

**Cleaner, Reliable
Australian Fuels**

**2020-21 Pre-Budget
Submission**



**FOUR BASIC AND AFFORDABLE MEASURES FOR
CLEANER, RELIABLE FUEL SECURITY AND LOCAL JOBS**



ABOUT GAS ENERGY AUSTRALIA

GEA is the national body which represents the bulk of the downstream gas fuels industry covering Liquefied Petroleum Gas (LPG), Liquefied Natural Gas (LNG) and Compressed Natural Gas (CNG).

The industry comprises major companies and small to medium businesses involved in the gaseous fuels industry - refiners, fuel marketers, storage owners and transporters, equipment manufacturers, LPG vehicle converters and other industry service providers.

To find out more, please visit
www.cleanercheaperfuels.com

EXECUTIVE SUMMARY

AUSTRALIAN GAS FUELS - INCLUDING LIQUEFIED PETROLEUM GAS (LPG), LIQUEFIED NATURAL GAS (LNG) AND COMPRESSED NATURAL GAS (CNG) - ARE AUSTRALIA'S NATURAL ADVANTAGE.

These fuels are cleaner, reliable, Australian, better for the environment, can provide greater domestic fuel security and offer more control over Australia's economic future. With Australia's abundant supplies of gas fuels, it makes no sense for Australia to be fully dependent on imported, dirtier and more expensive oil-based fuels (i.e. petrol and diesel) particularly for transport energy and off-grid power generation. Australian produced gas fuels also create more Australian jobs.

As the national peak body that represents the bulk of the downstream gas fuels industry, Gas Energy Australia (GEA) is pleased to submit this Pre-Budget Submission as part of the 2020-21 Federal Budget. It details four basic and affordable measures for cleaner, reliable fuel security and local jobs - and builds on our Visions for natural gas fuels and stationary energy LPG.

Unfortunately, cleaner, reliable, Australian gas fuels - with existing technology and abundant natural supplies - are often overlooked or penalised in Australia's policy settings despite being the only feasible alternative to diesel and other sources of energy for heavy transport and off-grid, end-of-network and off-shore baseload power generation.

WHY AUSTRALIA'S GAS FUELS?

While there is a lot of politics around energy policy and the pace of change towards renewables, there is one common element everyone agrees is needed. That our current and future energy sources must also be reliable. Gas fuels are Australian, they are cleaner and they are reliable - and on current technology - gas fuels are the most reliable, low-emitting technology available.

Australia has an abundance of gas fuels - like LPG, CNG and LNG - with significant existing and flexible distribution networks through virtual pipelines that can be very responsive to changing demand without needing expensive new fixed pipelines.

Australian gas fuels are also contributing to addressing the economic, energy and emission reduction challenges currently facing Australia by:

- *providing cheaper, reliable energy for families and businesses;*
- *improving Australia's liquid fuel security;*
- *reducing carbon emissions cost effectively; and*
- *protecting and creating Australian jobs, particularly in manufacturing.*



INCREASING LIQUID FUEL SECURITY

The International Energy Agency (IEA) fuel reserves requirement is a function of 90 days of imported fuel. Therefore, using more Australian fuels would reduce the quantity of the oil stocks we need to hold and the resulting cost - as well as being better for the environment when the fuel used is gas.

The cost of building a stockpile sufficient to meet our IEA requirement is unaffordable - previously estimated by the Commonwealth Government to be \$6.5 billion. In addition, shifting more domestic users from higher polluting, imported oil to cleaner, Australian gas fuels means lower carbon emissions and virtually none of the harmful particulate pollutants of oil-based fuels. And being Australian produced and not imported, means more jobs for locals.



IMPROVED ENVIRONMENTAL AND HEALTH OUTCOMES

There are also strong environmental and health benefits to be gained from removing barriers to the use of Australia's cleaner, reliable and healthier gas - instead of higher-emitting, higher-polluting, imported oil-based fuels such as diesel.

