



***Advancing CCUS for
Sarawak and Beyond***

Sarawak Bid Round 2024

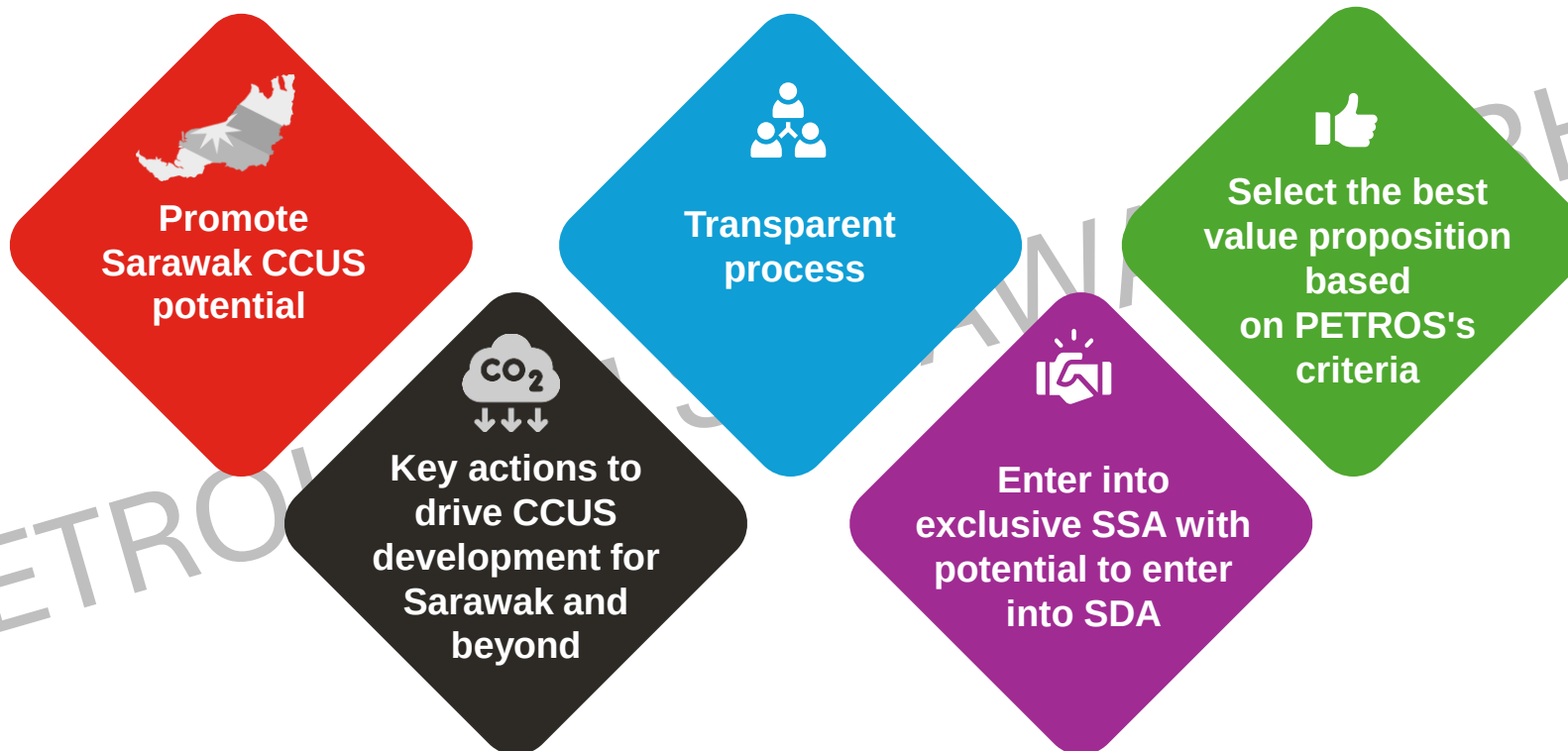
Investor Pack

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- This material summarizes all presentations of the launch-event day. For bidding-related matters, the Bid Guideline is available for reference, providing more details for each bidding process.



