



BEN LINE INTEGRATED LOGISTICS

# CONNECTING THE DOTS

## Navigating Permitting and Legal Requirements for CCUS Projects – Federal and State Law Perspectives

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# What is CCS/CCUS

## Carbon Capture and Storage (CCS)

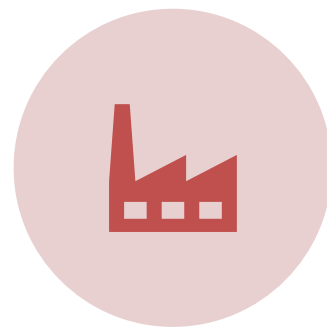
- Captures carbon dioxide (CO<sub>2</sub>) from industrial or power generation sources.
- Transports and stores CO<sub>2</sub> deep underground in geological formations.
- Prevents CO<sub>2</sub> from entering the atmosphere and contributing to climate change.

## Carbon Capture, Utilization and Storage (CCUS)

- Builds on CCS by reusing captured CO<sub>2</sub> for beneficial purposes.
- CO<sub>2</sub> can be converted into fuels, chemicals, or building materials before or after storage.



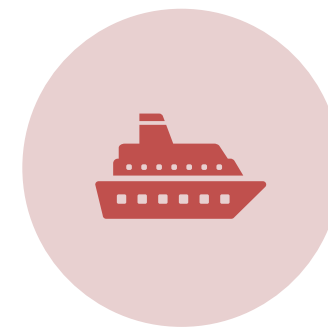
# CCS/CCUS Value Chain



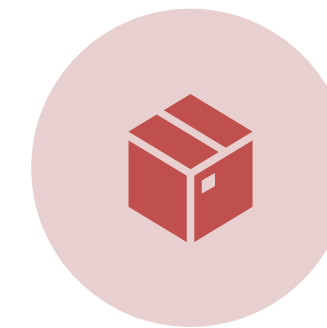
CO2 EMISSION



PURIFICATION AND  
LIQUEFACTION



TRANSPORTATION



UTILISATION OR  
STORAGE

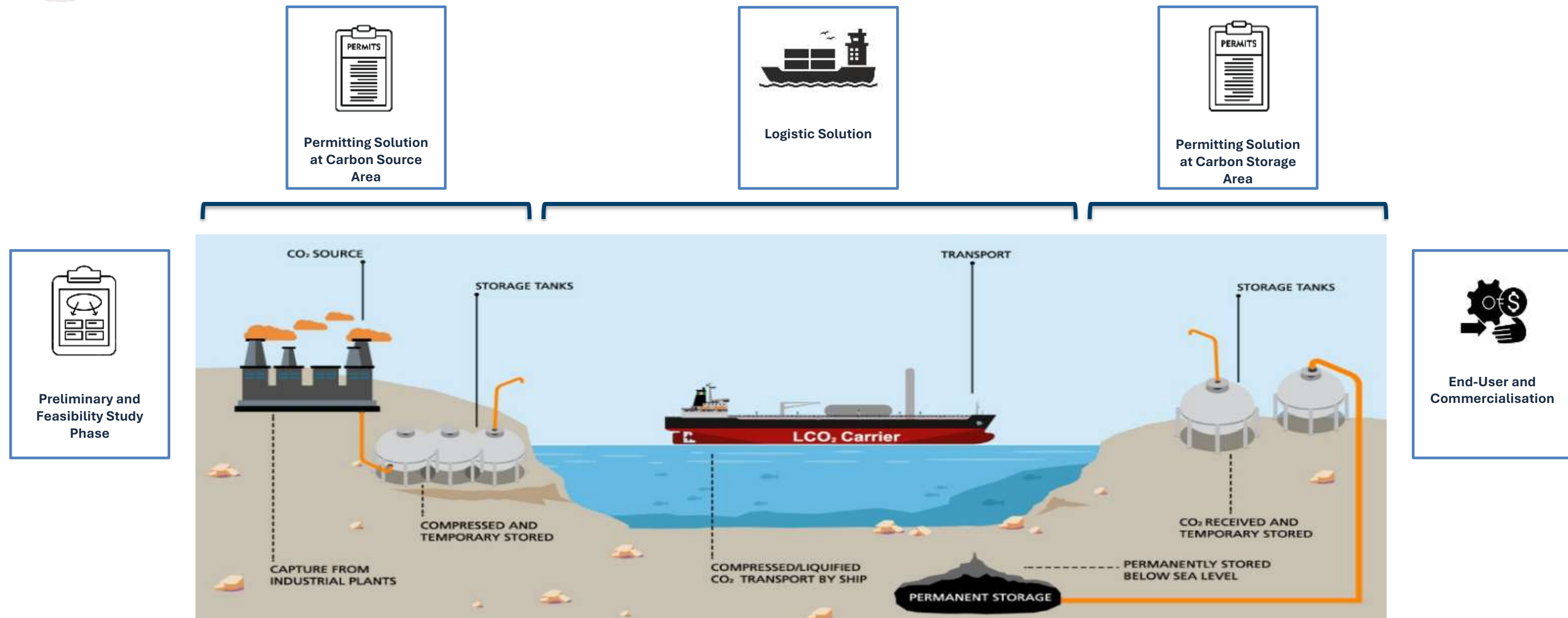
- Capture: Extract CO2 from sources
- Transportation: Move CO2 via pipelines
- Storage: Inject CO2 underground securely



