**Appendix 4.24.2** Industrial Greenhouse Gas Emission Intensity (GHGIND) in Malaysia - the comparison of data between CAIT and Malaysia Data

**Table A1: Comparison of CAIT and Malaysia Data for Indicator: Greenhouse Gases Emission per Capital (GHGCAP)**

| CAIT DATA | MALAYSIA DATA | EPI FINDINGS | MALAYSIA FINDINGS | EPI Target |
|---|---|---|---|---|
| **Electricity and Heat** | **Energy Industries** | 14.472072 Mt CO2 eq | 8.023912 Mt CO2 eq. | 2.5 Mt CO2 eq. |
| Main Activity Electricity and Heat Production | Public electricity and heat production | | | |
| Auto producer | *NIL* | | | |
| Other Energy Industry | Petroleum refining | | | |
| | Manufacture of solid fuels and other energy industries | | | |
| | | | | |
| **Manufacturing and Construction** | **Manufacturing Industries and Construction** | | | |
| Iron and Steel | Manufacturing (Not specific) | | | |
| Chemicals and Petrochemicals | | | | |
| Non-Ferrous Metals | | | | |
| Non-Metallic Minerals | | | | |
| Transport Equipment | | | | |
| Machinery | | | | |
| Food and Tobacco | | | | |
| Paper, Pulp and Printing | | | | |
| Wood and Wood Products | | | | |
| Textile and Leather | | | | |
| Non-specified Industry | | | | |
| Non- Energy Use Industry | | | | |
| Construction | Construction | | | |
| *Nil* | Mining | | | |
| | | | | |

**Table A1: Comparison of CAIT and Malaysia Data for Indicator: Greenhouse Gases Emission per Capital (GHGCAP) - Continue**

| CAIT DATA | MALAYSIA DATA | EPI FINDINGS | MALAYSIA FINDINGS | EPI Target |
|---|---|---|---|---|
| **Transportation** | **Transportation** | 14.472072 Mt CO2 eq | 8.023912 Mt CO2 eq. | 2.5 Mt CO2 eq. |
| Domestic air transport | Aviation | | | |
| Road vehicles | Road | | | |
| Rail | Rail | | | |
| National navigation | Navigation/ Maritime | | | |
| Pipeline transport | *Nil* | | | |
| Non-specified transport | *Nil* | | | |
| Non-energy use in transport | *Nil* | | | |
| *Nil* | Military transport | | | |
| | | | | |
| **Other Fuel Combustion** | **Not Specific** | | | |
| $CH_4$ and $N_20$ from biomass combustion | Emission from Biomass fuels | | | |
| $CH_4$ and $N_20$ stationary and Mobile combustion | *Nil* | | | |
| $CO_2$ from other sectors | *Nil* | | | |
| | | | | |
| **Fugitive Emission** | **Fugitive Emissions from Fuels** | | | |
| Gas venting/ Flaring | Venting and Flaring | | | |
| Oil and Natural gas systems | Oil and Gas System: Oil, Natural Gas, | | | |
| Coal Mining | Coal mining and Handling | | | |
| | | | | |

**Table A1: Comparison of CAIT and Malaysia Data for Indicator: Greenhouse Gases Emission per Capital (GHGCAP) - Continue**

| CAIT DATA | MALAYSIA DATA | EPI FINDINGS | MALAYSIA FINDINGS | EPI Target |
|---|---|---|---|---|
| **Industrial Process** | **Industrial Processes** | 14.472072 Mt CO2 eq | 8.023912 Mt CO2 eq. | 2.5 Mt CO2 eq. |
| $CO_2$ emissions from cement manufacture | Cement Production | | | |
| $N_20$ emissions from Adipic and Nitric Acid Production | Nitric Acid Production | | | |
| *Nil* | Lime Production | | | |
| *Nil* | Limestone and Dolomite Site | | | |
| *Nil* | Ammonia Production | | | |
| *Nil* | Carbide Production | | | |
| *Nil* | Petrochemicals | | | |
| $N_20$ and $CH_4$ emissions from other industrial | *Nil* | | | |
| *Nil* | Iron and Steel Production | | | |
| | | | | |
| **Agriculture** | Agriculture (Not Specific) | | | |
| $CH_4$ from Livestock | | | | |
| $CH_4$ and $N_20$ from livestock manure management | | | | |
| $CH_4$ from rice cultivation | | | | |
| $N_20$ from agriculture soils | | | | |
| $CH_4$ and $N_20$ from other Agriculture Sources | | | | |
| *Nil* | **Fishery** | | | |
| | | | | |
| *Nil* | **Forestry** | | | |
| | | | | |

