

Submission to the Department of Energy and Water Supply

on the

Towards a clean energy economy: achieving a biofuel mandate for Queensland

3 July 2015

ABOUT AIP

The Australian Institute of Petroleum (AIP) was established in 1976 as a non-profit making industry association. AIP's mission is to promote and assist in the development of a sustainable, internationally competitive petroleum products industry, operating efficiently, economically and safely, and in harmony with the environment and community standards. AIP provides a wide range of factual information and industry data to assist policy makers, analysts and the community in understanding the key market, industry and other factors influencing Australia's downstream petroleum sector.

AIP is represented on key statutory and advisory bodies including the National Oil Supplies Emergency Committee (NOSEC), the Fuel Standards Consultative Committee (FSCC), the Oil Stewardship Advisory Council (OSAC), the New South Wales Biofuels Expert Panel and the National Remediation Framework Steering Group (NFRSG). AIP sponsors or manages important industry health and environmental programs and the Australian Marine Oil Spill Centre (AMOSC) is a wholly owned subsidiary of AIP.

AIP is pleased to present this Submission to the Australian Department of the Environment on behalf of AIP's core member companies:

BP Australia Pty Ltd Caltex Australia Limited Mobil Oil (Australia) Pty Ltd Viva Energy Australia Limited

About AIP Member Companies

AIP member companies operate across the liquid fuels supply chain including crude and product imports, refinery operations, fuel storage, terminal and distribution networks, marketing and retail. Underpinning this supply chain is considerable industry investment in supply infrastructure, and a requirement for significant ongoing investment in maintaining existing capacity. Over the last decade, AIP member companies have invested over \$10 billion to maintain the reliability and efficiency of fuel supply meeting Australian quality standards.

AIP member companies play a very significant role in delivering the majority of bulk fuel supply to the Australian market.

- In relation to conventional petroleum fuels, AIP member companies operate all major petroleum refineries in Australia and supply around 90% of the transport fuel market.
- In relation to gaseous fuels, AIP member companies are the major suppliers of bulk LPG to the domestic market, representing around two thirds of the market.
- In relation to biofuels, AIP member companies are the largest suppliers of ethanol and biodiesel blended fuels and blended biodiesel to the Australian market.

Given this background and their significant role in the Australian fuels supply chain and broader economy, AIP member companies have a very strong interest in the supply of biofuels and the maintenance of liquid fuel supply reliability. Background information on the downstream petroleum industry is contained in the AIP publication Downstream Petroleum 2013 (<u>http://www.aip.com.au/topics/new.htm</u>) and the AIP submission to the Energy White Paper process (<u>http://www.aip.com.au/topics/submissions.htm</u>).

Contact Details

Should you have any questions in relation to this submission, or require additional information from AIP, the relevant contact details are outlined below.

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Key Messages

- The Australian Institute of Petroleum (AIP) highly supports market based mechanisms for the supply of fuel in Australia, which have delivered a strongly competitive fuels market with robust supply security.
- AIP believes that biofuels can have a place in the Australian fuels market where they are available at a competitive price, reliably supplied, acceptable to consumers, produced sustainably, and provide net greenhouse gas reduction
- AIP and member companies will work to comply with any biofuels mandate. However, the policy must be designed to deliver a sustainable, competitive and commercial market to develop in the medium to longer term for those fuels.
- The key lessons from the NSW ethanol mandate are:
 - the importance of comprehensive application of a mandate applying to all retailers, not just primary wholesalers and major retailers; liability must rest with the entity that has control over the choice of fuel sold at a site
 - the NSW Government decision to retain Regular Unleaded Petrol (RULP) created fundamental competitive issues where an estimated 50 per cent of retail sites are not subject to the mandate
 - o lack of recognition of the extent of consumer resistance to purchasing ethanol.
 - the costs of altering the existing supply infrastructure to accommodate biofuels supply and the ability of site owners to fund the required capital investment
 - some retailers were financially disadvantaged when they proceeded on site conversion on the announcement of the NSW Government's "no choice" policy.
- In designing a workable mandate policy, it is critical that the Queensland Government recognises the structure of the fuel supply industry in Queensland and that the policy development is underpinned by robust data.
- AIP strongly urges the Queensland Government to collect and analyse data on retail site numbers and volumes to assist in determining whether a 2% target is achievable and to assist in the design of any exemptions framework.
 - AIP also considers that a comprehensive Regulation Impact Statement (RIS) is essential to determine whether an ethanol mandate is the optimal method for achieving the stated aims of the biofuels policy
 - a RIS needs to also recognise the significant costs placed on the industry for site conversion and accommodating biofuels at terminals – these costs will need to be recovered leading to an upward pressure on fuel prices over time
- In the event of any mandate being implemented, <u>AIP strongly supports</u>:
 - retail site based compliance as the liability for supply must rest with the entity that has the closest relationship with the customer and can influence their purchasing decision
 - compliance would be determined on whether each individual site is supplying ethanol blends at the site –meaning that setting a mandate level would be irrelevant
 - no compliance liability at the wholesale level where biofuel supply would be assured by market forces and consumer demand
 - inclusion of ethanol from all fuel grades in assessing achievement of the target, including regular and premium petrol grades containing ethanol and 'E85'
 - inclusion of interstate ethanol supply in calculating target compliance

