



Energy White Paper 2014 – Issues Paper submission template

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Issues for comment are listed against each of the Chapter Headings. In making your submission, you are welcome to make comment against some or all of issues in the fields provided. A field for general comments is provided at the end of the template.

1. The Security of Energy Supplies

The Government seeks comment on:

- ways community expectations can be better understood and reflected in reliability standards;
- the value of developing fuel reserves to meet Australia's international oil security obligations, and augment domestic security;
- ways to increase new gas sources to meet demand and measures to enhance transparency in market conditions; and
- issues relating to the regulation of energy infrastructure.

Please provide any comments on The Security of Energy Supplies below:

Maintaining supply security and reliability for liquid fuels in Australia

As noted in the Issues Paper, *"there is a high degree of confidence in Australia's liquid fuels security"*. This confidence is well founded and supported by comprehensive government and independent reviews of liquid fuel supply security over many years. Key reviews include the National Energy Security Assessments (NESA) and Liquid Fuel Vulnerability Assessments since 2008, Australian Government Energy White Papers in 2004 and 2012, and the 2013 Report of the Parliamentary Inquiry into Australia's Oil Refining Industry.

These reviews have confirmed that Australian liquid fuels supply is highly secure, competitively priced and reliable because of:

- a flexible, resilient and reliable supply chain with
 - a diversity of supply sources for crude oil and petroleum products, including domestic and imported sources
 - secure shipping routes and a significant volume of stock on the water owned by local companies
 - a domestic refining capability providing multiple supply options and the ability to convert domestic and imported crude oil into useable products
 - actual and planned import, storage and distribution infrastructure which is able to meet growth in fuel demand
 - efficient domestic distribution using a variety of transport modes and routes
 - a safe and reliable network of service stations
- established and effective integration of this supply chain into the global crude oil and petroleum product markets, including the rapidly growing Asian fuels market
- domestic fuel pricing that relates directly to global market prices (import parity pricing)
- expert and efficient management of the supply chain by industry (demonstrated by a strong record of reliable supply)
- robust risk and emergency management frameworks at industry and government levels.

Because of these fundamental market features and strengths, these reviews have concluded that the Australian petroleum industry is in a strong position to maintain a high quality supply performance well into the future. Provided a competitive market is allowed to operate without unnecessary regulatory constraints, these reviews have confirmed that the industry will continue to adjust to the structural changes occurring in the global oil market which are reshaping the domestic industry, and deliver a higher level of imports needed to meet the expected growth in fuel demand in Australia.

- The Parliamentary Inquiry Report concluded that *"while Australia has both crude oil reserves and a refining capacity it is not self-sufficient" ... "and it has and continues to import both crude oil and refined fuels"*. This conclusion recognised that domestic crude production has been in decline for some time and also that diesel and jet fuel demand exceeds refinery production capacity.

AIP considers that Australia's longer-term liquid fuel supply security and future transport energy needs will best be met through policy frameworks and measures that strongly support efficient and flexible market operation (with an ability to quickly respond to market forces and developments) including:

- open and competitive crude oil and fuel product markets that support supply diversity
- market determined prices
- clear market signals and a stable investment policy environment
- avoidance and removal of unnecessary regulation and taxes
- economy and industry-wide policy settings that minimise capital and operating costs
- policy and competitive neutrality between transport fuels
- reliable, clean and high quality fuels acceptable to consumers
- supporting the fundamental strengths of Australian liquid fuels supply and market, particularly:
 - diversity of crude oil and liquid fuel sources
 - competitive and viable domestic refineries
 - flexible and resilient supply chains and efficient supply management.

AIP supports a strong market-based approach to liquid fuel supply and infrastructure development domestically to encourage the ongoing significant investment needed in supply infrastructure to meet growing fuel demand in Australia. A market based approach will also provide a flexible and robust framework that is capable of adjustment in response to changes in markets or technologies.

AIP considers that the critical issue for longer term security is ensuring that the market framework provides the right signals for ongoing investment throughout the liquid fuels supply chain (eg. in resource identification, extraction, processing and distribution, including port and shipping infrastructure). Efficient market-based signals will be the drivers for new infrastructure investment and the development of alternative liquid fuel supplies, and for consumer choices about how liquid fuels are used, particularly at lowest cost for consumers.

AIP's recent publication – '*Maintaining Supply Security and Reliability for Liquid Fuels in Australia*' (2013) – provides a factual overview of international fuels markets and supply chains, as well as the liquid fuels market and supply chain in Australia. It also details the key factors influencing the secure and reliable supply of liquid fuels to industry, business and consumers and explains why Australia is in a strong position to maintain this performance into the future. The publication is available from:

http://www.aip.com.au/pdf/Maintaining_Supply_Security_and_Reliability_for_Liquid_Fuels_in_Australia.pdf.

