



Topic: Carbon Neutral Initiatives for Malaysia

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MGTC Introduction

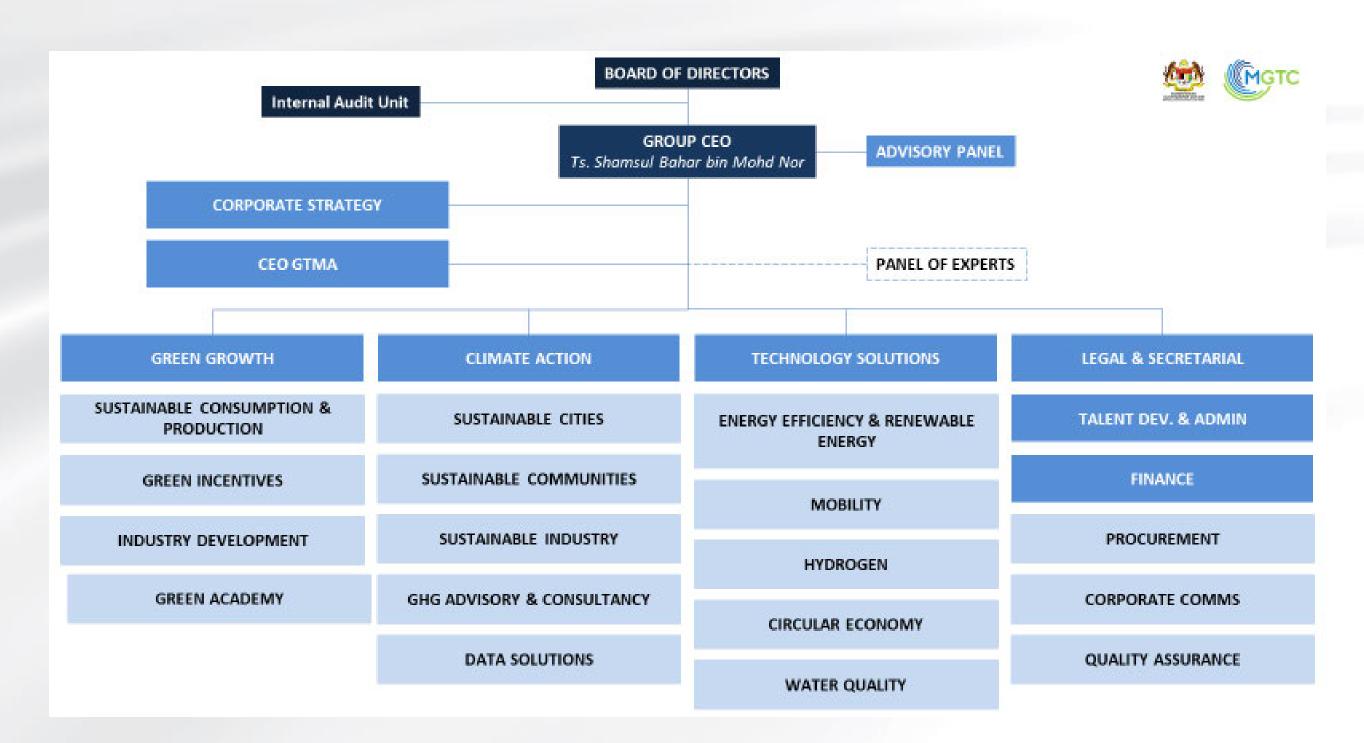




MALAYSIAN GREEN TECHNOLOGY AND CLIMATE CHANGE CENTRE

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 <u>low carbon mobility</u>
- 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.



















