.

Amendments proposed thus focus on two objectives: i) the reduction of labour management cost to business and ii) ensuring effective worker protection.

In 2012, the MoHR focused on introducing two new Acts on the following:

- **Minimum Wage:** To increase the standard of living by establishing a minimum wage for all workers
- **Minimum Retirement Age:** To increase the minimum retirement age to 60 thereby increasing productivity and retaining a greater number of local knowledge workers

Existing Acts currently under internal review comprise:

- **Industrial Relations Act (IR Act) 1967:** To expedite unfair dismissal cases and trade disputes; ensure effective enforcement of Industrial Court awards; and balance business needs and employees' rights through conciliation
- **Employment Act (EA) 1955:** To modernise the legislation in line with emerging needs of local and foreign employers and employees of an industrialising nation; spur productivity and efficiency, raise income levels and protect employees to foster local, regional and global competitiveness

During the year, efforts to amend the IR Act 1967 and the EA 1955 focused on stakeholder engagement to ensure a balanced review of the amendments proposed.

With 17 proposed amendments to the IR Act 1967 and 70 to the EA 1955, some challenges have arisen in reaching a consensus on the changes. MoHR will however strive to achieve the desired transformation in labour laws to support the creation of a fair and conducive working environment for the Malaysian labour force.

Achievements and Challenges

The Minimum Wage Order was gazetted on 16 July, 2012 and was enforced on 1 January, 2013. The Minimum Wage Act set a minimum payment of RM900 for workers in Peninsular Malaysia and RM800 for workers in Sabah and Sarawak.

The guidelines on the implementation of the Order have been published on MoHR's website, while the National Wage and Consultative Council (NWCC) and the Labour Department have conducted nationwide roadshows to explain the Order to the public and other stakeholders.

The Minimum Retirement Age Act 2012 was gazetted on 16 August 2012, and will be enforced on 1 July 2013. Guidelines on the Act will be published on MoHR's website accordingly, with nationwide roadshows and stakeholder engagement to be held in 2013.

Focus on Upskilling and Upgrading the Workforce

To support the transformative journey of each NKEA, upgrading of the skills and competitiveness of the Malaysian workforce is required. Initiatives under this policy area will address all levels of the workforce over the short-, medium- and long-terms.

Short and medium-term interventions will require the collaboration of industry players, educational institutions and the Government to address all NKEAs, while long-term initiatives are aimed at developing sustainable, sector-led approaches to address skill needs of each NKEA. These measures will equip Malaysia with a sufficiently skilled workforce to realise the goal of a high-income economy by 2020.

Upskilling the Oil, Gas and Energy Sector

As a key contributor to the Malaysian economy, the Government has focused on moving up the Oil, Gas and Energy sector value chain towards solutions in renewable energy. In tandem with this, the HCD SRI has focused on the development of a skilled workforce in this sector, with a particular focus on the solar photovoltaics (PV) industry, which the Government has identified as a major contributor in renewable energy.

In line with the passing of the feed-in tariff (FiT) law in 2012 for renewable energy sources, the Government identified that the development of a skilled PV industry workforce is crucial for the solar PV industry's success. The need for greater human capital development in the renewable energy industry is also covered under Thrust 3 of the Renewable Energy Policy and Action Plan (REPAP), which aims to ensure sufficient local competency in renewable energy.

The Sustainable Energy Development Authority (SEDA) Malaysia has commissioned the German-based Renewables Academy (RENAC) to conduct a Train-the-Trainer (TTT) programme on the design and installation of grid-connected PV systems. The ten day training is accredited according to the Institute of Sustainable Power (ISPQ) standard which requires local trainers to meet a specified level of experience, technical and teaching skills.

RENAC also assessed existing training facilities in UiTM and the Selangor Human Resource Development Centre (SHRDC), and recommended the expansion of the two centres.

Other initiatives undertaken in 2012 include SEDA's three mini-hydropower plant industry engagement workshops held in Ipoh, Kuantan and Kota Kinabalu.



Rooftop practical training session conducted by SEDA

Achievements and Challenges

Under the Energy and Renewable Energy initiative, 10 of 11 trainees passed the solar PV TTT exam in 2012. They have, in turn, conducted training for 139 participants. Additionally, SEDA and JTM (*Jabatan Tenaga Manusia* or Manpower Department) are developing a curriculum for solar PV installations in homes and offices. The curriculum, which will be recognised by the Energy Commission, will enable training for qualified technicians and electricians at public skills training institutes.

SEDA has also organised a series of industry workshops to educate the industry players, federal and state agencies on mini hydro and biomass/biogas. These workshops were held in Ipoh, Kuantan, Putrajaya, Johor Baru and Kota Kinabalu.

HCD initiatives for Oil and Gas, meanwhile, saw the procurement of PETRONAS Occupational Skills Standard (POSS) from PETRONAS and the development of National Occupational Skills Standard (NOSS) for downstream technical skills, based on POSS and industry input. The curriculum delivery will be piloted at three public skills training institutes in the first quarter of 2013.

The National Council on Skills Development (*Majlis Pembangunan Kemahiran Kebangsaan* or MPKK) has approved NOSS, while JTM and MoHR have developed the Written Instruction Material (WIM) for training delivery.



TTT training session in progress



SEDA giving a briefing on the Solar PV Troubleshooting Learning System

National Talent Enhancement Programme (NTEP)

The National Talent Enhancement Programme (NTEP) was launched in June 2011 to accelerate the development of the skilled workforce in Malaysia. It is targeted at boosting the employability of engineering graduates as well as technical and vocational certificate holders. The 12-month attachment programme cuts across the NKEAs and non-NKEAs for the Corridors.

The programme places particular emphasis on supporting the skills requirements in each of Malaysia's Regional Economic Corridors. As such, the programme is implemented via nine different entities – Iskandar Regional Development Authority, East Coast Economic Region Development Council, Northern Corridor Implementation Authority, Sabah Economic Development and Investment Authority (SEDIA), Workforce Development Unit (Sarawak Chief Minister's Department), Akademi Teknologi Hijau (a Malacca state agency), Selangor Human Resource Development Centre, MIGHT-METEOR and Construction Industry Development Board Malaysia (CIDB).

Achievements and Challenges

NTEP concluded on 31 December 2012, and has signed on 512 trainees across the nine participating agencies.

Agency	Target No. of Trainees	On Board
SHRDC	100	101
ATHM	100	62
ECER	50	100
IRDA	100	64
SEDIA	50	36
NCIA	100	71
Sarawak	50	2
MIGHT-METEOR	100	44
CIDB	32	32
TOTAL	682	512

Exhibit 13.16: Breakdown of trainees and participating agencies in NTEP



Visiting NTEP trainees at the RENESAS Semi-Conductor plant in Banting by the PEMANDU and PTPK team in May 2012



Hands-on training on the company's advanced machinery

Testimony

"For me, the best thing is that I am given tasks and problems up to an engineer's level. I have gained knowledge not only in my current field (QA/QC), but also in problem-solving, manufacturing and assembling products, promoting teamwork with other employees, tolerance in communicating with staff from various levels and also discipline in performing duties and tasks," said Mr Izzudin, who is attached to RENESAS under this programme.

MSC Malaysia MyProCert Programme

The goal of this programme is to upskill the Malaysian workforce to international certification standards; targeting 7,500 participants in three years. Initially offering SAP certification, the programme has expanded after partnering with other certification partners to include more skill sets. Costs related to this programme can be claimed under the Human Resources Development Fund (HRDF).

The MyProCert Programme provides employees international professional certification at a very affordable rate. The affordable rates are achieved through the following means:

- PEMANDU and the Multimedia Development Corporation (MDeC) obtain bulk discounts from international certifying bodies
- When an individual undergoes the training and passes the certification, the Government will reward the students by providing a one-off successful completion incentive
- The net amount that students have to pay is much lower than the market rate



Launch of five new partners in April 2012, by Human Resource Minister, Datuk Seri Dr S. Subramaniam

Achievements and Challenges

In April 2012, the MyProCert programme added five certification partners to offer upskilling for more skill sets. The partners comprise: Huawei Technologies (M) Sdn Bhd, Oracle Corporation Malaysia Sdn Bhd, iTrain (M) Sdn Bhd, Scicom (Academy) Sdn Bhd and SnT Global Services Sdn Bhd. The skill sets include Huawei Certified Datacom Associate, Oracle Certified Professional Programmes, iOS Mobile Development, BTEC Level 4 Business Process Outsourcing (BPO) and International Association of Outsourcing Professional BPO programme.

In 3Q2012, another five partners joined the programme, comprising PMP, MyTriz, Autodesk, National Instruments and Embedded System Design. It is envisioned that Malaysian participants trained and certified in this programme will supply the talent needed for the development of ICT industry players and potential foreign investment.

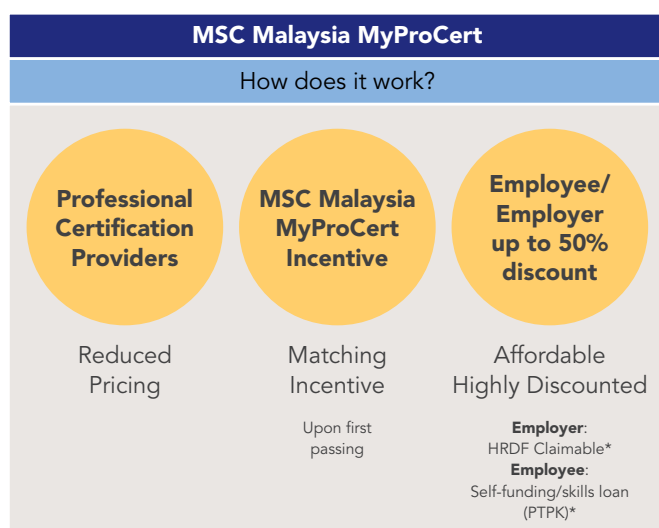


Exhibit 13.17: *Terms & Conditions apply

MSC Malaysia MyUniAlliance Programme

The MSC Malaysia MyUniAlliance Programme is a new initiative by the MDeC with support from PEMANDU. The goal is to develop graduates who are industry-ready and employable.