SBR 2024 Objectives



Notes:

SSA – Storage Study Agreement

SDA – Storage Development Agreement



Advancing CCUS for Sarawak and Beyond



Distinctive geological quality & capacity; Biggest in Malaysia



Existing Infrastructure



Government Support and Policy



Integration with other economics' investment



Skilled Workforce



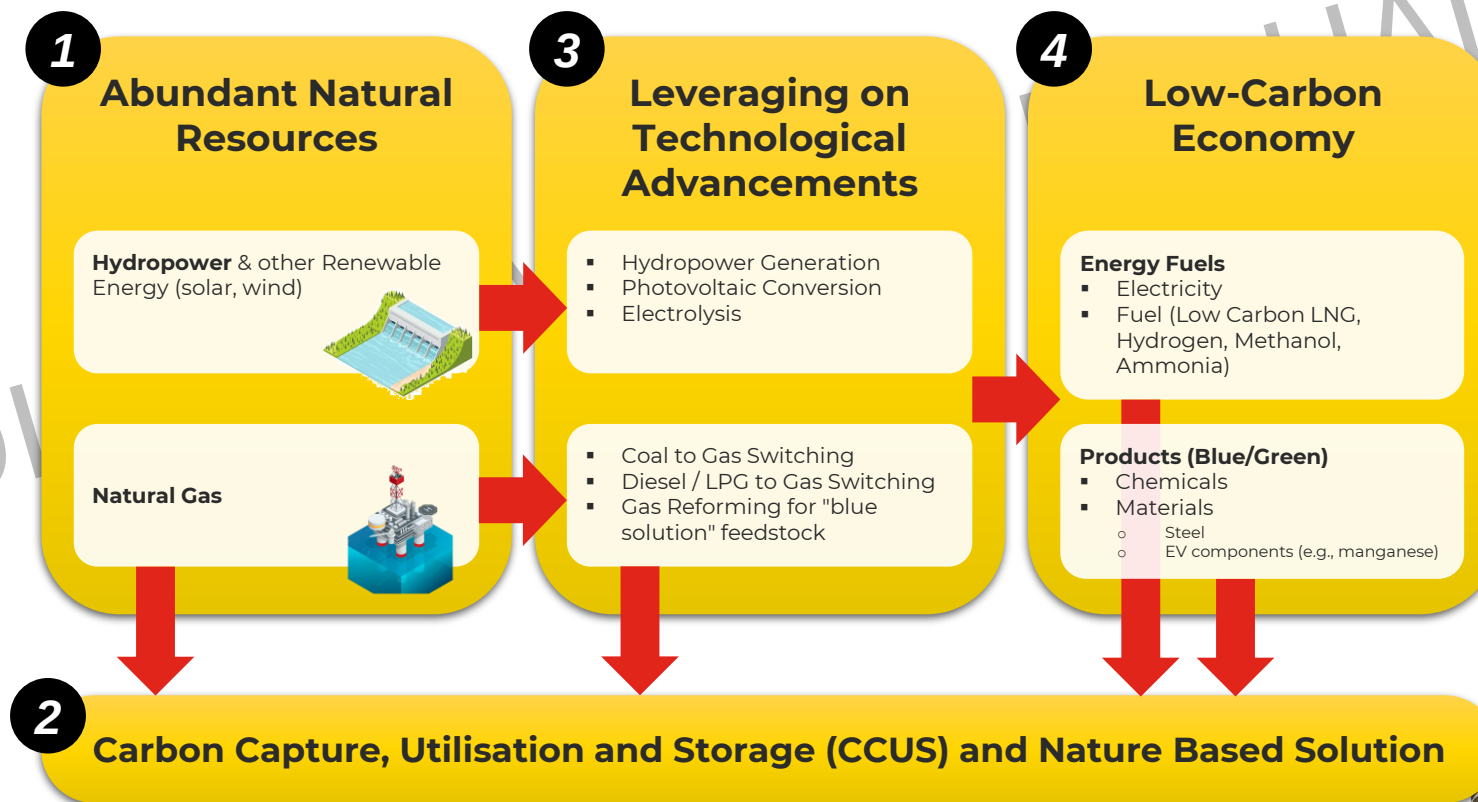
Clear Short-Term and Long-Term Plan



Positioning Sarawak as the Regional Low-Carbon Solutions Heartland

Sarawak has inherent advantages for holistic low-carbon solutions, poised to be a regional leader.

