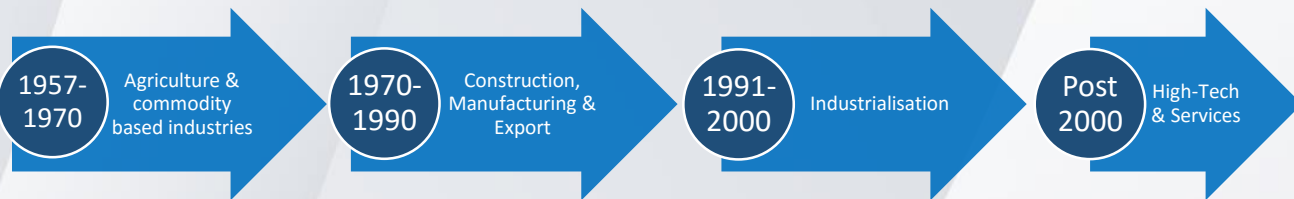


# EXPANDING ENERGY ACCESS IN MALAYSIA THROUGH NATURAL GAS INFRASTRUCTURE

## Transformation of the Malaysian Economy

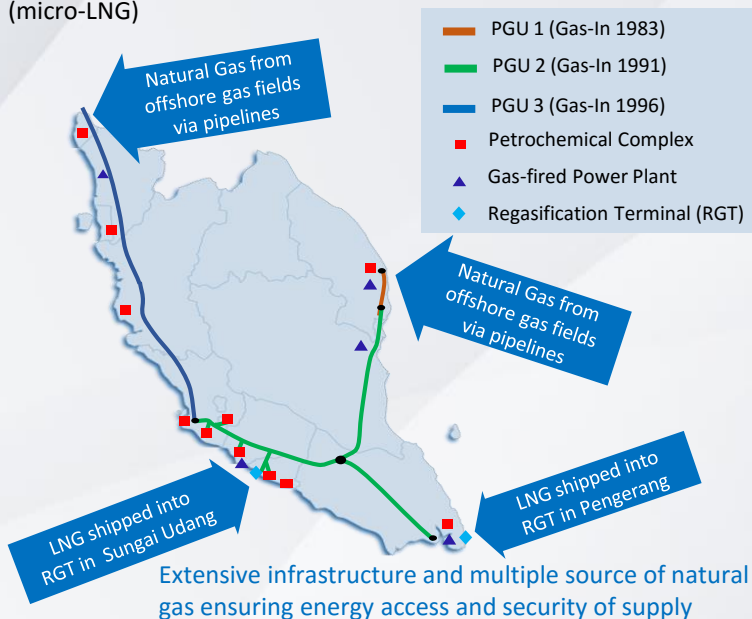
Over several decades since its independence, the Malaysian economy grew from agriculture and commodity-based and has now diversified into heavy and high-technology industries. In order to realise this transformation, Malaysia needed to ensure expansive energy access. The discovery of gas offshore in the east coast of Peninsula Malaysia offered a clean and versatile source of energy required to fuel this transformation.



Phases of Malaysia's Economic Development

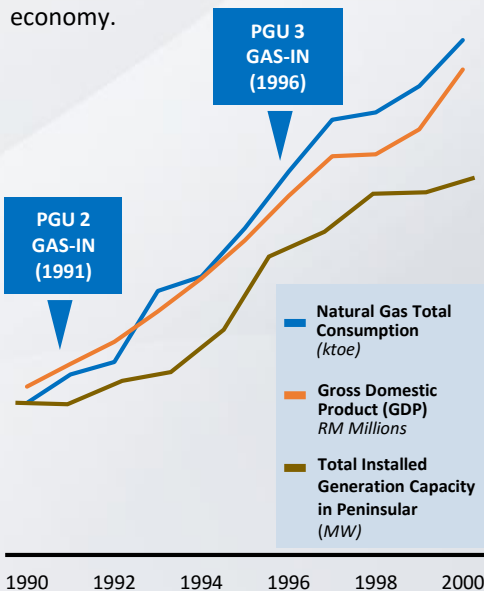
## Expanding Energy Access through Natural Gas Pipeline

An extensive natural gas pipeline network has been established to transport natural gas from the east coast of Peninsular Malaysia to the demand centres that are predominantly located in the west coast. The backbone of the network is the high pressure transmission pipeline called the Peninsular Gas Utilisation (PGU). The expansion of this PGU hinged on large base-load consumers and gas-fired power plants as anchor customers. The accessibility of the natural gas supply is further expanded with establishment of reticulation and distribution networks to serve industrial and commercial consumers. Piped gas distribution networks were also established in major west coast cities in Sabah and Sarawak. In areas not served by pipelines, gas is delivered via trucks in the form of compressed natural gas (CNG) or liquefied natural gas (micro-LNG)



## Natural Gas Driving Economic Growth

Increased accessibility to natural gas has promoted fuel substitution to cleaner gas, increased energy security, accelerated industrialization and diversification of the Malaysian economy. The Malaysian economy grew in tandem with the increase in gas consumption in Malaysia. Natural gas played a pivotal role as energy provider to power generation, spurring growth of gas-fired power plants in 1990s, thereby expanding energy access that further developed the economy.



Access to natural gas as source of energy driving Malaysia's economic growth

## Ensuring Energy Security & Sustainability

Energy security for Peninsular Malaysia is assured by both the availability of supply and reliable delivery of natural gas. In addition to gas piped from gas fields offshore of the peninsular, natural gas can also be brought into Malaysia from any parts of the world in the form of liquefied natural gas (LNG) delivered via ship tankers and injected into the pipeline network via the regasification terminals (RGT) in Sungai Udang and Pengerang. The RGTs also enabled the implementation of third party access (TPA) that allows competition in gas supply, thus providing more options to consumers. Diversified sources of supply further enhances security for the nation.

The credentials of natural gas as a clean, efficient and cost-effective fuel are indisputable. Natural gas is the cleanest, as well as the most environmentally friendly fossil fuel. This premium distinction, coupled with its role as a partnering fuel for renewable energy, ensures that natural gas will play a vital role in helping our country achieve its low carbon economy aspirations even as it continues to drive our country's economic growth.