This programme enables global technology players to establish strategic alliances with public and private institutions of higher learning (IHL) by investing in curriculum development and Train the Trainer (TTT) programmes. This is to facilitate the transfer of technology and expertise.

Achievements and Challenges

The MyUniAlliance Programme has signed up four global technology partners since its commencement, namely SAP, Google Web Academy, Huawei, and iOS. In 2012, a total of 18 IHLs participated in the programme, with about 36 lecturers having completed TTT programmes. These lecturers have since trained 462 students.

Strengthening Human Resource (HR) Management for SMEs

Malaysia's small- and medium-sized enterprises (SMEs) play a critical role in supporting the country's efforts to move up the global supply value chain and become a high-income nation. Therefore, SMEs' contribution to the Malaysian economy must grow to at least 40 per cent of Gross Domestic Product (GDP), similar to the likes of New Zealand, Singapore, South Korea, Taiwan and the USA. The capabilities and performance of SMEs must also be improved.

Did you know?

SMEs account for 99 per cent of Malaysian businesses, producing 31 per cent of Malaysia's GDP and employing 60 per cent of the Malaysian workforce, primarily in services, manufacturing and agriculture sectors

The Government has also identified SMEs as a key enabler in developing, retaining and attracting employees. To fully capitalise on this role and to achieve the long-term goal of creating globally competitive SMEs, Malaysia's SMEs must transform their human resources management (HRM) processes and capabilities. This, in turn, requires the SMEs to institutionalise HRM, scale up their HR personnel capability and adopt HR best practices to create a conducive and productive workplace.

However, SMEs face several challenges in maintaining productivity and managing their workforce. These include:

- Micro SMEs perceiving HR as a cost rather than as an investment
- High staff turnover and recruitment issues, such as hiring the right employee

NHRC offers the following three levels of services across different methods of delivery			
LEVELS	Level 1	Level 2	Level 3
Description	Provide understanding mechanism related to the requirements of respective legislation	Provide basic consulting on correct applications and issues resolution	Provide outsourcing capabilities
Method of Delivery	ONLINE DELIVERY Refers to the information and advice available via NHRC portal www.nhrc.com.my	QUICK RESPONSE DELIVERY Refers to the advice, guidance or response available through HR Call Centre 1800-88-4800 (toll-free number)	ON or OFF SITE INTERVENTION Refers to the comprehensive consultation on instituting various HR programmes in the enterprise either by NHRC itself or appointed consultants via: <ol style="list-style-type: none"> 1. HR Consultancy 2. SME TNA Consultancy Scheme 3. TNA Training

Exhibit 13.18: NHRC's three levels of services

Following these concerns, the National Human Resource Centre (NHRC) under MoHR was established in February 2012 with a mandate to provide strategic HR solutions for SMEs. Among its policies is to provide incentives to firms to adopt specific HR practices consistent with international standards.

Following the launch of the NHRC, the centre also launched its Portal and Call Centre in 2012, with its tailored HR solutions adopted by 4,000 SMEs. The NHRC portal offers solutions covering issues related to recruitment through retirement via toolkits, templates and process flows simplified for SMEs. These solutions can also be modified according to the companies' needs. The NHRC serves as a helpdesk for queries on HR matters, such as employee relations. Other higher-value services offered are customised HR consultation content.

This policy area also witnessed the launch of HR capability-building programmes in 2012, which were provided to HRDF and non-HRDF registered employers.

Additionally, a total of 7,000 were trained on HRM. Further achievements include the launch of the Quick Reference on HRM for SMEs in English, Bahasa Malaysia and Mandarin, and the approval of the Employee Handbook by the NHRC Advisory Committee.

During the year, 700 SMEs joined HR Clubs and participated in peer mentoring sessions.



Seminar on HRM for SME business owners in Petaling Jaya in 2012

Leveraging Women Talent to Increase Productivity

The 10th Malaysian Plan has outlined several targets related to women in the workforce, such as increasing the female labour participation rate to 55 per cent, which is expected to increase Malaysia's GDP by two per cent annually. In addition, the Government is aiming to have 30 per cent women on the boards of public-listed companies (PLCs) by 2016.

Currently, women in Malaysia have been taking career breaks or opting out of the workforce, especially after tertiary education and during their childbearing years. According to the World Bank Report, as at 2011, the female labour force participation rate in Malaysia was 47.9 per cent, which was below average of other East Asia and Pacific countries.

In order to attract and retain more women in the workplace, various initiatives have been implemented across ministries and agencies. These include strengthening the platform for upskilling and increasing entrepreneurship opportunities for low-income earners. The Government also advocates the establishment of a holistic structural social support system to contribute to work-life balance, offering childcare and eldercare solutions, among others.

More jobs aligned to women's needs should be offered to encourage the participation of women in the workforce, such as through home-based, part-time or flexible work arrangements.

Did you know?

According to Malaysia Higher Education Statistics (2011), 60 per cent of students at public universities are women. In public universities, women dominate fields of study such as education, healthcare and welfare, social sciences, and business and law.

The NEM also highlighted that there has been a considerable increase in the percentage of women decision-makers from seven per cent in 1990 to 30.5 per cent in 2010 in the public sector whereas in the private sector, the percentage has been around six to 10 per cent.

The plan is to have over 600,000 women in the workforce by 2015. The increasing number of employed women is expected to reduce the number of poor households in the bottom 40 per cent.

Achievements and Challenges

30% Women at Board Level	Women Directors Programme by National Institute of Empowerment of Women (NIEW) <ul style="list-style-type: none"> 220 women trained to become directors in PLCs Online registry (www.wcdregistry.com): In 2012, 640 women have signed up on the registry for directorships. Companies can use the registry to source candidates for board positions
Increasing Women workforce participation rate from 47% to 55%	Establishment of Childcare Centres by Welfare Department, MoWFCD <ul style="list-style-type: none"> 1,030 childcare centres registered 5,411 child-minders trained Budget 2013 incentives: <ul style="list-style-type: none"> Launching grants and fee assistance for private childcare centres Five-year tax exemption and a 10 per cent industry allowance for private childcare centre Double tax deduction for employers who provide subsidies to employees on childcare
	Tax incentive <p>Double tax deduction on training expenditure incurred by companies in re-employing women professionals on a career break, beginning 2013 (Implemented by TalentCorp)</p>
	Launch of Talent Wanita Portal (Collaboration between Talent Corp & MoWFCD) <ul style="list-style-type: none"> Women microsite: A platform to connect companies with suitable job opportunities for women on a career break. This can be accessed at www.talentwanita.my Career opportunities: Platform for companies with flexible work arrangements (FWA) and support facilities to post suitable jobs for women on career break; and for women to search for jobs that offer FWA and companies that provide support facilities Treasure trove: Sharing of articles and stories about women at work, particularly in terms of how they manage their personal commitments and work responsibilities; and companies that have implemented flexible work arrangements or support facilities in-house, which enable them to attract and retain women in the workforce

Exhibit 13.19: Achievement and challenges in leveraging women talent to increase productivity

Undertake Labour Market Forecast and Survey Programmes

The NEM has highlighted Malaysia's lack of a nationally endorsed, single source of comprehensive data on the labour market. This impacts the country's efforts to formulate effective labour policies, which can contribute to achieving developed nation status.

In a bid to address this concern and following proposals from the NEM, the Institute of Labour Market Information and Analysis (ILMIA) was set up in January 2012. The role of the institute is to forecast workforce demands in industry sub-sectors that will then support policy formulation and development.

The goal of this initiative is to build a centralised and interactive database as a national manpower planning tool. This database is expected to fill existing information gaps in Malaysia's labour market. This will in turn provide an accurate measure of workforce supply and demand for each industrial sub-sector.

Institute of Labour Market Information and Analysis

Formerly the National Institute of Human Resources, ILMIA is being enhanced and will become a center of excellence for the analysis of labour market trends and emerging human capital issues. This will enable better human capital planning, and in formulating effective labour policies.

The institute will consolidate talent supply and demand data from various ministries and industries to produce integrated labour market data. This will provide a more holistic view of the labour market, enabling better policy planning by the Government as well as human resource planning by the private sector.

The goal is for ILMIA to publish data consistent with International Labour Organization (ILO) standards. This data will then be utilised in the Government's labour policy and regulatory reforms.

Achievements and Challenges

Following its launch in 2012, ILMIA completed labour market analyses on manpower requirements for the Business Services, Tourism and Healthcare NKEAs. It also conducted studies on wage structures, proposed policies and programmes for employment and upskilling as part of the ETP, and provided information on the appropriate wage levels for workers.

ILMIA also undertook studies on the Labour Market Information Data Warehouse, Manpower and Economic Development Integrated System, and the National Employment Return during the year.

The institute also conducted studies in collaboration with the ILO and the World Bank, comprising a Green Jobs Mapping Study and a study on Developing Skills for Innovation and High-Income Economy in Malaysia, respectively.



Workshop on manpower requirements and wage structures in Malaysia

ILMIA and the World Bank

ILMIA has worked with the World Bank to identify human capital requirements for green jobs in Malaysia. The World Bank is also conducting training on the SAM & Dysam economic software for ILMIA personnel.

Other collaborations between ILMIA and the World Bank include a workshop on international labour market issues.

In the long-run, the plan is to establish collaboration with international organisations on labour market issues and database analysis.

