

28 February 2020

National Transport Commission
Public submission – Heavy vehicle charges consultation report
Level 3, 600 Bourke Street
Melbourne VIC 3000

Via NTC submission portal: ntc.gov.au

GAS ENERGY AUSTRALIA RESPONSE TO THE NATIONAL TRANSPORT COMMISSION'S HEAVY VEHICLE CHARGES REPORT

Gas Energy Australia (GEA) welcomes the opportunity to respond to the National Transport Commission's (NTC) heavy vehicle charges report.

By way of background, GEA is the national peak body, which represents the bulk of the downstream alternative gas 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 acknowledges the need for an increase in the Road User Charge (RUC) and heavy vehicle registration charges to ensure governments recover the amount spent on providing roads for heavy vehicles. And GEA is supportive in-principle of the NTC recommendation that these charges should increase by 2.5% in 2020-21 and 2.5 per cent in 2021-22.

However, GEA draws attention to the growing tax burden on LPG, LNG and CNG used in heavy vehicle transport on an energy equivalent basis (Table 1 and 2). Since 2011, the introduction and increases to fuel excise rates on gas fuels has eroded the price advantage of gas compared to diesel. This growing tax burden contradicts the bipartisan Federal Government commitment to apply energy content-based fuel excise to all transport fuels, with a 50 per cent discount for gas fuels in recognition of the broader benefits of Australian gas as a fuel source. These include environmental - lower carbon monoxide, carbon dioxide, particulate matter and NOx emissions - as well as economic and energy security that flow from it being locally produced rather than imported like most oil-based fuels.

GEA considers there to be significant benefits from the greater use of gas fuels for heavy vehicle transport that are not being fully realised due to unfavourable policy settings which make it more difficult for gas-powered heavy vehicles to compete with diesel, the dominant fuel. GEA's submission highlights the impact implementation of the NTC's recommended RUC and heavy vehicle registration charge increases, together with ongoing gas transport fuel excise increases and the reintroduction of fuel excise indexation, would have on the relative heavy vehicle transport tax burdens on LPG, LNG and CNG and how this contributes to the low uptake of gas-powered heavy vehicles in Australia.

What are your views on the Council's preference for an increase in both heavy vehicle registration charges and the Road User Charge by 2.5 per cent in 2020-21 and 2.5 per cent in 2021-22?

Table 1: Actual 2019 heavy vehicle tax burden on gas fuels and diesel

2019 Actual	Australian LPG	Australian LNG	Australian CNG	Imported Diesel
Total tax burden cents/diesel litre equivalent (DLE)	20.04 cpl	20.78 cpl	22.72 cpl	25.80 cpl
Per cent of total diesel tax burden	77.7%	80.6%	88.1%	100.0%

Table 2: Estimated 2020-21 heavy vehicle tax burden on gas fuels and diesel

2020-21 Estimate	Australian LPG	Australian LNG	Australian CNG	Imported Diesel
Total tax burden cents/diesel litre equivalent (DLE)	20.50 cpl	21.25 cpl	23.23 cpl	26.45 cpl
Per cent of total diesel tax burden	77.5%	80.4%	87.8%	100.0%

The Federal Government's Energy White Paper released in April 2015 stated that its policy is to continue to apply energy content-based fuel excise (and excise-equivalent customs duty rates) to all transport fuels, with a 50 per cent discount for gaseous fuels and biofuels.

Table 1 above calculates the relative tax burden on gas fuels compared to diesel for 2019 using Australian Taxation Office data. It shows that as a result of the freeze of the Road User Charge (RUC) applying to diesel in the years 2017-2020, the relative tax burden on LPG, LNG and CNG used in heavy trucking on an energy equivalent basis is 77.7 per cent, 80.6 per cent and 88.1 per cent compared to diesel. These figures are well in excess of the 50 per cent cap stipulated in the Federal Government's Energy White Paper in 2015.

Table 2 above estimates the tax burden on gas fuels compared to diesel for 2020-21 using the NTC's recommended price increase of 2.5% and the Federal Government's 2019-20 Mid-Year Economic

and Fiscal Outlook 2020-21 Consumer Price Index forecast. It shows the relative tax burden on gas fuels compared to diesel is unlikely to change much in the future.

This higher than promised relative tax burden on gas fuels acts as a major disincentive to use the Australian fuel, despite the fact that gas powered vehicles produce up to 23 per cent less greenhouse gas emissions than their petrol and diesel powered counterparts, as well as greatly reduced levels of dangerous particulate pollution.

Government inaction on this important issue in recent years has had the unintended consequence of contributing to the decline of gas-powered heavy transport. GEA considers that restoring this relative tax burden would fulfil a longstanding commitment and would be a demonstration of the importance of promoting innovative clean fuels sources to reduce carbon emissions. It would also be in line with the recent acknowledgment in the *Expert Panel Examining Opportunities for Further Abatement Discussion Paper, October 2019*, of the need to reduce transport related emissions in Australia.

○ Heavy Vehicle Registration Charges

GEA considers that when determining heavy vehicle registration charges, environmental benefits of Australian gas fuels should be considered. Gas powered vehicles offer advantages over traditional diesel-powered heavy vehicles in terms of fuel costs and greenhouse gas emissions. GEA considers that gas powered vehicles should benefit from lower registration charges compared to diesel-powered heavy vehicles to reflect the significant environmental benefits of their use. These benefits are detailed below.

Gas fuels such as LPG, LNG and CNG are clean, cheap and produced locally from Australian gas which is abundantly available in Australia.