- ✓ **No. 1 in Natural Gas** production and reserves in Malaysia (> 60% reserves)
- ✓ **No. 1 in CCS** potential in Malaysia (> 65% CCS potential)
- ✓ **No. 1 in Hydropower** generation potential in Malaysia



Sarawak CCUS Roadmap

2023 – 2025

2026 – 2030

2030 and beyond

Sarawak becomes
the preferred
CCUS destination
in the region,
driving Sarawak's
economic growth.



Building foundation

- Develop Sarawak Storage Atlas
- Data acquisition
- Regulatory framework



Building partnership

- Stakeholder engagement
- Strategic investment partnership
- Sarawak Bid Round



Project Execution (Injection)

- 2026 – M1
- 2028 – M3
- 2029 – Golok
- 2030 – Site 1



Data enhancement

- Seismic, eFTG Western Sarawak
- Exploration wells



Further Growth & Expansion

- 2031 – F clusters (F23 & F28)
- 2032 onward – Site 2

PETROS

Investments

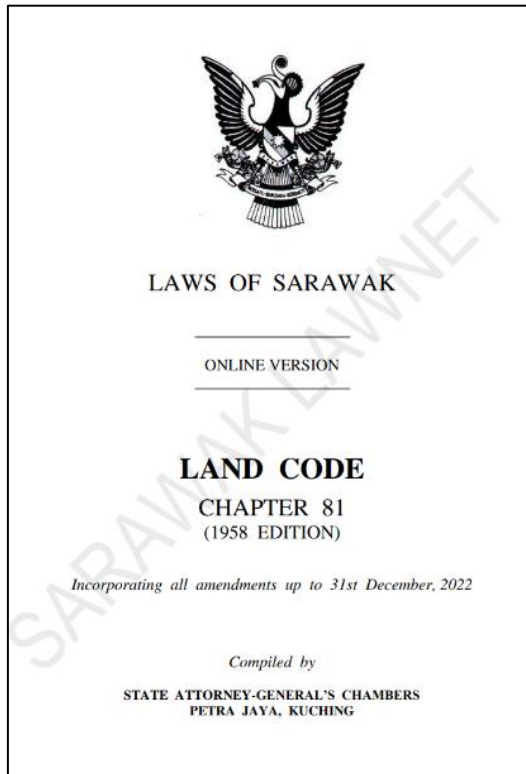
Sarawak Storage Atlas

Drill Exploration wells &
seismic acquisition

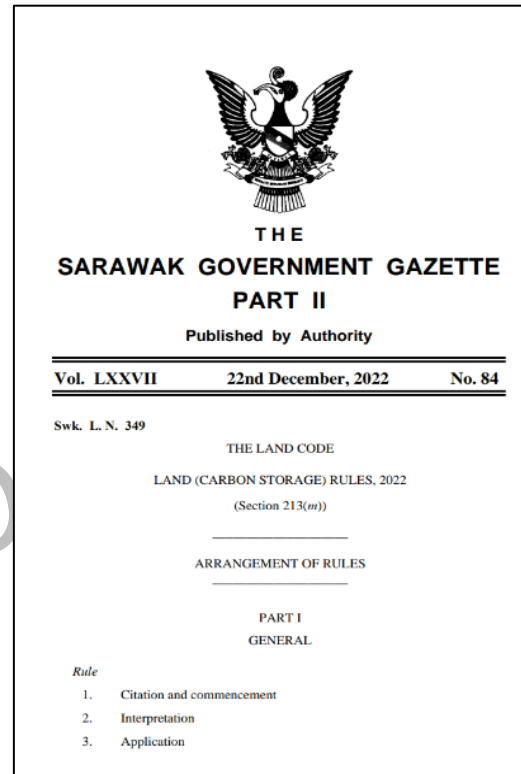
Storage Certification



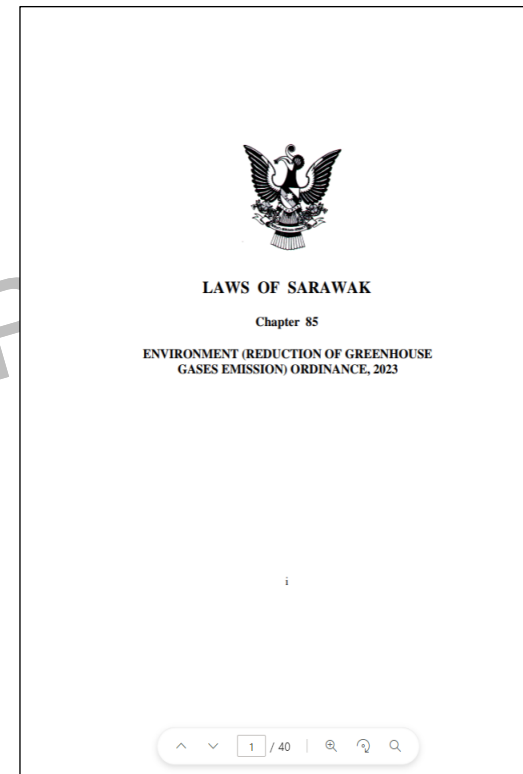
Laws and Regulation Set in Place regarding CCUS in Sarawak