Moving Forward

In 2013, the HCD SRI will focus on catalysing structural reforms through high-impact projects targeted at sectors across Malaysia and within the Regional Economic Corridors. In the long run, this SRI aims to facilitate higher labour productivity in the country via more efficient planning and policy-making, reinforced by a decision-support system and a robust labour market database.

Moving forward, this SRI will embark on a number of projects to achieve this, including:

- Developing a Labour Market Information System (LMIS), an integrated database of human capital supply and demand data: LMIS will enable the tracking and monitoring of workforce supply and demand across the 12 NKEAs.
- Increasing female labour force participation rate from 47 per cent to 55 per cent:
 - Providing childcare support to encourage women to return to work by providing fee assistance to low-income families and launching grants for childcare centres
 - Implementing policies and programmes such as double tax deduction on training expenditure for companies that re-employ women after a career break, and encouraging public-listed companies to disclose in their annual reports policies and practices to support the employment of women, such as flexible work arrangements and support facilities

- Pilot programme to place women in Board positions towards achieving a 30 per cent composition of women in decision-making positions by 2016: Enhancing technical and vocational training (TEVT) towards meeting the targeted 70 per cent skilled and competent workforce in 2020 from 30 per cent currently
- Encourage public-private partnerships between public skills training institutions and the private sector: This aims to enhance the quality of public institutions by ensuring the curriculum, trainers and facilities are in line with industry requirements; and will require policy reforms and an emphasis on employability, programme quality and effectiveness

It is envisioned that these critical measures, which take a holistic approach in the development of the Malaysian workforce and workplace, will inculcate the skills and working culture required for the country to move further up the value chain and achieve high-income nation status.

Enabling Change

FINANCIAL SERVICES AND REDUCING GOVERNMENT'S ROLE IN BUSINESS

ON THE GROUND WITH THE CIVIL SERVICE

As the pulse of a country's economy, the Financial Services NKEA is in a unique position to touch the lives of all Malaysians through its initiatives. In tandem with the Reducing Government's Role in Business SRI, the NKEA also plays a key role in developing the soft infrastructure believed to encourage more local and foreign companies to participate in the Malaysian economy.

"The civil service, specifically the Ministry of Finance (MoF), plays a role as the nerve centre of the initiatives. As such, the civil service links all the EPP owners with the NKEA/SRI team in running the initiatives," says YBhg Dato' Sri Dr Mohd Irwan Serigar Abdullah, Secretary General, Treasury, at the MoF.

"If something is not working out as planned, we will coordinate new resolutions to the problems. Besides ensuring the progress updates remain focused and consistent at all levels, we are also responsible for making sure that those initiatives are effectively undertaken within the timeframe, and validate them for reporting to the public," explains Dato' Sri Dr Mohd Irwan, who also sits on both Steering Committees for the Financial Services NKEA and Government's Role in Business SRI. Both Committees are also chaired by YAB Dato' Sri Mohd Najib Tun Abdul Razak, the Prime Minister and the Minister of Finance.

In the case of the Government's Role in Business SRI, meanwhile, Dato' Sri Dr Mohd Irwan says all Government-linked investment companies (GLICs) and Ministries under the divestment radar participate fully in the SRI, acting as operationalisation agents for their respective divestment programmes.

"In terms of challenges, in running/ governing the financial services sector, we must always be very careful in terms of supply and demand. Apart from being careful of uncertainties shrouding the global front, we should also be very cautious on the local investment and business landscape.

"It is how one weighs 'regulatory rule' versus 'market demand'. The same goes to being too 'strict' on financing requirements versus being 'very supportive' of micro-financing. One must strike a balance between the two," he adds.

Dato' Sri Dr Mohd Irwan also says the Reducing Government's Role in Business SRI, which leads the Government's divestment exercise of Government and State-owned companies, has increased the competitiveness among players across various industries. "Companies that are financially stable and able to generate robust income should be divested. They should run the business in their own capacity and should not rely on Government aid anymore.

"This will also support the survival rate of each company," he says.

The results speak for themselves: In the past two years, Financial Services players have registered growing profits, and the Malaysian economy has become more vibrant, while the GLIC divestment programme has signalled the country's investor-friendly outlook.

"We are happy to see more and more companies registering higher profit margins, entailing prosperity for our country. All these achievements are no doubt a result of the hard work, dedication and strong support of the NKEA and SRI teams covering civil servants and Government agencies, such as the Federal Treasury, Bank Negara Malaysia, the Securities Commission, Bursa Malaysia, the GLICs and PEMANDU," says Dato' Sri Dr Mohd Irwan.



YBhg Dato' Sri Dr Mohd Irwan Serigar Abdullah,
Secretary General, Treasury, at the MoF

INTERNATIONAL PERFORMANCE REVIEW



Cabinet Away Day

The International Performance Review (IPR) is an important element of the Economic Transformation Programme (ETP) designed as a platform to reflect and evaluate the results of initiatives implemented under the National Key Economic Areas (NKEAs) and Strategic Reform Initiatives (SRIs). The IPR, which comprises a panel of international experts, invites outside-in perspectives to continually improve on the work we do and to ensure we maintain momentum in the transformation journey. The 2012 IPR session was held over three days in February 2013, marking the second time the panel convened to review the ETP and its progress. The panel comprised independent third-party experts ranging from international development organisations to large-scale multinational corporations as well as representatives from other governments.

Key to the session were presentations made by the Directors of the NKEAs and SRIs to the panellists, and the ensuing robust discussions that took place as questions were raised and feedback given. The review concluded with the IPR members presenting their findings to the Prime Minister and his Cabinet on the final day. The members also held discussions with PriceWaterhouse Coopers, the appointed independent professional services firm which conducted the Agreed-Upon-Procedures (AuP) to provide third-party validation on the NKEA and SRI results and projects announced. The AuP helps check that the interpretation of the data and results are accurate and conforms to good international practice.

We present here the report from the IPR panel, encapsulating their collective observations and feedback on the ETP progress and results to-date. The panellists also challenged our key arguments, recommend areas for improvements as well as encouraged continued efforts and improvements in meeting the objectives.



Prime Minister Dato' Sri Najib evaluating the minister's performance at the Cabinet Away Day



The IPR panel presents its report on the National Transformation Programme at the Cabinet Away Day

IPR PANELLIST



Michael Thatcher

Chief Technology Officer, Asia,
Microsoft Corporation

As Chief Technology Officer for the Public Sector in Asia, **Mr Thatcher** is responsible for Microsoft's Technology Policy initiatives and engagements with Government and Academic leaders. Through this bi-directional dialog, he ensures that the unique needs of these constituencies are reflected in Microsoft's technology and development strategies. He has been leading this function since March of 2010.

He has worked for more than 25 years in the development, management and sales of information technology. Prior to his current role, Michael spent 5 years as Microsoft's Chief Technology Officer in the Middle-East & Africa and more than 6 years at the US corporate headquarters doing technical development, marketing and policy strategy.

He is co-inventor for two patents and has three pending applications. Before joining Microsoft, Mr Thatcher spent more than 10 years developing and deploying technical systems for oceanographic research with Wood Hole Oceanographic Institution, Lamont-Doherty Earth Observatory and Sea-Bird Electronics.



Stephen Sedgwick AO

Public Service Commissioner,
Australian Public Service Commission

Mr Sedgwick has had a long and distinguished career in the public sector, having served in a number of departments beginning in 1972. He was Secretary to the Commonwealth Departments of Finance, Employment and Education between 1992 and 2002, and was a member of the Board of the Asian Development Bank for five years until 2007. He became Australian Public Service Commissioner in December 2009 after a period as Professor and Director of the Melbourne Institute of Applied Economic and Social Research at the University of Melbourne. He was awarded the Centenary Medal in January 2001 and was made an Officer in the Order of Australia in June 2012.

He is a Fellow of the Institute of Public Policy at the Australian National University (ANU), and is a member of a number of Boards and Advisory Groups. These include the Sir Roland Wilson Foundation, the Advisory Council of the ANU Crawford School of Economics and Government, the Advisory Board for the Australian National Institute for Public Policy, the Board of Directors of the Commonwealth Association for Public Administration and Management, the Advisory Group for the Australian Human Rights Commission Male Champions of Change Research Project, and the ACT Government's Learning Capital Council.

Mr Sedgwick graduated with Honours in Economics from the University of Sydney and holds a Master's Degree from the University of London (LSE).



Ambassador Ombeni Yohana Sefue

Chief Secretary,
Government of the United Republic of Tanzania

As Chief Secretary, **Ambassador Sefue** is Secretary to the Cabinet and Head of the Public Service. Prior to that, he served as Ambassador and Permanent Representative of the United Republic of Tanzania to the United Nations in New York from 31st August 2010.

He was also Tanzania's Ambassador to the United States of America in Washington D.C. from 15th June 2007 to 14th August 2010, with concurrent accreditation to Mexico. Ambassador Sefue served as his country's High Commissioner (Ambassador) to Canada from October 2005 to June 2007, with concurrent accreditation to Cuba.

A career diplomat, Ambassador Sefue also served as Counselor in the Embassy of Tanzania in Stockholm, Sweden, between 1987 and 1992.

He worked with Hernando de Soto's Institute for Liberty and Democracy to establish a Property and Business Formalisation Program for Tanzania intended to provide legal protection and empowerment of the poor. Among other initiatives, he was also involved in the promulgation of the Tanzania Mini Tiger Plan intended to transform Tanzania into a middle-income country as well as the Tanzania Development Vision 2025.

In 2006-07, Ambassador Sefue assisted President Mkapa when the latter was a Commissioner in the Commission on Legal Empowerment of the Poor, an independent international commission, hosted by the United Nations Development Program (UNDP) in New York, focusing on the link between exclusion, poverty, and the law. In 2008, the Commission issued its report, Making the Law Work for Everyone.

