

GAS ENERGY AUSTRALIA

SUBMISSION

**GAS ENERGY AUSTRALIA
SUBMISSION RESPONDING TO
THE FEDERAL DEPARTMENT OF INFRASTRUCTURE AND
REGIONAL DEVELOPMENT
OPTIONS DISCUSSION PAPER ON
THE MOTOR VEHICLE STANDARDS ACT 1989**

Gas Energy Australia
Suite 7
16 National Circuit
Barton ACT 2600

This page has been left blank

20 October 2014

Mr David Stephens

Regulatory Policy Reform
Surface Transport Policy Division
Department of Infrastructure and Transport
GPO Box 594
CANBERRA ACT 2601

Via email: david.stephens@infrastructure.gov.au and MVSAreview@infrastructure.gov.au

See Distribution

**GAS ENERGY AUSTRALIA SUBMISSION TO THE FEDERAL DEPARTMENT OF
INFRASTRUCTURE AND REGIONAL DEVELOPMENT**

Options Discussion Paper on the 2014 Review of the *Motor Vehicle Standards Act 1989*

Dear Mr Stephens

Gas Energy Australia congratulates the Department of Infrastructure and Regional Development on the bold approach to reform canvassed in its Options Discussion Paper on the 2014 Review of the *Motor Vehicle Standards Act 1989* (MVSA), dated September 2014, and is pleased to make a submission responding to select reforms.

This submission seeks to highlight key issues that Gas Energy Australia considers should be addressed in the Review of the Act, especially barriers that could discourage the take-up of alternative transport fuels. It also responds to some of the questions posed in the Options Discussion Paper.

The key message this submission seeks to convey is that gas powered vehicles can make a significant and cost effective contribution to delivering better environmental and health outcomes, including reducing Greenhouse Gas (GHG) emissions, as well as improving Australia's energy security. However, for this to happen, it is critical that the MVSA and its administration do not create barriers to the use of alternative transport fuels such as Liquefied Petroleum Gas (LPG), Liquefied Natural Gas (LNG) and Compressed Natural Gas (CNG).

1. Background

Gas Energy Australia is the national peak body which represents the bulk of the downstream alternative gaseous fuels industry which covers LPG, LNG and CNG. The industry comprises major companies and small to medium businesses in the alternative gaseous fuels supply chain; refiners, fuel marketers, equipment manufacturers, LPG vehicle converters, consultants and other providers of services to the industry.

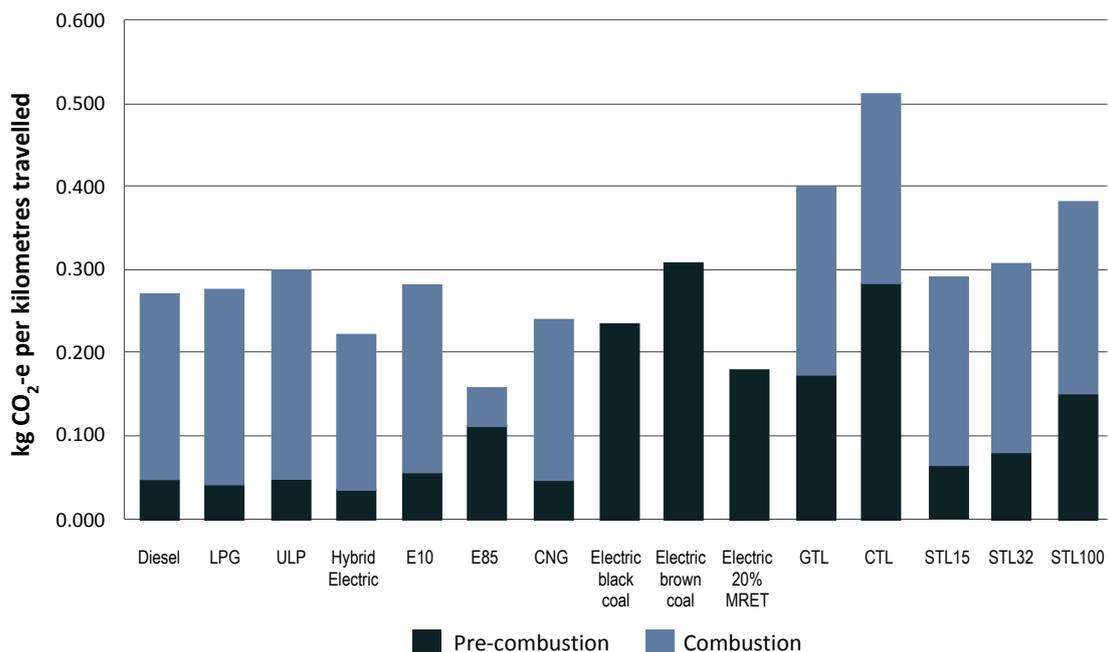
LPG is the most widely used alternative transport fuel in Australia and it is used mainly in light vehicles such as passenger vehicles and light commercial vehicles, including some light trucks. While not as well established as LPG, on the back of recent substantial infrastructure investments, the use of LNG and CNG has the potential to expand in a variety of domestic transport applications. While LNG is principally used to power heavy trucks, CNG is used to power a variety of vehicles including passenger vehicles, light commercial vehicles and small trucks, as well as buses and heavy trucks.