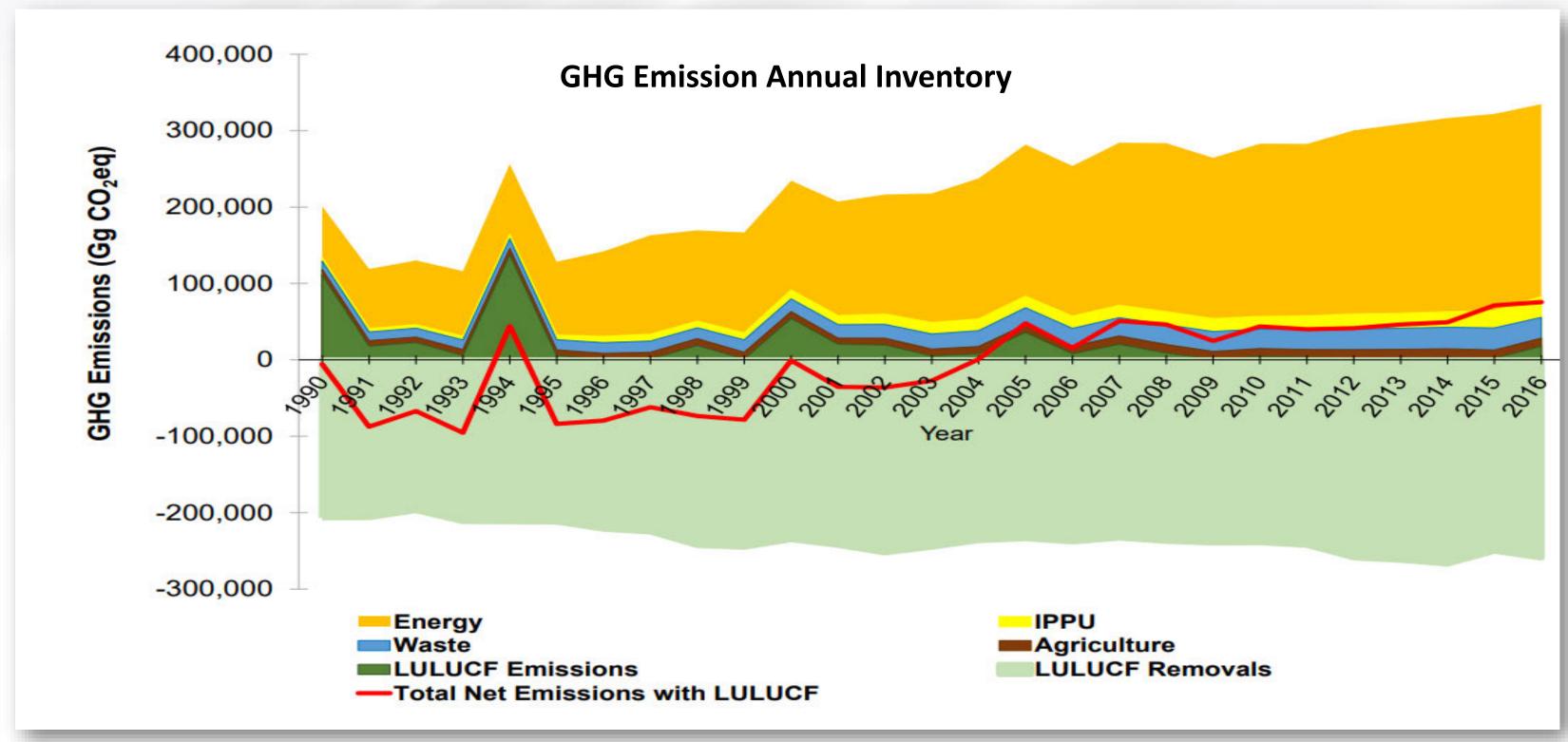
Malaysia NDC





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

2050: Net-zero GHG emissions



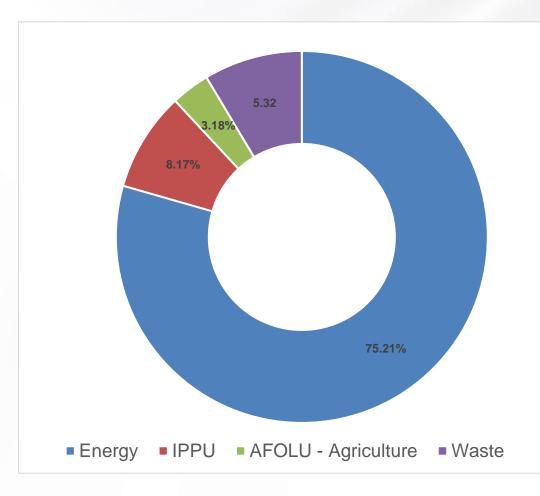
Malaysia's Total Emissions





316,833.23 Gg CO₂eq

Total GHG emission for 2016



Key Categories of GHG Emissions for 2016, without LULUCF Emissions

Energy	Energy Industries - Solid Fuels	31.1%
Energy	2. Energy Industries - Gaseous Fuels	48.7%
Energy	3. Manufacturing Industries and Construction - Liquid Fuels	61.4%
Energy	4. Road Transportation	68.9%
Energy	5. Manufacturing Industries and Construction - Gaseous Fuels	73.0%
Energy	6. Energy Industries - Liquid Fuels	76.5%
IPPU	7. Other Process Use of Carbonates - Limestone and Dolomite	79.6%
Waste	8. Industrial Wastewater Treatment and Discharge	82.7%
Waste	9. Solid Waste Disposal	85.4%
Energy	10. Fugutive Emissions from Fuels - Natural Gas	88.0%
IPPU	11. Aluminium Production - PFC-14 emissions	89.8%
IPPU	12. Aluminium Production - CO2 emissions	90.8%
AFOLu - Agriculture	13. Direct N2O Emissions from Managed Soils	91.5%
IPPU	14. Photovoltaics	92,2%
Energy	15. Fugitive Emissions from Fuels - Oil	92.8%
IPPU	16. Cement Production	93.3%
Energy	17. Other Sectors - Liquid Fuels	93.8%
Waste	18. Domestic Wastewater Treatment and Discharge	94.2%
AFOLU - Agriculture	19. Enteric Fermentation	94.6%
IPPU	20. Integrated Circuit or Semiconductor	95.0%