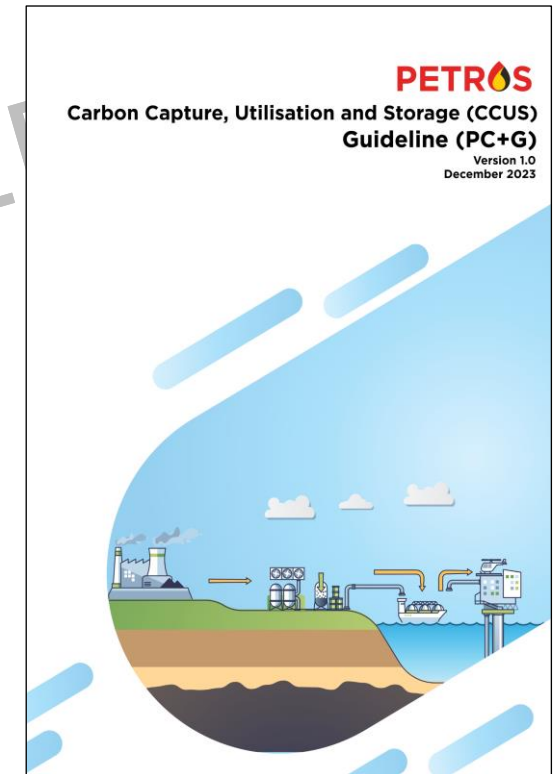
Land Code 1958



Land (Carbon Storage) Rules, 2022

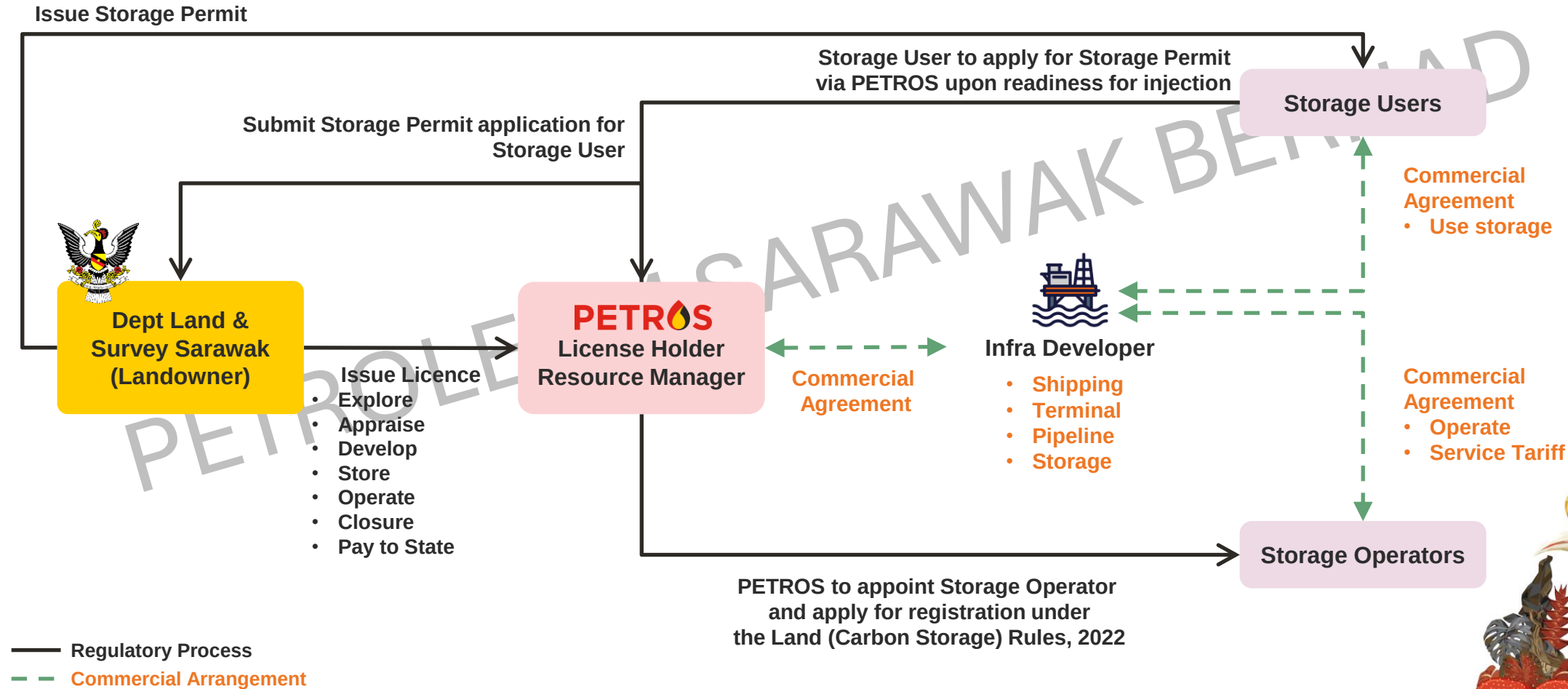