2. Gaseous transport fuels and the environment

Greater use of gaseous transport fuels would deliver a cleaner environment, including increased GHG abatement.

Depending on the sophistication of the combustion technology used, LPG powered vehicles can deliver GHG emissions benefits in the order of 10 per cent to 16 per cent. For example, new Australian developed factory fitted dedicated LPG Ford Falcons and Holden Commodores, with liquid and vapour injection technologies respectively, can deliver equivalent or better performance than their petrol equivalents with up to 16 per cent less GHG emissions¹.

Figure 1: Carbon intensity of Australian passenger vehicles



Source: Rare Consulting (2010)

Figure 1 above highlights the results of research conducted by Rare Consulting² which shows LPG and CNG powered vehicles emit significantly less GHG emissions than equivalent petrol powered vehicles. A copy of this research can be found on the Gas Energy Australia website at this [link](#).

¹ Federal Government Green Vehicle Guide at <http://www.greenvehicleguide.gov.au/GVGPublicUI/Home.aspx>

² Rare Consulting is a division of pitt&sherry which is a specialist consultancy providing strategic services in the areas of energy, transport, the environment and greenhouse strategy.

LPG powered vehicles also emit significantly less other pollutants of the sort that cause air pollution than petrol or diesel powered equivalents. More information about this is provided in a 2009 study by Atlantic Consulting entitled “LPG and Local Air Quality: A Scientific Review”. A copy of the Study can be found on the Gas Energy Australia website at this link.

Similarly, and subject to the same caveat in terms of the nature of the combustion technology used, Figure 1 also highlights that natural gas-powered vehicles (CNG and LNG) can deliver GHG reduction benefits in the order of 8 to 25 per cent.

The United States Department of Energy (US DOE) has also concluded that natural gas burns cleaner than conventional gasoline (petrol) or diesel due to its lower carbon content and that switching from oil-based fuels to natural gas can result in substantial reductions of hydrocarbon, carbon monoxide and oxides of nitrogen, as well as greenhouse gas emissions. The US DOE also noted that because natural gas is non-toxic, it isn't harmful to soil or water.

US DOE based these conclusions on its review of studies, including a 2007 study for the California Energy Commission (CEC) that analysed the life cycle emissions of alternative and conventionally fuelled vehicles. US DOE's review found that, compared to reformulated gasoline, CNG and LNG vehicles reduce life cycle particulate matter emissions by 80 per cent, carbon monoxide emissions by 20 to 40 per cent, emissions of volatile organic compounds by 10 per cent and GHG emissions by 21 to 26 per cent.

While the extent of the superior environmental performance of natural gas powered engines over their diesel equivalents can vary somewhat depending on the composition of the natural gas and the type of engine used, that superiority has been consistently demonstrated in studies conducted in different countries.

Further, in June 2012, the World Health Organization announced there was now sufficient evidence to conclude that diesel engine exhaust does cause cancer in humans³. Requirements to fit costly filters do result in the trapping of some of the pollutants associated with diesel exhaust. However, not only are many such filters an unnecessary expense for gas powered engines, but it is the finer particulates associated with diesel exhaust not caught by filters that are most harmful to humans.