**Table A1: Comparison of CAIT and Malaysia Data for Indicator: Greenhouse Gases Emission per Capital (GHGCAP) - Continue**

| CAIT DATA | MALAYSIA DATA | EPI FINDINGS | MALAYSIA FINDINGS | EPI Target |
|---|---|---|---|---|
| **Land Use Change (Yearly CO2 Emission)** | *Nil* | 14.472072 Mt CO2 eq | 8.023912 Mt CO2 eq. | 2.5 Mt CO2 eq. |
| Clearing of natural ecosystems for permanent croplands (cultivation) | | | | |
| Clearing of natural ecosystems for permanent pastures (no cultivation) | | | | |
| Abandonment of croplands and pastures with subsequent recovery of carbon stocks to those of the original ecosystem | | | | |
| Shifting cultivation | | | | |
| Wood harvest | | | | |
| | | | | |
| **Waste** | Nil | | | |
| $CH_4$ from landfills (solid waste) | | | | |
| $CH_4$ from wastewater treatment | | | | |
| $N_20$ from human sewage | | | | |
| $CH_4$ and $N_20$ from other (waste) | | | | |
| | | | | |
| **International Bunker** | **International Bunkers** | | | |
| Aviation Bunker | | | | |
| Marine Bunker | | | | |
| *Nil* | **Commercial** | | | |
| *Nil* | **Residential** | | | |
| *Nil* | **Other Relevant Greenhouse Gases** | | | |
| | Emission from halocarbon and Sulphur Hexafluoride (Consumption of HFC 134a for Mobile Air Conditioning (MAC) and Consumption of SF6 (Not Specific) | | | |

Noted: Climate Analysis Indicators Tool (CAIT) data is from year 2005; Malaysia data is from year 2004

**Table A2: Comparison of CAIT and Malaysia Data for Indicator: Industrial Greenhouse Gas Emission Intensity (GHGIND)**

| CAIT DATA | MALAYSIA DATA | EPI FINDINGS | MALAYSIA FINDINGS | EPI Target |
|---|---|---|---|---|
| **Industrial Process** | **Industrial Processes** | 59.416066 Metric Tons CO2 Equivalent per $mil, (USD 2005) PPP of industrial GDP | 117.752454 Metric Tons CO2 Equivalent per $mil, (USD 2005) PPP of industrial GDP | 36.3 tons of CO2 Equivalent per $mill (USD, 2005, PPP) of industrial GDP |
| $CO_2$ emissions from cement manufacture | Cement Production | | | |
| $N_20$ emissions from Adipic and Nitric Acid Production | Nitric Acid Production | | | |
| *Nil* | Lime Production | | | |
| *Nil* | Limestone and Dolomite Site | | | |
| *Nil* | Ammonia Production | | | |
| *Nil* | Carbide Production | | | |
| *Nil* | Petrochemicals | | | |
| $N_20$ and $CH_4$ emissions from other industrial | *Nil* | | | |
| *Nil* | Iron and Steel Production | | | |
| | | | | |

Noted: Climate Analysis Indicators Tool (CAIT) data is from year 2005; Malaysia data is from year 2004

**Table A3: Comparison of IEA and Malaysia Data for Indicator: CO2 Emission for Electricity Generation (CO2KWH)**

| IEA DATA | MALAYSIA DATA | EPI FINDINGS | MALAYSIA FINDINGS | EPI Target |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |
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| | | | | |