3

Domestic economic impacts of declining refining capacity

Introduction

- 3.1 Australia's oil refining capacity will decrease with the closure of the Clyde and Kurnell refineries. Some groups have cautioned that a reduction in domestic oil refining capacity could disadvantage Australia and have adverse economic impacts.
- 3.2 The Australian Government's *Energy White Paper 2012* (EWP), however, provides a more optimistic outlook. The EWP argues that effective supply chains to a range of competitive markets will provide for Australia's fuel needs. At the same time the EWP suggests that the aim of self-sufficiency is misplaced and could be a costly goal.
- 3.3 This chapter focuses on the domestic economic impacts of declining refining capacity. In particular, this includes a discussion of the adequacy of supply chains and the price outcomes for consumers. The broader energy security issues are dealt with in Chapter 4.
- 3.4 The impacts on employment arising from declining refining capacity are examined in Chapter 5.

Background

3.5 In June 2012 Shell announced that it was closing the Clyde refinery and converting it and the Gore Bay terminal into fuel import facilities by mid-2013. Similarly, in July 2012 Caltex announced that it was closing the Kurnell refinery and converting it to a major import terminal. The EWP notes that following these closures, Australia's maximum refining capacity will decline by around 28 per cent to 32 620 ML. Domestic refiners will produce just over half the fuel consumed in Australia with the remainder being imported.¹

3.6 During the past decade, refining companies have invested almost \$9 ½ billion in Australian refineries. The Australian Institute of Petroleum (AIP) stated:

The industry has had an ongoing process for debottlenecking individual refineries as well as expansion of port handling capacities. We have also invested heavily in energy efficiency and other sustainability opportunities at refineries, and the import terminal infrastructure has been enhanced significantly over the recent decade. By and large, these are factors which have been within the industry's control. However, we note that there is a range of issues that sit outside the industry's ability to pursue further improvements and enhancements in efficiency. Some of those factors are cost related. Some of them relate to the challenges that Australia would confront in terms of examining the possibility of a single mega-refinery in this country – whether it is the footprint for the refinery, the cost disadvantages or the challenges we would confront with distribution of production from such a refinery.²

3.7 Australian refining operations face increased competitive pressure from Asian mega-refineries. The EWP stated:

Australia's refining industry is undergoing structural change in response to strong competitive pressure from larger and newer Asian refineries, which continue to lower the break-even benchmark that our refineries compete against. The domestic pressure of high local costs, coupled with a high exchange rate, is expected to keep Australian refineries under pressure for some time.³

3.8 The EWP noted that Asia is increasingly becoming the global refining and trade centre. The EWP commented that 'significant net additions to Asia–Pacific export refining capacity are forecast to come online, including more refined fuels from India that meet Australian standards', which will maintain a surplus in regional refining capacity through to 2020.⁴

¹ Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 120.

² Dr John Tilley, Australian Institute of Petroleum (AIP), *Committee Hansard*, Canberra, 30 November 2012, p. 3.

³ Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 125.

⁴ Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 125.

- 3.9 The EWP noted that, in relation to reduced refining capacity in Australia, structural change is likely to undergo an orderly transition 'so that the market can respond accordingly to ensure that supply security is maintained and supplier market shares are preserved'.⁵ In addition, the EWP indicated that 'in order to continue to meet market demand, refinery closures are very unlikely to occur until alternative supply capacity has been secured', as is the case with the Clyde and Kurnell closures.⁶
- 3.10 The EWP pointed out that refinery closures are expected to be replaced by import terminals. The EWP stated:

Australia's refineries are in key geographical locations and have access to existing distribution infrastructure (pipelines or roads) to meet market demand. Therefore, any future refinery closure decisions are expected in most cases to be accompanied by decisions to convert the refineries to import terminals, maintaining these supply connections.⁷

