

GUIDE ON DEVELOPMENT OF REGASIFICATION TERMINAL IN PENINSULAR MALAYSIA





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1. OBJECTIVES

1.1. This Guide is issued by the Commission for the following purposes:

- (a) to establish a clear framework for the development of regasification terminals (RGT) in Peninsular Malaysia;
- (b) to outline the technical requirements and procedures for setting up RGT;
- (c) to define the roles, responsibilities, and functions of relevant parties under the framework;
- (d) to ensure that the development of RGT contributes and supports the sustainable growth of Peninsular Malaysia's energy sector by strengthening energy security and safeguarding consumer interest;
- (e) to foster a competitive and efficient market environment that encourages responsible investment and innovation in RGT infrastructure; and
- (f) to address any other matters related to or necessary for the effective development of RGT.

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2. SCOPE

- 2.1. This Guide may apply to the following parties directly or indirectly involved in the development of RGT in Peninsular Malaysia:
- (a) market participants interested in investing, developing, or operating RGT;
 - (b) consultants, contractors, and industry professionals involved in the construction, commissioning, and operation of RGT;
 - (c) entities such as shippers, LNG importers, service providers, and financial institutions that support or rely on RGT; and
 - (d) legal advisors and compliance officers responsible for ensuring adherence to regulatory standards and ensuring protection of consumer interests.
- 2.2. This Guide applies to the development of any type of RGT established for the purpose of importing, storing, and regasifying LNG in Peninsular Malaysia, but excluding the RGT Pengerang, RGT Sungai Udang and Kompleks Terminal Penggasan Semula Ketiga (Kompleks RGT-3). It covers RGTs designed to supply regasified LNG to the Peninsular Gas Utilization (PGU) system, as well as those proposed for direct supply to end-users such as power plants or industrial facilities, subject to regulatory consideration. RGT configurations may include fixed or floating facilities, located onshore or offshore, with supporting infrastructure such as storage tanks, regasification units, berthing facilities, and interconnection pipelines where applicable. The Guide is intended to cover RGTs with any kind of configurations and technologies, including future innovations, to ensure comprehensive regulatory oversight and alignment with national gas infrastructure planning and market access principles.
- 2.3. This Guide does not replace the Gas Supply Act 1993 [*Act 501*] or any regulations or guidelines made thereunder, nor does it override any applicable laws or standards. Any party uncertain about how the Gas Supply Act 1993 applies to them should seek independent legal advice to ensure full compliance.
- 2.4. Relevant parties should also be aware that other authorities may have jurisdiction over technical, safety, and environmental aspects throughout the gas value chain. These may include, but are not limited to, the Department of Occupational Safety and Health (“DOSH”), Jabatan Laut Malaysia (“JLM”), and Jabatan Alam Sekitar (“JAS”), which oversee technical, safety, and environmental issues.

- 2.5. This Guide is not the sole regulatory framework for RGT development. Developer/operator are encouraged to seek additional guidance from other industry standards, regulatory documents, or experts, provided that such guidance does not conflict with national laws and regulations.

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3. INTERPRETATION

3.1. In this Guide, unless the context otherwise requires, the terms used in this Guide shall have the same meaning as defined in the Gas Supply Act 1993 [Act 501] and the subsidiary legislations made under it.

3.2. In this Guide, unless the context requires, the definitions of the terms are as follow:

Access Arrangement (AA)	The document established by a regasification licensee and approved by the Commission containing the standard principles of arrangement between such regasification licensee and the parties who wish to access the relevant regasification terminal.
Act	The Gas Supply Act 1993 [Act 501].
Commission	The Energy Commission established under the Energy Commission Act 2001 [Act 610].
Developer / Operator	An entity responsible for the planning, development, construction, operation, and maintenance of RGT
Environmental Impact Assessment (EIA)	A formal assessment conducted to evaluate the potential environmental impacts of a proposed RGT and its compliance with national and international environmental regulations.
Feasibility Study	A detailed analysis that evaluates the technical, financial, environmental, and operational feasibility of a proposed RGT.
Heads of Agreement (HoA)	A document that outlines the main terms and conditions of a proposed agreement between two or more parties.
LNG Importer	Importer of liquified natural gas.
Letter of Intent (LOI)	A written document that declares the preliminary commitment of one party to do business with another.
Letter to Proceed (LTP)	A document issued by the Commission to a qualifying developer / operator, confirming that the proposed development has met the necessary submission requirements under this Guide and may proceed to the next stage of project development, subject to all associated commercial and investment risk being borne by the developer / operator.

