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## **APA Group**

Submission responding to the Senate  
Standing Committees on Rural and  
Regional Affairs and Transport Australia's  
transport energy resilience and  
sustainability.

November 2014



## **Introduction**

APA welcomes the opportunity to comment on Australia's transport energy resilience and sustainability. APA has been working with participants in the transportation and energy sectors to encourage the Federal Government to prepare a comprehensive transport energy plan for Australia. A major component of this plan should consider alternative transport fuels, such as natural gas, to mitigate exposures from supply disruptions to imported transport fuels and to realise environmental benefits.

Below is the relevant excerpt from APA Group's recent submission to the Federal Government's Green Paper in November 2014 discussing Australia's transport energy resilience and recommendation to consider developing domestic transport fuel alternatives.

## **About APA Group**

APA Group (APA) is Australia's largest natural gas infrastructure business, owning and/or operating in excess of \$12 billion of energy assets. Its gas transmission pipelines span every state and territory in mainland Australia, delivering approximately half of the nation's gas usage. APA has direct management and operational control over its assets and investments.

APA also has ownership interests in, and operates, approximately 25,000 kilometres of gas distribution networks supplying approximately 1.2 million gas consumer connections. APA owns other energy infrastructure assets such as gas storage facilities, gas power stations and wind farms. APA is listed on ASX and is included in the S&P ASX 50 Index.

## **APA's November 2014 submission to the federal government's Green Paper**

APA recently made the following submission on transportation fuels to the Green paper:

According to the Energy White Paper 2012, the transport sector is the largest end user of energy in Australia, consuming over a third of final energy. Road transport is also expected to double by 2050 and growth in light commercial vehicle and heavy truck activity is expected to be faster than private and passenger vehicles. The Energy White Paper 2012 also states that LNG and CNG have great potential in transforming the heavy-duty vehicle sector.

Australia's transportation sector is heavily reliant on imported fuels. According to the Energy White Paper 2012, Australia in 2010-11 imported 83% of its crude oil and other refinery feedstock. Some estimates in the market place suggest that due to further closures of domestic refineries Australia's reliance on imported transport fuels could shift towards 100% in the near future.

The Green Paper states "supply is maintained using domestic refineries, crude oil and refined product import terminals, and other stockholding facilities. Most of the supply chain is mobile, with about one-third of domestic supply at sea (at any one time) using a number of diversified and flexible shipping routes." With the Caltex Kurnell refinery converting to an import terminal in 2014, Australia has very limited domestic refining capacity for transport fuels and any disruption to the imported fuel supply chain could have significant implications to the Australian economy and potentially restricting the transport sector for extended periods.



The Green Paper states “increased domestic production of cost-competitive alternative transport fuels could strengthen Australia’s liquid fuel security by diversifying supply.” However currently there is no formalised transport energy roadmap to plan and facilitate the development of cost effective domestic alternatives to imported transport fuels.

APA has been working with participants in the transportation and energy sectors to encourage the Federal Government to prepare a comprehensive transport energy plan for Australia. A major component of this plan should consider alternative transport fuels, such natural gas, to mitigate exposures from supply disruptions to imported transport fuels and to realise environmental benefits.