In recognition of his extensive diplomatic career and the work done with different presidents, Ambassador Sefue received from President Jakaya M Kikwete one of the Nation's highest awards, The Order of The United Republic of Tanzania, First Class, on 9th December 2012.



Sir Michael Barber

Chief Education Adviser,
Pearson PLC

Sir Michael Barber is a leading authority on education systems and education reform. Over the past two decades his research and advisory work has focused on school improvement, standards and performance; system-wide reform; effective implementation; access, success and funding in higher education; and access and quality in schools in developing countries.

Barber recently joined Pearson as Chief Education Adviser, leading Pearson's worldwide programme of research into education policy and efficacy, advising on and supporting the development of products and services that build on the research findings, and playing a particular role in Pearson's strategy for education in the poorest sectors of the world, particularly in fast-growing developing economies.

Prior to Pearson, he was a Partner at McKinsey & Company and Head of McKinsey's global education practice. He co-authored two major McKinsey education reports: How the world's most improved school systems keep getting better (2010) and How the world's best-performing schools come out on top (2007). He is also Distinguished Visiting Fellow at the Harvard Graduate School of Education and holds an honorary doctorate from the University of Exeter.

He previously served the UK government as Head of the Prime Minister's Delivery Unit (from 2001-2005) and as Chief Adviser to the Secretary of State for Education on School Standards (from 1997-2001). Before joining government he was a professor at the Institute of Education at the University of London. He is the author of several books including *Instruction to Deliver*; *The Learning Game: Arguments for an Education Revolution* and *How to do the Impossible: a Guide for Politicians with a Passion for Education*.



Dr Yukon Huang

Senior Associate,
Carnegie Endowment

Dr Yukon Huang is a Senior Associate at the Carnegie Endowment in Washington DC and formerly the World Bank's Country Director for China. He was a member of the National Economic Advisory Council to the Prime Minister of Malaysia.

Prior to this, he was the World Bank's Director for Russia and the former Soviet Union and earlier Lead Economist for Asia. He has also held positions at the U.S. Treasury and professorships at various universities in the United States and abroad. He is currently an adviser to the World Bank and the Asian Development Bank, as well as various governments and corporations.

Dr Huang has published widely on development issues in professional journals and popular media. He is an A-List contributor to the Financial Times and his writings are frequently seen in outlets such as the Wall Street Journal and Bloomberg. He has a PhD in economics from Princeton University and a BA from Yale.



Yong Hee Kong

Private-Public Partnership Adviser,
Commonwealth Secretariat

As the PPP Adviser, **Yong Hee Kong** provides advisory and capacity-building support on PPP to the 54-member countries in the Commonwealth. He has more than 30 years' experience advising public and private sectors on Public-Private Partnerships (PPP), privatisation, project financing and strategic planning.

He holds a B.Eng (Hons) in Civil and Structural Engineering (UK), an MBA (UK), a Diploma in Corporate Treasury (UK), and a Postgraduate Diploma in Islamic Studies from ISTAC, International Islamic University, Malaysia.

Mr Yong qualified as a Chartered Accountant (England and Wales) with Deloitte, Haskins and Sells, UK. He has published widely on issues in PPP and edited the book, 'Public-Private Partnerships Policy and Practice – a Reference Guide'. His views expressed here are his own.



Michael J Hershman

President,
The Fairfax Group

Michael Hershman is an internationally recognised expert on matters relating to transparency, accountability, governance, litigation and security. The Fairfax Group, founded in 1983, has been retained by governments, corporations, law firms and international financial institutions to assist on matters relating to the conduct of senior-level officials and/or the entities with which they do business.

In 1993, along with Peter Eigen, he co-founded Transparency International, the largest independent, not-for-profit coalition promoting transparency and accountability in business and in government. For the past six years he has served Interpol as a member of the International Group of Experts on Corruption, and for the past 12 years, he has sat on the Board of the International Anti-Corruption Conference Committee.

Mr Hershman is a member of the Board of Directors of the U.S. Chamber of Commerce Foundation, and advises the Chamber on corporate compliance issues. Since 2007, Mr Hershman has been a member of the Board of Directors and the executive committee of the Centre for International Private Enterprise.

Mr Hershman serves as Chairman of the Senior Advisory Board for the International Anti-Corruption Academy and is a Member of the Independent Governance Committee for FIFA.



Dr Andrew Lee

Director Strategy Policy and Governance
with the Driver and Vehicle Services Division,
Department of Transport,
Government of Western Australia

Dr Andrew Lee has over thirteen years' experience working in strategy and policy in Australia, including service as a senior adviser to a Commonwealth Shadow Minister and a State Minister. For the last seven years he has managed reforms in business regulation and occupational licensing for the Government of Western Australia, including projects for the Council of Australian Governments 'Seamless National Economy' agenda. He has also worked for a major trade union.

Dr Lee has a BA with first class honours in History from the University of Western Australia and a PhD in History from the Australian National University.

In addition to regulatory reform, his interests include stakeholder relations and issues management, and strengthening public service performance in both strategic advice and service delivery. He currently holds the position of Director Strategy Policy and Governance with the Driver and Vehicle Services division of the Department of Transport, Government of Western Australia.

Dr Lee is participating in the IPR in a personal capacity and any views expressed are his own.



Dr Alex Mourmouras

Chief, D5 Division,
Asia and Pacific Department,
International Monetary Fund

Dr Alex Mourmouras has served in four IMF departments for over 19 years, in operational positions and as a leader of IMF training programs. As chief of the D5 division in the Asia and Pacific Department, he leads the work of the ASEAN division responsible for Brunei, Indonesia, Malaysia, Philippines, and Singapore. He is also the mission chief for Malaysia. Previously, he served as division chief in the European and Middle Eastern Division of the IMF Institute for Capacity Development, and as chief of the European Division in the IMF Institute.

In 2007, Dr Mourmouras served as Acting Director and Chief Training Economist of the Joint Africa Institute. From 1999 to 2003, he was economist and senior economist in the IMF's Policy Development and Review Department (PDR), contributing to a comprehensive review of IMF conditionality, the revamping of the IMF's debt sustainability framework, and the formulation of policies to prevent and deal with misreporting of information to the IMF.

Prior to joining the IMF, Dr Mourmouras held the position of Associate Professor of Economics and Director of Graduate Studies at the University of Cincinnati. He has also held academic positions at other universities. He obtained a Bachelor's degree in Applied Mathematics from Harvard College and a PhD in Economics from the University of Minnesota.



Dr Ravi Balakrishnan

Resident Representative
International Monetary Fund

Dr. Ravi Balakrishnan is currently the IMF Resident Representative with regional responsibilities based in Singapore. He started his career at the Bank of England and Bank of Spain before joining the IMF in 2001. Since then, he has worked on various countries across regions and income thresholds including Bolivia and the United States, and was also part of the team that produced the IMF's World Economic Outlook before taking up his current position. As Resident Representative, he has been actively involved in the Fund's work on Malaysia and Singapore, on capital flows to the region, and on inclusive growth. Dr. Balakrishnan has published various research papers (related to labour markets, inflation dynamics, exchange rates and capital flows) in well known journals. He holds a PhD and MSc in Economics from the London School of Economics (LSE) and a BA Honours from Churchill College, Cambridge University.

IPR REPORT 2012



Big Picture

The panel again commends the Government for its strong political backing of the transformation programme as well as its commitment to data transparency.

Our focus during the IPR proceedings in part was to see if the best of government and private industry practices were being applied to the ETP. On the basis of the information provided by PEMANDU and PWC's review of the data, we generally conclude that the use of data and technology combined with an ethical base, conduct and values approach compare favorably with other government-led transformation programmes.

We note that the overall KPI achievement indicates that the momentum of the programme has been sustained since its inception in 2010, as reflected in the strong investment pick up during 2012. We believe that there is a correlation between the significant increase in private and public investments in 2012 and the ETP, particularly through its increased infrastructure work on the Mass Rapid Transit (MRT) project and strategic investments in key sectors (commodities and manufacturing, and healthcare and financial services).

Additionally, we are pleased to note that the EPPs were derived as a result of the lab process where public and private sectors as well as industry players were very much involved in determining the catalytic projects within the sector. This would help to ensure market relevance of the projects.

Though we understand that implementing structural reforms under the SRIs is an arduous and time consuming occupation, the progress we see represents a good momentum—specifically the gazetting of the Minimum Wage Order and the enforcement of the Competition Act, liberalisation of the services sub-sector and professional entry into Malaysia, as well as the use and expansion of international standards in trade.

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Both the GTP and ETP exhibit a steadfast commitment to bring about meaningful change to government efficiency and effectiveness. Malaysia's ETP has distinguished itself from other transformation programmes the panel has observed elsewhere in the world, particularly in its use of technology throughout its initiatives.

The involvement and accountability of senior Government officials, up to and including Cabinet Ministers, is exceptional and helps ensure further success.

The Prime Minister and his PEMANDU team are also to be complimented on the transparency they have brought to the process, releasing information including statistics and performance to the general public, thereby allowing the public to judge the success or failure of the programme.

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Michael Hershman
President
The Fairfax Group

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This is an impressive programme that has secured a range of impressive achievements. There are a number of unresolved tensions between conflicting objectives; and insufficient attention is paid at times to the significance of the SRIs.

It would be timely, also, to take a little time to reflect on lessons learnt, relative cost/benefits, the relationship between KPIs and ultimate objectives, relative priorities (in the light of experience).

