

# ERC Advancing Thailand's Natural Gas Market Liberalization

## **Powering a Secure, Competitive, and Globally Integrated Future**

Thailand is advancing its regional energy standing through gas system development, expanded LNG terminal capacity, and broader shipper participation—supporting energy security, fuel diversity, and regional collaboration under a forward-looking regulatory framework.







# THE ENERGY REGULATORY COMMISSION (ERC)

Established under the Energy Industry Act of 2007 as the Regulator of Thailand's energy industry, covering the electricity and natural gas sectors under government policy. The ERC regulates tariffs, licensing, standards, service quality, and consumer rights to ensure fairness, promote efficiency, and strengthen long-term energy security. In particular, to enhance natural gas procurement and service provision with proper cost management, the ERC has continuously developed the industry structure to meet national needs, ensuring sufficient supply at fair, reasonable pricing for all users.

## Evolution and Importance of the Natural Gas Industry in Thailand

### A Milestone in 1981

In 1981, Thailand discovered its first natural gas field in the Gulf of Thailand, the Erawan field. This was a turning point, beginning the transformation of the nation's energy system.

### From Oil and Coal to Cleaner Energy

Before that time, Thailand relied on oil and coal. Domestic gas enabled a switch to natural gas, which is cleaner and more stable, reducing global oil shock risks and supporting the petrochemical industry, which generated investment, employment, and long-term growth.

### Natural Gas Today

Natural gas is now the primary fuel for electricity generation, accounting for 50–60% of the fuel mix. Supplies come from the Gulf of Thailand and from imports, including LNG, under the Gas Plan 2018–2037.



## Role and Mission

Under the Energy Industry Act 2007, the ERC regulates natural gas operations from planning, procurement, and infrastructure to distribution, in line with national objectives.

## Core Missions



**Promote competition in the natural gas industry** to be efficient, transparent, fair, and non-discriminatory by introducing third party access to the energy network and infrastructure.

**Provide views on the natural gas infrastructure** development plan and supervise standard terms and conditions of a natural gas sale agreement (GSA) in line with international standards.



**Set and regulate tariffs, issue licenses for operations** such as transmission pipelines, LNG Terminals system, and related activities.

**Ensure safe and secure operations of the natural gas industry**, particularly in the transmission pipeline system, in accordance with environmental and engineering standards.



**Protect the rights and benefits** of energy consumers regarding tariffs and service quality.

# Policy and Regulation of the Natural Gas Industry by the ERC







## Regulatory Goals

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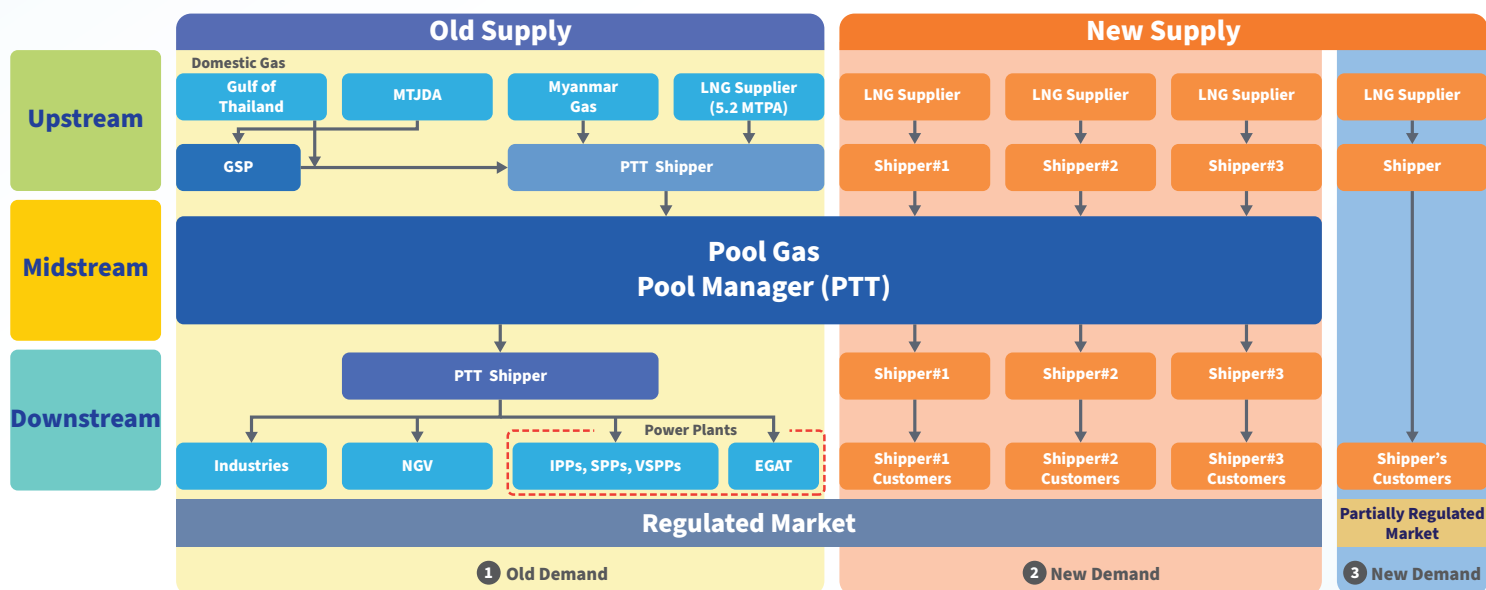
The ERC promotes fair and impartial competition in the natural gas industry to enhance the efficiency and security of the energy system. It promotes natural gas use in various economic sectors to reduce environmental impacts and supports international cooperation with its strategic alliance. In pursuing liberalization, the ERC restructures the industry for more competition, introduces new private sector players, and sets sound regulation to ensure fair, transparent competition and sustainable development.