- a robust exemption framework where the proper recognition is given to constraints in the retail sector, especially the capital cost constraints
- a concentrated industry/government promotional effort to attempt to dispel the negative consumer perceptions around biofuels use (where AIP member companies are prepared to provide in-kind contributions by way of market research, but not fund the promotion).
- <u>AIP does not support</u>:
 - the setting of any fixed ethanol percentage for compliance purposes the desired government percentage of ethanol supply should be expressed as a target
 - under a retail site based compliance model where there is expectation that all retail sites will be supplying ethanol, the percentage for compliance purposes is irrelevant
 - a target of 2% of regular grade petrol volume (RULP plus E10) will be difficult to achieve by 1 July 201.
 - the extent of the currently proposed reporting requirements as it represents a disproportionate burden on the retail fuel industry.
- As the achievement of compliance is easy to determine under a retail site based compliance model (i.e. retailers either sell or don't sell E10) site operators would have a clear requirement to comply with the mandate.
- Given the significant competitive issues that arise between retail competitors in the implementation of any mandate it is critical that the Queensland Government seeks the view of knowledgeable market participants in determining exemption applications.
- AIP considers that any sustainability requirements are placed on biofuels producers, not retailers, and that government assures compliance to any requirements.
- AIP strongly supports the review of the mandate policy at the initial target level before any decision is made to expand the mandate and that an appropriate RIS is conducted at that time, as well as initially.
- AIP considers that further work is required to understand the biodiesel market in Queensland and that there should be recognition of the fundamental differences between biodiesel and ethanol supply. Accordingly, there should be no biodiesel mandate until this work is undertaken.

Introduction

The Australian Institute of Petroleum (AIP) strongly supports market based approaches for the supply of fuels in Australia. A market based approach has delivered Australia a highly competitive fuel market that provides the consumer with fuels of an assured quality, delivered reliably at a reasonable price in a geographically dispersed supply chain.

Given the demonstrated benefits of a market based framework for liquid fuel supply, AIP only supports market intervention when there is demonstrated market failure that the market, or consumers, cannot efficiently resolve, and the intervention would result in a net benefit overall. In addition, any fuels market intervention policy must be based on sound science, rigorous economic analysis, equitable application to market participants, and transparent assessment and implementation, while minimising unintended consequences.

In assessing these impacts it is critical that any proposed policy is subject to a comprehensive Regulation Impact Statement (RIS) process. In conducting a RIS of any Queensland Government mandate it is imperative that there is good understanding of the Queensland liquid fuels market. Data on retail site numbers, ownership and volumes is particularly important given the lack of currently available information, which needs to be considered against potential market demand (or lack of).

AIP Position on Financial Incentives for Biofuels

AIP supports the use of transparent financial incentives (excise concessions, production grants and technology and market facilitation grants) to facilitate and encourage the use of biofuels and alternative fuels in Australia provided those incentives are either:

- short-term and aimed at offsetting some of the up-front capital costs associated with bringing the fuel or the fuel use technology to the market
- or
- ongoing but solely aimed at recognising significant and demonstrated environmental benefits of the fuels compared to the current environmental performance of mainstream fuels.

In this context, AIP supports the policy of successive governments of fuel excise neutrality based on the relative energy content of the individual fuels.

