

# PETRONAS Energy Transition Strategy

Energy transition is happening and is gaining momentum.

The energy transition journey is not linear given many moving parts – evolving policies and regulations, changing customer preferences for low-carbon energy solutions and increasing expectations of investors and financiers.

PETRONAS as a leading global energy company aims to play a key role in the energy transition, focusing on energy security and at the same time delivering energy solutions responsibly.

We have developed our Energy Transition Strategy centred on creating value for our customers and stakeholders. Our Energy Transition Strategy will steer PETRONAS to strengthen our Core Business, capture new growth opportunities for New Business and at the same time responsibly manage carbon emissions to realise our NZCE 2050 Pathway.

Our priority is to strike the right balance between growth in our Core Business and New Business while reducing greenhouse gas (GHG) emissions in order to thrive in the energy transition. We will allocate our capital resources with discipline and nurture a strong talent bench to deliver this strategy.

We will remain resolutely progressive to ensure a sustainable future.



## Core Business *More Energy, Less Emissions*

The world needs more energy to support a growing population and economic expansion, but this demand must be met with reduced emissions for a sustainable future.

Oil and gas will continue to be relevant in the energy mix until 2050, with gas playing a major role as a transition fuel, given growing demand for gas to fulfil global energy security needs.

PETRONAS is in an advantageous position in this energy transition as two-thirds of its hydrocarbon portfolio is made up of gas. PETRONAS will continue to serve global LNG demand as one of the leading LNG players in the world.

PETRONAS' efforts to strengthen its Core Business will help sustain the vibrancy of the oil and gas integrated value chain, local Oil and Gas Services and Equipment (OGSE) ecosystem and adjacent industries.

Our Core Business continues to be an anchor for PETRONAS as it is expected to generate steady cashflows to help finance our decarbonisation efforts and investments in new businesses.

We will produce oil and gas in a differentiated manner, safely, reliably, with focus on reducing carbon emissions and at a competitive cost.

We will continue to strengthen our Downstream assets to capitalise on the favourable commodities outlook and expand product offerings with a focus on customer-centricity.



### Priority Areas

- **Upstream Malaysia:** Intensify oil and gas exploration, development and monetisation in Malaysia to serve domestic energy demands, maximise integrated value chain and sustain the vibrancy of the domestic oil and gas ecosystem.
- **Upstream International:** Sustain production levels and high-grade international oil and gas portfolio towards being low-cost, low-carbon.
- **Gas:** Maintain LNG market leadership by maximising value from existing assets as well as pursuing new supply nodes.
- **Downstream:** Strengthen operational excellence, commercial excellence and value extension to fully capture the market.



**New Business**  
*Capturing New Growth Opportunities*

The energy transition presents many opportunities for PETRONAS.

PETRONAS has identified and pursued various New Businesses to future-proof our portfolio in response to changing customer preferences and to offer clean energy solutions. Each of these businesses are expected to progress at varying pace and trajectories depending on technological advancements and market demand.

We will pursue both organic and inorganic growth and seek opportunities to collaborate with partners across the globe to provide customers with cleaner and more affordable energy solutions.

Gentari, our clean energy solutions arm was established to focus on delivering PETRONAS' ambitions in Renewable Energy, Hydrogen and Green Mobility with pace.

To deliver sustainable results from our New Businesses, we will rely on new technologies and synergies within the Group, leveraging existing expertise as well as developing new capabilities to manage new ventures.

**Priority Areas**

- Our immediate focus is to purposefully scale and strategically position the following identified businesses:
  - **Specialty Chemicals:** Strengthen presence in the specialty chemicals business to offer customers a broad range of high-quality products through PETRONAS Chemicals Group Bhd.
  - **Carbon capture and storage (CCS):** Mature CCS to decarbonise PETRONAS' portfolio and design for regional demand to position Malaysia as a leading CCS hub in the region.
  - **Bio-based Value Chain:** Offer bio-based products and offerings to meet emerging market demands.
  - **Renewable Energy:** Build 30-40 GW of renewable energy capacity by 2030.
  - **Hydrogen:** Pursue up to 1.2 MTPA of hydrogen by 2030.
  - **Green Mobility:** Capture 10 per cent market share of public EV charging points across key markets in Asia Pacific.



**Net Zero Carbon Emissions**  
*Pathway to Zero*

Decarbonising our portfolio is not an option, but a must.

PETRONAS has charted a more granular pathway for NZCE 2050. We have identified key abatement levers and their abatement potential to decarbonise PETRONAS' Scope 1 and Scope 2 emissions.

PETRONAS will responsibly manage GHG emissions to future-proof our Core Business and reduce the carbon intensity of our product offerings to customers. We will continue to support Malaysia's commitment to reduce its global carbon footprint through its Nationally Determined Contributions.

We are committed to meeting the short- and medium-term targets to ensure we deliver meaningful progress towards NZCE 2050. To achieve this, we have allocated resources to ensure focused delivery.

PETRONAS has also elevated our GHG accounting and reporting approach to fully adhere to the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (2004), Ipeica Climate Change Reporting Framework (2011) and ISO 14064-1 GHG-Part 1 (2018). Additionally, we have adopted the Taskforce on Climate-related Financial Disclosures (TCFD) framework to enhance our sustainability reporting from 2023 onwards.