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Regasification Terminal (RGT)	A facility located onshore or in Malaysia waters which is used to regasify or store liquefied natural gas which is received from a liquefied natural gas carrier system.
Shipper	Shipping licensee under the Act 501.

- 3.3. Unless expressly indicated otherwise, the terms used in this Guide shall have the same meaning as those defined in the Gas Supply Act 1993 and the subsidiary legislations made under it. In the event of any inconsistency, the provisions of the Act and the subsidiary legislations made under it shall prevail over the provisions in this Guide.

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4. INTRODUCTION

- 4.1. In line with Malaysia's commitment to enhancing the energy sector, the Commission will continue to strengthen the implementation of the Third-Party Access (TPA) regulation. This regulation is designed to promote market competition by ensuring third parties can access gas infrastructure, including RGT, on a non-discriminatory basis. By enabling greater access, the TPA regulation helps foster a competitive market environment that drives down costs, improves operational efficiency, and encourages innovation. Additionally, it enhances market transparency, which benefits consumers by providing more affordable and reliable gas supply options. Moreover, it helps attract investment into the energy sector, thus supporting long-term infrastructure development and ensuring the security and sustainability of Malaysia's energy supply. Moving forward, the Commission will continue to refine and implement policies that foster a more inclusive and resilient energy market, promoting sustainability, efficiency, and responsible energy use.
- 4.2. As part of this initiative, the development of RGT will occur within a **market-determined framework** designed to foster **responsible investment** while balancing business profitability with long-term sustainability. This regulatory approach ensures that both public and private sector interests align to meet national energy goals. By promoting transparency and fairness, the framework creates a competitive environment where market participants can operate efficiently, while minimizing barriers to entry for new players.
- 4.3. As demand for electricity and gas continues to grow rapidly across Peninsular Malaysia, the timely development of new RGT is critical. New facilities will play a key role in ensuring a reliable and consistent energy supply, enabling Malaysia to meet its increasing domestic energy needs while simultaneously supporting its international sustainability commitments and climate goals.
- 4.4. The development of LNG regasification terminal involves several key considerations, including land acquisition, environmental permitting and community engagement. Developer/ operator needs to navigate regulatory processes, engage with local authorities, and secure necessary approvals to minimize risks and ensure the success of the project. In addition to complying with environmental and safety standards, developer / operator should plan for long-term sustainability by addressing potential challenges related to infrastructure resilience, technological advancements, and market dynamics.

5. ROLES OF THE COMMISSION

- 5.1. The Commission is the primary regulatory authority responsible for overseeing the operation and regulation of LNG and natural gas infrastructure in Peninsular Malaysia. It plays a key role in ensuring the safe, efficient and sustainable functioning of these sector while safeguarding consumer interests.
- 5.2. The Commission establishes the legal and regulatory framework governing the importation, transportation, and distribution of natural gas. Any person or party wishing to develop LNG regasification terminal may submit all the required documentation, as outlined in Chapter 8 of this Guide to the Commission.
- 5.3. The Commission is responsible for reviewing and assessing the documentation submitted by developer/operator. Upon completing the review, the Commission may issue to qualifying developer/operator a **Letter to Proceed (LTP)** confirming that the proposed RGT development has met the necessary submission requirements and consistent with the national energy policies.
- 5.4. The LTP affirms the project's eligibility to proceed to the next stage of development and may serve as a formal recognition to support internal decision making and stakeholder engagement. Issuance of the LTP does not constitute a license or assurance of commercial viability.
- 5.5. Upon the issuance of the LTP, the Commission may request a project progress report in relation to the development of the LNG regasification terminal, if necessary.
- 5.6. The Commission and any relevant authorities shall not be held liable for any action, decision, or outcome arising from the use or reliance on this Guide, including but not limited to information or data provided. The Commission does not guarantee the accuracy or completeness of any data or information submitted by developer or parties using this Guide. Parties are fully responsible for independently verifying the data and information provided.
- 5.7. The Commission reserves the right to issue or withhold the LTP at its discretion based on its review of the submitted documentation and in accordance with applicable laws and regulations.
- 5.8. The Commission also has the authority to modify or update any submission parameters, including requirements, guide/ guidelines, or timelines, as it deems necessary to reflect changes in regulations, technological advancements, or industry best practices.

- 5.9. Parties relying on this Guide are fully responsible to conduct their own due diligence, make informed decisions, and ensure compliance with all relevant laws and regulations. It is recommended that parties relying on this Guide frequently check for the latest version of this Guide from ST's website to ensure ongoing compliance with any updated provisions.

