FACT SHEET:

Cleaner, Reliable, Australian Energy for Agriculture and Mining

Australian gas fuels - Liquefied Petroleum Gas (LPG), Liquefied Natural Gas (LNG) and Compressed Natural Gas (CNG) - have an important role as a reliable component in a lower carbon energy setting.

They are also cleaner, Australian, support thousands of local jobs and are a more readily available source of energy than conventional fuels.

CLEANER, RELIABLE AND AUSTRALIAN ENERGY FOR OUR AGRICULTURE INDUSTRY

As the community - and in turn farmers - demand more environmentally friendly production methods, LPG is a great choice for Australia's farming industry.

It enables farmers to farm efficiently, using LPG as a clean, green, versatile energy source for a broad range of farming applications.

Practical applications for LPG in agriculture include its role in crop-drying, poultry breeding, irrigation, thermal desiccation, incineration, insect repelling, greenhouse/ animal shed heating and water heating.

A recent report by Infrastructure Australia, found that increasing energy costs are likely to reduce the productivity and sustainability of irrigated agricultural businesses.

In particular, sugarcane producers have expressed concern that rising energy costs are making it difficult for them to meet the target of doubling agriculture production.

By supporting Australian gas fuels, governments can also assist the agriculture sector, which wants to be able to use affordable local fuel sources.

CASE STUDY

SELECTED SEEDS, PITTSWORTH QLD

Selected Seeds is an industry leader for tropical pastures, domestically and internationally, and until recently used a combination of diesel and solar energy for grain drying.

Initially, Selected Seeds used a solar/diesel hybrid, because through the renewable energy grant program, it was the cheapest option. However, they have now replaced the diesel component of the hybrid with LPG, because it is cleaner, more reliable, improves energy efficiency during winter and saving 10% in costs.

ABOUT GAS FUELS

Australian gas fuels - Liquefied Petroleum Gas (LPG), Liquefied Natural Gas (LNG) and Compressed Natural Gas (CNG) address the triple drivers of reliability, cost and the environment - while securing local jobs and reducing Australia's reliance on foreign oil imports.

It is therefore critical to take the necessary steps to ensure that these fuels become a bigger part of Australia's energy mix - which will help create even more Australian jobs.

CASE STUDY

WA MINING JOBS SUPPORTED BY CLEANER, RELIABLE, AUSTRALIAN GAS FUEL

During 2018, LNG enabled the Carosue Dam, Daisy Milano, Dalgaranga, Darlot, Deflector and Mt Marion mines in Western Australia - which employ hundreds of workers - to reduce their combined diesel fuel consumption by 55 million litres.

This application has provided a total saving of $7.6 million on their fuel costs and reducing CO_2 emissions by 27,000 tonnes.

GAS-FUELED POWER GENERATION FOR THE MINING INDUSTRY

In the mining industry – which is either off-grid or requires supplementary generation - gas fuels can be used for a range of applications, including back-up generation, heating and catering for worker accommodation.

In 2016-17, the mining industry consumed almost 11% of the energy produced in Australia - but very little of that energy came from affordable Australian gas fuels.

Case studies show that gas and solar hybrid generators for off-grid power generation can actually provide a lower emitting, lower polluting and more cost-effective solution than the more common diesel solar hybrids.

GAS FUELS TECHNOLOGY USED IN MINING

Queensland company Intelligas, has recently developed technology to retrofit a range of mine vehicles including trucks, dozers and shovels with a 'plug in plug out' tank and High Density Compressed Natural Gas (HDCNG) fuel system.

Fitting these vehicles with a HDCNG engine not only reduces carbon emissions, but it improves the life of the engine and reduces engine noise by substituting up to 85% of diesel with gas - while maintaining equivalent performance levels or better.

CLEANER, RELIABLE, AUSTRALIAN FUEL FOR LONG-HAUL TRUCKS SUPPORTING OUR AGRICULTURE AND MINING SECTORS

Australia has a particular need for heavier, larger long-haul trucks to support our agriculture and mining sectors.

Few Australians know that gas is the only viable alternative to diesel for long-haul trucking with our trucking industry being an important part of the Australian economy. In 2017, it was worth almost $40 billion to our economy and paid $8.2 billion in wages to Australians.

Working closely with the National Heavy Vehicle Regulator, Unigas and its partners have been working on an LPG dual fuel heavy truck trial - and are now discussing steps for developing an Australian compliance model that will allow the industry to adopt a solution that involves installing an engine system that runs on both diesel and LPG.

The system has the advantage of maintaining engine power and torque, and remaining within the engine's designed operating performance. Trial results consistently showed 18 to 20 percent energy equivalent savings, a 60 per cent reduction in particulate matter and a 2 per cent CO2 reduction.

While still in the early stages, results show this technology has the potential to help the Australian heavy vehicle industry reduce emissions and operational costs, without compromising safety.