AIP Position on Biofuels Mandates

AIP strongly supports market based approaches for the supply of fuels, including biofuels, in Australia. AIP considers that biofuels will have a place in the Australian fuels market as long as they are:

- Available at a competitive price
- Reliably supplied
- Acceptable to consumers
- Produced sustainably

AIP believes that government policy in support of biofuels (e.g. for environmental benefits) needs to be:

- Transparent, with clear, credible and tested objectives
- Applied equitably to all industry participants
- Stable with clear timeframes for withdrawal of support
- Based on sound science
- Cognisant of other broader policy settings and commercial practice.

In principle, AIP does not support mandates requiring the use of any particular fuel as a way of increasing the demand for that fuel.

• While AIP members will work to comply with the requirements of any government imposed biofuels mandate, AIP believes any mandates for biofuels that may help to increase short-term consumer demand must be designed so that they enable a sustainable, competitive and commercial market to develop in the medium to longer term for those fuels.

AIP believes that fuel mandates may imply higher cost fuels, reduce market price transparency for fuel suppliers and consumers, limit price competition and associated marketing innovation, and fail to encourage the development of robust and reliable fuel supplies.

AIP believes that any government support of, or mandates for, biofuels must recognise that:

- Biofuels are generally supplied to the market at a higher price than conventional fuels if the excise exemption is taken into account.
- While biofuels add new sources of supply to the market and thereby increase the diversity of the fuel mix, it is far from clear that this will result in more reliable fuel supplies. There are few suppliers of biofuels in Australia and Federal tax policies effectively prevent the use of imported ethanol and biodiesel. In addition, the inherent fragility of the nascent biofuels supply chains and the lack of redundancy in the biofuels supply system mean there is a significant risk of supply disruption given the demonstrated impact of droughts and flood on biofuels raw materials supply.
 - \circ $\;$ The failure of domestic biofuels supply imposes costs on the fuel supply chain to convert from biofuels to RULP
 - The Queensland mandate design appears to recognise supply issues as a possibility and it will be important that this aspect is covered in any legislation
- There is strong, ongoing, consumer resistance to using ethanol blend fuels and a proportion of the market, albeit declining, that cannot use ethanol.
- The benefits cited for a biofuels mandate have not been rigorously tested and it is therefore imperative that these be comprehensively assessed in a Regulation Impact Statement (RIS)
 - Regional development benefits (such as jobs and economic development benefits) have not been adequately tested and may not be the optimal use of such a significant implicit subsidy of biofuels producers by retailers and motorists.
 - The environmental benefits have been found to be minimal and should be retested under the current fuel and vehicle standards
- If the carbon emissions abatement estimates for biofuels are robust then biofuels projects should be eligible for support under the Commonwealth Government's Emission Reduction Fund if they are competitive with other abatement options.
 - There is no experience to demonstrate a national biofuels mandate will encourage the development of robust and reliable local production of biofuels on a sustainable basis.
- While biofuels mandates and targets may have helped to create increased consumer demand:
 - The difference between the 39 cpl excise equivalent customs duty for ethanol imports and the effective zero rate of excise for domestically produced ethanol has made ethanol imports uncompetitive and impeded the development of a properly functioning ethanol market and supply chain
 - o There is ongoing uncertainty surrounding biofuels supply reliability
 - There is no guarantee of effective competition involving a diverse number of ethanol producers in the wholesale biofuels markets, as this depends on the balance of supply and demand which should include imports
 - The compliance regime that has developed in NSW lacks predictable and equitable outcomes for all suppliers.

Minimising the negative impacts of a mandate

There must be broad consultation with all stakeholders so that the negative impacts and/or unintended consequences of any mandate policy can be understood at both the political and policy levels and therefore minimised. Experience with the NSW ethanol and biodiesel mandates provides significant guidance on problems likely to be encountered in the implementation of such mandates, depending on their design, particularly:

- Consumer research shows there is strong opposition to ethanol from a significant proportion of motorists AIP member companies will provide consumer research to the Queensland Government on a commercial-in-confidence basis that demonstrates this.
- Discontent from consumers having to pay for premium grade petrol or change service stations if regular grade petrol is not available (although we note the government's commitment to retain consumer choice between E10 and regular grade petrol).
- Uncertainty around the warranty conditions for passenger vehicles and commercial transport operators utilising biodiesel blends.
- Opposition from fuel distributors obliged to spend additional capital on biofuel distribution assets, which suggest that any mandate policy is critically dependent on market demand.
- Strong public opposition from independent service station owners required to convert service stations and/or to undertake premature site refurbishment in order to supply biofuels.
- The importance of comprehensive application of a mandate applying to all retailers, not just primary wholesalers and major retailers; liability must rest with the entity that has control over the choice of fuel sold at a site.