The World Health Organisation has concluded that diesel particulates are cancer causing and that there is no safe level of airborne particulates - which are estimated to be causing up to 3,000 deaths a year in Australia.

Further, not only can LPG, LNG and CNG fuels reduce carbon emissions by up to 25% and virtually eliminate particulates along with NO_x and SO₂ - they are also Great Barrier Reef friendly as they evaporate off water if they spill rather than sediment and slicking like oil-based fuels.

THE GAS INDUSTRY IS CONSTANTLY DEVELOPING AND DEPLOYING NEW LOW-EMISSION GAS TECHNOLOGIES

The gas fuels industry is constantly developing and deploying low-emission gas technologies to deliver cleaner and cheaper products to their customers. For example:

- an LPG dual fuel heavy truck trial by Unigas, Prins Autogassystemen and CMV Truck & Bus in Victoria;
- Queensland company Intelligas developing 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;
- Australian taxi company 13CABS adding Toyota Camry Hybrids equipped with Sprint Gas sequential vapour injection LPG systems to its vehicle fleet.;
- INCAT Group in Tasmania designing the world's first high speed LNG ferry; and
- EVOL LNG successfully conducting the first commercial LNG marine bunkering operation in Australia with truck-to-ship refueling.

Encouraging Australian expertise and the development of gas fuels technology also creates and protects Australian based manufacturing jobs and helps keep these niche skills in Australia.

IT'S NOT ABOUT GAS OR RENEWABLES – IT'S ABOUT THE BEST LOW EMITTING FUEL FOR PURPOSE

GEA's 2020-21 Pre-Budget Submission isn't about choosing between gas or renewables – it's about making sure that the right energy source and right technology can work together to provide, secure, affordable and low emission energy to all Australians.

One of the measures for example would support either standalone off-grid gas-fuelled power generation or gas hybrids instead of higher polluting diesel fuel. That's good for our domestic liquid fuel security, good for the environment, good for local jobs and skills - and good for Australia's economy.

FURTHER INFORMATION

While our 2020-21 Pre-Budget Submission concentrates on four basic and affordable measures for cleaner, reliable fuel security and local jobs, further information is also available in our vision documents (A 2030 Vision for Natural Gas Fuels – CNG and LNG and Vision for Stationary Energy Liquefied Petroleum Gas (LPG)), which advocate removing barriers to the greater use of cleaner, cheaper Australian fuels.

To find out more, please visit www.cleanercheaperfuels.com.



2020-21 Pre-Budget Submission



Australian gas fuels address the triple drivers of reliability, cost and the environment. It is therefore critical to take the necessary steps to ensure that these fuels become a bigger part of Australia's energy mix - creating more Australian jobs.

1 CHEAPER, RELIABLE ENERGY FOR FAMILIES AND BUSINESSES

- ✓ Adopting a technology neutral approach to 'green schemes' so Australian families can save up to \$600 on their energy bills just by converting their electric hot water system to gas;
- ✓ Implementing microgrid pilot programs so off-grid communities can use reliable, affordable, cleaner fuels - including gas & gas hybrids; and
- ✓ Implementing an effective consumer education program about the range of lower emitting fuel energy sources available that can help mitigate against supply disruptions, increase energy security and provide lower energy costs for Australian families and businesses.



TAMWORTH FAMILY CUTS COSTS AND EMISSIONS CASE STUDY

Liz Hayward in Tamworth replaced her family's electric hot water system with an LPG one because it's more efficient and better for the environment. The new LPG system reduced her family's annual electricity bill by \$600.

2 INCREASED LIQUID FUEL SECURITY

- ✓ Honouring the Coalition and Labor's commitment that the tax on gas heavy transport fuels should be no more than 50% of that on diesel/petrol on an energy equivalent basis;
- ✓ Encouraging substitution of imported diesel with clean domestic gas fuels for off-grid power generation; and
- ✓ Adopting cleaner, Australian natural gas as the preferred marine fuel for local fleets instead of dirtier, imported oil fuels; including removing barriers to bunkering of Australian LNG.