In addition, natural gas engines are also noticeably quieter than diesel powered engines.

3. Gaseous transport fuels and energy security

Greater use of alternative gaseous fuels would also improve Australia's energy security.

Both the Federal Government's 2011 National Energy Security Assessment (NESA) and 2011 Strategic Framework for Alternative Transport Fuels (SFfATF) acknowledged that it is prudent to maintain a diverse energy supply and encouraged the development of commercially viable alternative fuels and technologies.

The 2011 NESA also concluded that diversity of supply, including access to alternative fuels, helped Australia maintain its liquid fuel security in the face of a spate of disruptive events, including a return to high global oil prices, the political crisis in Libya, as well as oil spills and natural disasters.

³ World Health Organization Press Release 213 dated 12 June 2012.

More recently, the Government's Energy White Paper Green Paper, released in September 2014, acknowledged that "increasing cost-competitive domestic production of alternative fuels could diversify the country's liquid fuel supply and strengthen fuel security".

Not only is Australia completely self-sufficient in LPG but it is also a net exporter of LPG. In 2013, Australia produced 2,317 kilotonnes of LPG, satisfying a local demand of 1,539 kilotonnes with net exports of 815 kilotonnes. Gas Energy Australia acknowledges the findings of the 2011 NESA that self-sufficiency or adequacy alone does not guarantee energy security. Nevertheless, it wishes to highlight the fact that Australia's LPG industry has the infrastructure and product affordability to also make a significant contribution to Australia's energy security in terms of reliability and competitiveness. This infrastructure is extensive and includes seven natural gas processing plants, nine coastal terminals, 170 regional depots, 1,000 local small business distributors and over 3,700 Autogas refueling stations across Australia.

Australia also possesses vast natural gas reserves which the Federal Government, in its 2012 Energy White Paper, estimated to be equivalent to 184 years of supply at current production rates. The contribution of these reserves to Australia's liquid fuel security as a substitute for petrol and diesel will increase in line with the progressive roll-out of refuelling infrastructure.

4. Regulatory barriers to growth

Despite the substantial private and community benefits from increased use of alternative gaseous fuels and their potential for growth, sales of Autogas have recently been declining. While the downstream LNG and CNG industries are at an earlier stage of development, recent substantial infrastructure investments are operating below capacity.

Gas Energy Australia agrees with the findings of the SFfATF that a range of barriers to the increased take-up of LPG vehicles currently exist and that some of these are regulatory barriers. The SFfATF identified the following regulatory

barriers to the uptake of LPG which are related to the MVSA and its administration:

- a. inconsistency between State and Territory regulations applicable to the Autogas sector (which for example require different LPG conversion kits to be sold in some jurisdictions);
- b. differences between Australian and international standards for Autogas equipment design and compliance standards;
- c. the inability to recognise international standards for Autogas equipment;
- d. the lack of national compliance and certification for persons performing LPG conversions, including compliance standards for equipment and the use of certified kits.

In addition, the SFfATF identified regulations preventing LNG and CNG vehicles from having larger fuel tanks to achieve similar ranges to conventional heavy duty vehicles as a specific barrier discouraging the take-up of these vehicles.

5. Gas Energy Australia response to Options Discussion Paper questions

Gas Energy Australia offers the following responses to a selection of the specific questions posed in the Options Discussion Paper.

Question 5. Is there a problem?

Yes. Gas Energy Australia considers elements of the MVSA and its administration create a barrier to the use of gas powered vehicles and components in Australia.

More broadly, those elements of the MVSA and its administration which act as a barrier to the imports and serve to protect the local automotive manufacturing sector will be less relevant after 2017.

Question 5.1 Have the problems with the current situation been reflected accurately and are there other problems that should be addressed?

Gas Energy Australia considers that current MVSA requirements that require re-testing and re-certifying of compliant imported motor vehicles and components where the international standard is equivalent or better than the comparable Australian standard impose unnecessary costs on the Australian community. These costs include creating a barrier to the adoption of new technologies if Australian standards and regulations fail to keep pace with the latest developments overseas.

Question 7. What policy options could be considered?

