



PETRONAS

ASIA CLEAN ENERGY FORUM 2020

WAN ATIKAHSARI WAN ZAKARIA

17th JUNE 2020

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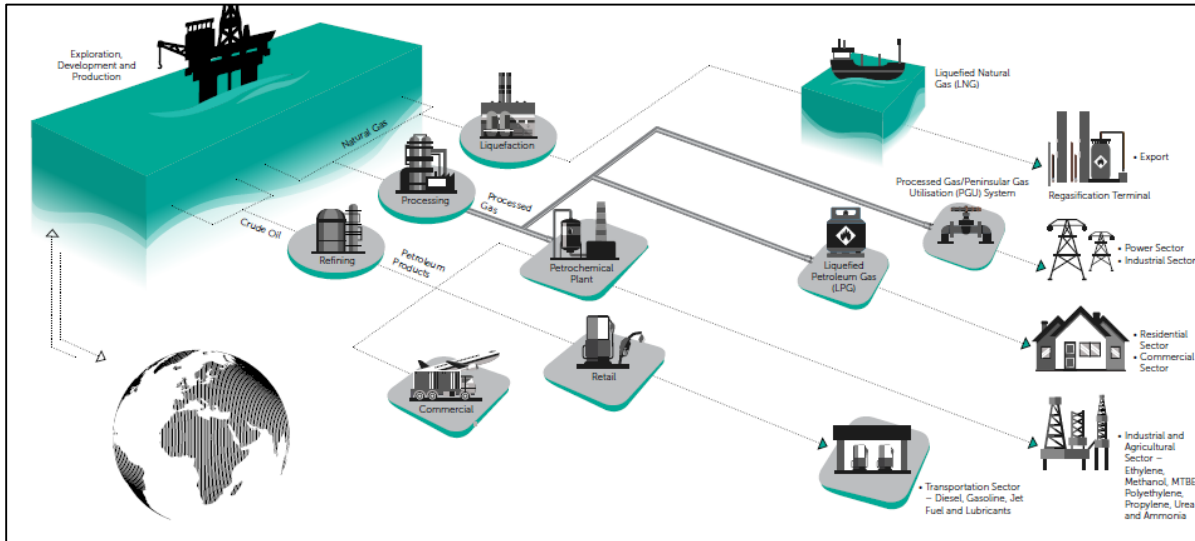
Outline

1. Objective
2. Background
3. Roadmap

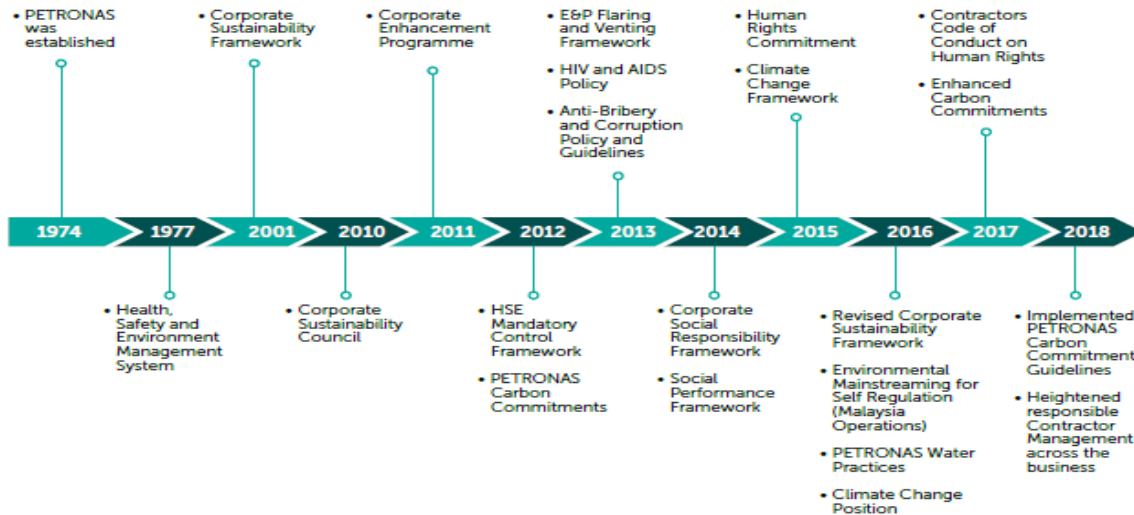
Objective

- The purpose of this presentation is to share PETRONAS' CCS/CCUS efforts in Malaysia

Background



Our Sustainability Milestones



Since the introduction of the PETRONAS Carbon Commitments in 2012, a cumulative **12 million tCO_{2e}** GHG emissions reduction has been achieved

Established and implemented in 2018, **PETRONAS Carbon Commitments Guidelines** will enhance our implementation moving forward

PETRONAS Carbon Commitments

PLANNING AND PROJECTS

- Zero continuous flaring and venting of hydrocarbon shall be incorporated in the design of new Upstream and Downstream facilities and projects.
- Malaysia Petroleum Management (MPM) shall apply a country level CO₂ emission allowance in the planning process for high CO₂ field development.
- High CO₂ field development in Upstream shall incorporate Carbon Capture, Utilisation and Storage (CCUS) technologies at design stage.
- Carbon price shall be considered in project decision-making together with the option of carbon offsets where economically feasible.