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BORNEO  
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Growth towards Sustainable Maritime Logistics | 11-13 FEBRUARY 2025

# Overview of CCS/CCUS Technology



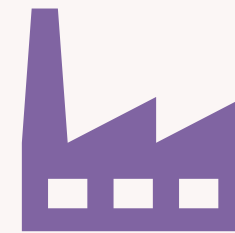
# Why CCS/CCUS Matters?



CO2 from fossil fuels contributes to global warming



Sea level rise and climate instability are major concerns



CCS captures CO2 from industrial processes & stores it



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Growth towards Sustainable Maritime Logistics for Borneo

# Overview of CCS/CCUS Act in Malaysia



Malaysian Parliament on 22 July 2025, Malaysia officially gazetted the Carbon Capture, Utilization and Storage Act 2025 (CCUS Act).



The Act comes into the operation on 1 October 2025 together with Carbon Capture, Utilization and Storage (Offshore Permit and Licensing) Regulations 2025



Part of the New Energy Transition Roadmap (NETR). It aims to regulate carbon capture, transport, utilisation & storage



Malaysia targets net-zero emissions by 2050



# Federal Framework in Malaysia

Environmental  
Quality Act  
(EQA 1974)

Emission  
reporting &  
monitoring.

Petroleum  
Development  
Act (PDA 1974)

PETRONAS  
rights to  
subsurface.

CCUS Act and  
its regulations

Dedicated  
regulatory  
framework.



# Key Legal Requirements of CCUS Act

## JURISDICTION

- The CCUS Act only cover the jurisdiction of Peninsular Malaysia and the Federal Territory of Labuan.
- State of Sabah and Sarawak are excluded.

## LEAD AGENCY

- A new dedicated agency Malaysian Carbon Capture, Utilization and Storage Agency or Malaysian CCUS Agency
- Functions include the following:
  - Advising the government
  - Regulating carbon-related activities
  - Managing post-closure monitoring funds
  - Promoting CCUS industry development
  - Technical experts may be appointed to support its operations.

