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## Petrol pricing in Australia: issues and trends

Petrol pricing remains a contentious issue facing motorists in Australia. This Brief provides a background to petrol pricing issues and looks at the international and domestic factors involved. Some of these factors are: crude oil and refined petroleum products prices; exchange rates; retail competition and price cycles; government policies; and taxation. Australian petrol price data are discussed including dissection into components, city/country price differentials and international comparisons.

Mike Roarty  
Science, Technology, Environment and Resources Section  
Stephen Barber  
Statistics Section  
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## Enquiries

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## Acronyms

AAA	Australian Automobile Association
ABS	Australian Bureau of Statistics
ACCC	Australian Competition and Consumer Commission
AIP	Australian Institute of Petroleum
bb/d	Barrels per day
CPI	Consumer price index
c/L	cents per litre
FSGS	Fuel Sales Grant Scheme
IPI	Import parity indicator
ML	Megalitres (one million litres)
OECD	Organisation for Economic Co-operation and Development
PSA	Prices Surveillance Authority

## Executive summary

Both international and domestic factors affect petrol prices. International factors include changes in international crude oil prices, movements in the Australian/US dollar exchange rate, and changes in the international prices for refined products. Domestic factors include local price cycles, retail outlet competition and the level of federal taxes (i.e. excise and GST). It is not possible to insulate the domestic market from the dynamics of the world market as these are intrinsically linked.

Some 90 per cent of the cost of producing petrol and diesel is purchasing crude oil. Crude oil prices vary on a daily basis according to global supply and demand fundamentals. On the world scale, Australia is only a small producer of crude; nevertheless on a theoretical basis, if total Australian production had been directed towards domestic refining in 2002–03, then Australia could have been some 85 per cent self sufficient.

International prices for petrol, as with other commodities freely traded on the world market, are set by supply and demand factors, rather than production costs. The international refined benchmark for the Asia Pacific region is the Singapore refinery price (Singapore Mogas 95 Unleaded). Refiner margins for domestic refineries are the difference between international refined product prices and the cost of crude oil (sourced either domestically or internationally).

Possibly of most annoyance to the motoring public are the substantial weekly fluctuations of petrol prices, particularly in major metropolitan markets. Prices can suddenly increase in the order of 10 cents per litre—when prices suddenly move from the low point to the high point in the established retail price cycle. Despite motorists' frustrations with continual fluctuations of petrol prices in the metropolitan markets, it is claimed that this feature and associated competition keep Australia's petrol prices amongst the lowest in the developed world. Furthermore, petrol price rises over the last decade have been modest in real terms. Australia's retail petrol prices remain amongst the lowest in OECD countries and despite the fact that taxes comprise some 50 per cent of the indicative petrol price, petrol taxes in Australia rank as the fourth lowest in OECD countries.

Petrol pricing remains a contentious issue facing motorists in Australia. This is despite the implementation of regulatory changes in the retail petrol market following some of the numerous Government inquiries that have been held on petrol pricing and other related refined petroleum product issues. Petrol price information and its structure are readily available and there is a high degree of price monitoring by a number of regulatory and consumer organisations.

Petrol prices and archived data are readily available from a number of websites including motoring organisations, the oil majors (Mobil, Shell, BP and Caltex) and the Australian Institute of Petroleum. Furthermore the Australian Competition and Consumer Commission provides information relating to petrol price cycles, factors affecting petrol prices, what determines petrol prices in Australia and the city country price differential.

Surveys of motorists' attitudes have found they are unhappy with price fluctuations but prefer them to higher overall prices. Motorists can take advantage of the cycles by buying at the low point in the cycle. The ACCC has examined the practice of price cycles and concluded that actions to limit their operation could lead to overall higher average retail prices. Furthermore, the ACCC recommended that there be a consumer awareness initiative to increase consumers' understanding of price cycles, and to help consumers buy when prices are relatively low. The ACCC has not identified any incidence of price collusion or raising prices prior to public holidays or weekends—other than movements within the established cycle—by the oil majors, an anecdotal claim raised by a number of commentators.