Queensland Mandate Design Features

Understanding the market

In the development of the Queensland Government's mandate policy proposals there appears to be little analysis of the Queensland fuels market, which is central to estimating the costs of the mandate and assessing the achievability of various levels of the mandate.

AIP considers that it is critical that the Queensland Government establishes a detailed understanding of the fuels market to assist in policy design and to provide an assessment of options for any possible exemptions framework. Ideally this data collection and analysis would be conducted through a RIS process.

The data that would need to be collected and analysed includes:

- Total liquid fuel volume demand
- Fuel volume demand by fuel type
- Fuel volume demand by vehicle type (passenger, commercial etc.)
- Fuel volume by delivery channel (wholesale versus retail)
- The number of Queensland retail sites including:
 - o who decides the fuel offering
 - who sets fuel prices
 - volume of fuel sold
 - o types of tanks
 - o number of bowsers
 - o number of grades

AIP notes that it would be ideal for such data to be collected before the design of any mandate policy in a RIS process. However, we also note that the majority of this data could be collected under a retail site compliance model.

There has been no detailed consideration of whether an ethanol mandate will actually achieve the broader aims for the biofuels manufacturing industry that has been cited as the main objective of the policy to stimulate the development of and investment in a sustainable Queensland biofuels industry. In this context, it is important that a coherent strategy is enunciated for biofuels manufacturing and that the role of the ethanol mandate is clearly identified. For example, it has not been considered whether a mandate is the optimal method for supporting advanced biofuels manufacturing or whether a superior policy proposition could be direct subsidy and/or support for technological innovation to underpin the development of second generation biofuels.

In this respect, AIP notes that all ethanol supply to meet current ethanol mandate for the foreseeable future will be sourced from first generation biofuels and it is by no means clear how the support of first generation biofuels will underpin the development of second and third generation producers, or whether it could actually impede the development of technologically advanced producers.

Setting the mandate level and compliance point

The point of liability for compliance with any mandate can significantly impact on the effectiveness of a mandate. For example, if the liability is imposed on fuel suppliers, those suppliers may or may not have control over the operation of retail sites bearing their brand, or the right to dictate whether to supply biofuel blends at particular service stations.

In NSW, the level of the mandate (6 per cent) and the compliance point (bulk fuel sellers and major retailers) was set with a regulated requirement to remove Regular Unleaded Petrol (RULP) from sale in NSW. The logic underlying this decision was it was not necessary to regulate smaller retailers because they would have no choice but to offer ethanol blends as it would be the only fuel available. The net result was that the decision not to remove RULP left the majority of the retail market with no ethanol compliance obligation.

Major retailers who had converted to ethanol blend only sites in anticipation of the removal of RULP experienced a significant loss of volume. These retailers have been progressively forced to reintroduce RULP back into these sites to counteract the loss of volume. The overall effect has been a reduction in overall ethanol penetration from about 4 percent in late 2012 (when RULP was scheduled to be removed) declining to below 3 per cent in late 2014 and on a continuing downward trend.

The NSW experience provides some valuable lessons for setting the compliance point and mandate level in Queensland. The stated intention of the Queensland Government to maintain consumer choice between RULP and E10 suggests that the coverage of the mandate and maintaining competitive neutrality are key considerations in maximising the penetration of ethanol blends.

The proposed compliance point in the discussion paper of fuel wholesalers and major retailers, where a major retailer is defined as greater than 10 sites, will repeat the NSW mandate experience; larger, potentially high volume sites will not be captured, compromising the compliance levels, and leading to competitive disadvantages between sites selling and not selling E10.

In the case of AIP member companies, there are a variety of business models which do not generally entail control of an individual site. While there is a significant proportion of company and company operated (COCO) sites, these tend to be less than 15% of total sites (depending on the chain).

The majority of AIP member branded sites are branded independents that have a fuel supply contract with AIP member companies but are operated by independent owners. All the operational decisions

regarding that site, such as product selection, pricing and convenience store retailing are generally decisions for the site operator. Moreover, the Commonwealth Government's Oilcode regulations (mandated under the Competition and Consumer Act) prevent a supplier from dictating to the fuel reseller the operation of the site, including specifically, the choice of products. These operators range from single site to generally 3 sites.