## PERMITTING

- Registration of Carbon Capture Installations
- Registration for Transportation of Captured CO<sub>2</sub>
- Import Permit for CO<sub>2</sub> captured abroad
- Registration for Utilization of Captured CO<sub>2</sub>
- Storage (Offshore & Onshore):
  - Assessment Permits and Storage Licenses
  - Involves quality criteria, monitoring, and long-term reporting
  - Onshore storage requires coordination with State Governments





# Key Legal Requirements of Capture, Utilization and Storage (Offshore Permit and Licensing) Regulations 2025



Offshore Assessment Permit

Required before conducting geological assessment of potential CO<sub>2</sub> storage sites.



Offshore Storage Licence

Required to operate a CO<sub>2</sub> storage site offshore.



Financial Security & Monitoring

Operators must maintain approved financial security throughout project life.



Site Closure & Post-Closure Phase

# State Law Perspective: Sarawak



Environment (Reduction of Greenhouse Gases Emission) Ordinance, 2023



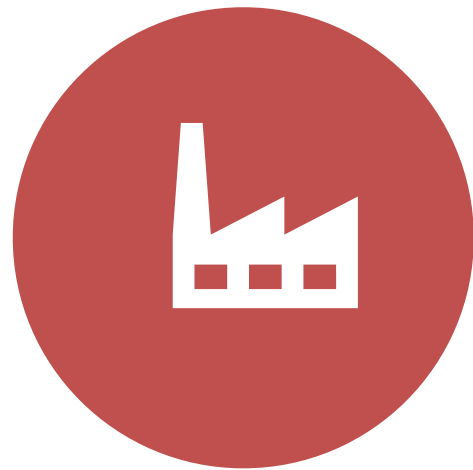
Land (Carbon Storage) Rules, 2022



The Forests Ordinance, 2015 and Forest (Forest Carbon Activity) Rules, 2022



# State Law Perspective: Sarawak



## CARBON STORAGE LICENSE

*SECOND SCHEDULE*  
FORM OF LICENCE FOR CARBON STORAGE  
(Section 32B & Rule 16)

Licence No:	
<b>LICENCE FOR CARBON STORAGE</b> <b>THE LAND CODE [CAP. 81 (1958 ED.)]</b> (Section 32B & Rule 16)	
This Licence is issued to the Licensee to use the land shown in the map attached hereto as Appendix A and generally described as:	
(hereinafter called "licensed area") for the exploration, appraisal and development of a storage site for the storage of scheduled gases in accordance with area plan of potential storage sites which is attached hereto as Appendix B in accordance with the provisions of these Rules and the terms and conditions hereinbelow and the special conditions set out in Appendix C.	
NAME(S) OF LICENSEE & COMPANY REGISTRATION NUMBER ("the licensee")	
Term Of Licence (Years):	
Commencement Date:	
Expiry Date:	
Size of Licensed Area (ha/km <sup>2</sup> ):	.....more or less
Licence Fee (RM):	.....per annum



## STORAGE PERMIT

*FOURTH SCHEDULE*  
FORM OF STORAGE PERMIT  
(Section 32B & Rule 27)

Permit No:	
Licence No:	
<b>CARBON STORAGE PERMIT</b> <b>THE LAND CODE [CAP. 81 (1958 ED.)]</b> (Section 32B & Rule 27)	
This Storage Permit is issued to the storage user to permanently store scheduled gases on the storage sites shown in the map attached hereto as Appendix A ("storage site") and generally described as:	
NAME OF STORAGE USER/COMPANY REGISTRATION NUMBER ("the storage user")	
Term Of Permit (Years):	
Commencement Date:	
Expiry Date:	
Permit Fees (RM):	
Levy on Carbon Storage Charges (RM):	
Cess (RM):	
Scheduled gases injection plan:	.....metric ton per year





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# Comparison Table

PERMIT TYPE	FEDERAL AUTHORITY (MyCCUS)	STATE AUTHORITY (SARAWAK)
Registration of Carbon Capture Installation	✓	
Import Permit for CO <sub>2</sub> captured abroad	✓	
Registration for Transportation of Captured CO <sub>2</sub>	✓	
EIA	✓	✓
Offshore Permit-related	✓	
Onshore Carbon Storage License		✓
Onshore Storage Permit		✓
Carbon Emission Report/Monitoring	✓	✓



# Permitting Challenges

- Overlapping jurisdiction (federal vs state).
- Unclear timelines for approvals.
- Limited regulatory capacity.





