‘opportunities and challenges for natural gas (NG) in the transport sector …’

Working Group 7
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Director and Chief Executive Officer
brief history …

- 1958-9 - ALPGA established (governing council)
  - located North Sydney
- 1984 - incorporated 1984 (board of directors - articles of association)
  - relocated Redfern Sydney
- 2009 - LPG Australia
  - transition included advocacy and industry policy development
- 2010 - established 4 year business / investment plan
  - relocated Canberra
- 2011 - new constitution and membership (gaseous fuels)
- 2012 - Gas Energy Australia
  - transition included industry development and communications
“... improve the nation’s energy security and environment and reduce energy costs .... by maximising the benefits of gaseous fuels* to the community...”

* downstream LPG, CNG and LNG
benefits of NG vehicles to Australia

- when compared to diesels ....
  - lower fuel costs
  - reduced carbon emissions – up to 23%
  - greatly reduced air pollutants especially particulates and nitrous oxides
  - lower noise levels
  - increased energy security for Australia
  - greater Australian ‘value add’ via the use of a locally produced and processed fuel
  - reduced imports of refined or crude oil
CNG gas powered buses and trucks

Source: ABS Motor Vehicle Census 9309.0

number of CNG powered buses in Australia

number of CNG powered trucks in Australia
LNG gas powered trucks

number of gas powered articulated trucks in Australia

Source: ABS Motor Vehicle Census 9309.0
NG vehicles - global

- over 16.7 million natural gas vehicles worldwide
- Australia ranks 45th in the world
- Australia ranks 17th among OECD nations

Source: NGV Global 2013
LNG and CNG visions
LNG and CNG vision for Australia
...our 10 point action plan

10 POINT ACTION PLAN TOWARD A CLEANER, CHEAPER, AUSTRALIAN FUEL FUTURE

1. Support Direct Action to reduce greenhouse gas emissions through the natural low carbon advantage of natural gas fuels.
   Recognise the "direct action" carbon and pollution benefits that accrue by supporting transport natural gas fuels through the Emissions Reduction Fund and other direct action measures. Government should ensure that the Emissions Reduction Fund (ERF) better supports the practical outcomes of converting natural gas and waste gases to fuels and converting trucks and other vehicles from higher emitting diesel to cleaner gas. Every truck that is converted from diesel to natural gas reduces emissions by almost 35 tonnes of CO₂ per year, equivalent to removing around 12 cars from the road.24

2. Support cleaner air and improved health outcomes through greater use of natural gas fuels.
   Diesel exhaust, which the World Health Organization concluded causes cancer in humans, contains toxic pollutants most likely to harm humans and is particularly dangerous because its sources are close to where people live and work. Australian Governments should implement measures, through the National Clean Air Agreement, both nationally and locally, to reduce Australians' exposure to diesel exhaust and encourage the use of low emission vehicles, vessels and equipment. This could include setting emission standards, banning high emission vehicles, vessels and equipment from workplaces or areas which are heavily populated; and operating government procurement policies that require the purchase of low emission vehicles, vessels and equipment.

3. Industry to build awareness of the benefits of Australian natural gas to potential purchasers and the Australian community.
   Industry recognises that it must do more to make the community aware of the benefits and many application of natural gas fuels. Then we can shift the Australian community away from dirty foreign oil and towards cleaner, cheaper, Australian fuels. The industry must help itself by highlighting the realities of alternative fuels and technologies in the Australian context. While Australia will see a range of lower emitting technologies for different uses - solar power can't drive a truck from Perth to Gladstone.

4. Use Natural Gas to power regional and remote Australian communities.
   Regional and rural communities and business that aren't on the electricity grid or near a gas pipeline, should have access to cleaner, cheaper and secure natural gas fuels. This includes remote agricultural and mining areas as well as indigenous communities reliant on unregulated diesel generation – often cross subsidised by taxpayers. Governments should recognise that "virtual" natural gas pipelines using new technology can transport compressed and compressed natural gas to off grid regional and remote communities more cost effectively than expensive and often subsidised pipeline options.

5. State and Local Government should make a strong commitment to adopt natural gas for major bus, ferry and train services.
   For cleaner air and water and lower costs, the State and Local Governments should facilitate the adoption of cleaner, cheaper natural gas fuels. We already have over 4,000 natural gas powered buses in Australia, but that is only the beginning.21 We still have over 90,000 buses on the road that are polluting our streets from dirtier, imported fuels.

6. Introduce appropriate tax settings during the development cycle of this infant industry.
   The tax system can be used to help reduce the inevitable upfront costs of first movers in the infant natural gas transport sector so it can achieve economies of scale and overcome the entrenched historical and policy advantages enjoyed by existing fuels. For example:
   - Provide appropriate tax breaks such as accelerated depreciation on the upfront conversion costs to promote the conversion or purchase of trucks to cleaner, cheaper, natural gas fuels.
   - Reduce the excise, which is now heading to over 70%, in line with the commitment by Government, reinforced in the Energy White Paper that tax on natural gas fuels would not be more than 30% of the rate of diesel/petrol on an energy equivalent basis.
   - Limit subsidies and proxy supports for imported diesel that have the unintended outcome of reduced competitiveness of Australian natural gas fuels.

7. Facilitate natural gas refueling infrastructure.
   Like in the US, the Australian Government and Industry should work collaboratively to facilitate the gradual expansion of refueling network's on major highways.
   The Government needs to fulfill their election commitment to support the development of logistics systems for natural gas as a transport fuel in transport corridors such as Brisbane, Sydney and Melbourne. The industry will work with the Government to take the first practical steps.

