

29 May 2020

Mr Martijn Wilder AM
Chair
Australian Renewable Energy Agency

Via electronically via the ARENA website at www.arena.gov.au/bioenergy-roadmap

GEA RESPONSE TO THE DEVELOPMENT OF A BIOENERGY ROADMAP

Dear Mr Wilder

Gas Energy Australia (GEA) welcomes the opportunity to make a submission on the development of the Australian Renewable Energy Agency's (ARENA) Bioenergy Roadmap.

By way of background, GEA is the national peak body which represents the bulk of the downstream alternative gaseous fuels industry, which covers Liquefied Petroleum Gas (LPG), Liquefied Natural Gas (LNG) and Compressed Natural Gas (CNG). The industry comprises major companies and small to medium businesses in the gas fuels supply chain including producers, refiners, distributors, transporters, retailers, vehicle manufacturers, equipment manufacturers and suppliers, installers, educators and consultants.

GEA considers the development of a strong bioenergy industry in Australia critical to support the transition to low and zero emission energy sources, as well as promote economic development, especially in regional areas. GEA supports the development of a bioenergy roadmap and GEA members and associates are committed to working with ARENA to contribute to the development of this roadmap.

GEA considers increased use of low and zero emission gas fuels such as biogas and hydrogen would ensure that major infrastructure investments such as Australia's vast network of actual pipelines and virtual pipelines can keep supplying energy to Australian households and businesses. Otherwise, climate change policies seeking greater electrification as the means to reduce emissions would require massive additional investment in electricity infrastructure and crippling increases in energy costs for Australians.

GEA considers there to be a number of areas where biogas can make a meaningful contribution to improving Australia's liquid fuel security, reduce emissions and promote regional economic development. These include shifting Australia's growing dependence on imported oil for major industries like transport and manufacturing. A diversification of Australia's fuel profile to make greater use of domestically produced fuels such as LPG, LNG and CNG and in the future biogas, requires supportive policy settings to drive the uptake of these fuels.

Opportunities to decarbonise the gas network

As gas undergoes its own decarbonisation journey, low emission fuels such as LPG and natural gas have the ability to maintain reliability of supply and reduce emissions cost effectively while renewable gases such as biogas and hydrogen become more readily available in the future. Biogas covering gaseous fuels such as biomethane or biopropane recovered from renewable sources have an

important role to play in decarbonising Australian energy applications and improving Australia's energy security.

The production of biomethane, which is the same as natural gas, is a well-established process using currently available commercial technologies. Production of biopropane, which is the same as propane in LPG, is becoming established internationally. Biogas can be injected and stored in the distribution or transmission networks, or within cylinders, and used as a transportable gaseous fuel in areas where the gas network does not extend, effectively providing renewable energy on demand. Biomethane converted to CNG or LNG or biopropane can also be used as transport fuel.

GEA is encouraged by the increased focus on renewable gases such as hydrogen in Australia but considers there to be further abatement opportunities for sectors which are more difficult to decarbonise through the increased use of biogas. These opportunities are detailed below.

The role of biofuels to help decarbonise the industrial and transport sectors and contribute to Australia's liquid fuel security

GEA considers there to be significant opportunities in Australia for biogas to support efforts to reduce greenhouse gas (GHG) emissions, combat climate change and improve Australia's liquid fuel security. Biogas is a renewable, local source of energy which can significantly contribute to decarbonising sectors such as industrial, energy, transport, mining and power generation.

- **Transport**

Biomethane can be compressed or liquefied to be used in natural gas or dual fuel vehicles as fuel for cars, buses and trucks. GEA considers that there are significant opportunities for biomethane to substantially reduce emissions and increase sustainability in the transport sector.

With transport accounting for around 17 percent of total emissions in Australia, there is significant scope for biogas to contribute more to the Government's environmental objectives and international commitments. In the short term, low emission fuels such as LPG and natural gas have the ability to maintain reliability of supply and reduce emissions cost effectively in the face of increasing pressures on the electricity network from the influx of renewable generation, increase in electric vehicles and early retirement of coal fired power stations. In the medium to long term, when gas is well advanced along its decarbonisation journey, renewable gases such as biogas and hydrogen, that utilise existing transport infrastructure, offer the prospect of affordable, reliable net zero emissions energy for vehicles. GEA considers that the development of a bioenergy roadmap is critical to this process.