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Stephen Sedgwick
Public Service Commissioner,
Australian Public Service Commission

Areas for further progress

As always, there are areas for further progress during the next stage under the ETP, including:

- Embedding the ETP culture into the civil service so that responsibility can be progressively transferred from PEMANDU, hence helping ensure that the ETP achievements and processes are made sustainable.
- Increasing the emphasis on underlying structural reforms, qualitative assessments and perceptions feedback from the public of the ETP rather than simply focus on NKPIs. In particular, more needs to be done on the SRIs to sustainably increase potential growth. These include providing equal opportunities for all, implementation of the Goods and Services Tax, subsidy reform, labour law reform, further reduction of government's role in business, skills enhancement in the workforce and a strong intellectual property rights protection support system.
- Dealing with conflicts between/within NKEAs/NKRAs/SRIs. Examples include: (i) the role of fuel subsidies and transportation objectives; and (ii) the Agriculture NKEA's initiative of integrated cage farming versus the eco-tourism projects under Tourism NKEA.
- Reducing the complexity of reporting results and focusing on the main

KPIs which illustrate transformation progress (e.g. reductions in reported crime, increases in the modal share of public transportation), as well as better aligning reported numbers with the national accounts data. This will help the Government and the public at large keep sight of the overall key objectives and whether they are being met.

- Perhaps the time has come for the Government to consider whether its final objectives are too modest. For example, the Government may want to mull over bringing forward the 2020 target of raising the GNI/capita to US\$15,000 to an earlier date.
- More generally, we urge PEMANDU to take a broader look at what the Government can really accomplish over the course of the next seven years, including re-examining the effectiveness and efficiency of the ETP and GTP as a package. This should encompass re-looking at priorities and the relative value for money across the various initiatives (whether in terms of public spending, tax concessions, or regulatory changes that favour one area of activity over another), which will help avoid the trap of goal displacement (i.e. the pursuit of KPIs irrespective of evidence pointing to better options to achieve the ultimate goals).

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The transformation programme strikes at a couple of very important aspects of what needs to be developed in Malaysia. This is a relatively small economy that sits at the crossroads between South Asia and East Asia. It's very important for Malaysia to be very open to encouraging foreign direct investment, helping the country develop its twin comparative advantages in commodities – oil, oil palm, forestry products, natural resources – and its strength in manufacturing, and potentially, in health and financial services.

I think these sectors are key focal points of the transformation programme, and this is done very well. Additionally, reform initiatives which are starting to gain more attention, for example recent actions to liberalise entry into professional services, strengthening competition, and improving standards, will help the Malaysian market in opening up more.

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Dr Yukon Huang
Senior Associate,
Carnegie Endowment

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Well done on the progress achieved in the last 12 months. I think you've made quantum leaps here. Detailed results are coming through. I have confidence in the civil service, of people in Malaysia and its leadership. However, the results needs to be better communicated to the people on the street.

”

Yong Hee Kong
Private-Public Partnership Adviser,
Commonwealth Secretariat



From left: Stephen Sedgwick, Dr. Yukon Huang, HK Yong, Dr. Andrew Lee and Alex Mourmouras

Observations and feedback NKEAs

Financial Sector

We commend the NKEA team on their continuous and growing engagement with the key regulators (Bank Negara Malaysia and the Securities Commission) in implementing EPPs under the Financial Services NKEA.

However, we are of the opinion that the NKEA should focus its objectives on achieving specific reforms rather than statistics such as average daily trading value on Bursa Malaysia and the value of new initial public offerings, which may instead be dependent on external factors. We acknowledge that the team is working towards realigning the strategy moving forward in 2013 with BNM, the SC and the Ministry of Finance.

Education

A crucial element to Malaysia's pursuit of high-income status is the country's ability to move higher up the value chain. In this regard, we see the Education NKEA playing a key role in providing the foundation for the creation of a skilled workforce which is employable and able to command higher pay.

We note that in 2012, the ETP and GTP progressed significantly in the areas of improving the availability and quality of early child care and education centres, with almost 1,500 pre-schools built during the year. We also commend efforts to test the proficiency of English teachers and provide remedial training for those who did not meet standards, and urge for the same type of proficiency testing for Mathematics and Science teachers.

We also encourage PEMANDU to evaluate the size of Malaysia's teaching force in a bid to focus on quality of teachers, rather than quantity.

One concern we raised with regard to the Education sector is the involvement of nine Ministries in vocational education and training. While this may help to improve governance, it is important to note that all public programmes tend to suffer from lack of co-ordination between different agencies. Therefore, we highlight the need for leadership by a central agency in implementing this initiative.

In improving output within the higher education system, we note the Education NKEA's efforts to encourage public-private partnerships and the establishment of the MyUni Alliance programme. We look forward to seeing greater collaboration between public education institutions and industry to ensure better employability of students upon graduation.

Technology and Intellectual Property

We also urge the Government to consider how technology can play a key role in helping Malaysia move higher up the value chain. In areas such as under the Tourism NKEA, for example, technology can help small- and medium-sized enterprises achieve reach; such as by accessing specific areas in the country to source for handicrafts or by using web portals to market their products. Considering how far the industry has moved with technology and globalisation, the Financial Sector might clearly benefit as well through a policy update or review in relation to its use of technology.



Michael Thatcher

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It's great to see the progress made under the NTP over the last three years. However, as we've said before, "it's a marathon not a sprint" and the key to achieving high-income status will be sustaining the momentum, particularly with regard to the SRIs. An essential part of this will be further embedding the NTP in the civil service, as it will ultimately have to implement the programme over the long term.

”

Dr Ravi Balakrishnan

Resident Representative,
International Monetary Fund

“

The progress on both the GTP and ETP is striking and a credit to all involved throughout the Malaysian Government and administration. Now that the datasets are becoming established, deeper analysis will become possible. PEMANDU should begin to think about the long-term impacts of what is happening as well as the short- and medium-term. For example, it is excellent to see the success with women entrepreneurs, but how much more interesting and worthwhile would it be if we knew more about what happened to the businesses they created and the contributions they were able to make in their communities? Also, beyond the data it would be good to know more about whether people have noticed the change.

I was glad to see the lessons being pulled out again from both the successes and the areas where less progress had been made. The learning from the process Malaysia has put in place may turn out to be as important as the impressive results achieved so far, because it will make possible further progress in the future.

It has been worthwhile to have the international panel. Now might be a good time to commission a thorough third-party evaluation aimed, above all, at learning the lessons so that they can be applied into the future. This would also be helpful with international recognition, which I think could have important benefits for Malaysia's reputation in the world.

”

Sir Michael Barber

Chief Education Advisor,
Pearson PLC



Michael Hershman and Stephen Sedgwick

In the same vein, the Government should also evaluate the productivity increases resulting from the growth of Internet use, rather than relying on KPIs linked to direct revenue streams, such as in the case of the Communications Content and Infrastructure NKEA. These could include the reduced cost of doing business by using technology to shorten the business license applications process, or the expansion of the reach of education programmes via E-learning.

This therefore underlines the importance of ensuring affordable Internet penetration throughout the country, as it creates a vast multiplier effect. We would also like to highlight the importance of continuing to improve access to technology at all levels of schools in the country with a focus on both students and teachers.

We remain concerned however, on the inability to meet objectives in connecting urban and non-urban schools. We believe this indicates a need to better influence local Governments to ensure more consistent and speedy co-operation in ensuring Internet access to schools.

Nevertheless, the drive to emphasise E-learning in health, education and Government represents a highly commendable effort.

As growth in the 'knowledge based industries' accelerates, having clearly established rules, enforcement and behaviours regarding intellectual property rights become paramount to sustainable growth, attracting additional FDI and increasing international trade in these sectors.

Oil, Gas and Energy

Of other efforts to move Malaysia up the value chain, under the Oil, Gas and Energy NKEA, we would like to encourage the Government to amend incentives to support more efforts in developing more non-commodity activities and alternative energy.

Therefore, we applaud steps such as those taken under EPP 10: Building up Renewable Energy and Solar Power Capacity, which allows locally produced electricity to be sold to power utilities at a fixed premium for a specific time through the feed-in-tariff (FiT) mechanism.

It is also encouraging to see that the NKEA has achieved strides in unlocking the value of downstream activities in Sabah, especially in the area of urea and ammonia production. Additionally, we note PETRONAS's efforts in exploring shale gas production. The introduction of a duty exemption on hybrid vehicles also represents a very attractive objective in light of Malaysia's goal to be seen as a promoter environmental consciousness.

We caution, however, that the drive towards clean energy should be based not only on environmental concerns, but also on strong financial footing. Many countries have lost substantial investments as a result of rushing into clean energy without a clear strategy, and it is imperative that Malaysia avoids this same folly.

We also recommend that Malaysia become a signatory to the Extractive Industry Transparency Initiative, which helps improve transparency in payments by oil and mining companies to Governments and transparency in revenues received by host country Governments.

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This is my first time as a member of the panel. I am here to listen to Malaysian and foreign experts, to learn of your achievements and become more familiar with the challenges you face moving the reform agenda forward. I would like to congratulate you on your impressive organisation of the International Panel Review.

My background is in teaching, research, and capacity development. Naturally, I naturally take a keen interest in the transformation programme's aim to reform Malaysia's education and training system. I am convinced that raising the educational attainment of all Malaysians is crucial for the country's future, and for achieving sustained, high quality, inclusive growth. Cross-country research points to a tight connection between economic growth and educational attainment in different countries. Educational attainment (what students learn as opposed to money spent on education or years of schooling) makes a big difference to a country's progress.

With regard to transfer programmes, it may be worth re-evaluating their nature. Better targeting of transfers would help conserve fiscal resources and improve benefit incidence (ensure that transfers accrue to those most in need).

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Dr Alex Mourmouras
Chief, D5 Division,
Asia and Pacific Department,
International Monetary Fund

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I think the process that's been underway and from the results we've seen so far after reviewing many of the initiatives, it is clear that the results are showing benefits. We are seeing increased investment in the nation, real movement.

One of the challenges with any reform is sustainability and the ability of that reform to keep building and keep growing. If I look at the track record over last three years, including momentum and sustainability, I believe keeping that going and harvesting benefits from initial efforts is going to be the trick in actually moving this forward.