- 3.11 The change from refining to imports is expected to lead to changes in inventory levels with overall stocks reduced when a refinery is converted into a terminal. However, the EWP commented that the 'drop in overall inventories associated with a refinery closure will have little, if any, impact on Australia's supply security'.⁸
- 3.12 In any economic consideration of the oil refinery industry it is essential to discuss environmental impacts and, in particular, fuel quality standards. The Fuel Quality Standards Act 2000 regulates fuel supplied in Australia in order to reduce the level of pollutants and emissions arising from the use of fuel that may cause environmental and health problems. In addition, the Act encourages the adoption of better engine technology and emissions control technology. The EWP stated:

Australia's fuel quality standards have improved urban air quality, facilitated the introduction of new engines and fuelefficient technologies, and reduced greenhouse gas emissions....

Any changes to fuel specification standards will need to consider Australia's circumstances and be subject to rigorous economic analysis of the costs and benefits to industry, consumers, and society more broadly, including consideration of domestic refining impacts and environmental and public health outcomes.⁹

- 8 Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 127.
- 9 Australian Government, Energy White Paper 2012, Australia's energy transformation, pp. 128-129.

⁵ Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 125.

⁶ Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 125.

⁷ Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 127.

- 3.13 The Commonwealth Department of Sustainability, Environment, Water, Population and Communities administers the Act, with RET providing input through an advisory committee. The Act covers the entire supply chain and involves a team of Commonwealth inspectors throughout Australia taking samples along the supply chain. In addition, relevant companies who are fuel producers or importers are required to report annually on whether the produced or imported fuels meet the Australian Standards for refined fuel products.
- 3.14 The downside to introducing more rigorous fuel quality specifications is that it can place additional constraints on domestic refineries. Shell stated that 'the window of capability of Australian refineries has reduced in the last 10 years, largely due to the introduction of new product quality specifications, which have introduced new constraints, not just sulphur, which means that the flexibility of refineries has materially reduced, although some refineries have invested in new capability to try to mitigate that'.¹⁰
- 3.15 During the hearing, some concerns were raised about the quality of fuel arriving in Australia. The CFMEU stated:

There is no guarantee, at times, when it arrives at our ports that it meets Australian standards. We know of incidents, even recently, where boats have had to go back to Singapore with finished product on them because they did not meet the grade. The problem with that is that, once upon a time, having a refinery at Clyde, they would bring it through. They would go through the refining process again and get it to grade. That does not happen anymore. As the industry declines, that will become a much more prominent problem.¹¹

3.16 Shell noted that ten years ago it was difficult to buy large quantities of finished product that met Australian specifications. However, this was changing with the rise of the new large refineries. Shell stated:

One of the things that happened as these new large refineries were built was that they were capable of making Australianspecification product — and the new ones that get built are. So we have changed from a world where, whilst economically the refineries were not perhaps that great, you could not buy large quantities of product for Australia internationally. Now you can, and that is a big change.¹²

¹⁰ Mr Michael Pope, Shell, Committee Hansard, Canberra, 30 November 2012, p. 30.

¹¹ Ms Lorraine Usher, CFMEU, Committee Hansard, Canberra, 30 November 2012, p. 31.

¹² Mr Andrew Smith, Shell, Committee Hansard, Canberra, 30 November 2012, pp. 29-30.

- 3.17 In Australia premium unleaded petrol, which is expected to be the base grade petrol for new vehicles, is equivalent to the Euro 4 standard. In the case of diesel the Australian standard equates to the Euro 5 standard. These Euro standards related mainly to the reduction in sulphur in the fuel, but also cover other production parameters.¹³ Projections of global petrol demand suggest that by 2020 a significant majority of demand will be for petrol with a sulphur content of less than 10 parts per million (ppm), as compared to 2011 that saw approximately half of the petrol demand with a sulphur content of between 10 to 50 ppm. A smaller proportion of demand also included petrol with sulphur levels of 51 to 500 ppm, and some with levels of 500 ppm. It is anticipated that petrol in this latter category will be phased out by 2025.¹⁴
- 3.18 Industry analysis indicates that other countries in the Asia-Pacific region are similarly mandating higher fuel quality standards. Japan, Hong Kong, Singapore and New Zealand are already observing Euro 4 or 5 standards for petrol and diesel products. Other countries such as China, India and Malaysia are working towards these standards.¹⁵

Discussion

Will supply chains meet requirements?