- **Industry**

Currently gas fuels provide reliable energy to the more than 400,000 Australians and thousands of businesses in regional areas not connected to the electricity grid. While many of these individuals and businesses use gas fuels for space heating, cooking and water heating, most are heavily dependent on diesel generators for electricity, even when they have solar panels. As a result, these communities will be difficult to decarbonise.

GEA considers that the Commonwealth Government should encourage domestic users to shift from higher polluting, imported oil to cleaner, Australian gaseous fuels such as LNG and LPG and as they become more readily available, renewable gases such as biogas, as a means to reduce our dependence on imported liquid fuels and lower carbon emissions. Recently we have seen increasing use of gas fuels for power generation in regional and rural areas, which has helped to reduce our reliance on imported liquid fuels. In 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. The development of a strong bioenergy industry in Australia can help pave the way for industries to transition from fossil gas fuels to renewable gas fuels such as biogas for remote power generation.

Current economic and regulatory impediments to the development of the bioenergy sector in Australia

GEA considers that opportunities for biogas are largely untapped in Australia. The recent Bioenergy Opportunities for Australia Report highlighted that *“although some support mechanisms are already available for the biogas sector, more favourable policy conditions would increase the uptake of project development. This could contribute to the growth of a mature and sustainable biogas industry in Australia”*¹.

GEA considers that there are two main areas where effective government policy and support would better position the Australian economy to transition to net zero emissions. These are adopting a technology neutral approach to energy policy, ‘green schemes’ and innovation initiatives and reversing the growing tax burden on LPG, LNG and CNG used in heavy vehicle transport on an energy equivalent basis.

- **Technology neutrality**

GEA considers that technology and fuel neutrality are critical when supporting the development of low emission technologies such as biogas and associated industries. A technology neutral approach to energy policy facilitates the take up of the most cost-effective low energy technology for specific applications and offers consumers a suite of opportunities to meet low emission objectives. The gas fuels industry is constantly developing and deploying low-emission gas technologies to deliver cleaner and cheaper products to its customers. 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.

- **Tax on gas fuels**

As detailed above, biogas can be used as a transport fuel in the same way as natural gas and autogas. In order to drive the uptake of biogas as a transport fuel, GEA believes the tax on gas transport fuels should be no more than 50 per cent of that on diesel/petrol on an energy equivalent basis. Both major parties committed to that in 2011. However, since that time the tax on LNG, CNG and LPG used in heavy transport is over 70 per cent and should be reduced to the committed level.

As biomethane and biopropane can use existing infrastructure with minimal modification, the increased use of gas fuels for transport will mean individuals and businesses will be reducing transport related emissions now and be well on the way to utilise biogas as it becomes more accessible.


¹ ‘Biogas Opportunities for Australia’ *ENEA Consulting* – March 2019, Chapter 4. Pg. 43
<https://arena.gov.au/assets/2019/06/biogas-opportunities-for-australia.pdf>

Conclusion

In conclusion, GEA considers that increased government support for the greater use of low and zero emission gas fuels in the key areas detailed above would significantly contribute to reduced emissions and increased reliability. Ensuring that policies and incentives targeting renewable energy remain technology neutral and do not favour one technology or fuel over another, returning the tax on gas fuels to no more than 50 per cent of that on diesel/petrol on an energy equivalent basis and the removal of tax on biogas transport fuels, and the substitution of imported diesel with low and zero emission gas fuels, would ensure that there is continuous development of cost-effective low emissions gas technologies. Taking into account of the decarbonisation journey of gas and ensuring that policies and programs to support zero emission fuels include renewable gas fuels such as biomethane and biopropane are critical to the development of a roadmap to support the establishment of a bioenergy industry in Australia.

GEA would welcome the opportunity to discuss these issues in greater detail. If you have any questions regarding this submission please do not hesitate to contact GEA's Policy Adviser Melissa Dimovski at mdimovski@gasenergyaustralia.asn.au.

For your consideration

A handwritten signature in black ink, appearing to read "John Griffiths", with a horizontal line drawn through it.

Mr John Griffiths
Chief Executive Officer
Gas Energy Australia