



Regional CCS Hub Development in Malaysia

Towards hard to abate industries decarbonization

15 August 2024

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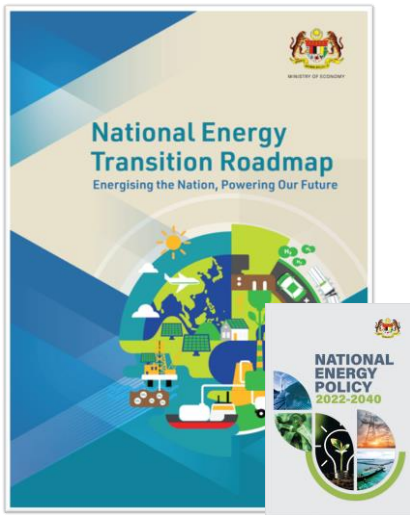
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CCS has been identified as one of the pillar that will propel Malaysia to realize its aspirations in the NETR and support the NIMP targets

National Energy Transition Roadmap (NETR)



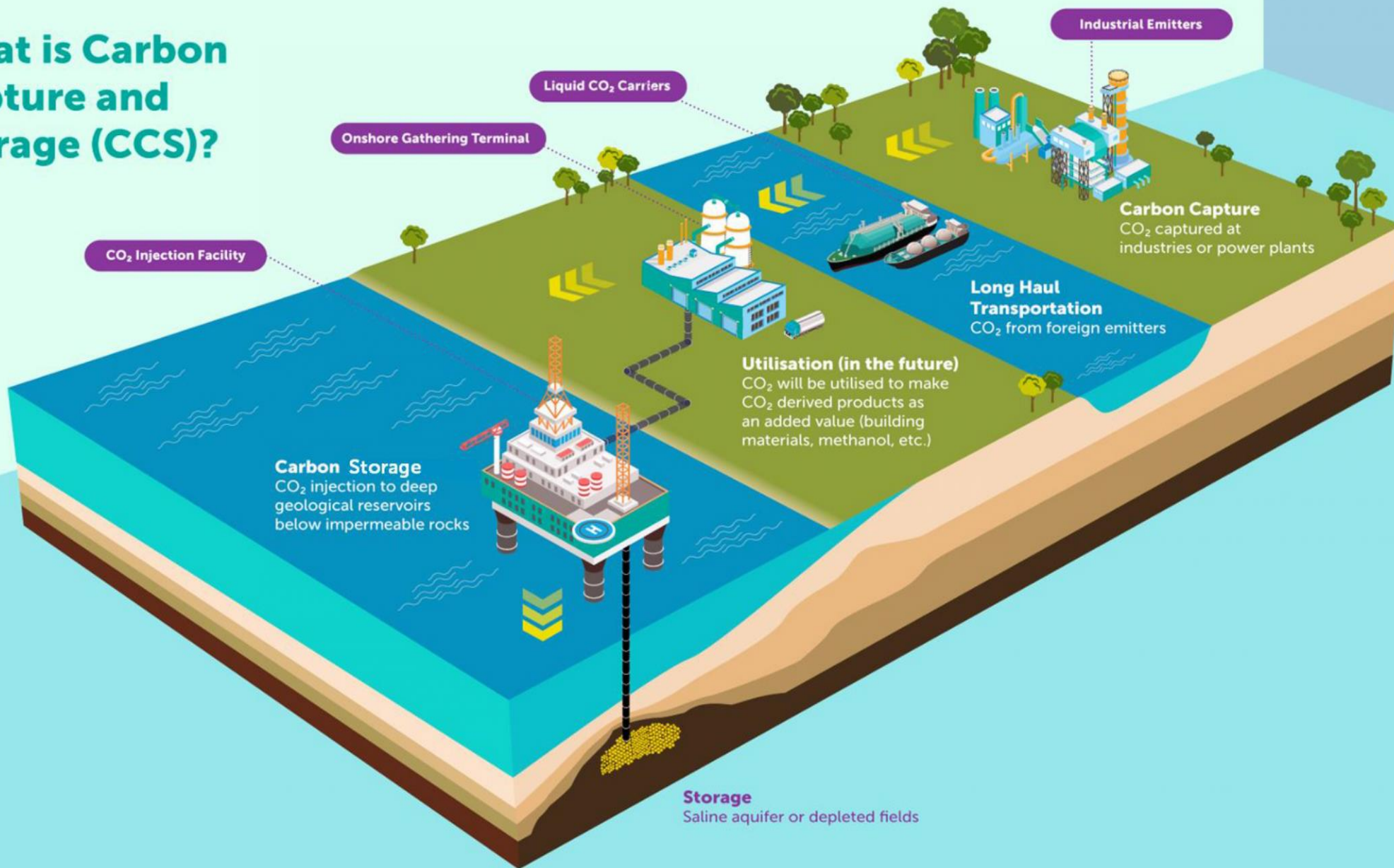
- **CCUS** is 1 of the **10 flagship catalyst projects** in the NETR roadmap.
- **By 2030:**
 - **3 CCUS hubs** (2 in Peninsular Malaysia, 1 in Sarawak)
- **By 2050:**
 - **3 carbon capture hubs**
 - **Storage capacity between 40 to 80 MTPA**
- The NETR is build upon the National Energy Policy (NEP) 2022-2040