Liquefied Petroleum Gas (LPG)

LPG is mainly composed of propane and butane. LPG is produced either directly through the processing of crude oil and natural gas, or as a by-product of the petroleum refining process. LPG used for automotive purposes is referred to as autogas and is an affordable, environmentally friendly and widely available fuel with significant refueling infrastructure across Australia.

Compressed Natural Gas (CNG)

CNG is mainly composed of methane. The natural gas is condensed to just 1% of its usual volume by passing it through a compressor. It remains in the form of a gas and is stored under high pressure in gas cylinders.

Liquefied Natural Gas

LNG is mainly composed of methane. It is created by freezing natural gas to less than -162 degrees Celsius which converts it from a gas to a liquid, making it 600 times denser. It is stored in insulated tanks under low pressure. LNG's energy density makes it an ideal alternative to diesel for long-haul trucks which can easily accommodate tanks for the fuel.

Gas fuels have significant environmental benefits compared to the use of diesel, especially in terms of reducing emissions of particulate matter, which is carcinogenic, and is almost eliminated with gas

use¹. Gas-powered heavy vehicles also emit up to 23% less greenhouse emissions than diesel powered heavy vehicles²

	DIESEL	GAS FUELS
Carbon Dioxide (CO ₂)	✘	23% lower
Nitrogen Dioxide (NO _x)	✘	75% lower
Particulate Emissions	✘	90% lower
Sulfur Oxide (SO _x)	✘	99% lower

Source: Rare Consulting Pty Ltd, National Alternative Transport Fuels Forums – Synopsis, June 2011, <http://www.qgc.com.au/news-media/NewsDetails.aspx?Id=5578>³

A report released by the Energy Supply Association of Australia estimated that; “assuming a 20 per cent reduction in greenhouse gas emissions through using natural gas and based on Australia’s 2011 transport emissions, greenhouse gas emissions fall by approximately 36,400 tCO₂-e for each per cent of natural gas vehicle penetration in the heavy-duty vehicle market. Given that since 1990, emissions from heavy-duty vehicles have on average grown by more than 2 per cent annually, the ability of natural gas vehicles to reduce emissions could make an important contribution to Australia’s emissions targets”⁴.

GEA considers that the greater use of gas fuels in heavy trucking would significantly contribute to reduced emissions and particulates, contributing to improved environmental outcomes for Australians, along with contributing to an increase Australia’s liquid fuel security through a greater diversification of fuels used in heavy vehicles.

¹ <http://www.environment.gov.au/archive/settlements/transport/comparison/pubs/1ch9.pdf>

² Rare Consulting Pty Ltd, National Alternative Transport Fuels Forums – Synopsis, June 2011, <http://www.qgc.com.au/newsmedia/NewsDetails.aspx?Id=5578>

³ Ibid

⁴ Energy Supply Association of Australia, *Developing a market for Natural Gas Vehicles in Australia*, Discussion Paper June 2014, pg. 21.

○ **LPG Dual fuel heavy vehicle truck trial**

The gas fuels industry is constantly developing and deploying low-emission gas technologies to deliver cleaner and cheaper products to their customers. One example of this is a LPG dual fuel heavy vehicle trial which commenced in 2017. Unigas, Prins Autogassystemen and CMV Truck & Bus undertook the trial using an engine system which runs on both diesel and LPG. CMV Truck & Bus installed the Prins Diesel Blend 2.1 technology in two Rivet Energy trucks. During the trial, LPG was substituted for diesel achieving consistent results of 18 to 20 per cent energy equivalent savings, a 60 per cent reduction in particulate matter and 2 per cent CO2 reduction.

○ **Barriers to uptake**

GEA considers that in Australia the primary reason for the limited uptake of gas fuels for heavy vehicle transport has been the great difficulty in competing with diesel, which is the dominant fuel in the market. Even in situations where the alternative transport fuels may be cheaper, the dominance of conventional fuels in the transport market is a significant market entry barrier for alternative transport fuels.

Diesel has received the benefit of relatively low taxation rates and relatively high subsidies throughout the twentieth century. Despite the Government's commitment to developing alternative fuel sources for transport, the imposition of excise on gas fuels in 2011 has significantly impacted the growth and competitiveness of gas fuels.

Scheduled excise increases for gas fuels, combined with the decisions to maintain the freeze on the RUC and to lock in fuel tax indexation, have undermined the potential of Australian gas fuels to strengthen the nation's fuel security and contribute to improved environmental outcomes for communities. The significant economic and environmental benefits of gas fuels such as LPG, LNG and CNG for heavy vehicle transport cannot be fully realised without addressing these barriers to entry.

○ **Recommendations**

Despite the increasing tax burden, the gas fuels industry is confident that it can continue to assist the transport sector to achieve improved emission and environmental outcomes - through the development of new initiatives such as the LPG heavy vehicle truck trial mentioned above and with the assistance of supportive government policy settings.

Gas Energy Australia recommends that the NTC advise the Deputy Prime Minister and Minister for Infrastructure, Transport and Regional Development, the Hon Michael McCormack MP, of the impact implementation of its recommended 2020-21 and 2021-22 increases on the RUC and heavy vehicle registration charges would have on:

- the relative heavy vehicle transport tax burdens on LPG, LNG and CNG compared to diesel;

- the Federal Government's policy to continue to apply energy content-based fuel excise to all transport fuels, with a 50 per cent discount for gaseous fuels; and
- the take-up of gas-powered heavy vehicles and the national interest and community benefits that would flow from these vehicles displacing diesel powered ones.

For your consideration

Kind regards

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
Gas Energy Australia