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6. ROLES OF DEVELOPER/ OPERATOR

- 6.1. Any person/party intending to develop RGT should conduct a comprehensive feasibility analysis at their own expense. This analysis would include site inspections, environmental studies, technical evaluations, and financial modelling. The developer/operator is responsible to verify all relevant data, including but not limited to climatic conditions, environmental impacts, and the feasibility of connecting to the transmission pipeline.
- 6.2. All necessary documentation and information gathered from these analysis needs to be submitted to the relevant authorities. If the project is approved, the developer/operator may recover these costs through the regasification tariff; otherwise, the costs remain the responsibility of the developer/ operator.
- 6.3. Any person/party wishing to develop an RGT is solely responsible for preparing and submitting all necessary documentation. This responsibility remains with them, even if they rely on information from the Commission, other parties, or their personnel and representatives. It is imperative that the developer/ operator independently ensures that all documentation fully complies with the relevant laws, procedures, and requirements set by the appropriate and relevant authorities.
- 6.4. All parties involved in the development of RGT are encouraged to adopt best practices in environmental sustainability. This includes reducing carbon emissions, mitigating environmental impacts, and utilizing renewable energy sources wherever feasible. Furthermore, they are required to conduct environmental impact assessments in accordance with national environmental laws and applicable international standards.
- 6.5. The developer/ operator is responsible for ensuring that all safety measures and risk management protocols are in place and comply with national and international safety standards.
- 6.6. Once the LNG regasification terminal are operational, the developer/ operator should continuously monitor their performance, ensuring compliance with all operational, environmental, and safety regulations. Licensees are also subjected to such audit as may be specified in their license conditions.
- 6.7. The developer/ operator needs to engage with relevant stakeholders, including local communities, and other affected parties, throughout the planning, development, and operation of the RGT. This includes conducting public consultations and addressing concerns raised by stakeholders.

7. RGT DEVELOPMENT FRAMEWORK

7.1. This Guide introduces a new market-determined framework for the development of RGTs in Peninsular Malaysia. This framework opens the opportunity for qualified market participants to propose and develop RGTs, subject to regulatory oversight. While development is now driven by market needs, RGTs remain regulated assets that require approval before investment decisions can be made. This ensures alignment with national energy policies, infrastructure planning, and the long-term interests of consumers and the gas industry.

7.2. The concept and key principles of this market-determined framework are as follows:

- (a) **Market-Determined Development:** The framework enables the market players to lead in identifying commercial opportunities and proposing new RGT projects. By encouraging competition and private investment, it promotes efficiency, innovation, and service diversity in the LNG import and regasification sector. The open participation of qualified parties supports a more dynamic and responsive energy market.
- (b) **Requirements and Market Engagement:** The Commission will announce the specific requirements for RGT development and invite market participants to express interest by fulfilling requirements outlined in this Guide. Such announcements may take in the form of market engagement, notifications or updates published on the Commission's website or any relevant communication approach deemed appropriate by the Commission.
- (c) **Submission of relevant documentation:** Developer/operator needs to submit a comprehensive, accurate, and timely documentation demonstrating their technical, financial, and environmental preparedness to undertake the RGT development project. All submissions need to fulfill requirements set by the Commission and comply with the applicable standards and national energy policies.

Incomplete, inaccurate, or late submission may result in one or more of the following actions:

- **Request for additional information** of which may delay the evaluation process,
- **Deferment of the application**, or
- **Rejection of the application** if the deficiencies are significant or remain unaddressed within a specified timeframe.

- (d) **Assessment and Certification:** The Commission will assess all submissions and, upon successful qualification, issue a LTP to the developer/ operator. The issuance of the LTP signifies that the proposed development is consistent with the Commission's requirements and national energy planning considerations. The LTP will be valid for a specified period as determined by the Commission and may include specific conditions or milestones that should be met within the validity period.

It is important to note that the Government does not guarantee the subscription of capacity, revenue or profitability of the project. All commercial, technical, and legal risks associated with the project will be borne solely by the developer/operator.

- (e) **Compliance with legal and regulatory requirements:** The RGT developer/ operator needs to ensure that the construction, commissioning, operation, maintenance, and decommissioning of the facilities adhere to both federal and state legal and regulatory requirements. Continuous compliance with these requirements should be maintained throughout the project lifecycle to ensure safety, sustainability, and legal alignment. The developer is also responsible for ensuring that the project remains compliant with any future regulatory, policy, or legislative changes.
- (f) **Application of licence:** In accordance with the Act 501, the developer/operator shall apply for a regasification licence at least six (6) months prior to the intended commissioning of the RGT. While licence application required at a later stage of project development, developer/ operator are advised to plan early and ensure that the project design, contractual arrangements, and financial commitments take into account the licensing requirements.