New Industrial Master Plan 2030

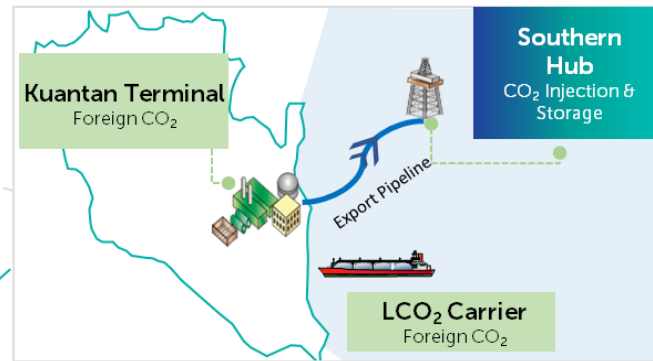
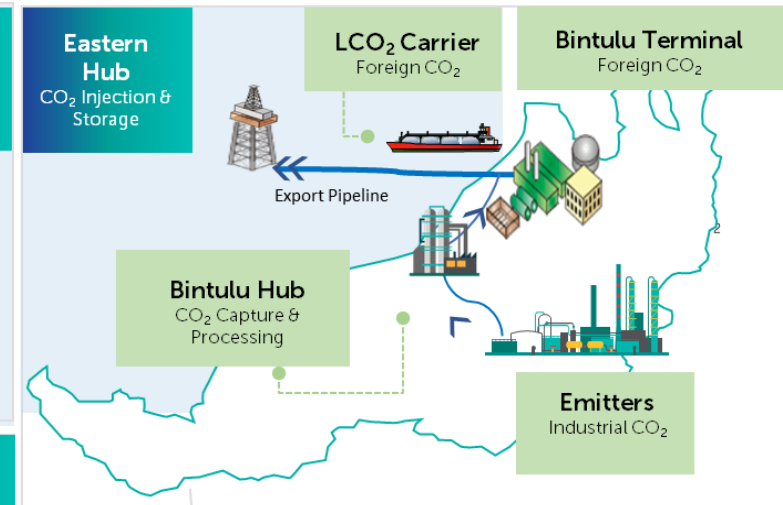
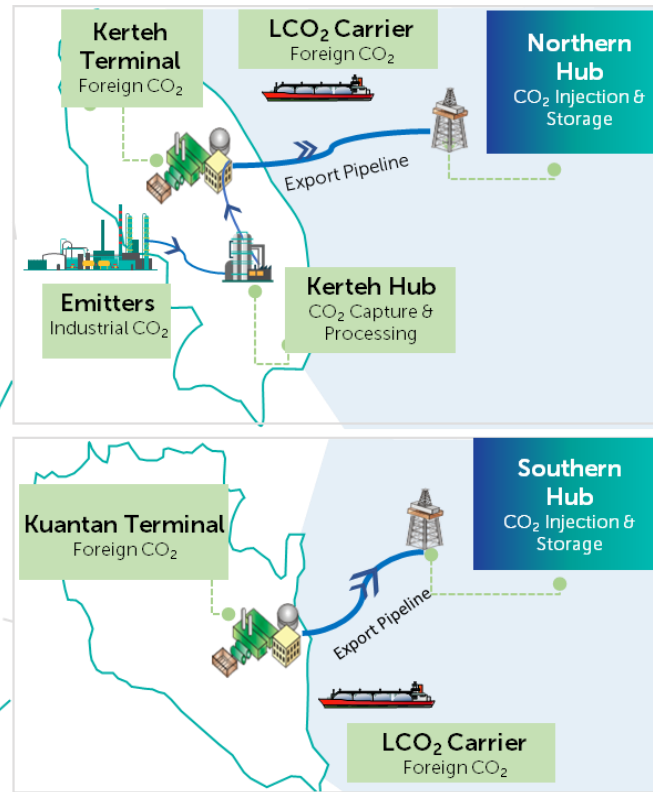
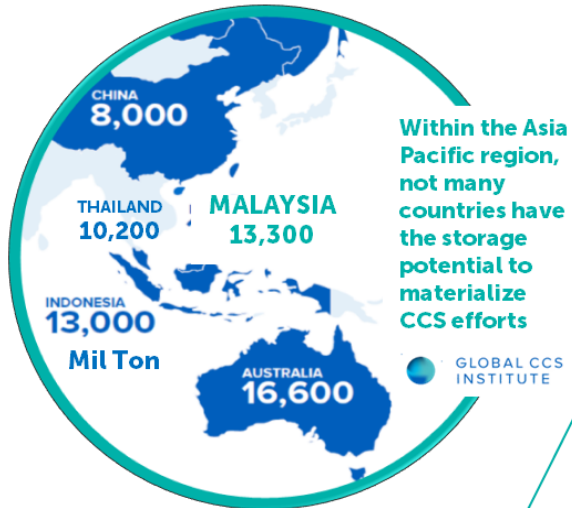


