

## Exceptional Energy – Key Messages



### LPG is an exceptional energy source due to its origin, benefits, applications and its industry.

With its immediate and global availability, environmental benefits, its natural by-product origin, transportation flexibility and diverse application, LPG plays a pivotal role in the transition towards a more secure, sustainable and competitive energy model.

#### Its origin

LPG is a naturally occurring by-product of natural gas extraction (60%) and crude oil refining (40%) - therefore we either utilise it or it becomes a wasted energy source.

#### Its benefits

**LPG is a clean, lower carbon, efficient and innovative energy source**

#### Its applications

- Agriculture
- Automotive
- Recreational – [ie BBQ, ballooning, camping etc]
- Cooking
- Heating
- Power generation

#### Its industry

- Diversified and competitive
- Devoted to the highest safety standards
- Well organised and recognised industry bodies
- Committed to meeting the world's energy challenge
- Equipped to immediately contribute to a sustainable energy mix
- Dedicated to creating viable and sustainable markets for LPG in rural communities to improve people's lives.

# Exceptional benefits

LPG is an exceptional energy source because of its benefits to consumers, industry and the environment.

## LPG is a clean energy source

- LPG vehicles **emit far fewer air pollutants** than diesel and petrol vehicles
- LPG **produces less air pollutants** (particulate matter and NOX) than diesel, oil, wood or coal

LPG helps improve local air quality and therefore minimizes the damage to human health, buildings and vegetation which burden governments with enormous economic costs.

- LPG is one of the **cleanest** conventional fuels available

## LPG is a lower carbon energy source

- LPG emits about 20% **less CO<sub>2</sub>** than heating oil and 50% less than coal
- LPG is proven to be a genuinely **low carbon fuel** with savings of over 20% against petrol in the autogas markets.
- LPG's most common forms Propane and Butane are **not considered as greenhouse gases** by the International Panel on Climate Change (IPCC), the scientific body of the United Nations
- LPG has **no impact** on soil, water and underground aquifers
- LPG is key to a clean and **sustainable** energy mix
- LPG has **limited impact** on the environment
- LPG helps reduce CO<sub>2</sub> emissions and **combat climate change**

## LPG is an efficient energy source

- LPG is **energy efficient** as a high proportion of the energy content of LPG is converted to heat
  - LPG is highly energy efficient
- LPG is **secure**
  - Due to its dual origin and **substantive reserves**
  - Due to its **competitive** market

Due to its **vast production network** and **flexible transport** infrastructure (sea, rail, road)

- Due to **security of supply** being safeguarded by a wide range of sources (throughout the world) and a flexible supply chain, via water, rail and road, with numerous global routes and entry points.
- Due to its **global availability**, flexible transportation modes and diverse applications, LPG plays a role in the transition towards a more secure and competitive energy model.
- LPG is already **available**
  - LPG enables the transition from high carbon conventional fuels to renewable energy sources
  - LPG can immediately **replace polluting** and higher carbon conventional fuels
  - LPG is an **immediately available** clean energy
- LPG is **flexible**
  - LPG is **extremely versatile** and portable thereby providing energy to some of the remotest parts of the world.
  - LPG **gives rural communities access** to modern conveniences where grid-based energy services are unavailable
  - LPG provides developing rural communities with **a modern alternative** to traditional cooking fuels (e.g. firewood, charcoal, dung), contributing to a better quality of life and liberating women and children from time spent collecting fuel. Enabling them to pursue education or value-added economic activities within the community.
  - LPG **enhances** the quality of rural life
  - LPG is **available** anywhere, anytime

## LPG is an innovative energy source

- LPG is a **natural partner** to intermittent renewable energy sources and systems
- LPG enables **decentralised power generation** through for instance small self-contained generators and micro CHP
- LPG **replaces chemicals in agricultural applications**, such as sanitising livestock stalls and weed control
- LPG is a **natural partner** for renewable energy and energy efficiency