In some cases, AIP member companies are a fuel wholesaler and do not operate any retail sites even though these sites can be AIP member company branded. The main purpose for this branding is the AIP member company assurance of fuel quality. In the case of other fuel supply contracts (e.g. direct purchase agreements), the AIP member company has no control over the operation of the site and in particular, the choice of the products on the forecourt.

The independent service station sector has a variety of operating models including single site operators, franchises and company owned. AIP estimates that, including the AIP member company branded independent sector, independent service station operators could account for about 60% of the service station numbers in Queensland. AIP does not have access to this information, hence the suggestion that the Queensland Government collect data in order to have a clear picture of the retail network.

AIP has strongly advocated in NSW, and now in Queensland, that understanding site control is critical to understanding the options for and feasibility of a biofuels mandate. Consequently, AIP considers that liability under any mandate should fall on the party who has the right to dictate the site's fuel offering on the forecourt. We believe they have greatest ability to influence the customer's perception of ethanol blends as a fuel of choice, through the provision of information, competitive pricing and positioning in relation to other fuels. The wording in any legislation should make it clear that it is this party that is ultimately responsible for meeting the mandate. It is expected that liable parties will then source an appropriate amount of ethanol blend fuel from wholesalers, who will in turn seek it from ethanol blenders and ethanol producers, to enable them to comply with their obligations.

Once retailer liability is required, fuel wholesalers will not need to be liable parties under the mandate. Fuel wholesalers will respond to their customers' (retailers) demand for fuels. If the retailer is required to sell ethanol blends under the mandate, they will require their wholesaler to supply it to them. If their retail customers are not liable under the mandate (i.e. retailers who are given an exemption from the mandate, however defined), then they may or may not order ethanol blends from the wholesaler, depending on what products they wish to offer to customers. The wholesaler cannot force a site operator to buy ethanol blends, and therefore should not be held liable if its customers decide not to stock ethanol blends. Given the Queensland Government's desire to maintain choice at the bowser, it would seem perverse to try to dictate to wholesalers what they should and shouldn't be selling to their customers.

The key point to recognise in retail site compliance is that the setting of any mandate level becomes irrelevant because compliance is judged on whether the retail site makes the fuel available. Consequently, AIP and member companies consider that the desired level of ethanol should be expressed as a target.

Addressing consumer demand

The continued availability of RULP will mean many consumers (market research indicates 20-30% of consumers) who can safely use ethanol blends will choose to use RULP because of negative perceptions of ethanol blends. In effect, the NSW mandate forced these consumers to either purchase a biofuels product they may not understand or to "trade-up" to Premium Unleaded Petrol (PULP), a higher cost conventional and well known fuel.

Market research by AIP member companies continues to demonstrate that there is ongoing consumer resistance to the use of ethanol blends. Additional effort needs to be invested in the education of

consumers and other stakeholders particularly around the environmental and vehicle operability aspects of ethanol blend fuels.

While the number of unsuitable vehicles will reduce over time as the national vehicle fleet is replaced, there will still be significant numbers of vehicles which cannot use ethanol blends, estimated at 13.7% in NSW in 2013 (11.5% if motorcycles are not included). In addition, some applications such as marine and small engines are generally not able to use ethanol blends. These vehicles and applications will require the ongoing availability of conventional petrol for many years. This could be achieved through unblended PULP even if most or all regular grade becomes ethanol blends by regulation or through market actions.

AIP member companies welcome the proposals for a public information campaign to assist in addressing the lack of demand by consumers provided this is funded by government. We note that given the likely limited amount of funding available it is imperative that the information strategy is very clear about the targets of the campaign and has measurable outcomes. For example, AIP member company market research has indicated that there is a substantial proportion of consumers who are strongly opposed to the utilisation of ethanol under any circumstances and therefore targeting this group is unlikely to yield a substantial increase in ethanol sales. Moreover, we consider it is critically important that any marketing messages are absolutely credible and are delivered by an independent party.

Consequently, AIP and member companies are willing to contribute personnel and marketing information to facilitate the design and delivery of such a program. We consider that a working group could be formed under Departmental auspices to draw in company expertise and provide recommendations for the design and delivery of the program. We further consider that the design of any promotion program should not be finalised until the market research contributions of each market participant are fully analysed and the target audience is firmly identified.