The established government process of National Energy Security Assessments (NESA) provides a valuable insight into factors impacting on future liquid fuels security and any emerging supply chain vulnerabilities. The 2012 NESA is considered to be robust and credible by industry and market experts and already takes account of the impacts of refinery closures in Australia.

- Circumstances that have changed since the last NESA update (and which all point to an enhanced energy security assessment for liquid fuels) include the growth of the Asian oil market into the global hub for demand and trade, continued construction of large scale state of the art refineries in Asia, forecast ongoing supply surpluses in Asia for this decade, and improvements in the geopolitical outlook.

AIP notes that the NESA assessments for each energy sector are focused on 'supply security' and 'energy policy' and consider how Australia is served by current and future market operation and settings for each sector, including how each market operates during periods of market 'disruption' that are more likely to be encountered. Thus, the liquid fuels NESA is not intended to consider 'national security' settings and scenarios in which crude oil or product supply is disrupted for an extended period by broadly based military/civil conflict or warfare. Such 'national security' scenarios should be considered as part of Defence planning and reviews, and are not appropriate for the Energy White Paper and 'supply' security assessments.

The value of developing fuel reserves to meet Australia's international obligations

IEA member countries, including Australia, are required to hold oil stocks equivalent to at least 90 days of net oil imports and, in the event of a global oil supply disruption, to release stocks to the market or reduce demand domestically.

The IEA's 90 day stockholding obligation is calculated using a complex methodology developed in 1974 for the highly regulated European market prior to the significant globalisation of the oil market and trade activity. As a result, this IEA methodology is not reflective of the way the Asia-Pacific market works, and is even becoming less reflective of how the European market operates (ie. with the European market now increasingly relying on petroleum product imports and longer supply chains).

In particular, 'stock on water' cannot be counted towards a member country's IEA stockholding obligation, despite this stock being integral to supply operations in Australia and in our region and representing more than a quarter of total stockholdings directly owned/controlled by Australian companies.

Since joining the IEA, Australia has relied on commercial industry stocks coupled with significant domestic production of crude oil to meet its stockholding obligations, and on market based mechanisms and demand restraint under the National Emergency Plan to respond to emergencies.

Australia's compliance position has fallen below 90 days of net oil imports in recent years largely due to a decline in domestic crude production and increased demand. Commercial stocks of fuel held in the domestic supply chain (e.g. stocks of petrol, diesel, jet fuel) have actually increased in response to demand growth and increasing product imports following refinery closures. Consequently, the decline in Australia's 90 day stockholding compliance position raises no heightened supply risk for the domestic fuels market or for fuel users. Indeed, there is a strong case that commercial stocks plus a robust supply chain and competitive and efficient market obviate the need for any mandatory stockholding.

This assessment also recognises that Australia has a robust 'Emergency Response' framework and emergency management plans for liquid fuels. These plans are consistent with Australian market operation and characteristics, utilise established and tested industry commercial practices, and adopt those best practice IEA approaches (eg. demand restraint) that will be effective in our specific market circumstances.

In depth Government security reviews have confirmed that Australia's current approach and framework on stockholdings remains appropriate, efficient and cost effective in the context of Australia's:

- open market operation and market realities applying to Australia and our region
- high level of liquid fuels security and reliability
- proven commercial stockholdings and management
- market and commercial approaches which have delivered supply reliability at a competitive cost to consumers and end-users, with no widespread customer shortages being experienced
- robust emergency response framework at government and industry levels to handle extreme circumstances.

Given these market facts and realities, any level of emergency stockholdings for Australia over and above normal commercial and market requirements **cannot be justified on energy security grounds**, as confirmed by comprehensive government reviews over several years.

Therefore, it is AIP's view that any consideration of emergency stockholdings for Australia for international treaty compliance reasons, requires very careful examination of:

- the extremely high costs of stockpiling against the risk-weighted benefits of such action
- how emergency stockholdings might contribute to Australia's fuel needs in an emergency
- how emergency stockholdings will contribute to an IEA collective action in a global supply disruption
- how emergency stockholdings will interact with the current supply operations and investments by industry and their supply management plans (including to deal with supply disruptions on commercial and market terms) and not create market distortions and unintended consequences which will impact on supply reliability and costs to fuel consumers.

The Issues Paper estimates that "the building of strategic reserve stocks to maintain compliance with the IEA treaty requires an estimated \$6.8 billion investment to provide both stocks and storage infrastructure".

AIP agrees with the Issues Paper that the appropriate options for a program to build such a significant level of stockholding (which is not justified on market, commercial and energy security terms) would need to occur "via either Government funded stockholding, Government funded ticketing for overseas stocks, or legislated mandatory industry stockholdings funded by passing costs onto consumers".