Issuance of LTP by the Commission does not guarantee the subsequent grant of a licence. Developer/operator should take the necessary precautions and ensure that their project remains compliant with all applicable regulatory, technical, and safety standards throughout the development process.

- (g) **Tariff Determination:** The determination of the regasification tariff is based on commercial arrangement between developer and shippers. The Commission will review the proposed tariff and cost structure to ensure effectiveness and reasonableness.
- (h) **Risk Management Framework:** Developer/operator needs to develop a comprehensive risk management framework that identifies and addresses potential risks across all phases of the RGT's lifecycle, including development, construction, commissioning, operation, maintenance, and decommissioning. The

framework among others include the mitigation strategies for environmental, technical, financial, and operational risks, and be regularly updated to reflect emerging challenges and evolving regulatory or market conditions.

- (i) **Penalties for non-compliance:** Developer/operator needs to observe their obligations under the Gas Supply Act 1993 [Act 501] and related legislation and ensure full compliance to avoid potential legal and financial consequences. Developer/operator who fails to comply with the regulatory requirements may be subject to penalties, including suspension or revocation of licenses.

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8. REQUIREMENTS FOR SUBMISSION

8.1. Project Feasibility

(a) **Project Rationale & Justification:**

Explanation of why the project is needed, including demand forecast and market analysis.

(b) **Market Demand & Capacity Booking Commitments:**

Developer/ operator needs to demonstrate credible demand for the project by submitting signed Letters of Intent (LOIs), Heads of Agreement (HoAs), or other binding instrument from prospective shippers detailing the committed capacity (in mmscfd and GJ), contract duration, and terms of engagement. These agreements will reflect a reasonable level of commitment and exclusivity to the proposed regasification terminal to avoid the risk of volume duplication across multiple potential terminals.

While LOIs or HoAs may be submitted to indicate early market interest, the Commission encourages submission of higher forms of commercial commitment. These agreements provide stronger assurance of project viability and better safeguard both parties against execution and delivery risks. Developers/ operators to ensure that the aggregated committed volumes are aligned with actual market demand.

Agreements should consider incorporating back-to-back obligations between the developer and shipper, ensuring that the shipper receives appropriate remedies or compensation in the event of project delays, cancellations, or failure to deliver on contracted capacity. These provisions aim to uphold mutual accountability and promote disciplined project execution.

(c) **Technical Specification:**

As per detailed out in Appendix A.

(d) **Proposed Location:**

Demonstration of ability to secure the site that can accommodate LNG carriers and connect to the nearby PGU pipeline with map of the proposed location and relevant documentation.

- (e) Connection Scheme:
Detailed plans and pipeline connection schemes from the RGT to the transmission pipeline, including the technical specifications.
- (f) Risk Assessment & Mitigation Plan:
Identification of financial, technical, regulatory, and operational risks, along with mitigation strategies.

8.2. Business Model & Commercial Framework

- (a) Detailed description of the revenue model, including description of regasification services and other services offerings (e.g, storage, LNG bunkering, reloading, etc).
- (b) Explanation of the pricing structure for all services and how the business model aligns with the market's needs, ensuring fair competition under Third-Party Access (TPA) regulations.
- (c) Indicative Tariff and Its Structure:
Tariff should reflect the cost of providing services and aligns with the TPA requirements, including transparency and non-discriminatory. This may subject to review by the Commission to ensure they are fair in the context of the local market.
- (d) List of Requirements for Access:
The requirement need to be fulfilled by shippers when applying for capacity.
- (e) Capacity Products and Allocation:
Description outlining how operator will allocate capacity to market participants. The mechanism should detail out (but not limited to) the following:
 - i. Capacity definition and products (e.g., slot-based capacity or volume-based capacity, time interval of the subscription, etc);
 - ii. Annual capacity allocation methodology and procedure;
 - iii. Capacity (both physical and contractual) congestion management;
 - iv. Spot capacity allocation procedure;
 - v. Unused capacity management; and

vi. Capacity transfer mechanism;

The developer/ operator needs to ensure that the capacity booking process complies with the principles on non-discrimination, transparency and fair competition as mandated by TPA regulations.

8.3. Regulatory & Legal Compliance

(a) Regulatory Approvals & Compliance Plan:

Status of necessary permits, compliance with national and state regulations (if applicable).