# Case Study – Early Engagement with Regulator and Due Diligence



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# Case Study – Transparent Stakeholder Communications



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# Connecting CCS/CCUS with BIMP-EAGA Intermodal Transport

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- BIMP-EAGA stands for Brunei Darussalam–Indonesia–Malaysia–Philippines East ASEAN Growth Area.
- Established in 1994 to promote regional cooperation and balanced economic development.
- **Theme:** Reducing Trade Costs, Improving Logistics Movements & Capitalising on New Opportunities.
- BIMP-EAGA promotes regional connectivity and sustainable economic growth.
- CCS/CCUS aligns with this by supporting low-carbon transport and industrial activities.
- Integrates carbon management within regional logistics and enables cleaner, cross-border trade movements.
- Supports green investment and innovation across member countries.





## Carbon capture and storage: Indonesia's winning opportunity

### The Malaysian Reserve

Friday, October 10th, 2025

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Home / Business / News / Petronas targets 80m tonnes CCS capacity as Malaysia eyes role as regional hub

### Petronas targets 80m tonnes CCS capacity as Malaysia eyes role as regional hub



### Shell to explore carbon transport and storage options in Brunei and Singapore

By Reuters

October 26, 2022 2:17 PM GMT+8 · Updated October 26, 2022



# Synergies in Logistics and Infrastructure

- Shared infrastructure such as ports, vessels, and storage hubs improves logistics efficiency.
- Encourages cross-border collaboration in transport, storage, and monitoring systems.
- Strengthens supply chain resilience and reduces overall trade costs.
- Promotes sustainable industrial zones within BIMP-EAGA.



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Getting towards a Sustainable Maritime Logistics Trade for BIMP-EAGA