Any Government decision to mandate increased industry stock levels for 'international compliance reasons' would need to apply proportionally to all fuel suppliers (refiners, manufacturers and importers). If the significant estimated cost of 'mandatory' industry-wide stockholdings could not be passed through to consumers, or the Government did not underwrite these costs, there would likely be an adverse impact on Australian refinery competitiveness and ongoing viability, significantly reducing Australia's energy security.

There are also a range of practical, logistical and market factors making the building of strategic reserve stocks impracticable in an Australian market context.

For example, the costs of acquiring, holding and managing stockpiles above commercial levels would be significant and such stocks would need to be very substantial to provide petroleum products to the domestic market for an extended period. In addition, increasing stocks of petroleum products is also far from straightforward. There are issues around the location of stocks for ready release to the domestic market, turnover of stock, seasonal and State based product specifications, and potential quality degradation over extended storage periods.

Finally, to establish whether additional emergency stocks are required to meet IEA obligations, the Government will need full confidence that Australian stockholding data is comprehensive and robust to clearly demonstrate a risk to, or breach of, their IEA obligation (see below).

The Issues Paper notes that that *“there are opportunities to grow Australia’s liquid fuels supplies with new oil discoveries in both proven areas and in under-explored frontier basins”* and *“liquids from new shale gas developments and light tight oil may add further oil resources in future”*.

AIP notes that the discovery and commercialisation of potential future supplies of crudes and condensates from Australian sources, together with the current progression to the production phases of existing resource projects, should amongst other things improve Australia’s IEA compliance position without the necessity for a strategic stock build and the associated expenditure of very substantial taxpayer or consumer funds.

Enhancing market transparency & policy development

High-quality and transparent liquid fuels data and analysis is crucial for government, business and consumers to be able to make efficient and well-informed decisions and perform robust analysis. However, as confirmed in government reviews, there are a number of areas where liquid fuels data collection and analysis can be improved to better support these objectives, including in a more efficient and cost effective way for both government and industry.

For many years AIP has strongly supported coordinated Government efforts to develop higher-quality and broader coverage domestic liquid fuels data and consolidate liquid fuels data collection and analysis across Government agencies. AIP is fully supportive of the current proposals to introduce streamlined mandatory liquid fuels data reporting.

AIP believes that a single definitive and robust dataset for liquid fuels through data consolidation and streamlining will lead to a significantly lower collection and reporting burden on both government and industry (noting there are currently 12 different liquid fuels reporting requirements across Commonwealth agencies alone). AIP believes this is readily achievable if the single liquid fuels dataset is based on the wide range and significant volume of high quality liquid fuels data collected for Excise/Customs purposes. This action will deliver significant red-tape reduction.

More robust liquid fuels data will not only contribute to improved market monitoring, decision making and international reporting/compliance, but will also better inform future government security/vulnerability assessments of the liquid fuels market as international factors and market forces reshape the global and domestic market.

2. Regulatory Reform and Role of Government

The Government seeks comment on:

- priority issues, barriers or gaps within the COAG energy market reform agenda;
- possible approaches and impacts of review of tariff structures including fixed network costs, further time-of-use based electricity tariffs and the use of smart meters;
- possible measures to promote greater price transparency in gas markets; and
- areas where further privatisation of government-owned assets would contribute to more effective regulatory frameworks and better outcomes for consumers.

Please provide any comments on Regulatory Reform and Role of Government below:

Australia's liquid fuel market is different to other domestic energy markets in that it is part of globally and regionally integrated supply chains which are mature, flexible and well-functioning and which deliver internationally competitive fuel prices and reliable supply to consumers and business. Thus, there is much less of a role for government in the development of an efficient, reliable and competitive liquid fuels market as these conditions already exist.

However, there is still an important role for governments alongside the Australian petroleum industry in meeting future challenges, strengthening the security and operation of the fuels market, and facilitating the significant ongoing infrastructure investment required to meet Australia's growing liquid fuel needs.

Specifically, AIP considers that there are four important roles for governments:

- maintaining a clear and stable market based policy framework and investment environment, and a level playing field for market operators
- carefully reviewing and streamlining the existing complex and overlapping array of environmental and other regulatory measures to ensure that current measures are soundly based, cost effective and harmonised (including across jurisdictions)
- ensuring that future regulatory decisions do not impose burdens on industry or undermine the competitiveness of liquid fuel refining and supply
- maintaining multilateral efforts to ensure that world markets remain open and competitive, and that efficient, effective and market reflective response mechanisms are in place to mitigate the impact of supply disruptions and global oil supply emergencies.

Policy stability is key to the delivery of ongoing energy security and attracting the necessary and significant industry investments to meet Australia's future liquid fuel needs. An attractive investment environment and more efficient, timely and consistent planning, approval and regulatory processes, would support the ongoing investment in the growth, modification and maintenance of key infrastructure supporting the liquid fuels supply chain.

A strong market-based approach to policy settings by government will also provide a flexible and robust framework capable of responding to the changing global oil market and also to technology developments in the industry. As part of a stable market-based approach, AIP recommends a set of policy principles to guide governments and safeguard liquid fuel supply security in Australia — see Box below.