- 3.19 The EWP is confident that the diversity of international supply chains will meet Australia's refined fuel needs and cover our reduction in refining capacity. A key objective in meeting our energy security is to have well-functioning and competitive markets. The EWP notes that this requires effective policy and regulation which can:
 - anticipate and respond to changing energy demand and supply needs
 - deliver timely investment in the energy system, from upstream energy resource development to customer supply
 - access a diversity of supply chains
 - respond flexibly to energy shocks through energy substitution, diversion of energy supplies, and demand reduction responses
 - allow free-forming competitive prices, which are an efficient balancing mechanism and a stimulus for the development of additional supply and supporting infrastructure.

¹³ AIP, Downstream Petroleum 2011, p. 14.

¹⁴ International Fuel Quality Centre, Worldwide Fuel Specifications 2012, p. 6.

¹⁵ AIP, Downstream Petroleum 2011, p. 15.

3.20 As a demonstration of the markets' ability to cope and respond to oil supply disruption, the EWP draws attention to the way markets responded to the 2011 Libyan oil disruption. The EWP stated:

In the case of Libya, 1.2 million barrels per day of oil was lost from global supply. The market responded by increasing production from other sources, particularly Saudi Arabia and other countries in the Organization of the Petroleum Exporting Countries (OPEC). This effectively replaced the loss of Libyan oil supplies and allowed markets to continue to meet global demand. This market response was supported by the IEA Libya Collective Action, in which IEA member countries released oil stocks to add short-term liquidity to the market, and cushioned the economic impact of surges in oil prices. Australian fuel prices reflected movements in the global market, and we did not suffer any disruption to our liquid fuel supply.¹⁶

3.21 The National Energy Security Assessment made the point that energy security did not depend on energy independence or self-sufficiency but rather the growing interconnectedness of the global energy trade which provides Australia with flexibility and energy security. The EWP concluded that:

Our lack of oil self-sufficiency and the prospect of further refinery rationalisation does not in itself compromise or reduce our energy security. ... [Australia's] liquid fuel security is expected to remain high because of our access to reliable, mature and highly diversified international liquid fuel supply chains.¹⁷

3.22 The Australian Institute of Petroleum (AIP) shared this assessment commenting that it 'expects that the longer-term robustness of Australia's supply chains will not be significantly affected by recent decisions to convert refineries into bulk fuels importing facilities'.¹⁸ Similarly, Mobil Oil stated:

> The Australian petroleum industry has adequate fuel supply infrastructure and robust supply chain processes in place to ensure that it can continue to reliably meet local fuel demands, as it has done over many decades. The closure of a further one or more local refineries should not, of itself, pose a threat to reliable domestic fuel supply in the long term.¹⁹

- 18 AIP, Submission 14, p. 12.
- 19 Mobil Oil, Submission 17, p. 3.

¹⁶ Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 53.

¹⁷ Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 53.

3.23 Mobil Oil, however, noted that, 'some level of domestic refining capacity is highly desirable to provide additional flexibility to cope with the short term product supply interruptions or imbalances which can occur'.²⁰ During the hearing, Mobil Oil stated:

A lot of the discussion over the course of today has seemed to me to be working on the view that there is no future for the refining industry in Australia. I do not agree with that, fundamentally. I think there is a business for refining in Australia. It is important to the economy. These are high-tech, high-skilled jobs that are very important for the long-term viability and vibrancy of the Australian economy. It is important from an education perspective. It is important from an infrastructure perspective.²¹