# Innovation and Economic Opportunities

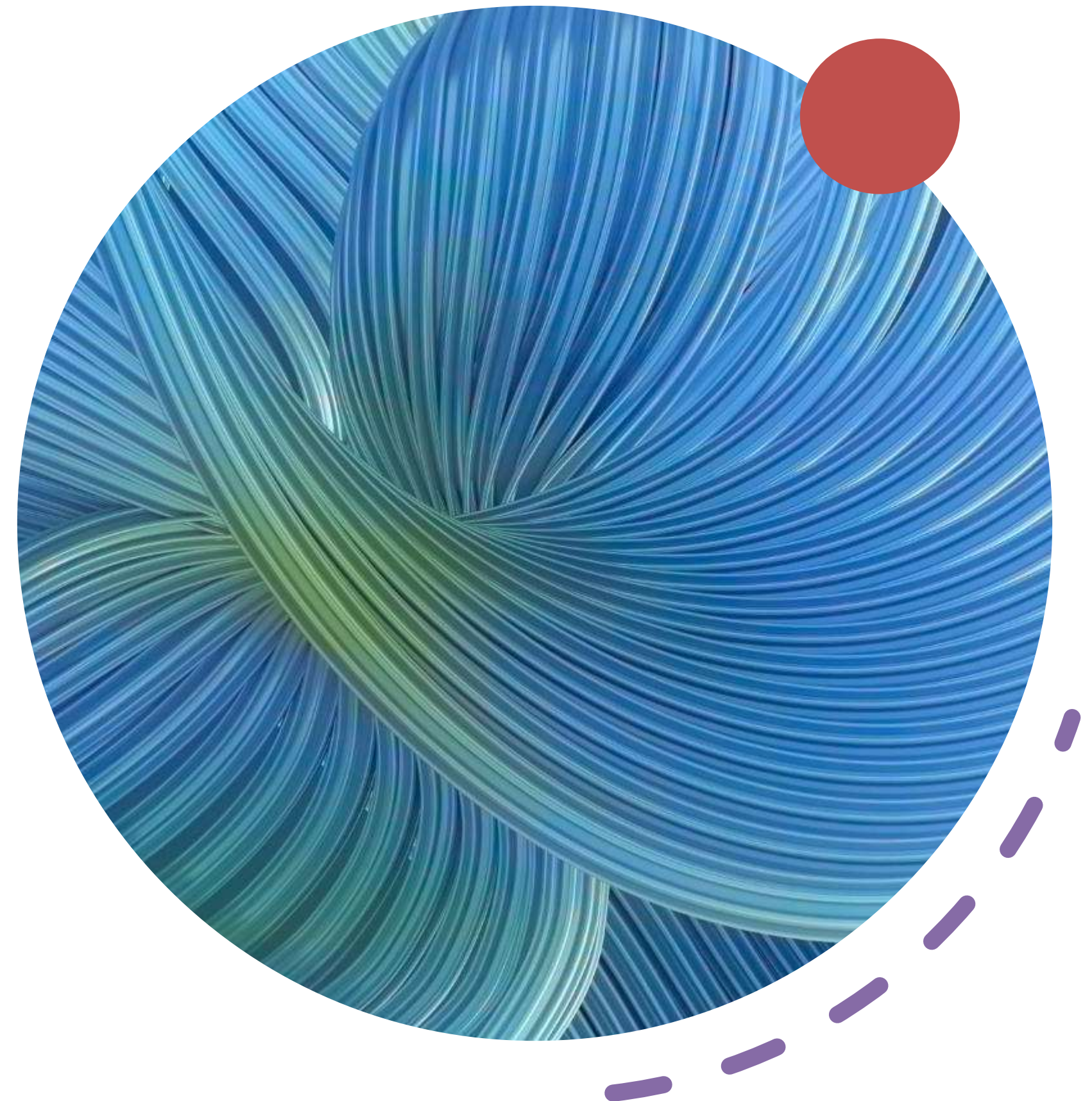
Development of cross-border CO<sub>2</sub> storage hubs (e.g. Borneo Basin).

Creates new opportunities in green technology, services, and investment.

Enhances the region's ESG profile and access to global low-carbon markets.

Positions BIMP-EAGA as a leading low-carbon economic zone in Southeast Asia.

CCS/CCUS becomes a key enabler for sustainable trade and transport innovation.



## HYCO1 Signs a Memorandum of Understanding with Malaysia LNG Sdn. Bhd. to Collaborate on Carbon Capture and Utilization Project in Bintulu, Sarawak, Malaysia

April 25, 2025 (Houston, TX) – HYCO1, Inc. and Malaysia LNG Sdn. Bhd. (MLNG) signed a Memorandum of Understanding (MOU) to collaborate on the potential utilization and conversion of Carbon Dioxide (CO<sub>2</sub>) into chemical and fuel products, setting new standards for sustainability and innovation. The signing was between Gregory Carr, CEO of HYCO1, Inc., and Mohamed Syazwan Abdullah @ Laga Jenggi, Managing Director of MLNG.

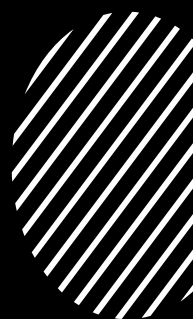


# Role of Bintulu





So?



CCS/CCUS is a key enabler for Malaysia's net-zero ambitions and regional decarbonization



Clear regulatory alignment between federal and state authorities ensures smooth project implementation



Integration with BIMP-EAGA intermodal transport unlocks new logistics, storage, and investment opportunities.