Ongoing management of the mandate

Timing

The conversion of the liquid fuel supply chain requires significant investment to construct storage and blending facilities at terminals and depots as well as conversion/up-grade of retail sites. There are lead time and logistics issues which must be addressed in this conversion process. There may also be cases where it is uneconomic to convert smaller terminals in regional areas to ethanol supply.

Despite the progressive investment in storage, distribution and retail infrastructure to support biofuels, there are significant numbers of service stations that are unsuitable to supply ethanol blends because of tankage suitability. A large proportion (possibly as high as 50%) are independently owned service stations which in many cases will require tank replacement. The significant capital costs involved in these upgrades and changes would affect the ongoing financial viability of these service stations. There is also a limited contractor workforce to undertake the necessary conversion processes, which may limit the ability of the industry to be compliant by 1 July 2016.

An alternative to site refurbishment is to provide broad ranging exemptions to these site owners, but this will undermine the objectives of any mandate, and has been found to lead to unintended but significant reductions in volumes of biofuels sold at nearby complying service stations. This creates a fundamental inequity for service station owners where sites that are not required to invest capital to convert to biofuels because of an exemption also see an increase in sales volume of conventional fuels.

Thresholds for eligibility for any exemptions must be transparent so that the associated compliance regime can also be transparent. Experience has shown that this can lead to ongoing competitive disadvantages for market participants without creating any incentives (or penalties) for ethanol producers to enhance the reliability or price-competitiveness of ethanol supplies. Exemption criteria

may include site tankage issues, site competitiveness, interstate supply, other supply chain issues (e.g. uneconomic supply), site volume, supply availability.

Although there is a domestic overcapacity of ethanol supply, the limited number of sources means disruptions to supplies may occur as a result of floods and adverse growing conditions in different parts of the country. This uncertainty around ethanol supply is further exacerbated by the absence of competitively priced alternative supplies through imports from other countries due to the excise/grants/customs duty settings.

Consequently, AIP proposes that a thorough examination should be undertaken to ascertain that 1 July 2016 timeframe is achievable.

Possible Exemption Criteria

The possible exemption criteria that could be assessed in the RIS are:

- Unsuitable infrastructure:
 - transitional exemption for tank replacement could take into account the remaining useful life of the asset and the financial capability of the party liable for tank replacement or additional tankage; however a retailer would need to provide the government a business plan to demonstrate its intent to upgrade infrastructure in order to comply within a reasonable timeframe.
- Interstate supply:
 - o exemption for sites supplied directly from interstate terminals or depots.
- Secondary supply from a depot:
 - transitional exemption for sites supplied from depots where blended product is not available, until depot infrastructure can be replaced to hold ethanol blended product.
- Financial hardship:
 - transitional exemption framework for branded independents and independent service stations which have limited capital or access to finance to convert their site to store and supply ethanol blends. Timetable for conversion could be linked to financial ability.
- Competitive disadvantage:
 - where local area site competition is predominantly ULP supply or a choice between ethanol blends and ULP exists, a transitional framework that moves sites towards compliance without competitively disadvantaging local competitors should be considered. Even a 'choice' site that sells ULP may be disadvantaged by a competitor site selling only ULP when ULP bowser availability becomes an issue for motorists who prefer regular grade petrol over E10.

Sustainability Criteria

Adoption of sustainability criteria for biofuels production and supply requires close consideration as there are currently no clearly accepted frameworks for determining or setting these criteria, nor for measurement and compliance regimes. AIP considers that the requirement for sustainability is an issue for the biofuels producer and should be determined by the Queensland Government.

Biodiesel Issues

While assurance of quality and sustainability of biodiesel production is progressively being addressed by biodiesel producers and suppliers, biodiesel quality and availability are still expected to constrain the ability of biodiesel producers and fuel suppliers to meet mandated levels of supply.

Additionally, the requirement to seek a waiver of national fuel quality standards for cetane and density specifications for biodiesel adds time, complexity, cost and administrative burden in the supply of biodiesel. Although the fuel standards framework (which allows up to 5 per cent in diesel and 20 per cent in commercial applications) is being revised to facilitate market development of biodiesel blends, more consistent advice and endorsement is needed from automobile, truck and heavy vehicle manufacturers on the suitability of biodiesel for use in vehicles.