Environment (Reduction of Greenhouse Gases Emission Ordinance, 2023)

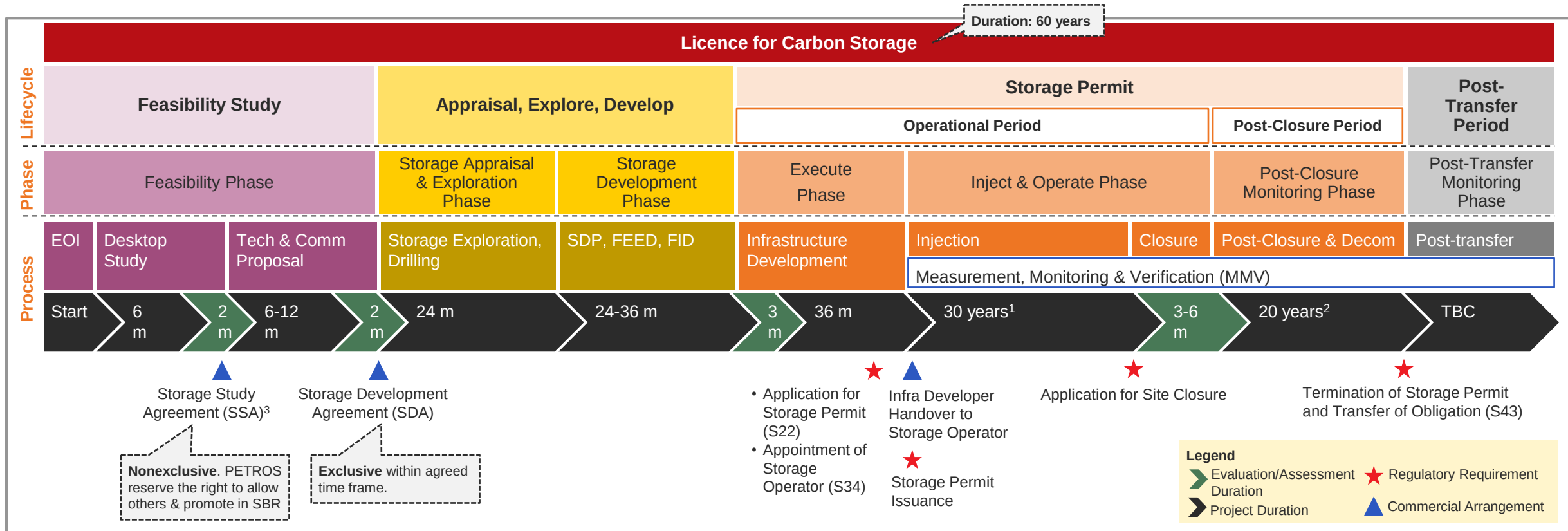


PETROS CCUS Guideline (PC+G)