AIP and its members companies also support multilateral government efforts to ensure that world markets remain open and Australia continues to be well integrated into regional oil and commodity markets. The importance of international engagement is underscored by global supply diversification, shifting demand–supply patterns, and the need to attract investment in a highly competitive capital market.

Where government activity is needed in the market, and a clear market failure has been demonstrated, AIP and its member companies advocate policies and regulation that apply equally to all industry participants and are based on comprehensive economic analysis and sound science.

The downstream petroleum industry operates across Australia and is therefore subject to a range of policies in each jurisdiction that entail significant regulatory and compliance costs. AIP considers that there can be major benefits in pursuing a harmonisation of these regulations across jurisdictions. The benefits of such action would include common and consistent approaches and frameworks that would lower costs for regulators and industry and lead to greater certainty in regulatory outcomes.

Particular areas of concern include:

- ambient air quality
- assessment of site contamination
- remediation of contaminated sites
- underground petroleum storage systems
- retail site regulation including local council Development Approvals
- retail price boards
- heavy vehicle registration and safety compliance monitoring
- ethanol mandates
- ad hoc greenhouse gas abatement measures.

Various models could be pursued to harmonise regulations in these areas, including:

- formal intergovernmental agreements with mirror legislation in each jurisdiction, along the lines of the National Environment Protection Measures (NEPM) process (but noting the need to streamline the unwieldy review process)
- Jurisdictional implementation of independently developed national guidelines supported by a practitioner accreditation program
- Commonwealth legislation.

Experience to date has demonstrated the benefits that can be derived through harmonisation of regulations in some of these areas, and highlights the potential for further significant productivity gains that could be realised without any significant loss of environmental or community benefits.

A Policy Framework for Liquid Fuels Supply Security and Reliability

Government policies will impact on the ability of Australian refiners and fuel importers to attract further investment funds for refinery and import terminal upgrades (and ultimately for major maintenance programs) and also impact on investments throughout the fuels supply chain.

A sound government policy framework for liquid fuels security should:

- maintain a strongly market based approach to liquid fuels with minimal regulatory intervention
- recognise the competitive pressures from regional refineries and the impact on the economy of any loss of Australia's competitive advantage as a result of government policies
- facilitate the development of liquid fuels supply infrastructure, including streamlining approvals for new or expanded infrastructure developments such as new storage facilities or port deepening
- place no additional and unjustified compliance, regulatory and cost burdens on the fuels supply industry that reduce the industry's ability to compete effectively in the region
- ensure R&D policy settings are appropriate and encourage the commercial development of transport fuels which can contribute to liquid fuel security in Australia
- seek to identify and address any government policy and regulatory impediments to Australia maintaining a high level of liquid fuel security over the longer term.

Within this policy framework, any government proposals for changes to current market-based policy settings, or intervention in the fuels market, need to clearly demonstrate that:

- a real market failure or vulnerability exists within the industry
- continued reliance on domestic and international markets is unable to deliver a similar outcome or that consumers cannot, or cannot efficiently, do these things
- new policy measures will produce a net benefit to the community (based on sound science and rigorous economic analysis) and will not impact adversely on the competitiveness of the industry or liquid fuel supply security and reliability.

Existing or new government regulatory regimes should:

- clearly define their objectives
- be regularly reviewed to ensure the objectives are still relevant
- be harmonised across jurisdictions
- be enforced, and applied, consistently to all market participants
- be allowed to lapse when their objectives have been met.

This policy framework and principles reflects fundamental industry drivers including the significant capital employed by the industry, competing opportunities for capital within companies, and the risk to supply security if any policy changes make an ongoing domestic refining presence unviable in the future.

3. Growth and Investment

The Government seeks comment on:

- commercial or market initiatives that could enhance growth and investment in the energy and resources sectors;
- areas where approvals processes could be further streamlined while maintaining proper environmental and social safeguards;
- further ways that regulatory burdens could be reduced while maintaining appropriate levels of disclosure and transparency in energy markets; and
- the impacts of variable land access policy and ways the community could be better informed and engaged on development in the energy sector.

Please provide any comments on Growth and Investment below:

There is a changing and challenging market environment currently for the downstream petroleum industry – globally, regionally and domestically – and this environment is expected to endure for some years. This is particularly so for Australian refineries, given ongoing excess supply in the Asian region, the strong Australian dollar impacting on domestic refining margins, and Australian refineries facing continued competitive pressure from Asian refineries which enjoy significant cost, scale and technology advantages.

In this market environment, the industry requires a supportive policy framework and stable investment environment to enable it to continue to make significant infrastructure investments, as well as seek further efficiencies in refining and supply, to ensure ongoing supply security and reliability.