OPERATIONS

- Zero continuous venting of hydrocarbon for all existing Upstream and Downstream facilities.
- Reduce continuous flaring of hydrocarbon for all existing Upstream and Downstream facilities where operationally and economically feasible.
- Downstream and LNG operating assets shall meet and sustain top quartile energy performance.

RENEWABLE ENERGY

- Renewable Energy technologies shall be considered in all facilities and projects where operationally and economically feasible.

PARIS AGREEMENT








By 2030
Paris Agreement signed by 197 parties to combat climate change and maintain temperature rise to within 2°C

MALAYSIA NDC

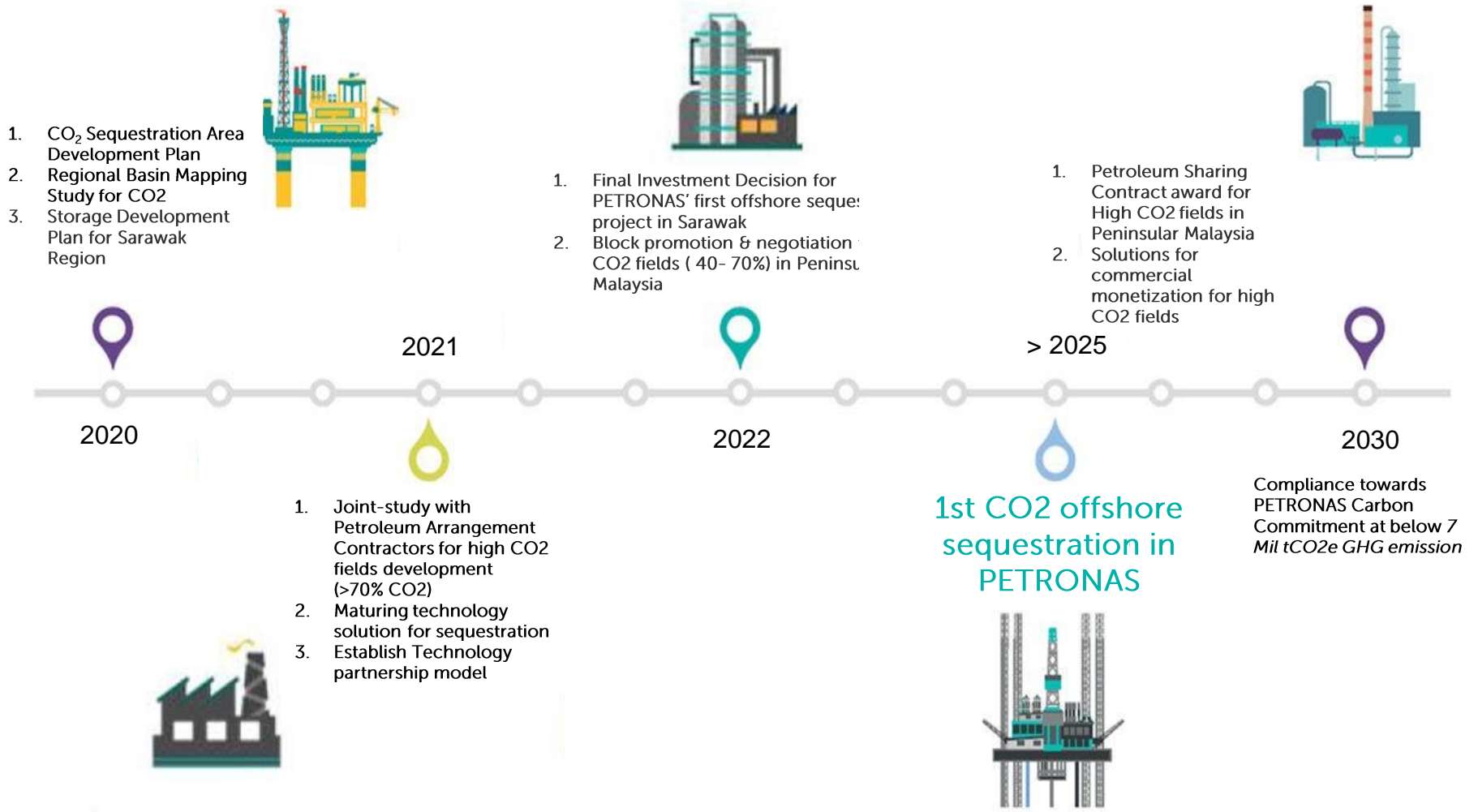
Malaysia committed a Nationally Determined Contribution (NDC) to the Paris Agreement
65 million tCO₂e
(Measured as below the BAU in 2030 at 0.531 (2005) to 0.292 (2020) million tCO₂e per Billion RM)

PETRONAS EMISSIONS REDUCTION TARGET

PETRONAS GHG Emissions Reduction Target 7 million tCO₂e

8	Planning & Projects	Operations & Renewable Energy
High CO ₂ Fields	 Limits By MPM	 CCUS at design stage
Flaring & Venting	 ZERO CONTINUOUS Hydrocarbons Flaring/Venting for new facilities and projects	ZERO CONTINUOUS Hydrocarbons Venting for existing facilities
Energy & Carbon Price	 CONSIDER Carbon Price & Carbon Offsets	 TOP QUARTILE Energy Performance in Downstream and LNG operating assets
		 REDUCE CONTINUOUS Hydrocarbons Flaring for existing facilities
		 CONSIDER Renewable Energy in facilities and projects

The ROADMAP



Thank you for your passion!