Sarawak CCUS Regulatory Framework



Sarawak CCUS Implementation Framework

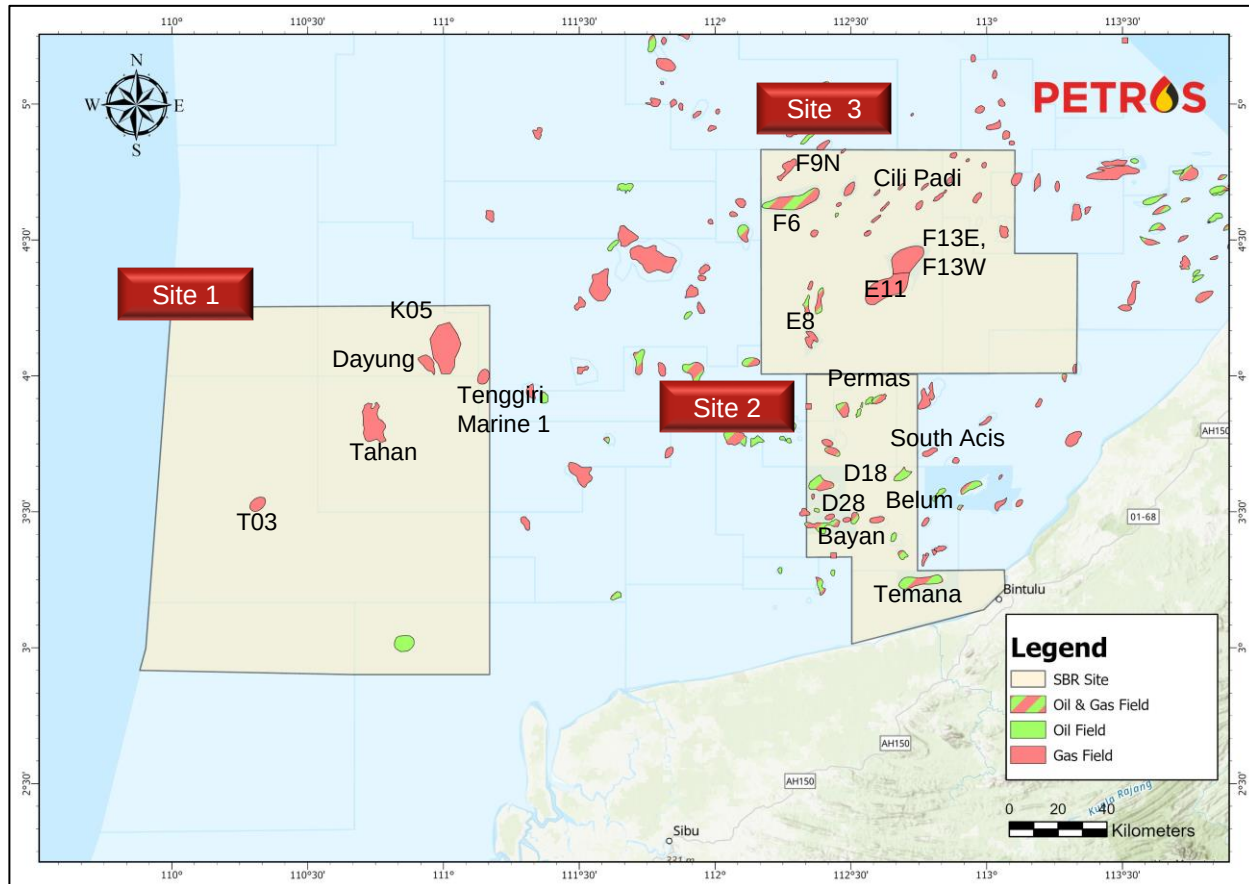


(1) Indicative and based on project period.

(2) Based on Section 41(4) and subjected to 43.

(3) Exceptions may be granted at PETROS's discretion, subject to project maturity.