Apart from difficult market conditions, there are also other challenges impacting on the industry's ability to grow and invest efficiently:

- The increasing cost of doing business in Australia (labour and capital costs), and the cumulative cost impact of a wide range of complex and overlapping government regulation is impacting on the domestic refining industry's ability to compete in the region and remain viable longer term
- The future industry investment task is significant to ensure ongoing supply security and this can be best supported by a favourable and stable investment environment, as well as soundly-based, harmonised and streamlined regulation across all levels of government
 - For example, any further changes to fuel quality standards must be based on sound science and provide a net economic benefit to the community as well as a return to the refiner to justify the significant investment required to produce these fuels locally
- A major obstacle to liquid fuel supply reliability is the absence of a level playing field for competing transport fuels (eg. no commercial access to imported ethanol, which is also hampering the development of an efficient and competitive domestic biofuels market)
- Any future requirement for industry to fund and hold additional stockholdings to meet Australia's international compliance obligations could impose further (unjustified) cost on industry and lead to higher fuel prices for consumers and major fuel using industries.

Thus, while a market based policy framework will help respond to these ongoing industry challenges, governments have an important role in ensuring that regulatory decisions and imposts do not undermine the competitiveness of liquid fuel refining and supply (eg. where the manufacturing of fuel imported from other nations may not be subject to similar imposts). Governments also have an important role in addressing non-commercial barriers to effective market operation and in ensuring that ongoing liquid fuels supply security is a priority consideration across and within levels of government.

In this regard, AIP supports future government reforms focusing on ensuring that planning, approval and regulatory processes are efficient, timely and nationally consistent, to support longer term investment in liquid fuel import, storage and distribution infrastructure.

There is also an ongoing need for state and territory governments (and private port operators) to maintain investment in port facilities and associated fuel handling infrastructure to remove supply bottlenecks and to meet expected growth in fuel imports and demand over time.

AIP members are also concerned about the future availability of, or encroachment on, appropriately located land for the significant liquid fuels supply infrastructure that will be essential for future supply reliability and security.

Competing land uses are placing limits on options for liquid fuels infrastructure growth, for example:

- existing sites used for liquid fuel supply infrastructure are increasingly being constrained through residential and light industry encroachment into buffer zone areas, and areas traditionally regarded as industrial are now attracting residential developments to make use of inner city and coastal amenities
- expansion or modification of sites to enable increases or improved efficiencies in storage and handling facilities are increasingly being limited by planning authorities
- port handling facilities have limited capacity for further expansion or for improved handling facilities
- road transport access to terminals for handling increasing volumes of fuels is becoming more difficult and options to distribute fuel to consumers is constrained due to the increased use of tunnel infrastructure in larger city road networks.

These competing interests can bring long delays to current and near term development approvals for liquid fuel infrastructure investments.

Given the importance of liquid fuels for Australia's economy, AIP strongly believes there is a need for a cross jurisdiction initiative to consider long term planning for Australia's liquid fuel infrastructure, to ensure that appropriate land is identified for terminals and distribution corridors, and that appropriate planning arrangements are put in place to ensure that future investments in liquid fuel infrastructure can proceed in a timely and cost effective way that meets the variety of community expectations associated with liquid fuels and industrial activity.

Overall, policy stability, a level playing field for competing transport fuels, and efficient, well-targeted and harmonised government regulation will help support the industry's future investment task as well as the development and growth of robust, efficient and commercial markets for all transport fuels.

4. Trade and International Relations

The Government seeks comment on:

- how to grow the export of value-added energy products and services;
- ways to remove unnecessary barriers to continued foreign investment in Australia's energy sector;
- ways to strengthen support for access to export markets; and
- ways to support business to maximise export opportunities for Australia's energy commodities, products, technologies and services, including the value of Australia's participation in the variety of international forums.

Please provide any comments on Trade and International Relations below:

With increasing fuel import requirements since 2003, the domestic fuels industry has taken the opportunity to fully integrate into the deep and growing Asian market to meet growth in Australian fuel demand, and has established multiple and reliable sources of supply from the region.

Importantly, additional diversity and flexibility in the Australian supply chain is expected over time with the rapid emergence of Asia as the global hub for the oil market and the emergence and proximity to Australia of major new petroleum export centres (eg. India).

Australia's direct involvement in global trade in crude oil and petroleum products provides security through the diversity of source countries and multiple import terminals and the relative ease with which crude oil and petroleum products can be moved in readily available ships, pipelines, or surface transport.

However, effective international engagement is becoming more important with the shifting global oil map and pattern of trade, greater energy diversification, rapid technology innovation and uptake, and also to attract investment in a highly competitive capital market.

AIP and its members companies support multilateral efforts to ensure that world markets remain open, Australia continues to be well integrated into regional and global commodity markets, and that effective and market-reflective response mechanisms are in place to mitigate the impact of short term supply disruptions and global oil supply emergencies.