8. Reform government policies and regulations that impose costs on consumers and taxpayers and discourage the use of natural gas fuels.
   Australian Governments should reform energy policies and programs that discriminate against natural gas and cut bureaucratic red tape that imposes millions of dollars in administrative and compliance costs which are passed on to consumers and taxpayers. Such as climate change policies, and programs that are restricted to renewable energy and exclude cleaner, cheaper natural gas and different state regulations for the transport of natural gas fuels which impose costs on transport across State and Territory borders.

   Federal Government grants and schemes should be spent supporting new industries that benefit the Australian community. For example, rather than prop up a dying car industry, grant schemes and the ERF should seek to capture, support and grow our natural advantage in natural gas fuels and downstream skills.
   We should be supporting R&D, and manufacturing jobs in the development of engine technology and aftermarket – including in the Australian niche of 15-litre and other heavy engines, before we lose the knowledge in our current auto-manufacturer and supplier industries.

10. Government, industry and the education training sectors work together to develop a workforce skills development strategy.
    Australian natural gas is our natural advantage and we need to retain and further develop the skills associated with the natural gas industry and offshoot sectors in order to become international leaders.
    To once again become a nation that builds things, we need to identify the immediate, mid-term and long-term career streams and specialisations that our workforce should develop to be internationally competitive.
barriers

- established market dominance of diesel and petrol
- lack of awareness of natural gas fuels and technologies
- price premium for natural gas vehicles or conversions
- limited natural gas refuelling infrastructure
- small size - Australian market and natural gas vehicles
- lack of government commitment to NG fuels including uncertainty about future excise rates and weight and length ‘penalties’ for NG vehicles
- low diesel and petrol prices and rising natural gas prices
Our 2030 Vision

We want your feedback on our 2030 Vision for Cleaner, Cheaper Australian Fuels.

OUR 2030 VISION
heavy vehicle transport tax burden: LNG vs diesel vs CNG (a)

<table>
<thead>
<tr>
<th>Forecast</th>
<th>Australian LNG</th>
<th>Imported Diesel</th>
<th>Australian CNG</th>
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</thead>
<tbody>
<tr>
<td>Effective excise rate</td>
<td>19.37 cpl</td>
<td>0 cpl</td>
<td>21.18 cpl</td>
</tr>
<tr>
<td>26.75 cents/kg converted to cents/diesel litre equivalent (DLE)</td>
<td>19.37 cpl</td>
<td>0 cpl</td>
<td>21.18 cpl</td>
</tr>
<tr>
<td>Road User Charge (RUC) cpl (b)</td>
<td>0 cpl</td>
<td>26.30 cpl</td>
<td>0 cpl</td>
</tr>
<tr>
<td>Total tax burden c/DLE</td>
<td>19.37 cpl</td>
<td>26.30 cpl</td>
<td>21.18 cpl</td>
</tr>
<tr>
<td>Per cent of total diesel tax burden</td>
<td>73.7%</td>
<td>100.0%</td>
<td>80.5%</td>
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(a) Includes impact of reintroduction of fuel excise indexation.
(b) 1 July 2015 increase based on 0.6% increase recommended by National Transport Commission (NTC) in its February 2015 Heavy Vehicle RUC Annual Adjustment Consultation Report.
heavy vehicle transport tax burden: LNG vs diesel vs CNG

key observations

- Since 2 February 2015, tax burden on transport LNG and CNG has been 59.0% and 64.5% respectively of that on diesel
- benefit to LNG and CNG from repeal of carbon tax outweighed by ongoing excise increases and reintroduction of fuel excise indexation
- these burdens contradict previous and current government policies this burden should not exceed 50 per cent

- from 1 August 2015, tax burden on transport LNG and CNG will rise to 73.9% and 80.8% respectively of that on diesel if the Government accepts the NTC’s recommendation to increase the RUC by 0.6%
- moreover, this relative burden will continue to increase over time because excise is likely to increase at a faster rate than the RUC
composition of LNG, CNG and diesel prices

- key observations

- Since 2 February 2015, the price of LNG and CNG has been about 72% and 79% respectively of that of diesel and non-refundable business taxes (including excise and RUC) account for:
  - 15% of the price of both LNG and CNG; and
  - 19% of the price of diesel

- from 1 August 2015, the price of LNG and CNG will be about 75% and 82% respectively of that of diesel if the Government accepts the NTC’s recommendation to increase the RUC by 0.6%, with non-refundable business taxes accounting for 18% of the price of both LNG and CNG – slightly less than diesel at 19%
energy security
joint statement in support of a Transport Energy Plan for Australia
community & government engagement

- www.cleanercheaperfuels.com.au
- ongoing Direct Action Plan Emissions Reduction Fund (ERF) development
  - political difficulty of incorporating environmental differential in fuel pricing (e.g., carbon tax)
- Senate Inquiry into Australia’s Transport Energy Resilience and Sustainability
- Energy White Paper
  - Election commitment to facilitate LNG highway
…do not forget LPG!

- … another cleaner, cheaper … Australian fuel
- established supply and refuelling infrastructure
- Gas energy Australia ‘LPG vehicle manufacturing initiative …
  - new vehicle offering to Australian market
  - modelled of successful European manufacturing
  - market demand and feasibility sturdy – in progress
  - jobs, skill and infrastructure transition
  - VIC government investment
  - SA government … interest?
.... a pleasure to speak to you this morning ... questions?