”

Michael Thatcher
Chief Technology Officer, Asia,
Microsoft Corporation

Tourism

We are encouraged that the NKEA achieved maximum results for its 2012 KPIs, from targeting more international events to building more 4- and 5-star hotels. This raises the question however, whether PEMANDU should re-consider the NKEA's objectives for 2013 to determine whether they are too modest.

We are also concerned that Malaysia's social and political environment may present obstacles in achieving complete success in the area of organising international entertainment events. We recommend that particular issues such as those related to international entertainment regulations be addressed in order to avoid a contradiction of goals.

SRI's

In relation to the targeted divestment of Government-linked investment companies (GLICs) under the Reducing Government's Role in Business SRI, we recognise that the achievement of 15 divestitures out of the targeted 24 divestments for 2011-2012 is an important step in the right direction. We caution that the process may become slower and more controversial as the divestments turn to some of the larger GLICs, and highlight that industry, Government and civil society buy-in for this exercise is essential. We recommend the Government undertake more efforts to communicate the rationale behind this push for privatisation.

We also recognise the extensive measures undertaken through the Human Capital Development SRI to create workplace and workforce transformation towards the creation of employable and skilled manpower. We note the SRI's efforts in evaluating any overlaps across the upskilling programmes, in addition to assessing the outcome of funding these programmes. We note that the development of the Labour Market Information System will help address potential challenges in manpower supply and demand, while providing insight into labour market trends.

The work done under the Competition, Standards and Liberalisation (CSL) is especially vital to Malaysia's transformation towards a competitive, high-income economy. The progressive work achieved in the area of standards development and utilisation is particularly encouraging. However, we caution that the implementing agency remain cognisant of the rate for which international standards are being "refreshed" as standards can easily change or rapidly become irrelevant. To address the low uptake in voluntary certification of standards, the panel proposes the option of self-certification of products to be further explored by manufacturers.

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PEMANDU is catalyst to a new way of public service delivery, and we need to take a conscious effort to ensure that the civil service embraces this way forward in a set time to continue the momentum.

Tanzania is embarking on its own transformation programme and to a larger extent, we are inspired by what is happening in Malaysia. We have taken a keen interest and we think it is an appropriate model for us. What I've really found interesting is to see the level of political commitment at the highest level for this transformation, which I think is a key ingredient for success.

The other is the focus. What you see in this country, the priority areas to focus on, translating that into detailed programmes and projects, and monitoring the implementation to ensure that you get the results you want, is something that I found very interesting. This is something we will certainly take into account as we develop our own transformation programme.

The system that you have in place proves that if you design your transformation programme properly, set your priorities and targets right and translate them into programmes of action, it is possible to get the results that you want.

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Ombeni Sefue
Chief Secretary,
Government of the
United Republic of Tanzania

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The energy and commitment to the NTP is commendable, as is the determination to combine market solutions with a social safety net. The NTP is focused on productivity but not along winner-takes-all lines. Also commendable is the emphasis on co-ordinating a whole-of-government approach to resolve issues from various angles, and committing the public service to performance measurement and a performance culture.

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Dr Andrew Lee
Director Strategy Policy and
Governance with the Driver and
Vehicle Services Division,
Department of Transport,
Government of Western Australia



The 2012 IPR panel together with Dato' Sri Idris Jala

AGREED-UPON PROCEDURE REPORT BY PWC

2012 ETP RESULTS

Verification by Independent Third-Party

A core tenet of the ETP has been transparency and accountability and this is reflected in the Annual Report. The ETP Roadmap was published in October 2010 detailing the measures in the transformation programme. In this report, the 2012 key performance indicators for each National Key Economic Area (NKEA) and Strategic Reform Initiatives (SRI) were published in full, with achievements versus targets listed*.

PEMANDU endeavoured to ensure the scoring system is transparent and stringent. Extensive rigour has been put into confirming the collection of data, tabulations of statistics and that results are accurate.

To this end, PEMANDU engaged PricewaterhouseCoopers Malaysia (PwC), an independent professional services firm, to conduct a series of Agreed-Upon-Procedures – specific tests and procedures to review reported results for the KPIs and projects announced. These Agreed-Upon-Procedures were applied to a sample taken from the key performance indicators of each NKEA, SRI as well as projects announced during the Progress Updates. The respective calculations were also checked against guidelines and formulae originally developed in the NKEA labs, and prescribed by PEMANDU.

Over the course of this exercise, PwC's findings highlighted a number of exceptions on the samples selected, which were subsequently addressed and reflected in this Annual Report. PwC confirmed that the results reported for the selected samples in the Annual Report have been validated according to the Agreed-Upon-Procedures. PwC also identified opportunities to improve processes and the quality of information. PEMANDU, together with the relevant Ministries and private sector stakeholders will be taking positive prescriptive actions to effect these improvements over the next 12 months.

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Extensive rigour
has been put into
confirming the
collection of data,
tabulations of
statistics, and that
results are accurate.
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**Exceptions were made where targets featured market-sensitive data.
In such instances, this information was kept confidential at the request of involved parties*

ETP SCORECARD

Measurement Methodology Key Performance Indicator

The ETP Scorecard assesses the extent to which the planned Key Performance Indicator (KPIs) for each Entry Point Project achieved the desired outcome for the past year. The actual year-to-date results are presented in three scoring methodologies

All three methods have been formulated to provide a pragmatic representation of the actual KPI numbers in percentages.

Method 1 Scoring is calculated by a simple comparison against set 2012 targets. The overall NKRA composite scoring is the average of all scores.

Method 2 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is less than 100%, score #2 is taken as the actual percentage
- If the scoring is equal or more than 100%, score #2 is taken as 100% The overall NKRA composite scoring is the average of all scores

Method 3 Scoring is calculated by dividing actual results against set 2012 targets with an added rule:

- If the scoring is equal and less than 50%, score #3 is indicated as 0
- If the scoring is more than 50% and less than 99%, score #3 is indicated as 0.5
- If the scoring is equal or more than 100%, score #3 is indicated as 1




The traffic light approach is outlined below:




Green – exceeded targets

Yellow – achieved 50 per cent or more

Red – underperformed

Where decimal points are concerned, the scorecard employs a rounding mechanism. In cases where the KPI results have a decimal point of 0.1 to 0.4 per cent, the final percentage value is rounded downwards. Where the results have a decimal point of 0.5 to 0.9 per cent, the final percentage value is rounded upwards.

Methods 1 and 2	
Achievement	Traffic Lights
90 per cent and above	
51 per cent to 89 per cent	
50 per cent and less	

Method 3		
Achievement	Scoring	Traffic Lights
100 per cent and above	1	
51 per cent to 99 per cent	0.5	
50 per cent and less	0	

LIST OF ENTRY POINT PROJECTS

No	Entry Point Projects
	Greater Kuala Lumpur/Klang Valley
1	Attracting 100 of the World's Most Dynamic Firms within Priority Sectors
2	Attracting Internal and External Talent
3	High-Speed Rail Connection to Singapore
4	Building an Integrated Urban Mass Rapid Transit System
5	Revitalising the Klang River into a Heritage and Commercial Centre
6	Greener Kuala Lumpur
7	Creating Iconic Places and Attractions
8	Creating a Comprehensive Pedestrian Network
9	Developing an Efficient Solid Waste Management System
	Oil, Gas and Energy
1	Rejuvenating Existing Oil Fields through Enhanced Oil Recovery (EOR)
2	Developing Small Fields through Innovative Solutions
3	Intensifying Exploration Activities
4	Building a Regional Storage and Trading Hub
5	Unlocking Premium Gas Demand in Peninsular Malaysia
6	Attracting MNCs to Bring their Global Oil Fields Services and Equipments Operations to Malaysia
7	Consolidating Domestic Fabricators
8	Developing Capabilities and Capacity through Strategic Partnerships and Joint Ventures
9	Improving Energy Efficiency
10	Building Up Renewable Energy and Solar Power Capacity
11	Deploying Nuclear Energy for Power Generation
12	Tapping Malaysia's Hydroelectricity Potential
13	Increase Petrochemical Outputs
	Financial Services
1	Revitalising Malaysia's Equity Markets
2	Deepening and Broadening Bond Markets
3	Transforming Development Financial Institutions (DFIs)
4	Creating an Integrated Payment Ecosystem
5	Insuring Most, If Not All, of Our Population
6	Accelerating the Growth of the Private Pension Industry
7	Spurring the Growth of the Nascent Wealth Management Industry
8	Accelerating and Sustaining a Significant Asset Management Industry

(more on next page)

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No	Entry Point Projects
9	Nurturing Regional Banking Champions
10	Becoming the Indisputable Global Hub for Islamic Finance
	Wholesale and Retail
1	Increasing the Number of Large Format Stores
2	Modernising via the Small Retailer Transformation Programme (TUKAR)
3	Developing Pasar Komuniti
4	Transforming Automotive Workshops
5	Developing Makan Bazaars
6	Developing 1Malaysia Malls
7	Developing a Virtual Mall
8	Facilitating Local Businesses to Acquire Stakes in Foreign Retail Businesses
9	Making Malaysia Duty-Free
10	Setting Up Wellness Resorts
11	Organising Unified Malaysia Sales
12	Transforming KLIA into a Retail Hub
13	Developing Big Box Boulevards
	Palm Oil and Rubber
1	Accelerating the Replanting and New Planting of Oil Palm
2	Improving Fresh Fruit Bunch Yield
3	Improving Worker Productivity
4	Increasing the Oil Extraction Rate (OER)
5	Developing Biogas Facilities at Palm Oil Mills
6	Developing High Value Oleo Derivatives and Bio-based Chemicals
7	Commercialising Second Generation Biofuels
8	Expediting Growth in Food and Health-based Segments
9.1	Increasing Average National Rubber Productivity
9.2	Ensuring Sustainability of the Upstream Rubber Industry
9.3	Increase World Market Share of Latex Gloves to 65 per cent by 2020
9.4	Commercialising Ekoprena and Pureprena (Green Rubber)
	Tourism
1	Positioning Malaysia as a Duty Free Shopping Destination
2	Designating Bukit Bintang-Kuala Lumpur City Centre Area as a Vibrant Shopping Precinct
3	Establishing Premium Outlets in Malaysia
4	Establishing Malaysia as a Global Biodiversity Hub
5	Developing an Eco-Nature Integrated Resort
6	Cruise Tourism: Creating a Straits Riviera
7	Targeting more International Events
8	Dedicated Entertainment Zones (DEZ)