Question 7-1 What are the benefits or costs of refining the risk based approach to the regulation of vehicles entering the Australia market?

The additional costs associated with re-testing and re-certifying also increase the price of gas powered vehicles and discourages their take-up, thereby denying the community the environmental, energy security and lower transport costs benefits they offer. Moreover, because gas-powered vehicles occupy a much smaller segment of the market than petrol or diesel powered vehicles, these additional costs are shared by fewer consumers which disproportionately increase the price of gas-powered vehicles.

Further, times have changed and are continuously changing and to move forward, Australia need more flexible regulations. In particular, changes in the global production of motor vehicles and rapid technological change highlight the need for more flexible performance-based regulations to give Australian consumers access to innovative developments in a cost effective manner.

Question 7-3 Does a case still exist for Australian Government intervention in vehicle standards?

Yes, Gas Energy Australia considers uniform national motor vehicle standards impose a lower regulatory burden than different state and territory legislation and regulations and therefore provide consistency across all Australian jurisdictions.

However, the current policing and administration of these standards by individual state authorities generates inefficiencies, barriers to the adoption of new technologies and ultimately higher costs for industry and consumers.

Consequently, Gas Energy Australia supports the creation of a single national regulator to administer compliance with national vehicle standards.

Moreover, Gas Energy Australia considers national standards' effectiveness and cost efficiency from an environmental perspective would be enhanced with greater use of Portable Emissions Measurement System (PEMS) testing. A number of overseas jurisdiction, including the United States and the European Union, have begun using PEMS testing to reduce both the costs and time involved in assessing vehicle emissions and make the testing more reflective of real vehicle driving conditions than laboratory tests. This would address the current situation in Australia where there is no in-vehicle testing of the emissions performance of heavy vehicle engines.

Question 7-4 Could the Australian Vehicle Standards Rules be used as an alternative to the national standards? If so, what would be the necessary approach to minimise the regulatory burden, industry compliance costs and inconsistent application across states and territories?

No, not without increasing the regulatory burden and industry compliance costs as a result of inconsistent application of motor vehicle standards regulations across states and territories.

Current states and territory practices and rules (e.g., vehicle inspections for yearly registration) vary from state to state and greater consistency would reduce costs for industry and consumers. At the same time, the ability of individual state authorities to police vehicle standards is hampered by widespread under-resourcing.

Gas Energy Australia also notes that the interaction between the MVSA and the Australian Vehicle Standards Rules can be complex and it is often difficult for industry to know where the MVSA ends and the state regulations begin.

The multiple layers and duplication of certification an LPG component imported into Australia can face as well as some of the associated costs is detailed at Annex A – Component Certification Journey. Gas Energy Australia acknowledges that reducing these layers cannot be achieved by reforming the MVSA alone. Nevertheless, Gas Energy Australia considers reforming the MVSA a critical first step in reducing the unnecessary red tape currently holding back greater take-up of gas powered vehicles.

Question 7-5 Are there non-regulatory ways of achieving the same policy objectives of road safety, environment, security, and adequate consumer choice?

No, the seriousness of some of the externalities such as road injury and environmental damage imposed on the broader community by poor quality vehicles justifies a regulatory approach to maintaining vehicle standards. Moreover, these regulations should be consistent across the country and harmonised with United Nations (UN) vehicle regulations. As noted above, the effectiveness and cost efficiency of national vehicle standards' delivery of better environmental outcomes would be enhanced with greater use of PEMS testing.

Question 7-6 What other legislative 'fixes' to the Act do you consider necessary?

While Gas Energy Australia does not support the MVSA Review Options Discussion Paper's Options 1 (i.e. Do Nothing) or 2 (i.e. Repeal the Act), it does support Options 3 (i.e. Modernise the Act) and 4 (i.e. Strengthen the Act). In particular, Option 3 provides the opportunity to strengthen the Act and to provide more consistency and effective policing of vehicle standards to deliver better environmental and safety outcomes.

Question 7-8 In what areas do you consider the Act's compliance processes and enforcement powers could be better targeted to the risks? And what additional or alternative enforcement or compliance activities would you consider as effective and efficient?