AIP therefore supports broad engagement with the IEA, as well as with the G20 and APPEC, to support these market orientated goals. Working in close partnership with industry and other key stakeholders, the Government is encouraged to pursue common energy goals such as energy security, flexible and resilient markets, and energy and technology innovation.

However, it is important that these multilateral fora are well informed about market realities, changes in market conditions, and market operations so as to encourage actions that:

- support efficient, transparent and open domestic, regional and global markets that create clear incentives for timely investment and efficient operation and end use
- promote and strengthen energy supply chains and market efficiencies, reduce barriers to trade, and improve market and regulatory transparency.

Any actions on these terms, and which reflect our regional and domestic market realities, will help ensure that energy security is achieved at least cost to Australia and in ways that do not create further market distortions.

5. Workforce Productivity

The Government seeks comment on:

- the nature of any current skills shortages being experienced and how these could be addressed by and with industry;
- the capacity of industry and education sector-led programs to meet long-term training and skills development needs of the energy and resources sectors; and
- specific long-term training and skills development needs for alternative transport fuel, renewable energy, energy management and other clean energy industries.

Please provide any comments on Workforce Productivity below:

Individual AIP member companies will be able to provide insights into:

- the employment at refineries, import terminals and distribution networks
- the profile and performance of their workforces
- their experiences concerning labour productivity and mobility
- any barriers or obstacles to increasing labour productivity.

6. Driving Energy Productivity

The Government seeks comment on:

- the current suite of energy efficiency measures, ways these could be enhanced to provide greater energy efficiency or possible new measures that would enhance energy productivity;
- the use of demand-side participation measures to encourage energy productivity and reduce peak energy use; and
- measures to increase energy use efficiency in the transport sector.

Please provide any comments on Driving Energy Productivity below:

Measures to increase energy use efficiency in the transport sector

All prospective motor vehicle technologies can operate on the current quality of fuels in Australia. There are no fuel economy gains to be made from further tightening fuel standards. The combined impact of the National Fuel Quality Standards and Motor Vehicle Emission Standards has also reduced the fleet average carbon emissions (see FCAI data).

Future improvements in fuel economy will therefore be a function of fleet replacement with newer vehicles, particularly those which incorporate international vehicle technology developments:

- In the passenger vehicle sector:
 - Significant improvements have already been achieved and will continue to be made as the vehicle fleet is replaced
 - The fuel economy of the Australian passenger fleet is largely a function of the choices made by individual vehicle owners regarding vehicle types purchased and the fuels used by those vehicles
 - The Henry Tax review highlighted a range of policies that could efficiently affect consumer behaviour such as Road User Charges and Registration charges (“feebates”)
 - Switching to alternative fuels will not lead to major improvements in fuel economy. Ethanol mandates will actually lead to an increase in fuel consumption because of lower energy content.
- In the heavy vehicle sector:
 - There are commercial advantages for large operators to focus on energy efficiency and newer trucks
 - Short haul trucking and small operators have significantly older trucks with generally poorer fuel economy and emissions performance.

AIP believes that any actions by governments to increase energy use efficiency in the transport sector must clearly demonstrate that:

- **a real market failure or vulnerability exists within the industry**
- **new policy measures will produce a net benefit to the community and will not impact adversely on the competitiveness of the fuels industry or liquid fuel supply security and reliability**
- **continued reliance on domestic and international vehicle and fuels markets is unable to deliver a similar outcome.**

7. Alternative and Emerging Energy Sources and Technology

The Government seeks comment on:

- ways to encourage a lower emissions energy supply that avoids market distortion or causes increased energy prices;
- the need to review existing network tariff structures in the face of rapidly growing deployment of grid-backed-up distributed energy systems, to ensure proper distribution of costs;
- additional cost-effective means, beyond current mandatory targets and grants, to encourage further development of renewable and other alternative energy sources and their effective integration within the wider energy market;
- how the uptake of high efficiency low emissions intensity electricity generation can be progressed;
- any barriers to increased uptake of LPG in private and commercial vehicles and CNG and LNG in the heavy vehicle fleet; and
- any barriers to the increased uptake of electric vehicles and advanced biofuels.

Please provide any comments on Alternative and Emerging Energy Sources and Technology below:

Renewables and alternative fuels in the fuels mix

The Australian liquid fuel mix has altered quite substantially over the last ten years.

Total liquid fuel used in Australia has increased by around 2% per year with petrol, diesel and jet fuel comprising 90% of liquid fuel demand.

- The demand for ethanol blend petrol increased to a peak of 16 per cent of petrol use in 2010–11, largely in response to the ethanol fuel mandate in NSW, but has subsequently declined.
- LPG demand has declined from 2.5 billion litres to 1.8 billion litres (and its share of the fuel mix has declined from 7% to 4%).