(b) Land Acquisition & Site Control Documentation:

Proof of land ownership, lease agreements or commitment letters.

(c) Access Arrangement (AA):

Developers need to submit signed key terms of the Access Arrangement if the full document is not yet finalised. The complete AA needs to be submitted to the Commission upon finalisation and to be complied with the requirements set out in the Third Party Access Code for Malaysian Regasification Terminals.

(d) Regasification Agreement (commonly known as Terminal Use Agreement, TUA):

Developers need to submit signed key terms of the Regasification Agreement if the full agreement has not been finalised. The complete agreement needs to be submitted to the Commission once finalised and to be prepared in accordance with the specifications outlined in the Third Party Access Code for Malaysian Regasification Terminals.

(e) Gas Connection Manual (GCM):

Developers need to submit signed key terms of the GCM if the full agreement has not been finalised. The complete agreement needs to be submitted to the Commission once finalised and to be prepared in accordance with the requirements set out in the Third Party Access Code for Malaysian Regasification Terminals.

(f) Inter-Capacity User Agreement (ICUA):

The ICUA governs the terms of access and use of regasification capacity between multiple capacity holders at the terminal. Developers need to submit the signed key terms of the ICUA, and the full agreement needs to be submitted to the Commission upon finalisation.

8.4. **Credibility, Financial Capability & Funding Plan**

- (a) Financial Model & Projections:
Capital expenditure (CAPEX), operating expenditure (OPEX), projected revenues, and expected return on investment (ROI).
- (b) Proof of Financial Capability:
Audited financial statements and evidence of committed financing sources (e.g., loan agreements or equity commitments).
- (c) Project Funding Strategy:
Breakdown of financing sources, including equity, debt, and potential public-private partnerships.
- (d) Yearly company profile report from Suruhanjaya Syarikat Malaysia (SSM) showing latest shareholding structures, ownership changes, and corporate standing.
- (e) Proof of experience in the development, implementation and operation of large-scale infrastructure projects, particularly those related to energy, LNG or similar sectors.
- (f) Any other requirements stated in the Guideline on License Application (Established pursuant to section 11A of the gas Supply Act 1993 [Act 501]).

8.5. **Environmental & Safety Assessments**

- (a) Preliminary Environmental Impact Assessment (EIA):
Approved by the relevant state or federal Department of Environment (DOE).
- (b) Social Impact Assessment (SIA) (if required):
Approved reports outlining environmental risks and mitigation plans.
- (c) Marine Risk Assessment (MRA):
Approval from the Malaysia Marine Department.

8.6. **Project Implementation & Execution Plan**

- (a) Project Timeline & Milestones:

A detailed project schedule from planning to commissioning, including key approvals, permitting, construction phases and operational startup. Indicate the expected timeline for each phase, with contingency plans in place for delays or unforeseen events.

(b) Technology & Infrastructure Design:

Details on regasification, storage, and transportation technology, ensuring compliance with international standards.

(c) Procurement & Construction Strategy:

Plan for contractor selection, supply chain management and construction methodology.

8.7. Right to request additional information


The Commission reserves the right to request any additional information, clarification, or documentation from the developer/ operator in relation to the proposed project. This is to ensure that all necessary aspects of the proposed project are adequately assessed in line with regulatory, technical, and policy requirements. The developer/operator needs to provide such information, clarification or documentation in a timely and complete manner to avoid delays in the assessment process.

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APPENDIX A: TECHNICAL SPECIFICATION FORM

Total LNG storage capacity, (m3)	
LNG Heel level	
Maximum LNG Unloading rate, (m3/h)	
Minimum cargo size for LNG Unloading (m3)	
Minimum LNG Reloading rate, in the case of LNG Regasification being performed at the same time of LNG Reloading, (m3/h)	
Minimum LNG Reloading rate, in the case of LNG Regasification not being performed at the same time of LNG Reloading, (m3/h)	
Maximum LNG Reloading rate, in the case of LNG Regasification being performed at the same time of LNG Reloading, (m3/h)	
Maximum LNG Reloading rate, in the case of LNG Regasification not being performed at the same time of LNG Reloading, (m3/h)	
Minimum cargo for LNG Reloading, (m3)	
Maximum cargo for LNG Reloading, (m3)	
Minimum LNG Carrier Size	
Maximum LNG Carrier Size	
Minimum LNG Regasification Rate	
Nominal LNG Regasification Rate	
Maximum LNG Regasification Rate *Max for the terminal without considering limitation at the transmission entry point	
Berthing rights configuration	



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