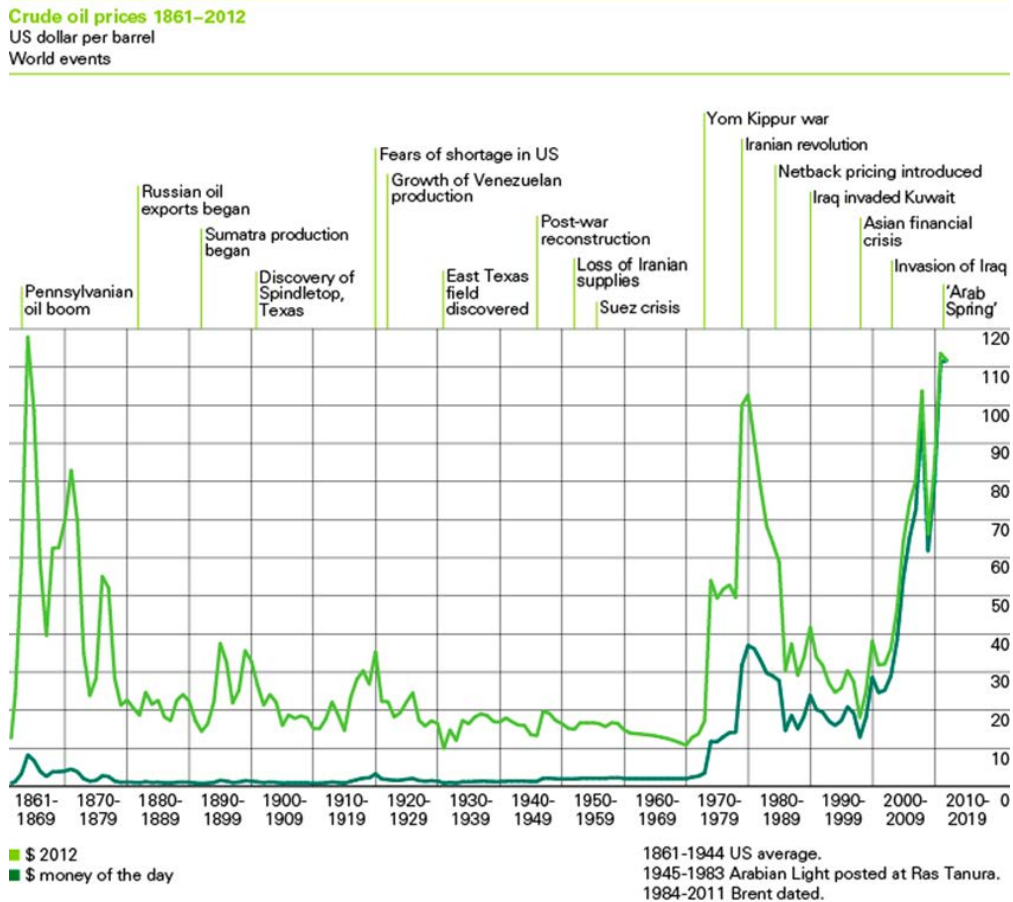
Natural gas can be used as a fuel for vehicles when it is liquefied (LNG) or compressed (CNG). When used as a substitute for diesel fuel in transport applications it results in approximately 30% less full lifecycle emissions. It is particularly useful as fuel for medium and heavy vehicles such as buses and trucks. It is already well utilised as a fuel for bus fleets in Australia.

Depending on the prevailing oil and gas price, LNG and CNG fuel alternatives are up to 50% cheaper than imported diesel fuel on an equivalent per litre basis. LNG and CNG alternatives require additional upfront equipment expenditure however over the longer-term are more attractive in terms of lower and stable fuel costs and lower emissions compared to diesel.

Analysis compiled by the NRMA states that out of 28 International Energy Agency member countries Australia is the only one failing to meet its 90-day net oil import stockholding obligations. In 2012 our net oil import stockholdings were 71 days. This places essential products and services, such as medical supplies, at risk if disruptions to imported fuel were to occur. Figure 1 demonstrates the volatility of crude oil prices. Sharp fluctuations in the oil price can also cause short-term or terminal business stress.



Figure 1 – Crude Oil Prices (Source: BP website)



Natural gas vehicles can play a significant role in meeting emission reduction targets and also to mitigate the risks associated with the reliance on imported fuels from regions which in the past have been associated with fuel supply instability. The Energy White Paper 2012 forecasts that by 2050 biodiesel could contribute around 13% of total transport fuel consumption, natural gas 12%, bio-derived jet fuel 8%, electricity for transport 5%, and synthetic diesel 2%. If Australia is to meet these material contributions it requires a national transport roadmap that provides initial support to emerging fuels and incentives for end users to switch away from imported and higher emission fuels.

A transport energy roadmap could include a national approach to fuel excise across alternative fuel classes (LNG, LPG, CNG, biomass, etc.) where rebates are provided to fuels based on emission intensity. Other policy recommendations include technology agnostic vehicle conversion programs, uniform discounts in state road registrations for cleaner vehicles and weight based vehicle tax relief for additional weight for “on-board” fuel storage to achieve a superior environmental performance to diesel.

A mature Australian LNG and CNG industry would provide the impetus for the transportation sector to significantly reduce diesel consumption. LNG and CNG displacing diesel can provide a cheaper and cleaner alternative while mitigating exposure to oil imports and creating local jobs to support a domestic industry. A mature domestic LNG and CNG industry could provide significant long-term cost savings to the transportation sector.