- Deploy large scale CCUS solutions to decarbonize hard-to-abate sectors
- Focus on **4 key** components:
 - Capture CO₂ from industrial processes
 - Transport by ship, pipeline and land transport
 - CO₂ storage in depleted oil fields
 - Utilization of captured CO₂ and aligned with circular economy principles
- CCUS framework and regulations is key to execute Mission Based Project (MBP) 3.3 in pushing for net zero

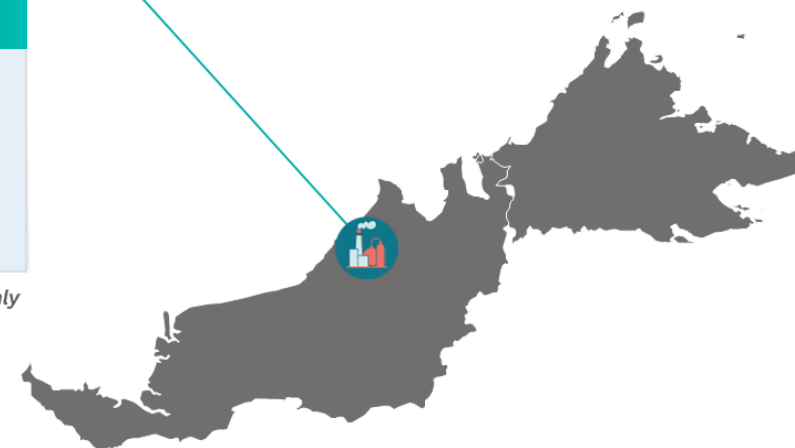
What is Carbon Capture and Storage (CCS)?



Development of 3 regional CCS Hub in Malaysia



For Illustration Purposes only



Collaboration Between PETRONAS & Power Company for CCS

Y Power Plant

- 1000 MW each
- Coal-Fired

Z Power Plant

- 2 x 1000MW
- Coal Fired



- Sailing option
- Pipeline option (using existing PM Gas Network)
- Trucking option



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YEARS