(more on next page)

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No	Entry Point Projects
9a	Developing Local Expertise and Better Regulating the Spa Industry
9b	Golf Tourism
10	Establishing Malaysia as a Leading Business Tourism Destination
11	Enhancing Connectivity to Priority medium Haul Markets
12	Improving Rates, Mix and Quality of Hotels
Electrical and Electronics	
1	Executing a Smart Follower Strategy for Mature Technology Fabrication
2	Developing Assembly and Test Using Advanced Packaging Technology
3	Developing Integrated Circuit Design Firms
4	Supporting the Growth of Substrate Manufacturers and Related Industries
5	Increasing the Number of Silicon Producers
6	Supporting the Growth of Substrate Manufacturers and Related Industries
7	Increasing Solar Module Producers
8	Developing LED Front-end Operations
9	Expanding LED Packaging and Equipment
10	Creating Local Solid State Lighting Champions
11	Building a Test and Measurement Hub
12	Expanding Wireless Communication and Radio Frequency Identification (RFID)
13	Growing Automation Equipment Manufacturing
14	Building Transmission and Distribution Companies
15	Building an Electrical Home Appliance Manufacturing Hub and International Distribution Network
16	Development of Balance of System for Solar Photovoltaics (PV)
17	Grow Embedded Systems Industry
18	Enabling Electric Vehicle Component Manufacturing
19	Supporting Regional Rail MRO Services via Electrical and Electronics Component Manufacturing
Business Services	
1	Growing Aviation Maintenance, Repair and Overhaul Services (MRO)
2	Building Globally Competitive Outsourcers
3	Positioning Malaysia as a World-Class Data Centre Hub
4	Jump-starting a Vibrant Green Technology Industry
5	Nurturing Pure-Play Engineering Services
6	Developing Malaysia as a Shipbuilding and Repair Hub
Communications Content and Infrastructure	
1	Nurturing Malaysia's Creative Content
2	Deploying 1Malaysia Payments
3	Connecting 1Malaysia
4	Establishing e-Learning for Students and Workers
5	Launching e-Healthcare

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No	Entry Point Projects
6	Deepening e-Government
7	Ensuring Broadband for All
8	Extending Reach
9	Offering a Smart Network
10	Extending the Regional Network
11	Track and Trace
Education	
1	Scaling up Private Early Childcare and Education Centres
2	Improving Early Childcare and Education Training
3	Scaling Up International Schools
4	Expanding Private Teacher Training
5	Scaling up Private Skills Training Provision
6	International Expansion of Distance Learning
7	Building an Islamic Finance and Business Education Centre
8	Building a Health Science Education Discipline
9	Building an Advanced Engineering, Science and Innovation Discipline Cluster
10	Building a Hospitality and Tourism Cluster
11	Launching EduCity@Iskandar
12	Championing Malaysia's International Education Brand
13	Introducing Public-Private Partnerships in Basic Education
14	Building a Games Development Centre
15	Establishment of Branch Campuses for Foreign Universities
16	Establishment of Not-For-Profit Education Institutions
Agriculture	
1	High-Value Herbal Products
2	Edible Bird's Nest Swiftlet Farming
3	Mini-estate Farming for Seaweed
4	Integrated Cage Farming
5	Cattle Integration in Oil Palm Estates
6	Replicating Integrated Zone for Aquaculture Model (IZAQs) to Tap Market for Premium Shrimp
7	Premium Fruits and Vegetables
8	Food Park
9	Fragrant Rice Varieties in Non-Irrigated Areas
10	Strengthening Productivity of Paddy Farming in MADA
11	Strengthening Productivity of Paddy Farming in Other Granaries
12	Expansion of Cattle in Feedlots
13	Dairy Clusters
14	Seed Industry Development

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No	Entry Point Projects
15	Participation of MNCs
16	Overseas Acquisition/JV of Cattle Farms
17	Pasar Komuniti - PAKAR
	Healthcare
1	Mandating Private Health Insurance for Foreign Workers
2	Creating Supportive Ecosystem to Grow Clinical Research
3	Malaysian Pharmaceuticals: Increasing Local Generic Manufacturing for Exports
4	Reinvigorating Healthcare Travel
5	Creating a Diagnostic Services Nexus
6	Developing a Health Metropolis: A World-Class Campus for Healthcare and Bioscience
7	Upscale Malaysia IDV Industry
8	Build Malaysian Showcase on Next Generation of Core Single Use Device (SUD) Products
9	Become the Hub for High-Value Medical Devices Contract Manufacturing
10	Malaysian Clinical Devices Champions
11	Medical Equipment Supply Chain Orchestration
12	Medical Equipment Refurbishment Hub
13	Build Medical Hardware and Furniture Cluster

LIST OF BUSINESS OPPORTUNITIES

No	Business Opportunities
	Greater Kuala Lumpur/Klang Valley
1	Vitalising Putrajaya
2	Housing
3	Basic Sewerage Services
	Oil, Gas and Energy
1	Process Improvements
2	Economic Growth
	Financial Services
1	Investment Banking
2	Other Segments Including DFIs
3	Commercial Banking
4	Insurance and <i>Takaful</i>
5	Asset and Wealth Management
6	Islamic Banking
	Wholesale and Retail
1	Organic Growth
	Palm Oil and Rubber
1	Expansion of Plantation Land Bank
2	Development of Existing Downstream Activities
3	Development of National Biodiesel Activities
	Tourism
1	Food and Beverage Outlets
2	Local Transportation
3	Tour Operator Segment
	Electrical and Electronics
1	Semiconductors
2	Solar Photovoltaics
3	Light Emitting Diodes (LEDs) / Solid State Lighting
4	Industrial Electronics

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No	Business Opportunities
	Business Services
1	Multi-Disciplinary Practice Construction
2	Accounting Sector
	Communications Content and Infrastructure
1	Fixed Services
2	Mobile Services
3	Courier, Post and Broadcast
4	Regional Operations
	Education
1	Discipline Clusters to Support NKEAs
2	Centre of Excellence in Language Learning
	Agriculture
1	Nutraceutical Products
2	Foreign Distributor
3	Ornamental Fish Farming
4	Aquaculture Feed Mill
5	Aquaculture Export Centre
6	Snacks Industry
7	Free-Range Chicken Rearing
8	Button Mushroom Farming
9	Packaged Fruit Production Such as Jackfruit
10	Foreign Direct Investment in Herbal Products
11	Snack Food Industry (SFI)/County Food Facilities
	Healthcare
1	Seniors' Living

GLOSSARY OF TERMS

1MMPP	1Malaysia Micro Protection Plan	DWDM	Dense Wavelength Division Multiplexing
3R	Reduce, Reuse, Recycle	E&E	Electrical and Electronics
AAIM	Automotive After-sales Industry Malaysia	E&P	Exploration and Production
AAM	Automobile Association of Malaysia	EASA	European Aviation Safety Authority
ACD	Asia Cooperation Dialogue	EBN	Edible Bird's Nest
AeU	Asian e-Learning University	ECCE	Early Child Care and Education
AMWM	Asset Management and Wealth Management	ECERDC	East Coast Economic Regional Development Council
ANM	Arkib Negara Malaysia	EHA	Electrical Home Appliances
ASB	Amanah Saham Bumiputra	EOR	Enhanced Oil Recovery
ATOM	Automotive Modernisation	EP	Employment Pass
ATOM	Automotive Workshop Modernisation	EPF	Employees Provident Fund
BB	Bukit Bintang	EPMS	Energy Performance Management System
BBB	Big Box Boulevards	EPPs	Entry Point Projects
BCC	Bumiputera Corporate Champions	EPU	Economic Planning Unit
BCIC	Bumiputera Commercial and Industrial Community	ESB	Artha ESB Artha Global Management Sdn Bhd
BDM	Batam Dumai Malacca Cable System	ETF	Exchange Traded Funds
BETP	Bumiputera Economic Transformation Programme	ETP	Economic Transformation Programme
BLESS	Business Licensing Electronic Support System	EXIM	Export and Import Bank of Malaysia Bhd
BMI	Business Monitor International	F&B	Food and Beverage
BOs	Business Opportunities	F&N	Fraser and Neave
BPO	Business Process Outsourcing	F1	Formula 1
BPR	Business Process Reengineering	FAMA	Federal Agriculture Marketing Authority
C&D	Construction and Demolition	FCPO	Crude Palm Oil Futures
CAAT	Computer Assisted Audit Techniques	FDI	Foreign Direct Investment
CAGR	Compounded Annual Growth Rate	Felda	Federal Land Development Authority
CBCs	Community Broadband Centres	FFBs	Fresh Fruit Bunches
CCI	Communications Content and Infrastructure	FGVH	Felda Global Ventures Holdings Bhd
CCIG	Creative Content Industry Guild	FINAS	National Film Development Corporation Malaysia
CCM	Companies Commission of Malaysia	FIT	Feed-in Tariff
CDCEs	Certified Data Centre Experts	FNM	Filem Negara Malaysia
CGI	Computer-Generated Imagery	FRIM	Forest Research Institute of Malaysia
CIF	Cost, Insurance and Freight	FRISB	Felda Rubber Industries Sdn Bhd
CIMBSI	CIMB Securities International Pte Ltd	FTA's	Free Trade Agreements
CMDV	Centre for Market Discovery & Validation	FTK	Full Turnkey
CME	Chicago Mercantile Exchange	FTZ	Free Trade Zones
CMSA	Capital Markets and Services Act 2007	GAP	Good Agriculture Practices
CNIIs	Critical National Information Infrastructures	GASAC	Government Accounting Standards Advisory Board
COE	Centre of Excellence	GBI	Green Building Index
CRA	Credit Rating Agencies	GDP	Gross Domestic Product
CRB	Cypark Resources Berhad	GDV	Gross Development Value
CRC	Clinical Research Centre	GE	General Electric
CRM	Clinical Research Malaysia	GFMAS	Government Financial Management and Accounting System
CRS1	Carrier Routing System 1	GHG	Greenhouse Gas
CSL	Competition, Standards and Liberalisation	GHIAL	GMR Hyderabad International Airport Limited
CTRE	Continuing Tourism-Related Education	GI	Gicemic Index
DBKL	Dewan Bandaraya Kuala Lumpur/Kuala Lumpur City Hall	GIFT	Global Incentives For Trading
DCA	Department of Civil Aviation	GLC	Government-linked Company
DESB	DreamEdge Sdn Bhd	GLIC's	Government-linked Investment Companies
DEZ	Dedicated Entertainment Zones	GMP	Good Manufacturing Practices
DIKN	Dasar Industri Kreatif Nagara	GNI	Gross National Income
DMO	Delivery Management Office	Greater KL/KV	Greater Kuala Lumpur/Klang Valley
DoA	Department of Agriculture	GreenTech Malaysia	Green Technology Corporation
DSN	Diagnostic Services Nexus	GST	Goods and Service Tax
DVS	Department of Veterinary Services		

