Topic: Carbon Neutral Initiatives for Malaysia

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MGTC Introduction

3-key roles

• Mainstreaming the **Green Economy** through green product and service expansion programs such as the **MyHIJAU Mark Certification Program**. The **Green Technology Financing Scheme (GTFS)** & **Green Technology Investment Tax Exemption (GITE)** as well as training and human capital development schemes.

• Drive climate change mitigation actions such as advocacy for **energy efficiency and renewable energy**, **low carbon urban programs**, and **low carbon mobility**.

• Cultivate a **green lifestyle** through publicity and awareness programs in fostering cooperation between the government and private sectors in the global-scale platform such as International Greentech and Eco Products Exhibition and Conference Malaysia (IGEM) program and other public programs physically or through social media.
Malaysia NDC

2030: Reduce GHG emissions intensity of GDP by 45% of 2005 levels

2050: Net-zero GHG emissions

Source: BUR3, 2020

GHG Emission Annual Inventory

Source: BUR3, 2020
### Malaysia's Total Emissions

316,833.23 Gg CO₂ eq
Total GHG emission for 2016

#### Key Categories of GHG Emissions for 2016, without LULUCF Emissions

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>1. Energy Industries - Solid Fuels</td>
<td>31.1%</td>
</tr>
<tr>
<td>Energy</td>
<td>2. Energy Industries - Gaseous Fuels</td>
<td>48.7%</td>
</tr>
<tr>
<td>Energy</td>
<td>3. Manufacturing Industries and Construction - Liquid Fuels</td>
<td>61.4%</td>
</tr>
<tr>
<td>Energy</td>
<td>4. Road Transportation</td>
<td>68.9%</td>
</tr>
<tr>
<td>Energy</td>
<td>5. Manufacturing Industries and Construction - Gaseous Fuels</td>
<td>73.0%</td>
</tr>
<tr>
<td>Energy</td>
<td>6. Energy Industries - Liquid Fuels</td>
<td>76.5%</td>
</tr>
<tr>
<td>IPPU</td>
<td>7. Other Process Use of Carbonates - Limestone and Dolomite</td>
<td>79.6%</td>
</tr>
<tr>
<td>Waste</td>
<td>8. Industrial Wastewater Treatment and Discharge</td>
<td>82.7%</td>
</tr>
<tr>
<td>Waste</td>
<td>9. Solid Waste Disposal</td>
<td>85.4%</td>
</tr>
<tr>
<td>Energy</td>
<td>10. Fugitive Emissions from Fuels - Natural Gas</td>
<td>88.0%</td>
</tr>
<tr>
<td>IPPU</td>
<td>11. Aluminium Production - PFC-14 emissions</td>
<td>89.8%</td>
</tr>
<tr>
<td>IPPU</td>
<td>12. Aluminium Production - CO2 emissions</td>
<td>90.8%</td>
</tr>
<tr>
<td>AFOLu - Agriculture</td>
<td>13. Direct N2O Emissions from Managed Soils</td>
<td>91.5%</td>
</tr>
<tr>
<td>IPPU</td>
<td>14. Photovoltaics</td>
<td>92.2%</td>
</tr>
<tr>
<td>Energy</td>
<td>15. Fugitive Emissions from Fuels - Oil</td>
<td>92.8%</td>
</tr>
<tr>
<td>IPPU</td>
<td>16. Cement Production</td>
<td>93.3%</td>
</tr>
<tr>
<td>Energy</td>
<td>17. Other Sectors - Liquid Fuels</td>
<td>93.8%</td>
</tr>
<tr>
<td>Waste</td>
<td>18. Domestic Wastewater Treatment and Discharge</td>
<td>94.2%</td>
</tr>
<tr>
<td>AFOLu - Agriculture</td>
<td>19. Enteric Fermentation</td>
<td>94.6%</td>
</tr>
<tr>
<td>IPPU</td>
<td>20. Integrated Circuit or Semiconductor</td>
<td>95.0%</td>
</tr>
</tbody>
</table>

#### Data from Malaysia's 3rd BUR
Figure 2.6: Emissions Time Series from 1990 to 2016 for Energy Sector

Figure from Malaysia’s 3rd BUR
Related Policies

LCMB Key Targets

- **National GHG emission average (and FE) engine emission regulation**
  - Transferring all new vehicles
  - 
    - 144 gCO2/km (Euro 4)
    - 123 gCO2/km (Euro 5)
    - 95 gCO2/km (Euro 6)

- **Electric Vehicle**
  - 15% EV (from the Total Industry Volume by 2030)

- **EV Charging Infrastructure**
  - 10,000 units (by 2030)

- **Battery Electric Buses (EV) 15% e-bikes (by 2030)***

- **Mode Shift**
  - 40% public transport modal share in major cities (until 2030)
  - 5% Road to rail freight transport shift (2025)
  - B100 use in selected diesel stage buses (2025)
TNB SETS NET ZERO EMISSIONS ASPIRATION BY 2050

- Adopts sustainability pathway to reduce emission intensity by 35% and halve coal generation capacity by 2035
- Gradual recovery of 1HFY2021 financial performance on increased economic activity and recovery of industrial sector demand

Tenaga Nasional Berhad (TNB) announced its sustainability pathway with an aspiration to achieve net zero emissions by 2050, in a bold move towards decarbonisation and Renewable Energy (RE).

“We are making this commitment (Net Zero Carbon Emissions (NZCE) by 2050) to make a positive change — not only to ride the energy transition — but because a fundamental shift is needed and the organisation wants to be part of the solution, for the world that yearns for a path towards a more sustainable future.”

Tengku Muhammad Taufik
President & Group CEO, PETRONAS
(Source: www.petronas.com/sustainability)
Bursa Malaysia aims to become carbon neutral by 2022 and achieve net zero emissions by 2050.

One of their planned initiatives is to offset emissions from electricity consumption, employee travel to work and paper consumption, and other relevant emission sources beginning next year. This will be accomplished by supporting nature-based solutions that remove carbon from the atmosphere.

“Our deliverables in the area of ESG follows through from our sustainability journey taken over the years, including our financing commitments of ‘No Deforestation, No New Peat and No Exploitation’ (NDPE), not providing financing to black-listed activities deemed not in line with the Group’s core values and no financing of new coal activities while transitioning together with existing borrowers to achieve sustainable renewable energy mix over the medium- to long-term.”

Datuk Abdul Farid Alias
Group President & CEO
(Source: Maybank Newsroom 2021)
Thank You

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