# Guidelines for Promoting Competition in the Natural Gas Industry

## Natural Gas Industry Structure

1. **The group that is under the ERC regulation in terms of quantity, quality, and price (Regulated Market)**, comprising end users in the electricity generation sector i.e. EGAT, IPPs, SPPs, and VSPPs, the industrial sector and NGV, that use natural gas from the country's Pool Gas.
2. **The group that is under the ERC regulation in terms of quantity and quality (Partially Regulated Market)**, comprising end users who do not use gas from the country's Pool Gas.



### Upstream

- PTT Shipper manages the Old Supply.
- Shippers can procure and import LNG.
- **ERC regulates and set criteria for LNG procurement to meet domestic demand.**
- PTT operates the separation of Gulf gas.


### Midstream

- **Shippers in the Regulated Market** sell gas/LNG to the Pool Manager to be combined as Pool Gas and buy gas from the Pool Gas at the amount equal to their procurement.
- **PTT functions as the Pool Manager**, ring-fenced from PTT.
- **ERC regulates the GSA execution** between Shippers and the Pool Manager.
- TPA must be allowed to LNG Terminals & Gas Transmission Pipeline System.
- Establish TSO as a new juristic person by 2023.

### Downstream

- **Shippers in the Regulated Market** buy gas from the Pool Gas at the amount equal to their procurement.
- **Shippers in the Partially Regulated Market** can sell LNG directly to their customers.
- Gas users that are power plants of EGAT, IPPs, SPPs and VSPPs, including NGV, are classified under the Regulated Market. Others can opt to be under the Regulated Market or the Partially Regulated Market.