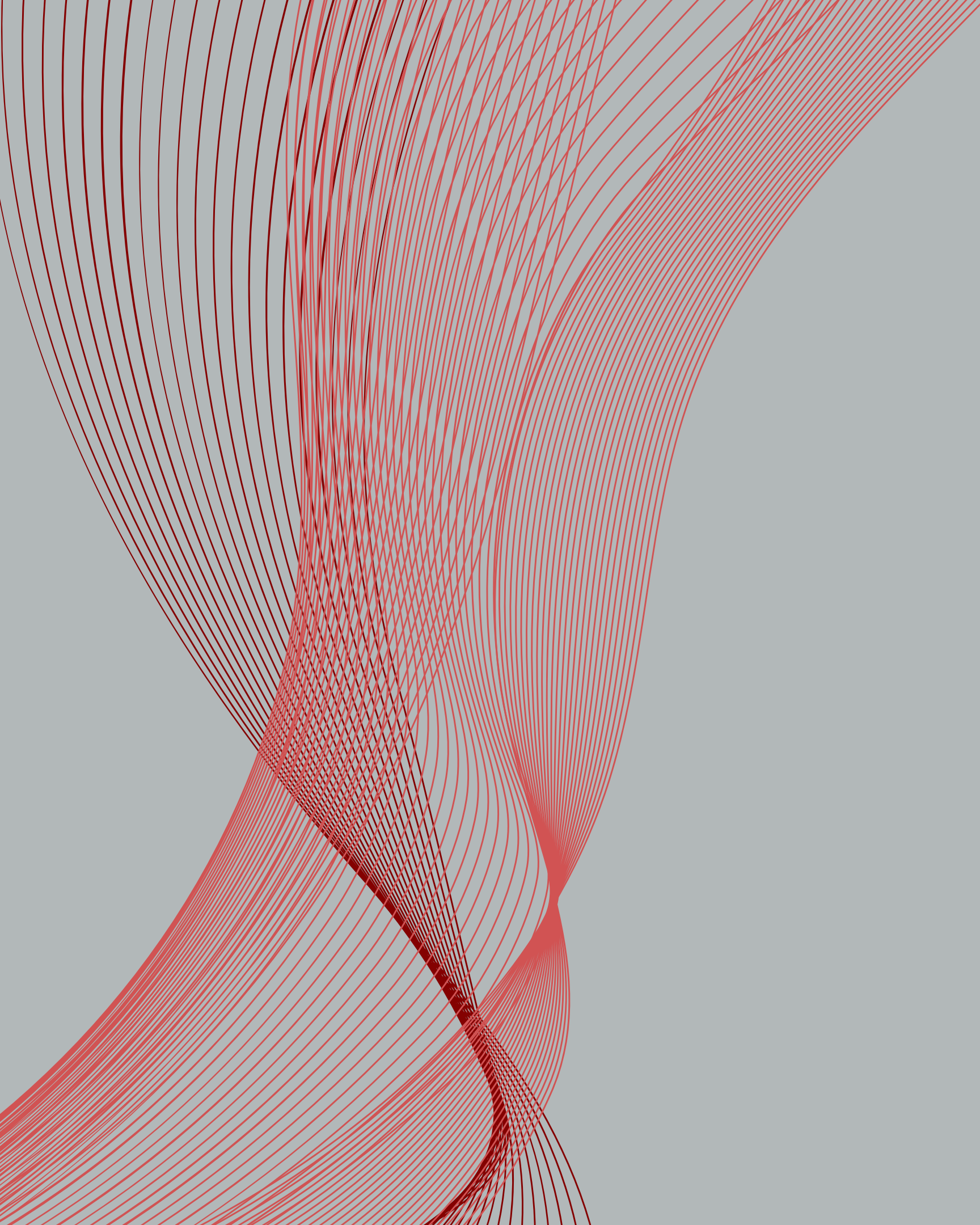


With strong governance and innovation, Malaysia and BIMP-EAGA can lead Southeast Asia's low-carbon transition.



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**THANK YOU**



Wahab Jumrah