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POWERING THE NATION'S ENERGY DEMAND THROUGH THE PENINSULAR GAS UTILISATION PIPELINE



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WITH over 40 years of opera-tional experience, PETRONAS Gas Berhad (PGB) remains com-mitted to providing continuous and reliable gas supply access to the nation through the Peninsular Gas Utilisation (PGU) pipeline, a key component of Malaysia's energy infrastructure. The PGU is a 2,675km pipeline network that transports gas to Malaysia's power sector and vari-ous industries across Peninsular Malaysia and Singapore. With four entry points – Kertih in Terengganu, Pengerang in Johor, Sungai Udang in Melaka and Thailand, the extensive net-work plays a crucial role in

work plays a crucial role in ensuring a steady flow of natural gas to support the country's ener-gy needs and economic growth.

gas to support the country's energy reeds and economic growth. At its height, natural gas pow-ered up to 80% of Peninsular Malaysia's electricity generation, playing a crucial role in fuelling the nation's economic growth. Today, natural gas contributes approximately 40% of the power generation fuel mix in Peninsular Malaysia – underscoring its con-tinued importance in the nation-al energy landscape. Beyond electricity, natural gas is also a key energy source for Malaysia's non-power sectors. More than 1,900 industrial and commercial customers across the country rely on gas for their operations including manufac-turing, petrochemicals, food processing and others.

processing and others. This widespread use highlights the enduring relevance of gas as



The PGU network transports gas to Malaysia's power and petrochemical plants, and various industries across Peninsular Malaysia

a cleaner, reliable and flexible fuel supporting Malaysia's transi-tion towards a more sustainable energy future. The construction of the pipe-line commenced in 1983, mark-ing a significant shift for indus-tries from oil and coal to gas. This transition has had a positive environmental impact.

nus transition has had a positive environmental impact. As one of the cleaner fossil fuels, natural gas has contributed to a reduced carbon footprint in power generation and other

industrial sectors. By providing a reliable source of cleaner energy, the PGU con-tributes to the sustainability and environmental goals of Malaysia. The pipeline was constructed in phases, with PGU 1 commenc-ing its operations with gas-in from Kertih to Teluk Kalong. Terengganu in 1983, delivering the first sales gas to power and industrial customers. The initial phase laid the foun-dation for subsequent expansions,

which were necessary to meet the growing demand across the rest of Peninsular Malaysia. Stage two of the PGU network was officially inaugurated in 1991, connecting Teluk Kalong to Plentong in Johor. This phase expanded the pipeline's reach, enabling the distribution of gas to a broader base of industrial, commercial and residential users. users

The successful completion demonstrated the potential of the

PGU network to support Malaysia's energy needs effec-tively. PGU 3, completed in 1998, further expanded the network from Meru to Pauh, adding 450km of pipeline. The expansion was designed to support Peninsular Malaysia by ensuring efficient supply of natu-ral gas to meet growing energy demands and supporting eco-nomic development in the region. The PGU network is cur-rently operated from the PETRONAS Gas Control Centre, located in Segamat, Johor.

located in Segamat, Johor. This facility ensures continuous operations and monitoring, managed by PGB's technical personnel

Sonnel. PGB also implements ongoing technical integrity management programmes in line with interna-tional standards accepted by reg-ulators in Malaysia, that ensure the safe and reliable operation of its assets. At present, the pipeline has the capacity to transport more than 2,500 million standard cubic feet of gas per day. Looking ahead, PGB is dedicat-ed to continuously operating in a safe and responsible manner, maintaining its operational excel-lence and upholding the nation's energy security. The PGU network has been the backbone of expanding energy access during Malaysia's era of industrialisation and PGB will continue to meet the coun-try's evolving energy needs, in alignment with the averament's PGB also implements ongoing

try's evolving energy needs, in alignment with the government's National Energy Transition Roadmap.

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