

10 March 2017

Ms Judi Zielke
Deputy Secretary
Ministerial Forum on Vehicle Emissions
Department of Infrastructure and Regional Development
CANBERRA ACT

DRAFT REGULATION IMPACT STATEMENT – VEHICLE EMISSIONS STANDARDS FOR CLEANER AIR

Dear Judi

Gas Energy Australia is pleased to make a submission to the Ministerial Forum on Vehicle Emissions Draft Regulation Statement – *Vehicle Emissions Standards for Cleaner Air*.

By way of background, Gas Energy Australia (GEA) is the national peak industry body for the bulk of the downstream gaseous fuels industry, including 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 alternative gaseous fuels supply chain; refiners, fuel marketers, equipment manufacturers, vehicle converters, consultants and other providers of services to the industry.

Gaseous fuels are a significant source of energy in Australia, providing energy for homes and businesses and the fuel to power vehicles. The LPG sector alone in 2015 had domestic production totaling over 1.8 million tonnes of product. *The Energy in Australia 2014* publication by the Bureau of Resources and Energy Economics (BREE) estimated that 3 per cent of energy consumption in the transport sector is autogas (LPG) and that natural gas (LNG and CNG) accounted for approximately 2 per cent of transport energy consumption¹.

The role of gaseous fuels in the Australian transport sector is significant with:

- almost 380,000 LPG powered vehicles;
- in excess of 3,300 dispensers supplying Autogas to Australians every day;
- over 4,000 CNG buses; and
- over 3,700 natural gas powered rigid trucks and non-freight carrying vehicles.

GEA applauds the Government's actions in taking a whole-of-government approach to vehicle emissions. It is through looking at all three aspects of vehicle emissions – CO₂, noxious emissions and fuel quality that the best outcome will be achieved for both consumers and the environment. Particularly as focusing on one aspect of emissions may change consumer behaviour to such an extent that other undesirable results occur. For example, if the Government were to examine CO₂ emissions in isolation it may result in an increase in the dieselisation of the fleet, such as occurred in Europe. Whereas, looking at vehicle emissions in their entirety should ensure that noxious emissions of oxides of nitrogen and sulfur (NO_x and SO_x), particulate matter (PM), hydrocarbons and carbon monoxide (CO), which are all harmful to humans, are also included in the discussion.

¹ Bureau of Resources and Energy Economics – Energy in Australia 2014

- As highlighted in the AMBARC research “*Analysis of the Australian 2015 New Light Vehicle Fleet and Review of Technology to Improve Light Vehicle Efficiency*” (commissioned by the Department of Infrastructure and Regional Development), an outcome of meeting the Australian Climate Change Authority’s Target A in 2025 (105g CO₂/km), might well be a greater number of diesel vehicles, around 57 per cent of the fleet. Australia’s vehicle fleet is currently dominated by petrol vehicles at nearly 70 per cent of the fleet.
 - If the Government were just to look at reducing CO₂ emissions, dieselisation of the fleet could be increased and this would result in worse outcomes for air quality and human health and mortality.

GEA is encouraged by the Government’s efforts to extensively consult with industry to investigate potential measures to address CO₂ and noxious emissions from vehicles in Australia. With transport accounting for around 17 per cent of total emissions in Australia, there is significant scope for this sector to contribute to the Government’s environmental objectives. In particular, GEA supports the Government’s commitment to maintaining a technology neutral approach to assessing the implementation costs, environmental benefits and other impacts of different policy options to ensure that the most efficient and cost effective option is pursued rather than the most popular.

Australia has vast supplies of affordable LPG and natural gas which both have a low carbon and noxious chemical content. Hence, the gaseous fuels industry is confident that it can assist the transport sector to achieve improved emission and environmental outcomes with the aid of supportive government policy settings. For example:

- Autogas emits 22 per cent less CO₂ than petrol;
- Autogas emits 95 per cent less NO_x than diesel;
- Autogas emits 68 per cent less NO_x than petrol; and
- Autogas produces 120 times less small particle emissions than diesel vehicles².

Natural gas fuels – CNG and LNG – are cleaner and healthier than diesel, having:

- 30 per cent lower CO₂;
- 75 per cent lower NO_x;
- 90 per cent fewer particulate emissions; and
- 99 per cent lower SO_x³

Additionally, gaseous fuels are indigenous fuels, which increases Australia’s energy security as we are less reliant on imported fuels. Gaseous fuels are also locally produced and distributed, generating jobs and economic benefits for Australia.

² WLPGA *Autogas*, European Commission *Life Cycle Assessment*

³ www.ferus.com/products-services/products/lng-cng

GEA is pleased to provide the following responses below to the specific questions in the Draft Regulation Statement on *Vehicle Emissions Standards for Cleaner Air* which we hope will be considered in the development of measures to reduce vehicle emissions.

Vehicle Emissions Standards for Cleaner Air

1. Business as usual

GEA does not support the *business as usual* option. Australian emission standards currently lag well behind international standards. Existing arrangements and market forces are not encouraging car manufacturers and importers to offer the most environmentally friendly vehicles.

- GEA encourages the Government to change the business as usual model so that strategies and policies can be developed to foster technology which delivers environmental and economic benefits.

2. Fleet purchasing policies

GEA agrees with the Regulation Impact Statement's conclusion that pursuing this option would create very little benefit to the Australian environment as the Australian Government fleet is less than one per cent of new vehicle sales.

3. Voluntary standards

GEA agrees with the Regulation Impact Statement's conclusion that pursuing this option would result in lack of certainty as to whether the requirements would be met. Additionally, as the scheme would be voluntary there would be no mechanism to penalise underperformers.

4. Mandatory standards for light vehicles

The Australian Government would mandate improved noxious emissions performance for light vehicles under the *Motor Vehicle Standards Act 1989 (MVSA)*. The new Australian Design Rule (ADR) would mandate the Euro 6 emissions standards that will commence in the EU in September 2017.

GEA considers that changes to the light vehicles standards are warranted but that the Government should look to the entire vehicle fleet so that the benefits are larger.

5. Mandatory standards for heavy vehicles

The Australian Government would mandate improved noxious emissions performance for heavy vehicles only, by determining a new ADR under the MVSA.

As with option 4, GEA considers that the Government would be limiting the benefits from only mandating a change in standards for heavy vehicles.

6. Mandatory standards for light and heavy vehicles

GEA supports the proposed mandatory standards for light and heavy vehicles. This action would align Australia's vehicle standards with those operating overseas.

We would also like the Government to recognise comparable testing overseas of vehicle standards and require the use of portable emissions measurement systems (PEMS) to get a more realistic measurement of emissions.

- GEA considers that any standard introduced must not result in an increased discrepancy between average laboratory testing and real world fuel efficiency.
- Recent UK results showing PEMS tested diesel light vehicles produced on average over 6 times Euro 6 NO_x limits⁴.

We would be more than happy to discuss our submission with you in more detail.

Yours sincerely

A handwritten signature in black ink, appearing to read "John Griffiths", with a long horizontal flourish extending to the right.

John Griffiths
Chief Executive Officer

⁴ UK Department of Transport, *Vehicle Emissions Testing Programme*, April 2016