Key factors influencing the fuel mix over the past decade have been:

- Increasing demand for diesel in mining and agriculture
- Dieselisation of the passenger vehicle fleet
- Fuel economy improvements in new petrol vehicles and an increasing number of hybrid fuel vehicles
- Introduction of ethanol mandate in NSW, but demand tempered by consumer inability or resistance to the use of ethanol blend fuels
- Declining financial attractiveness of use of LPG in vehicles
- Increased demand for aviation travel.

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

Ways to encourage a lower emissions energy supply that avoids market distortion or causes increased energy prices

Over-arching policy framework

AIP believes that renewable and other alternative energy sources will have a place in a diversified Australian liquid fuels market as long as they are available at a competitive price, reliably supplied, acceptable to consumers, and produced sustainably.

However, each biofuel and alternative fuel faces particular challenges in progressing to a sustainable market position. In considering potential options for government to encourage greater use of these fuels, AIP strongly believes (as indicated in AIP comments in Section 2) that government's role is to:

- maintain a clear and stable market based policy framework and investment environment, and a level playing field for market operators
- ensure that any regulatory market interventions are essential, and are soundly based, cost effective and harmonised with other policies (and regularly tested to establish that objectives are being met)
- ensure that future regulatory decisions and imposts do not undermine the competitiveness or robustness of liquid fuel supply.

Any proposals for changes to current market-based policy settings need to clearly demonstrate that:

- a real market failure or vulnerability exists within the industry
- new policy measures will produce a net benefit to the community and will not impact adversely on the competitiveness of the fuels industry or liquid fuel supply security and reliability
- continued reliance on domestic and international markets is unable to deliver a similar outcome, or that consumers cannot, or cannot efficiently, do these things.

AIP only 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 if 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 transport 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. However, AIP sees no case for expanding or extending the current fuel excise concessions for renewable and alternative fuels.

Fuel Mandates

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 the NSW biofuels mandate, AIP believes mandates for biofuels that may help to increase short-term consumer demand must be designed so that they enable a competitive market to develop in the medium to longer term for those fuels.

Fuel mandates imply higher cost fuels, reduce market transparency for fuel suppliers and consumers, do not engender price competition and associated innovation, and fail to encourage the development of robust and reliable fuel supplies.

While biofuels add a new source of supply to the market which increases the diversity of the fuel mix, the ethanol supply chain remains exposed to the impact of drought and floods on raw material production. There are only three suppliers of fuel ethanol in Australia and the domestic market is effectively blocked from utilising ethanol imports.

Vehicle compatibility issues will continue to gradually disappear as the vehicle fleet is replaced and as marine and small engines are being adapted to use ethanol blend fuels. However, in the case of biodiesel, more consistent advice is needed from Original Equipment Manufacturers (OEMs) on the use of biodiesel in automobiles and heavy vehicles.

Measures to encourage further development of renewable and alternative fuel markets

AIP strongly opposes the differential fiscal treatment of domestic and imported ethanol and considers that this fundamentally undermines supply reliability and competitive market pricing for ethanol. AIP proposes that government equalises the fiscal treatment of imported and domestically produced ethanol so that an efficient and stable ethanol market can be created with significantly improved options for supply.

AIP will continue to work with governments to ensure that current barriers to greater market uptake of biofuels and alternative fuels are fully understood and will promote sound approaches to policy design to overcome any market barriers while avoiding unintended consequences. In particular, AIP will work with governments to ensure that policy and regulatory compliance regimes are credible, predictable and equitable for all fuel suppliers.

Barriers to increased uptake of LPG in private and commercial vehicles and CNG and LNG in the heavy vehicle fleet

The decline in demand for **LPG** is a combination of factors making LPG fuelled vehicles less attractive to consumers than new petrol and diesel vehicles, including:

- improved fuel economy in petrol and diesel vehicles equivalent to those using LPG, and the availability of low fuel consumption vehicles for large kilometre users (such as the Prius for taxi applications)
- the reduction in fuel price differentials between LPG and petrol/diesel, as global LPG prices have risen over recent years
- the introduction of excise on LPG
- the reduction in the value of LPG conversion and dedicated vehicle subsidies
- long delays in the supply of dedicated LPG direct injection vehicles into Australia and higher purchase costs for dedicated LPG vehicles
- the relative gap between the environmental benefits from LPG use compared to new petrol and diesel motor vehicles has narrowed over time
- reduced power output and torque in converted LPG engines, compared to new petrol and diesel vehicles.

AIP does not believe there are artificial barriers to the use of LPG in the Australian fuel market. The long standing decline in LPG use in the Australian fuels market is a reflection of a range of market and commercial factors, leading to declining consumer preference for LPG as an attractive fuel option. This decline in LPG demand is leading some retailers to question whether it is still commercially viable to stock LPG as a retail product offering.