- 3.24 Similarly, Caltex noted that when it announced the closure of the Kurnell refinery, it did indicate a future for its Lytton refinery commenting that 'we can see a pathway to a sustainable future for that asset'.²²
- 3.25 In relation to this point, the EWP did note that a domestic refining capacity does provide Australia with a limited ability to process crude oil. The EWP stated:

A domestic refining presence provides Australia with a limited ability to process domestically produced crude in-country, and a degree of supply flexibility and reliability. While there is the prospect of some further reduction in Australia's refining capacity, the underlying competitiveness of most Australian operations, along with the strategic advantages that some in-country refining presence offers, suggests that the prospect of a severely reduced or no refining capacity in Australia over the next decade is very remote.²³

- 3.26 The Department of Resources, Energy and Tourism (RET) noted that 'highly diversified supply has combined with pro-active supply chain management by companies to mitigate the effects on reliability of shortterm events such as refinery outages, shipping delays or unexpected spikes in demand'.²⁴
- 3.27 The Australian Workers' Union (AWU) believes the government should not be placing as much reliance on Asian refining capacity. The AWU cautions that relying on Asian refineries is 'highly questionable as these

²⁰ Mobil Oil, Submission 17, p. 3.

²¹ Mr Andrew Warrell, Mobil Oil, Committee Hansard, Canberra, 30 November 2012, p. 31.

²² Mr Gary Smith, Caltex, Committee Hansard, Canberra, 30 November 2012, p. 31.

²³ Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 126.

²⁴ Department of Resources, Energy and Tourism (RET), Submission 18, p. 15.

Asian refiners may be unsustainable – and cut off from global supply chains of crude oil'.²⁵ While the AWU has not proposed the need for self-sufficiency it has suggested the need for greater self-reliance. The AWU stated:

It is unclear how closure of domestic refining capacity adds to supply diversity when it is accompanied by increasing reliance on supplies sourced from offshore vulnerable to disruption, impacting directly on Australian consumers but beyond our reach to influence.²⁶

3.28 The Australian Manufacturing Workers' Union (AMWU) also argued that there were potential problems with the loss of domestic refining capacity noting that 'OECD countries are concerned about loss of energy sovereignty and the consequent increased dependence on oil imports'.²⁷ The AMWU commented that the risks associated with greater dependence on imports include:

- the potential for upward pressure on raw materials and suppliers resulting in higher prices flowing through the supply chain;
- less interaction with customers and feedback thus less capacity to adapt quickly to product requirements - there remains a shortfall in Asia of refineries that meet Australian specifications; and perhaps most significantly
- the concentration of risk of supply disruption in regions subject to natural and geo-political shocks and upheavals.²⁸
- 3.29 In contrast to these views, other groups were more optimistic about the advantages of diverse supply chains. The Business Council of Australia stated:

The market for petroleum products is a transparent and competitive market with both domestic and international participants. There is access to a diverse range of sources of supply which should be capable of meeting Australia's demand for petroleum products.²⁹

3.30 Similarly, Caltex commented that 'Australia can access diverse and wellestablished supply chains, so any reduction in refining capacity will be offset by sourcing refined product via import facilities'.³⁰ Caltex noted that

²⁵ Australian Workers' Union (AWU), Submission 4, p. 11.

²⁶ AWU, Submission 4, p. 13.

²⁷ Australian Manufacturing Workers' Union (AMWU), Submission 7, p. 3.

²⁸ AMWU, Submission 7, p. 3.

²⁹ Business Council of Australia, Submission 8, p. 2.

³⁰ Caltex, Submission 12, p. [8].