88.0%

Cumulative of total emissions

The Energy Sector





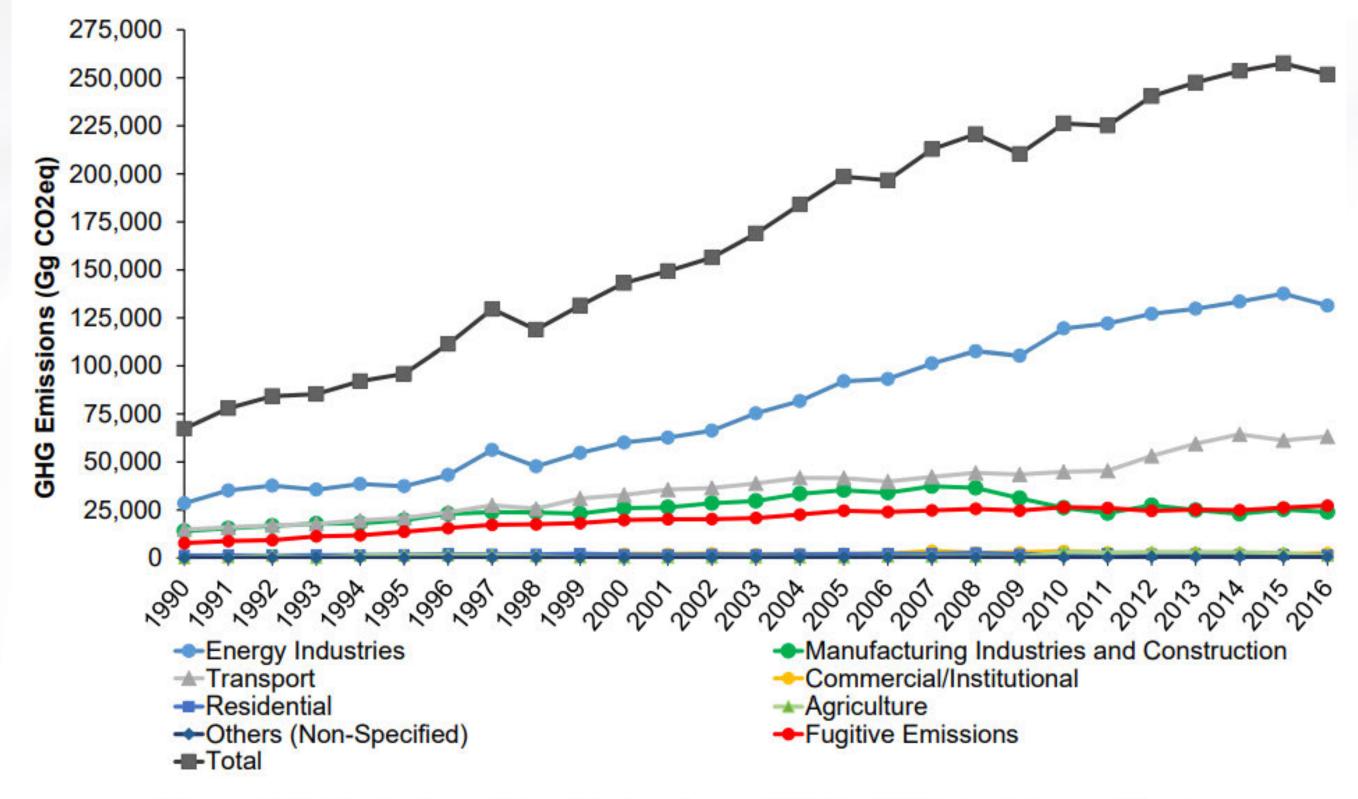


Figure 2.6: Emissions Time Series from 1990 to 2016 for Energy Sector

Related Policies







2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035

MW

20,000

15,000

10,000

5,000

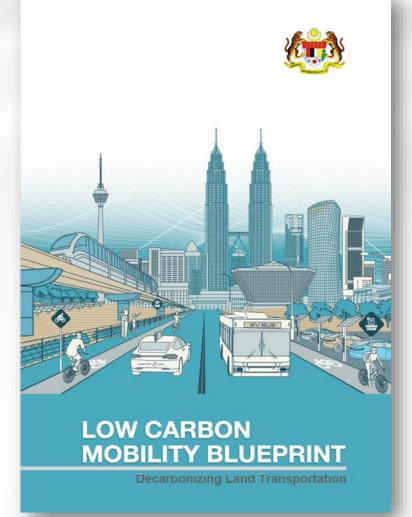
Baseline @ 2020

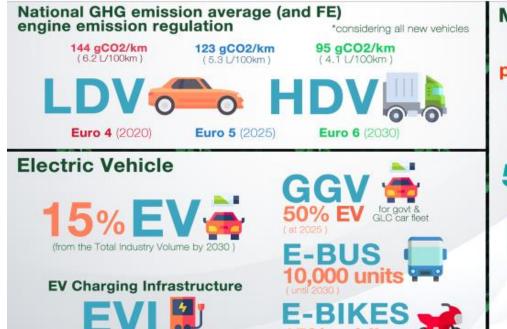
New Capacity Target

BAU

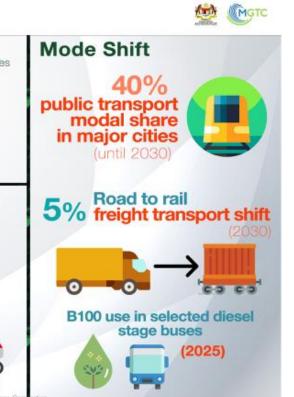
8,450 MW-23% RE Share







10,000 Charging Points by 2025



TRENDS IN MALAYSIA







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).

Tenaga Nasional (https://www.tnb.com.my/assets/quarterly_results/Press_Release_2QFY21.pdf)



"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)

TRENDS IN MALAYSIA









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.

Bursa Malaysia (https://focusmalaysia.my/how-bursa-malaysia-commits-to-become-a-carbon-neutral-exchange/)

"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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