The Three Storage Sites Offered in SBR2024



	Site 1	Site 2	Site 3
Area, km2	20,281	4,865	10,677
Potential Unrisked Storage Capacity, MMTCO2e	1428 [Saline Aquifer]	254 [Depleted]	864 [Depleted] 793 [Saline Aquifer]
Site Highlights	- Potential of saline aquifer. - Biggest support to Kuching Hub. - Potential for asset-led to CO2 fields nearby.	Fields almost EoFL and proximity to shore Bintulu.	- World Class reservoirs. - Many infrastructure that can be re-purpose.
What we offer?	3 Saline Aquifer SSA period of 2 years Target Injection 2028-2030 (phases)	Depleted Fields: D18, Temana, Belum, Permas, D28, South Acis, Bayan SSA period of 3 years	Depleted Fields: F6, F9N, F13E, F13W, E8, E11/F13W, Cili Padi 4 Saline Aquifers SSA period of 3 years

SBR Bidding Timeline

24 Jul 24 – 28 Nov 24	30 Sep 24	15 Nov 24	28 Nov 24	28 Nov 24	Dec 24 – Mar 25	1 Apr 25 Onwards	April Onwards
Data Review Commencement	Deadline for KYC Self-Declaration Questionnaire Submission	Deadline for Clarification inclusive of Storage Study Agreement (SSA) Document Clarification	Deadline for Company Qualification and Bid Proposal Submission and Closing of Data Room	Deadline for Technical Evaluation Report Submission	PETROS Bid Clarification, Evaluation and Selection	Notification to Winner(s)	Storage Study Agreement (SSA) Signing Date
- Technical data and bid documents for the opportunities under SBR 2024 is made available for potential bidders inside SBR Online Portal (CORE) platform. - All bidder(s) to ensure that registration is to be done through CORE. - Upon bidder(s)'s registration and approval to access is granted, one (1) ID will be given to the company.	- All bidder(s) to complete and submit KYC forms and upload the KYC form via CORE. - Bidder(s) are encouraged to submit KYC earlier than the deadline.	- Bidders may submit clarification throughout data review period. - Deadline for bidder(s) to submit clarification question(s) on SBR 2024 (i.e bidding process, site on offer) inclusive of clarification on Storage Study Agreement to PETROS via petros.sbr@petroleumsarawak.com no later than 15 November 2024, after which no further clarifications shall be entertained.	- Bidder(s) to submit respective bid documents and proposal via CORE by 5 pm (Malaysian time), on 28 November 2024. - All bidder(s) shall inform PETROS of any partnership or consortiums and must submit information as separate companies and the consortium. - Bidder(s) to submit partnership or consortium documents and any other relevant documents on the formation and nature of the partnership or consortium.	All bidder(s) who have accessed, reviewed, evaluated and/or downloaded the SBR 2024 data/materials but no interest to participate in bidding are still required to submit Technical Evaluation Report to PETROS by 5 pm (Malaysian time), on 28 November 2024.	- PETROS will evaluate the submitted bids. - During the Bid Evaluation period, clarification session will be held with respective bidder's (if required). It is important for bidder(s) to submit information as required to minimise requirement for clarifications.	Letter of Award ("LOA") will be issued to the winning bidder(s).	Signing of the Storage Study Agreement (SSA).

SBR Bidding Process

KYC & Company Profiling

Investors who have signed the CA will be required to submit KYC within 2 months from signing. Investors are encouraged to submit earlier if possible.

Format: Questionnaire. Traffic light system for evaluation.

Evaluation: Conducted by SBR Bid Evaluation Team.

Requirement: Mandatory to pass KYC to proceed to the next evaluation stage. No further evaluation will be performed upon elimination.

Decision: SBR Management Committee shall decide which investors shall be considered for next stage of evaluation.

Company Evaluation

Investors will be evaluated in 7 areas.

Format: Pre-determined Criteria provided in bid guideline.

Evaluation: Conducted by SBR Bid Evaluation Team.

Requirement: 50% passing score with mandatory requirement to pass in organizational capability and financial strength.

Decision: SBR Management Committee.

Bid Evaluation

Upon passing Company Evaluation, Investors bid shall be evaluated to determine the value proposition and techno-commercial viability of the proposal.

Format: Pre-determined Criteria and template for proposal provided in bid guideline. Template is to ensure sufficient information and consistency in submission.

Evaluation: Conducted by SBR Bid Evaluation team.

Requirement: Submission of comprehensive and complete techno-commercial proposal.

Decision: Best techno-commercial proposal will be selected and recommended to SBR management committee for endorsement, subsequently to PETROS Board for approval to sign SSA.