'current supply chains are highly effective in meeting liquid fuel requirements, so there will be no decrease in supply reliability adversely affecting fuel using industries or private consumers'.³¹ In relation to the replacement of refining capacity with terminal facilities, Caltex stated:

With a reduction in local oil refining capacity, there is a need for good terminal and other infrastructure to ensure supply reliability. This will be provided efficiently by the private sector, as there is a commercial driver to maintain reliable supply to the market. Caltex is well progressed with its planned investments at Kurnell to ensure supply reliability. The company has two development applications in progress which are recognised as State significant developments. The first is a development to upgrade the dedicated Kurnell port and berthing facilities to enable larger ships to import product for the NSW market. The second is the development to convert the refinery into a terminal to ensure that there is adequate tankage for imported fuels.³²

3.31 BP was similarly optimistic about accessing international supply chains to meet domestic market needs. BP stated:

Certainly Australia is neither self-sufficient in crude oil nor refining capacity, and we will be increasingly reliant on international markets and overseas suppliers. However to provide some context, BP currently imports more than 100 cargos of refined product into Australia each year and we do not envisage significant problems with increasing these volumes due to a consolidation of the refining industry and/or market growth.³³

3.32 Mr Eriks Velins commented that the present supply chains, which are mixtures of own refining and crude and refined product imports, 'are safe, secure and reliable and supply fuels at the lowest cost'.³⁴

- 33 BP, Submission 13, p. 8.
- 34 Mr Eriks Velins, *Submission* 1, p. 3.

³¹ Caltex, Submission 12, p. [8].

³² Caltex, Submission 12, p. [8].

Import price outcomes for consumers

- 3.33 The Construction, Forestry, Mining and Energy Union (CFMEU) commented that the announced closure of the Clyde refining facility will have adverse consequences including 'reduced competition in distribution and retail of petroleum products, leading to higher average fuel prices with consequent impact on household incomes and the viability of businesses'.³⁵
- 3.34 The AWU commented that 'based on the level of imports, Australia's transportation fuel is exposed to any external shocks of supply'.³⁶
- 3.35 Similarly, the NRMA was not optimistic about market forces addressing serious fuel disruptions and its impact on fuel prices. The NRMA stated:

At present Australia has been shielded by higher fuel prices by the high Australian dollar. In the event of a serious global crisis this convenient financial safety net may not be available. There is a presumption that the market will resolve any short term interruption to supply but does not consider the impact on consumers in any detail.³⁷

- 3.36 The Australian Automobile Association (AAA) commented that 'a major disruption in the supply of transport fuels could have significant economic and social consequences, particularly if proposed refinery closures proceed in 2013 and 2014.'³⁸
- 3.37 The view that petrol prices could increase as a result of reduced domestic oil refining capacity was not shared by other groups in evidence to the committee. The key point is that fuel prices are based on import parity pricing. RET stated:

Crude oil and petroleum fuels are internationally traded commodities with prices determined by market forces. The Department does not anticipate that refinery closures in Australia would lead to price increases as import parity pricing is already used in the market and domestic competition influences fuel pricing. The Department notes that Caltex has announced it has entered into an arms-length, long-term agreement with Chevron for the procurement and supply of petrol, diesel and jet fuel.³⁹

- 37 NRMA, Submission 15, p. [5].
- 38 AAA, Submission 16, p. [1].
- 39 RET, Submission 18, p. 17.

³⁵ Construction, Forestry, Mining and Energy Union (CFMEU), *Submission 9*, Why shut a refinery amidst a boom?, 5 September 2011, p. 1.

³⁶ AWU, Submission 4, p. 11.

- 3.38 The EWP noted that 'Australia's liquid fuel market has operated on the principle of import price parity [IPP] since 1977, which means that domestic fuel prices are closely linked to international events'.⁴⁰ The Australian Consumer and Competition Commission (ACCC) has confirmed that the international benchmark price is the largest component of domestic petrol, diesel and automotive LPG prices.⁴¹ The international benchmark price, which differs for each fuel, is a base price for Australian suppliers. The EWP stated that the benchmarks for each fuel are:
 - petrol Singapore Mogas 95 Unleaded
 - diesel Singapore Gas Oil 10 parts per million
 - LPG Saudi Contract Prices.⁴²
- 3.39 The EWP concluded that 'the closure of existing Australian refineries is unlikely to have any major impact on consumer fuel prices, as import parity pricing is the basis for wholesale and retail fuel pricing in Australia'.⁴³
- 3.40 BP emphasised that IPP is the critical feature of petrol pricing, stating:

Given the recent publicity concerning the impact of refinery closures on pricing for consumers it should be reiterated that exrefinery prices are based on the landed price of Australia fuel grade standard product, ie the Import Parity Price (IPP). If a refinery tried to sell product above the IPP other companies would simply import the product. Thus refinery sales and margins in Australia are governed by the landed cost of internationally traded petroleum products as reflected in the IPP.⁴⁴

3.41 Similarly, Caltex commented that 'the prices of products from Australian refineries reflect international prices through the mechanism of the import parity price'.⁴⁵ In particular, Caltex stated that 'as a consequence, declining refinery capacity has no impact on import prices, hence no impact on the cost basis for Australian wholesale or retail prices'.⁴⁶ This view was shared by Mobil Oil which stated:

Today, the price of fuel sourced from Australian refineries reflects the alternative cost of supplying fuel purchased on the Singapore spot market as that is the option available to all fuel suppliers into

⁴⁰ Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 121.

⁴¹ Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 121.

⁴² Australian Government, *Energy White Paper 2012, Australia's energy transformation*, p. 122.

⁴³ Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 126.

⁴⁴ BP, Submission 13, p. 9.

⁴⁵ Caltex, Submission 12, p. 11.

⁴⁶ Caltex, Submission 12, p. 11.

Australia. This has been confirmed by the ACCC through the reviews and regular annual monitoring of the industry it has done since 2007, and will continue to be the case if further Australian refineries close.⁴⁷

3.42 Shell commented that 'claims that refinery closures will increase the cost of fuel to consumers are flawed'.⁴⁸ Shell stated:

Prices for all gasoline in Australia are predominantly based on import parity pricing (IPP) – shipping, wharfage and storage and handling are all additional costs that get added in but the price of petrol and diesel in Australia are almost all import parity price and taxes. Specifically:

- The Singapore benchmark price of petrol plus shipping costs and Australian taxes represents almost the entire wholesale price of petrol – over 90% of the Terminal Gate Prices (TGPs).
- The remainder of TGP reflects insurance, a quality premium for Australian fuel standards, local wharfage and terminal costs and a small wholesale marketing margin (where competitively possible).⁴⁹
- 3.43 Mr Eriks Velins noted that 'the current government fuel pricing policy has ensured that consumers can obtain some of the OECD's cheapest petroleum fuels and marketing margins have been adequate to justify investment of capital to provide for growth'.⁵⁰
- 3.44 The AIP also noted that the price of fuel in Australia is dependent on world market prices. The AIP stated:

Singapore prices are the key pricing benchmarks for Australia because this represents the competitive alternative for supply to Australia. Benchmark prices are adjusted by a negotiated quality premium that reflects Australian fuel quality standards. Growth in demand for fuel in Australia will continue to be largely met by imports, further strengthening the price relationship with Asian fuel prices.⁵¹

3.45 In December 2012 the ACCC completed a report into the prices, costs and profits of unleaded petrol in Australia.⁵² The ACCC noted that

- 49 Shell, Submission 20, p. 11
- 50 Mr Eriks Velins, *Submission 1*, p. 4.
- 51 AIP, Submission 14, p. 13.
- 52 Australian Consumer and Competition Commission (ACCC), *Monitoring of the Australian petroleum industry, Report of the ACCC into the prices, costs and profits of unleaded petrol in Australia,* December 2012.

⁴⁷ Mobil Oil, Submission 17, p. 4.

