What is Liquefied Petroleum Gas (LPG)?

LPG is a clean, high energy content fuel made up of light hydrocarbons, predominantly propane (C3) and butane (C4). It is different from Liquefied Natural Gas (LNG), which is mostly methane (C1). LPG is a supply-driven by-product, with about 60% derived from crude oil production (Associated Gas) and natural gas production (Non-Associated Gas), and 40% from the refining of crude oil (40%). Storage and transportation of large volumes of LPG is in a fully refrigerated state, whilst smaller volumes are generally transported in pressurised vessels.

The LPG market has been growing at an annual rate of approximately 6% in recent years. The USA is now a leading LPG producer and exporter, backed by a strong shale gas industry. The Middle East region remains a principal producer, with Russia, Iran and China gaining ground. On the demand side, China and India have been in the forefront, but other Asian countries like Indonesia, Bangladesh, Vietnam and Pakistan have strong growth potential with high populations and developing infrastructure. LPG is versatile and can be used in a wide range of applications:

- Residential/Domestic and Commercial: cooking (kitchen and barbecues), heating and lighting.
- Chemicals and Refinery: petrochemicals feedstock.
- Industry: furnaces, fuel for power generators.
- Transport: low-emission alternative to gasoline and diesel for taxis, buses and private cars.
- Agriculture: crop harvesting and drying, heating and power for farm equipment.

The residential/domestic sector accounts for 44% of global LPG use. This demand is highest in remote towns and villages that are not connected to a pipeline gas grid. India and Indonesia have adopted policies that have transformed domestic LPG consumption as a replacement for kerosene, wood and other biomass substances. Demand in other sectors like petrochemical feedstock especially propane dehydrogenation (PDH) plants, autogas, fuel for power generation plants and very recently as a fuel for ship engines, lends further support to a robust and developing clean energy market.

Epic Gas with a fleet of fully pressurised LPG ships is uniquely positioned to provide the “last tonne-mile” delivery in markets where LPG demand is high or growing, and infrastructure designed to allow pressurised product to be readily received and distributed to the domestic market.