GTFS	Green Technology Funding Scheme	KLK	KL Kepong
GTP	Government Transformation Programme	KLRC	Kuala Lumpur Regional Centre of Arbitration
GW	Gigawatts	KPI	Key Performance Index/Indicator
HCD	Human Capital Development	KPJ	Kumpulan Perubatan Johor
HDC	Halal Industry Development Corporation	KPKK	Ministry of Information, Communication and Culture
HDO	Herbal Development Office	KPKT	Ministry of Housing and Local Government
HLMG	Hong Leong Manufacturing Group	KPO	Knowledge Process Outsourcing
HOPE	Project Hovid Objective Pharmaceutical Excellence	KRS	Konsortium Rangkaian Serantau Sdn Bhd
HPBS	High Performing Bumiputera SMEs	KVMRT	Klang Valley Mass Rapid Transit
HPRI	Halal Pharmaceutical Research Institute	kWh	Kilowatt-hour
HR	Human Resources	KWSP	Kumpulan Wang Simpanan Pekerja
IAGTO	International Association of Golf Tour Operators	LED	Light Emitting Diode
IAOP	International Association of Outsourcing Professionals	LPG	Liquified Petroleum Gas
IAS	International Aids Society	LTE	Long-Term Evolution
IBFIM	Islamic Banking and Finance Institute Malaysia	MADA	Muda Agricultural Development Authority
IC	Integrated Complex	MAE	MAS Aerospace Engineering
ICE	Independent Checking Engineer	MAEPS	Malaysian Agricultural Exposition Park Serdang
ICON2	Integrated Content Development 2	MAHB	Malaysia Airport Holdings Bhd
ICs	Integrated Circuits	MAMPU	Malaysian Administrative Modernisation and Management Planning Unit
ICT	Information Communications Technology	MAPCU	Malaysian Association of Private Colleges and Universities
ICU	Implementation Coordination Unit	MARA	Majlis Amanah Rakyat
ID	Identification	MARDI	Malaysia Agricultural Research and Development Institute
I-FACS	Islamic Finance Advisory and Consulting Services	MAS	Marked-Assisted Selection
IIEU	International Event Unit	MAS	Malaysia Airlines
IILM	International Islamic Liquidity Management Corporation	MATRADE	Malaysia External Trade Development Corporation
IUM	International Islamic University Malaysia	MATRADS	Malaysian Association of Tyres Retreaders and Dealers Societies
ILMIA	Institute of Labour Market Information and Analysis	Mbps	Megabits-per-second
IMT	Independent Management Team	MCMC	Malaysian Communications and Multimedia Commission
INTAN	National Institute of Public Administration	MCT	Medium Chain Triglyceride
INTI	INTI International University	MDB	Medical Devices Bureau
IP	Intellectual Property	MDeC	Multimedia Development Corporation
IP	Internet Protocol	MDTCC	Ministry of Domestic Trade, Cooperatives and Consumerism
IPO	Initial Public Offering	MEF	Malaysia Employers Federation
IRB	Inland Revenue Board	MEPS	Malaysian Electronic Payment System Sdn Bhd
IRDA	Iskandar Regional Development Authority	MGLP	Malaysian Green Labelling Programme
ISC	Industry Standard Committee	MGTA	Malaysian Golf Tourism Association
ISL	International Standards and Liberalisation	MGTC	Malaysia Green Tech Corporation
ISPM	International Standards for Phytosanitary Measures	MHTC	Malaysian Healthcare Travel Council
IT	Information Technology	MIA	Malaysian Institute of Accountants
IVDs	Intravenous Devices	MICE	Meetings, Incentives, Conventions and Exhibitions
IWG	Industry Working Group	MIDA	Malaysian Investment Development Authority
IZAQs	Integrated Zone for Aquaculture Models	MIFC	Malaysia International Islamic Financial Centre
JANM	Jabatan Akauntan Negara Malaysia (Accountant-General's Department of Malaysia)	MIM	Malaysian Insurance Institute
JCorp	Johor Corporation	MITI	Minister of International Trade and Industry
JETC	Joint Economic Trade Committee	MMBH	Malaysia Mega Biodiversity Hub
JKR	Department of Works	MMHE	Malaysia Marine and Heavy Engineering Holdings Berhad
JPA	Public Service Department	mmscfd	Million Standard Cubic Feet Per Day
JUCN	Japan-US Cable Network	mmstb	Million Barrels
JV	Joint Venture	MMU	Multimedia University
KeTTHA	Ministry of Energy, Green Technology and Water	MNC	Multinational Company
KKR	Ministry of Works	MNPC	Malaysia Nuclear Power Corporation
KLCC	Kuala Lumpur City Centre	MoA	Ministry of Agriculture
KLIUC	Kuala Lumpur Infrastructure University College		

MoF	Ministry of Finance	PCG	Petronas Chemical Group Berhad
MoH	Ministry of Health	PCG	GLG High Performance
MoHE	Ministry of Higher Education	PDP	Project Delivery Partner
MoHR	Ministry of Human Resource	PDS	Private Debt Securities
MoICC	Ministry of Information, Communications and Culture	PDTs	Proprietary Day Traders
MOSTI	Ministry of Science, Technology and Innovation	PEMUDAH	Special Taskforce to Facilitate Business
MoU	Memorandum of Understanding	PIA	Promotion of Investments Act
MPAJ	Majlis Perbandaran Ampang Jaya	PITA	Petroleum Income Tax Act
MPC	Malaysia Productivity Corporation	PNB	Permodalan Nasional Berhad
MPIB	Malaysian Pineapple Industry Board	POC	Proof-of-Concept
MPOB	Malaysian Palm Oil Board	POIC	Palm Oil Industrial Cluster
MPRC	Malaysia Petroleum Resources Corporation	POME	Palm Oil Mill Effluent
MPS	Majlis Perbandaran Selayang	POS	Point of Sale
MPSAS	Malaysia Public Sector Accounting Standards		
MRB	Malaysian Rubber Board		
MRO	Maintenance, Repair and Overhaul		
MRT Corp	MRT Corporation Sdn Bhd		
MS PT	PT Mitra Samaya		
MS	Development of Malaysian Standard		
MTAB	Majlis Tindakan Agenda Bumiputera		
MTAC	Malaysia Truly Asia Centre		
mtpa	Million Tonnes Per Annum		
mtpd	Metric Tonnes Per Day		
MyCC	Malaysian Competition Commission		
MyCCAP	Malaysia Centre for Clinical Attachment and Placement		
MyCEB	Malaysian Convention and Exhibition Bureau		
MyCenTHE	Malaysia Centre of Tourism and Hospitality Education		
MyClear	Malaysia Electronic Clearing Corporation Sdn Bhd		
MyQuest	Malaysia Quality Evaluation System		
NAPEI	National Association of Private Educational Institutions		
NAV	Net Asset Value		
NCIA	Northern Corridor Implementation Authority		
NEAC	National Economic Advisory Council		
NEM	New Economic Model		
NEP	New Economic Policy		
NGO	Non-Government Organisations		
NKEA	National Key Economic Area		
NKRA	National Key Results Area		
NMIT	Netherlands Maritime Institute of Technology		
NOSS	National Occupational Skills Standard		
NTDC	NCIA Technology Design Centre		
NTEP	National Talent Enhancement Programme		
NTTCom	NTT Communications Corporation		
NUMed	Newcastle University Medicine Malaysia		
NWCC	National Wage Consultative Council		
ODM	Original Design Manufacturing		
OEM	Original Equipment Manufacturing		
OER	Oil Extraction Rate		
OFSE	Oil Field Services and Equipment		
OGE	Oil, Gas and Energy		
OIC	Organisation of The Islamic Cooperation		
OUM	Open University Malaysia		
PAKAR	Pasar Komuniti and Pasar Kavarán		
PBT	Projek Perumahan Rakyat, Local Authorities		

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