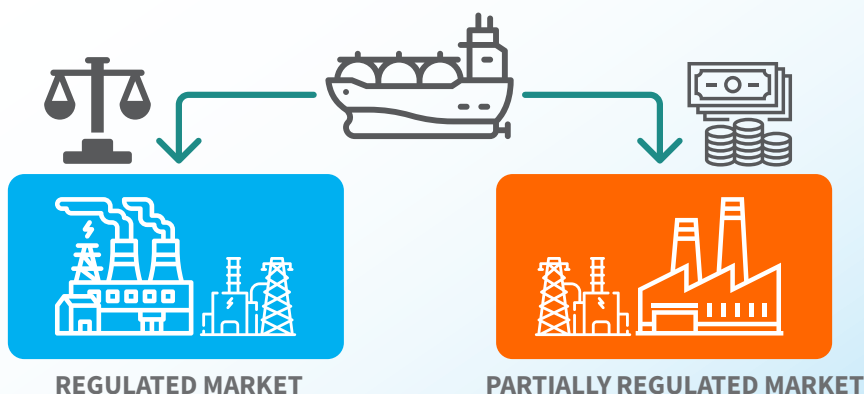


# Development of the Natural Gas Industry Regulation to Create Balance and Fairness for Energy Consumers

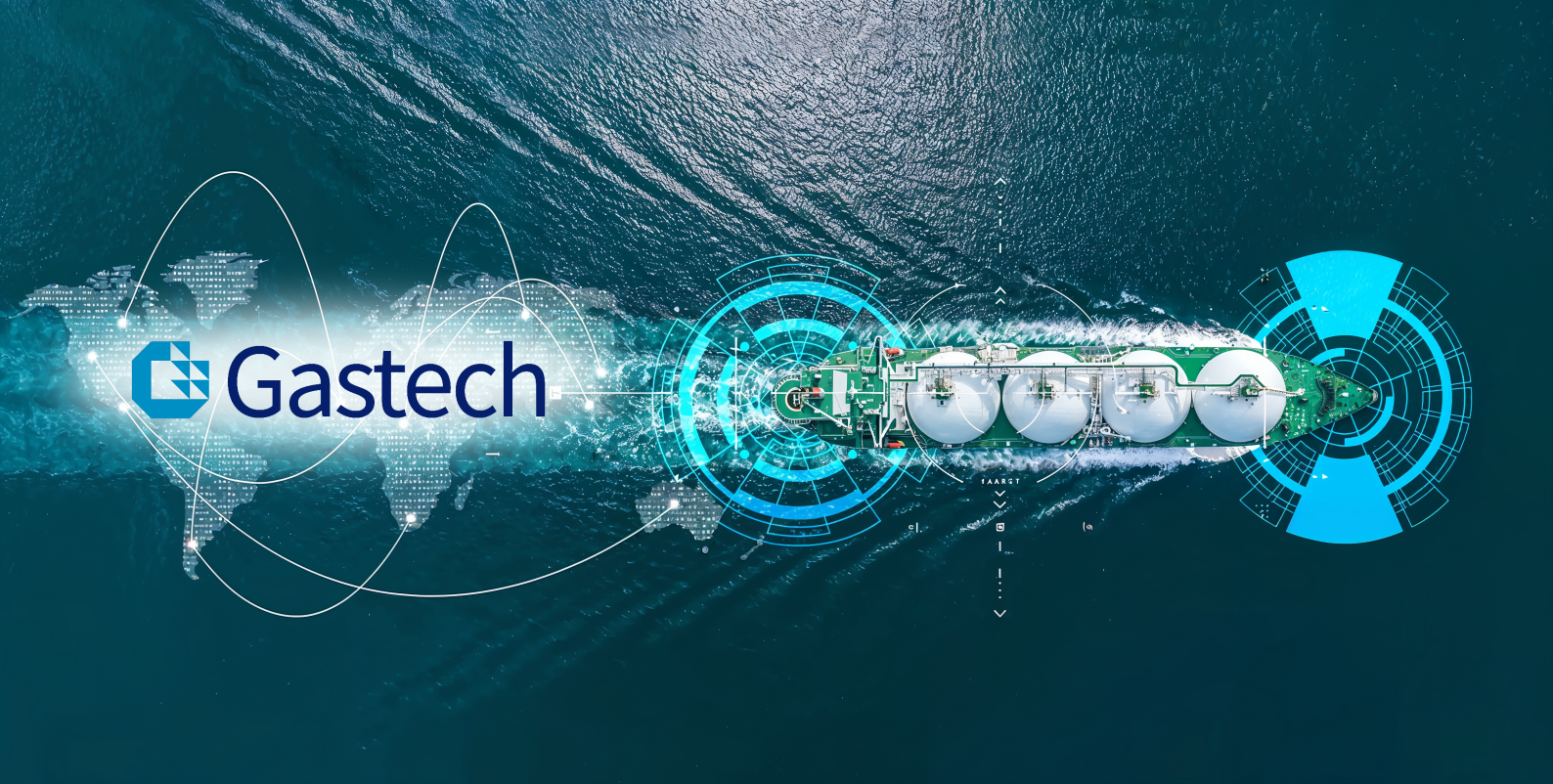
A significant evolution in the gas industry took place when the ERC granted licenses to new natural gas procurement and wholesale licensees, or “Shippers.” Previously, only PTT Public Company Limited (PTT) operated across the entire supply chain from upstream to downstream. Currently, seven new Shippers have been licensed, making eight in total. With rising gas demand and declining domestic production, it is necessary to import more LNG to ensure long-term energy security.

## Two-Tier LNG Mechanism

At this stage of liberalization, the ERC set up a Two-Tier LNG mechanism: Regulated Market and Partially Regulated Market. In Regulated Market, users from Old Supply and new LNG Shippers mainly use imported gas for power generation and grid supply. In Partially Regulated Market, power plants outside the grid and industrial operators can procure gas for their own use. The goal is to improve supply system efficiency and allow new players to offer more options, particularly in electricity generation.







# Participation and Collaboration

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Participating in Gastech 2025 in Milan is an important opportunity for the ERC to keep track of global energy trends such as natural gas, LNG, hydrogen, low carbon technologies and AI, which are key issues in the energy transition.

The ERC expects to engage with energy leaders and regulators worldwide to prepare and create innovative regulation suited to the new global energy context.







## ENERGY REGULATORY COMMISSION (ERC)

is committed to promoting fair and transparent competition in the natural gas industry, ensuring efficiency and security of the energy system, and supporting sustainable energy development for the benefit of all energy users.

We continue to enhance the natural gas industry structure to meet the country's needs, with sufficient supply, reasonable costs, and pricing that is fair for all sectors.

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