MARINE LNG TO MEET STRICTER EMISSION REGULATIONS CASE STUDY

In early 2017, the first commercial LNG marine bunkering in Australia of a new Woodside offshore platform supply vessel took place in Western Australia. In the near term, LNG will be used to power ferries operating between Tasmania and Victoria which will enable compliance with stricter International Maritime Organisation sulphur and emissions regulations.

3 CARBON EMISSIONS REDUCED COST EFFECTIVELY

- ✓ Reforming government procurement rules and policies to include low emission gas fuel options for fleets and public transport;
- ✓ Adopting a technology neutral approach to reducing both vehicle CO₂ and tailpipe emissions and controlling emissions from off-road vehicles used in mining, agriculture and construction; and
- ✓ Ensuring government policies and programs supporting zero emission fuels include renewable gas fuels such as biogas and hydrogen.



WA MINING JOBS SUPPORTED BY CLEANER CHEAPER FUEL CASE STUDY

During 2018, LNG enabled the Carosue Dam, Daisy Milano, Dalgara, 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, saving a total of \$7.6 million on their fuel costs and reducing CO₂ emissions by 27,000 tonnes.

4 GREATER FREIGHT TRANSPORT PRODUCTIVITY

- ✓ Integrating gas fuels transport into a national freight and logistics strategy which protects designated freight, including gas fuels transport, corridors from the impact of urban intensification;
- ✓ Ensuring road infrastructure projects such as the Coffs Harbour Bypass accommodate the carriage of all goods, including gas fuels; and
- ✓ Aligning and removing the duplication of freight transport regulation across Australia's states and territories.



COFFS HARBOUR BYPASS MUST ACCOMMODATE GAS FUELS TRANSPORTATION TO IMPROVE SAFETY CASE STUDY

If the preferred route of the Coffs Harbour Bypass requires tunnels, they should be designed to ensure all vehicles carrying gas fuels can use the bypass and avoid Coffs Harbour's residential and urban areas - improving safety for all road users and the wider community.

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The industry comprises major companies and small to medium businesses in the gas fuels supply chain; refiners, fuel marketers, equipment manufacturers, LPG vehicle converters, consultants and other providers of services to the industry.

IMPORTANT GAS FUELS FACTS:



Over **400,000 Australians and thousands of businesses** in regional Australia are not on the electricity grid – many of which run on dirtier, more expensive and often subsidised diesel generation.

LPG, LNG and CNG fuels can **reduce carbon emissions by up to 25%** and virtually



eliminates particulates along with NOx and SO₂.

Over **380,000 gas vehicles** -



around 3,000 dispensers supplying autogas in Australia.

The stationary energy LPG sector **supports 2500 direct jobs**



while over **3600 automotive technicians** are qualified to work on LPG autogas vehicles.

Half of the gas used in Australia is for mining and manufacturing – contributing \$196 billion to the national economy and **employing over 949,000 Australians.**



70% of homes use mains or bottled gas – that's



6.5 million homes and growing.



Australia's gas infrastructure can store the **same amount of energy as 6 billion Powerwall batteries.**

Displacing 10% of diesel used on heavy on-road transport could reduce imported diesel by 1,018 million litres per annum - **reducing CO₂ emissions by up to 597,000 tonnes.**



GEA Members have almost **\$4.3 billion invested in LPG facilities, trucks and cylinders.**



Electricity emissions are the largest source of emissions in Australia, representing 45% of emissions, making it an important sector for abatement.



Gas delivers 44% of Australia's household energy - but only 13% of household greenhouse gas emissions.



Every 10% substitution of imported diesel by Australian gas fuels would **save \$870 million in import costs.**

LPG contributes more than \$3.5 billion a year to the national economy and other gas fuels add to this contribution.



Transport related greenhouse gas emissions are predicted to grow by 37% between 2005 and 2025 – unless we **support cleaner fuel options like gas.**



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