Note:

1. More than one Investor may be selected to sign SSA. In the case of more than one winners, it will be multiple SSAs signed and running concurrently but exclusive only to SSA parties.
2. PETROS may recommend "marrying" of companies or splitting applications for competing sites so that each investor might receive sites that it is focused on.

Company Evaluation

A score card assessment of the investors

Criteria	Description
HSSE	Bidder's HSSE management system, HSSE performance track record, and experience in HSSE key decision-making.
Organizational Capabilities	Overall technical core competency relevant to CCUS, specifically in the areas of exploration, storage site assessment and development, injection, abandonment, and storage site MMV (Monitoring, Measurement, and Verification).
Financial Strengths	Demonstrate financial viability and capacity to meet financial commitment during the various phases of CCUS exploitation. The financial assessment shall focus on capital availability/ accessibility, sufficiency, and profitability through analysis of qualitative and quantitative criteria, including creditworthiness and availability of funds.
Leadership Assessment	Description of the company's net zero target and plan, how the investor will manage the storage site in practice, including a robust organisational structure with clear lines of accountability and demonstration of relevant experience. Considerations include a strong technical team (geology, geomechanics, reservoir, wells, facilities, operation, MMV, abandonment) with regional experience and processes for efficient storage site management. Clarity can be sought through interviews.
Track Record	A prospective operator/ partner is expected to have proven experience in operatorship or partnering with others in comparable developments elsewhere, demonstrate success in those developments, and have a sound approach to storage site development.
Strategic Fit	The investor's strategic fit to the asset and opportunities, along with interest in long-term collaboration with PETROS and alignment with Sarawak's CCUS goals, which includes supporting Sarawak's economic growth endeavors.
Technology	The investor should demonstrate any research and development capabilities within the CCUS domain and/ or propose the deployment of new technology, particularly in the areas of MMV and CO2 extraction and injection.

Bid Proposal Submission

Technical Bid	
Technical	Description
Storage Site Assessment	Evaluation of storage site. Criteria under the assessment shall be outlined in the bid guideline along with the scoring scheme for each sections where each sections shall further contain sub-sections. It should cover the following sections: • Appraise, Explore, Develop • Storage Development • Injection & Operation • Site Closure • Post Closure & Monitoring
Commitment	Description
Work Programme Summary	Provide details of the main data acquisition or geoscientific and engineering studies along with the levels of commitment, to be offered.
Technology Plan	Technologies which have been used or identified to address critical areas of a CCUS development project and their Technology Readiness Levels.
Local	Bidder to propose how they are going to include local players and provide knowledge transfer creating avenues for local players to participate and grow in CCUS activities.

Commercial Bid	
Commercialisation	Description
Commercial Model	Bidders to submit the commercialisation strategy along with the cash flow and value model for all parties (for itself, PETROS, emitters etc..) with details of the key basis and assumptions. The proposal should provide the life cycle cost and the value in \$/tonne.
Storage Study Agreement (SSA)	
	Description
Description of SSA scope and deliverables	The deliverables expected from the SSA is pre-FEED. Bidders to detail out or to state agreement to the standard project phase definition, scope and deliverables.
Financial Commitment	Description
Financial Commitment	Bidders to demonstrate commitment to embark on the proposed work programme and the means to source the funding. PETROS expects bidder to commit at least a RM5 Million work programme (based on internal assessment) for the SSA period. Higher amount scores higher points.

SBR Data Review and Bidding Platform



SBR 2024 Official Site can be accessed via

[CORE \(petroleumsarawak.com\)](https://petroleumsarawak.com)

Bidder(s)'s Registration	Approval of access to from PETROS	Others
Bidder(s) to register by clicking “Sign Up” icon 	Only parties who genuinely seek to partake in SBR 2024 as a potential investor are allowed to access CORE. Other parties such as Service/Consultation companies, Finance Institutions and other companies who are not intending to be direct CCUS investors not allowed to access CORE. Geotechnical Data related to offered can only be viewed via the site and cannot be downloaded.	Access by Third Party: Bidder(s) who wishes to outsource the bid proposal work must inform PETROS through writing of the plan and the company that the Bidder(s) intends to engage. The Bidder(s) must sign CA with the company the Bidder(s) seeks to engage.



For more information, contact us at

petros.sbr@petroleumsarawak.com



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PETROLEUM SARAWAK BERHAD
Thank you