Against this background, AIP believes the ongoing policy rationale for providing large subsidies to LPG is questionable and should be critically reviewed. The current cost of the LPG excise concession is over \$300 million per year, and there will be very limited manufacture of dedicated LPG vehicles in Australia. LPG vehicles offer minimal, if any, environmental benefits compared to new petrol and diesel fuelled vehicles. The previous fuel cost benefits of using LPG have substantially reduced as international demand and therefore prices for LPG for non-transport applications has increased significantly in recent years (LPG is no longer a 'surplus' global product). Overall, the energy security benefits to be gained from ongoing excise concessions for LPG are no longer apparent, particularly given reduced LPG production from Australian refiners.

Notwithstanding the potential attractiveness of **CNG and LNG** as fuels for heavy transport in Australia, each gaseous fuel has its own storage and handling requirements which are not compatible with the existing fuel handling and distribution system.

Although governments have provided subsidies at various times to overcome some these barriers, such as the Alternative Fuels Conversion Program, it is unlikely that such financial assistance will overcome the barriers to greater use of these fuels unless provided on a very long term basis.

AIP members have investigated the business cases for investing in major fuel supply infrastructure across the main heavy transport corridors in Australia. The refuelling infrastructure is slowly expanding to support growth in the market coming from the progressive introduction of compatible vehicles.

In addition to relative costs, factors influencing transport operators' attitudes to the use of these fuels include consumer resistance because of perceived and real risks, lack of experience in fleet operations using alternative fuels, lack of qualified service technicians, increased weight and truck size and lower load size, the extent of the network of refuelling infrastructure, and the projected price of domestic gas.

General Comments

Any further comments?

Summary: Key Messages

- In recent years the Australian fuels industry has faced considerable international and domestic challenges, with major structural changes and intense competition in global petroleum markets.
- Australian refineries, in particular, have been challenged by ongoing excess supply in the Asian region and the strong Australian dollar impacting on the outlook for domestic refining, and continued competitive pressure from new Asian refineries which enjoy significant advantages in terms of cost, scale and technology, and also government assistance.
- The downstream petroleum industry has responded to these challenges through stringent cost control and enhanced efficiency, and also by further integration into the rapidly expanding Asian fuels market.
 - Two Australian refineries are being converted to import terminals to strengthen links to regional refiners and marketers.
- As a result of industry investments to date, and Australia's efficient access to regional markets for liquid fuels, the industry expects to continue to deliver secure, reliable and competitively priced fuels to the domestic market longer term, as confirmed in Government assessments over a number of years.
 - These Government reports confirm that Australia has a high level of supply security for liquid fuels and has been very well served by proven, mature and diverse supply chains and supply sources including the domestic refineries, and this performance is expected to continue in the future, even with a higher level of imports to meet growth in fuel demand.
- However, for the industry to remain competitive and make the significant ongoing infrastructure investments needed to maintain supply security and reliability, the industry needs a clear longer term policy framework and a stable investment environment, underpinned by a strong market-based approach by all levels of government.
 - This requirement is underscored by the challenges in attracting investment in a highly competitive global capital market.
- At the highest level, this market based approach by government should focus on:
 - ensuring a competitive and open market is maintained in Australia
 - ensuring that the local refining industry is not competitively disadvantaged
 - maintaining a strong commitment to technical skills development in the education system.
- Under this market based policy framework, governments have an important role alongside industry in strengthening our competitive position and the security and operation of the fuels market by:
 - ensuring existing regulation is soundly based, streamlined and harmonised across all levels of government and new regulatory decisions and imposts do not undermine the competitiveness of domestic petroleum refining and fuel supply
 - removing non-commercial barriers to effective market operation and competition, like the absence of a level playing field for competing transport fuels
 - demonstrating for any proposals for changes to current market-based policy settings that:
 - a real market failure or vulnerability exists within the market or industry
 - new policy measures will produce a net benefit to the community and will not impact adversely on industry competitiveness or liquid fuel supply security and reliability
 - continued reliance on domestic and international markets is unable to deliver a similar outcome or that consumers cannot, or cannot efficiently, do these things.
- As the domestic fuels industry evolves in response to global and local pressures, industry members will continue to strive to increase productivity and efficiency and adapt to changing market conditions to remain regionally competitive so as to continue to deliver secure fuel supplies to meet Australian consumer and business needs.
- **Policy stability, a level playing field for competing transport fuels and market participants, and the minimum level of efficient and well-targeted government regulation will help support the industry's future investment as well as the development of robust, efficient and commercial markets for all transport fuels.**

*This submission should also be read alongside the new edition of AIP's key biennial publication – **Downstream Petroleum 2013** - on the state of the Australian downstream petroleum industry and its financial performance (see <http://www.aip.com.au/industry/facts.htm>). This latest report provides an overview of recent developments in petroleum refining and marketing in Australia and the Asian region. The report highlights the challenges and competitive pressures facing the Australian industry and its importance to Australia's economic performance and energy security.*