Gas Energy Australia considers the vehicle registration process provides an ideal method to control vehicle records including tracing product failures as well as monitoring vehicle safety and environmental performance. It could also assist with tracking all vehicle modifications, verification of component certification and recalls as well as providing additional security for tracing stolen vehicles etc. However, to perform these tasks most effectively and efficiently, the vehicle registration process needs to be consistent across all states and territories.

Question 7-10 What regulatory services under the Act could be delivered through private sector or other organisations?

Gas Energy Australia welcomes greater use of International Organisation for Standardisation (ISO) international standards and national standards developed by national standardisation bodies (e.g., Standards Australia) to ensure that products and services are safe, reliable and of good quality. Such standards provide confidence and assurance to the consumer of product quality (fit for purpose) and safety, reduce costs for industry and governments by minimising waste and errors, and promote increased productivity as well as assist companies to access new markets and facilitate free and fair global trade.

Question 7-13 Are there any specific local requirements for light vehicles that would prevent full harmonisation with UN regulations for light vehicles?

Gas Energy Australia considers there is a need to ensure the suitability of vehicles for Australian conditions such as local fuel specifications and right hand drive.

Question 7-14 How much business compliance cost savings could be made through the above options to harmonise Australian standards with the UN Regulations and the acceptance of evidence of compliance with those standards?

Gas Energy Australia welcomes efforts to date to harmonise Australian Design Rules (ADRs) with United Nations (formerly UN Economic Commission for Europe) Regulations but notes that of the 12 ADRs not aligned to the UN Regulations, one, ADR 44, covers LPG powered vehicles.

Gas Energy Australia supports the Productivity Commission's recommendation in its inquiry final report 'Australia's Automotive Manufacturing Industry', released in March 2014, to:

- a. accelerate harmonisation of ADRs with the UN Regulations;
- b. mutually recognise other nation's appropriate vehicle standards; and
- c. require Australian federal, state and territory governments to justify any existing and future jurisdictional deviations from UN Regulations through comprehensive and independent cost benefit analyses.

However, Gas Energy Australia considers Australia should go further in adopting the UN Regulations and standards rather than retain separate ADRs so as to facilitate the import of gas powered vehicles and components into Australia. The globalisation of the motor vehicle industry and the small size of the Australian vehicle market, make the development and maintenance of unique Australian standards uneconomic from both a government and local industry perspective and highlights the need for flexibility and adoption of new technologies.

For example, LPG vehicle equipment imported into Australia that is designed and manufactured in Europe and has satisfied the requirements of E67R, the European equivalent of Australia's AS1425, must, at significant cost, then be shown to comply with AS1425, which is a requirement of ADR 44. In one case, a manual hand/service tap which European regulations had removed from their requirements had to be installed. Adopting the UN Regulations, which mirror E67R, as Australia's LPG vehicle standard would ensure the majority of high quality components coming from Europe would be accepted in Australia without the need retesting, redesigning or modification.

At the same time, Gas Energy Australia acknowledges the need to ensure acceptance of international certification is backed by rigorous compliance, verification and audit processes to ensure product quality and safety, and is confident this could be achieved.

Consequently, with regard to Option 5 (i.e. Harmonisation of Australian vehicle standards with international standards), Gas Energy Australia supports method 1 (i.e. remove ADRs and replace them with a legislative reference to the UN Regulations) or at least method 2 (i.e. adopt the UN Regulations as the primary motor vehicle standard, with the additional capacity to permit variations to suit Australian conditions).

Question 7-16 Is there benefit in providing for the approval of modules of design/assembly of a vehicle? How could this be done to ensure the certification is valid for a range of later added componentry and bodies?

Gas Energy Australia considers where the base line testing and modification has been conducted at a high level (e.g., tier 1 or tier 2 level suppliers) and meets relevant European or US standards, identical system applications brought into Australia should be given automatic approval.

The concept of mutual recognition of international standards and product certification by globally accredited national certification bodies is a standard practice that supports and facilitates world trade.

Question 7-17 What risks would a regulatory framework need to address if barriers were reduced on vehicle imports??

Consumers would need more protection with regard to such issues as local fuel specifications, right-hand drive requirements and component support for consumers.

Question 7-21 Could consumer protection for personally imported new vehicles be left to consumer laws, and why/why not?