⁴⁸ Shell, Submission 20, p. 11.

international factors were the key to Australian petrol prices. In particular, the ACCC stated that 'relatively low levels of petrol taxes in Australia result in petrol prices in Australia being among the lowest in the OECD.'⁵³

3.46 During the hearing the ACCC confirmed that import parity pricing was the key determinant of petrol pricing, stating:

Basically the marginal source of supply of refined fuels, as it is for accrued oil, is imports. The price in Australia has to reflect an international parity price – the price in the international markets. Otherwise, if the price in Australia was below that, then you would have shortages, because it would be more profitable to export refined fuel outside of Australia. So effectively what happens is that the price in Australia reflects an international price. The ACCC has looked at this. We have been analysing the market for the last five years on this. We are about to put out a large report, in the next couple of weeks, looking at these things. But there are a number of reports that we have done over the past four years that are all on the public record. They clearly show that retail prices in Australia reflect, effectively, the wholesale prices plus a margin. And those wholesale prices reflect the import parity price, so they reflect those international prices.⁵⁴

3.47 In relation to the impact that refinery closures might have on the cost of petrol, the ACCC stated:

So the impact of a refinery closure on the wholesale price that people are getting — and therefore, downstream, the retail price — is not impacted by the closure of a refinery or two refineries or three refineries in Australia. They are affected by the international prices and the value of the Australian dollar. There have been a couple of examples where there have been closures of refineries, and we actually have real-life examples of whether there will be a price impact. Port Stanvac, the refinery in Adelaide, was mothballed in 2003. Effectively it never went back into production, but it was mothballed in 2003. In the time that went out and over the years after it went out, the terminal gate price in Adelaide, which is a reasonably good proxy for the wholesale price in Adelaide, went down relative to the prices in the other mainland capitals. There was not a price effect in Adelaide. In fact, if you look at Adelaide

⁵³ ACCC, Monitoring of the Australian petroleum industry, Report of the ACCC into the prices, costs and profits of unleaded petrol in Australia, December 2012, p. ix.

⁵⁴ Mr Matthew Schroder, ACCC, Committee Hansard, Canberra, 30 November 2012, p. 14.

prices now and over the last few years, Adelaide has had the lowest or near the lowest prices in Australia.⁵⁵

Energy White Paper – Liquid fuel market policy actions

3.48 The EWP outlined a range of policy actions the Australian government should take in managing Australian liquid fuel needs. The policy actions are reproduced below.

Liquid fuel market policy actions

To ensure that Australia is positioned to meet its liquid fuel needs, the Australian Government will:

- continue to monitor developments in the liquid fuel market, including liquid fuel supply vulnerabilities associated with the decline in domestic refining capacity
- work with industry and, guided by the Alternative Transport Fuels Implementation Advisory Group, pursue a market-led approach to the development and deployment of alternative transport fuels
- develop a more consistent long-term policy framework for liquid fuels so as to promote stability and certainty for future investment, with the first step being the Productivity Commission review of fuel excise arrangements and an examination of a regime based precisely on the carbon and energy content of fuels, which is to be completed in time to allow any changes to be implemented by 2015–16.

The government will maintain and improve our understanding of the liquid fuels market through:

- assessing Australia's liquid fuel vulnerabilities as part of the National Energy Security Assessment (this will cover the liquid fuel supply chain, including import and refining infrastructure and critical supply linkages)
- improving the quality of the Australian Petroleum Statistics, including consideration of mandatory reporting
- undertaking biennial Australian Liquid Fuel Technology Assessments from 2013.

Source Australian Government, Energy White Paper 2012, Australia's energy transformation, p. 131.