**Priority Areas**

- Intensify efforts in zero routine flaring and venting, energy efficiency, electrification including digital solutions, operational excellence and equipment optimisation.
- Mature CCS as a key decarbonisation lever for our assets.
- Electrify PETRONAS operations, wherever feasible, through asset modification, infrastructure development and sourcing for renewable energy where feasible.

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## Immediate Priorities

- **Upstream Malaysia:** Intensify domestic oil and gas exploration to maximise integrated value chain, while expediting appraisal programmes to replenish our resources.
- **Upstream International:** Continue to sustain production and high-grade oil and gas portfolio towards low-cost, low-carbon molecules.
- **Gas:** Maximise LNG value from existing assets and pursue new supply nodes, maturing opportunities in Canada and Argentina to meet growing demand.
- **Downstream:** Preserve integrated margins through continuous operational and commercial excellence.



- **Specialty Chemicals:** Leverage acquired platforms to drive market and product expansion.
- **Carbon Capture & Storage:** Achieve Kasawari CCS first injection by 2026 and study new storage sites.
- **Bio-based Value Chain:** Establish pathways into biofuels production through co-processing in existing facilities and establishing greenfield refineries.
- **Renewable Energy:** Pursue organic growth from existing platforms while seeking inorganic growth opportunities.
- **Hydrogen:** Invest in early positions and set up local teams especially in priority markets.
- **Green Mobility:** Expand charging points across Asia Pacific, starting with Malaysia and India.

**2024** Intensify GHG emissions reduction efforts to meet capping of emission to 49.5 Million tCO<sub>2</sub>e in Malaysia (Operational Control).

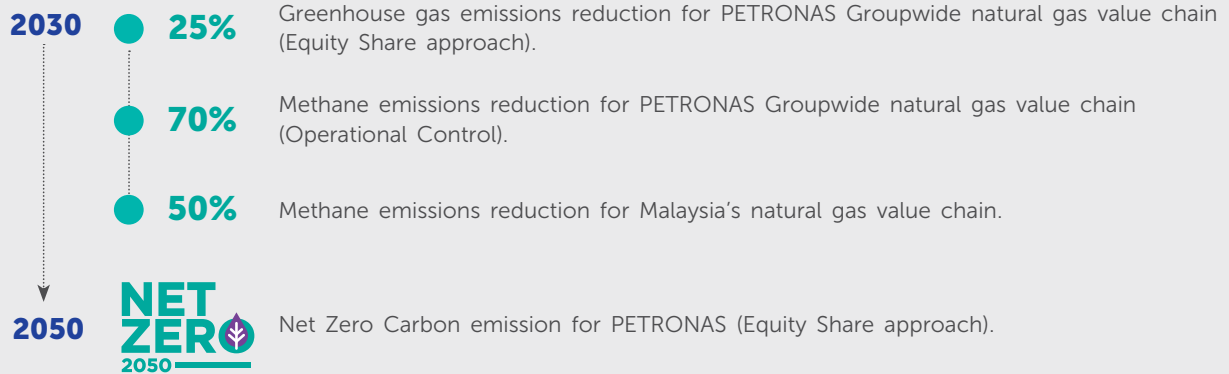
**2025** Fifty per cent Methane emissions reduction for PETRONAS Groupwide natural gas value chain<sup>2</sup> (Operational Control).



### Long-Term Ambitions

- **Upstream Malaysia:** Strengthen and future-proof Upstream Malaysia business to meet growing energy demand and sustain the vibrancy of integrated value chain and domestic oil and gas ecosystem.
- **Upstream International:** Continue to sustain production and high-grade oil and gas portfolio towards low-cost, low-carbon molecules.
- **Gas:** Maximise and grow LNG portfolio globally and maintain leadership position in LNG.
- **Downstream:** Diversify the offerings of Downstream business with differentiated and lower carbon footprint products.

- **Specialty Chemicals:** Scale up specialty chemical offerings and expand markets to fulfil changing customer needs.
- **Carbon Capture & Storage:** Key decarbonisation lever for PETRONAS and to design for regional demand.
- **Bio-based Value Chain:** Expand bio-based products and offerings to meet market demand.
- **Renewable Energy:** Build 30-40 GW of renewable energy capacity by 2030.
- **Hydrogen:** Pursue up to 1.2 MTPA of hydrogen by 2030.
- **Green Mobility:** Capture 10 per cent market share of EV charging points across key markets in Asia Pacific.



**Note:**

From 2019 levels.

Operational Control approach accounts for 100% of the GHG emissions occurring from operations in, which the company has operational control. Equity Share approach accounts for GHG emissions from reporting units according to its interest in the assets managed by the reporting unit.

<sup>1</sup> GHG emissions predominantly are Carbon Dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>) and Nitrous Oxide (N<sub>2</sub>O) measured in CO<sub>2</sub>e.

<sup>2</sup> Natural gas value chain definition is aligned with the Oil and Gas Climate Initiative's (OGCI) reporting parameters, which includes production processing and storage, transportation, distribution and end-use of natural gas.

<sup>3</sup> Targets are for Scope 1 and Scope 2.

<sup>4</sup> We are working on establishing a better understanding of our Scope 3 emissions and their impact to our operations.