Gas Energy Australia notes that during the Melbourne public consultation workshop, the Department's assertion that the Australian Consumer Law (ACL) does not apply to commercial vehicles was challenged and the Department conceded there is some uncertainty surrounding this issue. Given the importance of the fleet market for gas-powered vehicles, Gas Energy Australia seeks clarification of whether or not the ACL applies to commercial vehicles.

Question 7-24 Do you agree that the concessional options could be grouped into risk categories to allow the possible consolidation of the scheme? If so, do you agree with the model proposed in this review?

Yes, Gas Energy Australia considers the concessional schemes could be grouped into risk categories to consolidate the schemes and the model illustrated in Diagram 3 on page 48 of the MVSA Options Discussion Paper would be workable.

Question 7-27 Could the regulation of the Registered Automotive Workshops and the New Low Volume Manufacturers be combined under a new legislative framework (as illustrated in Diagram 3 on page 48 of the MVSA Options Discussion Paper)?

Yes, Gas Energy Australia considers the regulation of the Registered Automotive Workshops and the New Low Volume Manufacturers could be covered by the concessional schemes consolidation model illustrated in Diagram 3 on page 48 of the MVSA Options Discussion Paper.

Question 7-28 What are the advantages and disadvantages of such a consolidation approach?

The Options Discussion Paper's concessional schemes consolidation model would reduce compliance and administrative costs for consumers, industry and taxpayers, especially if applied consistently across all states and territories.

6. Conclusion

Gas Energy Australia considers uniform national motor vehicle standards impose a lower regulatory burden than different state and territory legislation and regulations and therefore provide consistency across all Australian jurisdictions.

Gas powered vehicles can make a significant and cost effective contribution to delivering better environmental and health outcomes, including reducing GHG emissions, as well as improving Australia's energy security. However, for this to happen, it is critical that the MVSA and its administration do not create barriers to the import of these vehicles and components into Australia.

If a vehicle, or vehicle component, has satisfied international testing, compliance and certification standards, there is no obvious benefit from re-testing and re-certifying if the international standard is equivalent or better than the Australian standards. Re-testing and re-certifying imposes costs on the Australian community which include creating a barrier to the adoption of new technology if Australian standards and regulations fail to keep pace with the latest developments overseas.

The additional costs associated with re-testing and re-certifying also increase the price of gas powered vehicles and discourages their take-up, thereby denying the community the environmental and energy security benefits they offer. Moreover, because gas-powered vehicles occupy a much smaller segment of the market than petrol or diesel powered vehicles, these additional costs are shared by fewer vehicles which disproportionately increase the price of gas-powered vehicles.

In addition, the administration of the regulations applicable to gas powered vehicles varies between States and Territories which imposes extra costs on industry and consumers.

7. Recommendations

Gas Energy Australia recommends that the Department of Infrastructure and Regional Development acknowledge the need to mitigate barriers to the take-up of gas powered vehicles when advising the Government on reforms to the MVSA and its administration. In particular, and as a critical first step in reducing the unnecessary red tape currently holding back greater take-up of gas powered vehicles, it supports:

- a. Option 3 (Modernise the Act);
- b. Option 4 (Strengthen the Act);
- c. Option 5 (Harmonisation of Australian vehicle standards with international standards);
- d. Option 6 (Streamline new vehicle certification processes); and
- e. Option 8 (Consolidate concessional schemes).

And while outside the scope of this Review, Gas Energy Australia recommends that the Department of Infrastructure and Regional Development considers, as part of a second round of reforms, how to achieve:

- a. greater consistency in state and territory vehicle standards legislation and regulations; and
- b. the creation of a single national regulator to administer compliance with national vehicle standards.

For your consideration.

Yours sincerely

A handwritten signature in black ink, appearing to read "Michael Carmody".

Michael Carmody
Director and Chief Executive Officer

Annex: A. Component Certification Journey

Distribution: Department of Infrastructure and Regional Development

For Information:

Members – Gas Energy Australia Autogas Industry Group
Members – Gas Energy Australia Joint CNG LNG Task Force
Gas Energy Australia Technical Committee Chairpersons
Gas Energy Australia State Representatives
Gas Energy Australia Secretariat