Conclusion

- 3.49 With the closure of the Clyde and Kurnell oil refineries, refining capacity in Australia will decrease by about 28 per cent and leave five operating refineries. Domestic refiners will produce just over half the fuel consumed in Australia with the remainder being imported.
- 3.50 During the hearing, Mobil Oil noted that 'some level of domestic refining capacity is highly desirable to provide additional flexibility to cope with the short term product supply interruptions and imbalances that can occur'. Similarly, Caltex noted that when it announced the closure of the Kurnell refinery, it did indicate a future for its Lytton refinery commenting that 'we can see a pathway to a sustainable future for that asset'.
- 3.51 The committee notes that during the past decade oil refining companies have invested almost \$9 ½ billion in Australian refineries. The most recent announcements of closures have been accompanied by significant investment in import terminal infrastructure, including the upgrading of port infrastructure. For example, Shell noted that it has made significant investments in exploration, development and supply of liquefied natural gas and condensates. It serves Australia well if at a time of global transition, companies are sufficiently profitable to make investments in the future.
- 3.52 The closure of the refineries will not lead to negative price outcomes for consumers. Australian fuel prices reflect an import parity price which is the price in international markets. The ACCC was clear in its advice to the committee that as a result of import parity pricing, the retail price for petrol is not impacted by refinery closures.
- 3.53 The recent history of refinery closures has not resulted in any negative price impacts for Australian consumers. The ACCC noted that when the Port Stanvac refinery was mothballed in 2003 there was not a price effect in Adelaide. The ACCC stated that 'in fact, if you look at Adelaide prices now and over the last few years, Adelaide has had the lowest or near the lowest prices in Australia'.
- 3.54 These changes in refining capacity to date will not impact on Australia meeting its liquid fuel requirements. There are reliable, mature and highly diversified international fuel supply chains, which provide Australia with economic security. The Energy White Paper (EWP) noted that 'our lack of self-sufficiency and the prospect of further refinery rationalisation does not in itself compromise or reduce our energy security'. The Australian Institute of Petroleum and refiners were also confident about the

reliability of Australia's supply chains and infrastructure to continue to meet local fuel demands, as it has done over many decades.

- 3.55 The committee notes that the market is robust and, from the available evidence, it is operating soundly. Australia is well serviced by reliable and diverse supply chains. However, this is an extremely important sector in global transition and the committee supports the ongoing monitoring of the liquid fuel market as outlined in the EWP. In particular, the EWP noted that the Australian Government will:
 - continue to monitor developments in the liquid fuel market, including liquid fuel supply vulnerabilities associated with the decline in domestic refining capacity.
- 3.56 In addition, the Australian Government will maintain and improve our understanding of the liquid fuels market through:
 - assessing Australia's liquid fuel vulnerabilities as part of the National Energy Security Assessment (this will cover the liquid fuel supply chain, including import and refining infrastructure and critical supply linkages).
- 3.57 As part of considering the economic impacts of refinery closures it is also essential and timely to note the importance of fuel quality standards and their bearing on environmental and health outcomes. The EWP stated that 'Australia's fuel quality standards have improved urban air quality, facilitated the introduction of new engines and fuel-efficient technologies, and reduced greenhouse gas emissions'.
- 3.58 Industry analysis indicates that improving fuel quality standards is a global trend. It is anticipated that by 2020 there will be a significant reduction in the sulphur levels in petrol. In the Asia-Pacific region, Australia is not alone in mandating higher fuel quality, with Japan, Hong Kong, Singapore and New Zealand already observing Euro 4 or 5 standards for petrol and diesel products, respectively, which are equivalent to the Australian Standards. Countries such as China, India and Malaysia are also working towards these standards.
- 3.59 As part of its responsibilities in administering the Fuels Quality Standards Act, the Commonwealth Department of Sustainability, Environment, Water, Population and Communities has inspectors in each state and territory who take samples of domestically produced and imported refined fuel products to ensure they meet Australian fuels quality specifications.
- 3.60 The committee notes concerns by stakeholders that the move towards imported refined fuel might reduce standards both in terms of

environmental outcomes and quality control. The committee is not in a position to assess the validity of the claims.

3.61 However, the committee agrees that rigorous monitoring is important to ensure that imported refined fuels are meeting Australian fuel quality standards. The committee suggests that fuel quality standards and environmental outcomes should be monitored as part of the EWP's recommended monitoring of liquid fuel vulnerabilities.