Country petrol prices are usually higher than the prices of major metropolitan outlets. There have been recurring claims of profiteering because of the differential in country centres. Despite these claims there are reasons for the price differential. A country service station typically sells less than half the amount of fuel of a metropolitan service station. Hence there is less opportunity to reduce the operating margin on fuel sales taking into consideration the overall viability of the business. Additionally there is higher distribution costs associated with country retail outlets. Furthermore, there are generally lower sales of higher profit non-fuel items in the country.

Prior to the foray of the Woolworths supermarket chain into petrol retailing, competition with the oil majors—the dominant force in refining, marketing and retailing—was largely provided by independent networks. However, the number of outlets operated by independents was small in comparison to the retail outlets linked to the majors. Woolworths first entered the petrol retail market in 1996 and in late 2003 announced an alliance with Caltex which aims to extend a discount petrol offer to supermarket customers nationwide. The Woolworths/Caltex alliance follows an announcement earlier in 2003 of a commercial alliance between Coles Myer and Shell into petrol retailing. Following on from the major supermarket alliances, the independent IGA franchise supermarket chain also entered into a petrol discounting in late 2003. Their offer matches the petrol discount of the major supermarket chains, with the benefit of purchasing petrol from any outlet.

A major problem for the independents and the oil majors not associated with the supermarket alliances—BP and Mobil—is competing in a market where the discounts offered in petrol retailing are being more than offset by increased sales and the higher margins applying in the broader supermarket chain market. Petrol retailing is a notoriously low margin business.

The implementation of increasingly tighter fuel standards are likely to have an impact on the price motorists pay for fuel in the coming years. Australian standards are being aligned with European standards through the Commonwealth's *Fuel Quality Standards Act 2000* which established the first national regulations to ensure consistent fuel quality across Australia. The Commonwealth is currently undertaking a review of this Act and assessing whether the cleaner fuels which underpin the introduction of improved vehicle technologies are consistently available.

## Introduction

The aim of this paper is to provide a background to petrol pricing issues and update and expand on earlier work that has been undertaken by the Parliamentary Library on this topic.<sup>1</sup>

Australia's petrol prices overall are among the lowest in the OECD, even when taxes are included. Nonetheless, petrol pricing is one of the most contentious issues that face motorists in Australia. This is despite the implementation of regulatory changes in the petrol retail market following numerous inquiries (see Appendix A) held on petrol pricing and related petroleum product issues. There has been high profile media claim and counter claim of oil company profiteering, price collusion amongst industry participants and repeated calls for regulatory intervention in the market.

Probably the issue of most annoyance to the motoring public is the substantial weekly movement in retail petrol prices in major metropolitan areas. Prices can suddenly jump 10 cents per litre—when prices suddenly move from the low to the high point in the established retail price cycles that feature in the major metropolitan markets.

The paper looks at a number of the issues relevant to petrol pricing. These include international and domestic factors. International factors include the world crude oil market, the exchange rate, international prices for refined petroleum products (petrol and diesel) and the significance of the import parity indicator. Domestic factors include retail competition and price cycles, petrol retailing trends, government policies and taxation. Petrol price data is discussed including city/country price differentials as is dissection of prices into components including the refinery price, taxation and retailing margins. Domestic prices are also compared with international prices. A number of current and emerging issues related to petrol pricing including petroleum product retailing, trends emerging in this sector, deregulation of the refined petroleum products market and new fuel standards are discussed.

Whilst there is an abundance of information available to the general public on petrol pricing issues—probably more now than ever before—the *detail* is less than previously available. For example, the components of an indicative petrol price—petroleum product excise, state franchise fees, refinery feedstock, and the margins of the oil refiner, the marketer and retailer—has reverted to, in the case of the Shell company, a refinery price, tax and the Shell and retail margin. These components are published daily on the Shell website: [www.shell.com.au](http://www.shell.com.au).

## Factors affecting petrol prices

Both international and domestic factors are key determinates of petrol prices. International factors include changes in international crude oil prices, movements in the Australian/US dollar exchange rate, and changes in international prices for refined products. Domestic



factors include local prices cycles, retail outlet competition and the level of federal taxes (i.e. excise and GST). These factors are discussed below.

## **International factors**

### **The crude oil market**

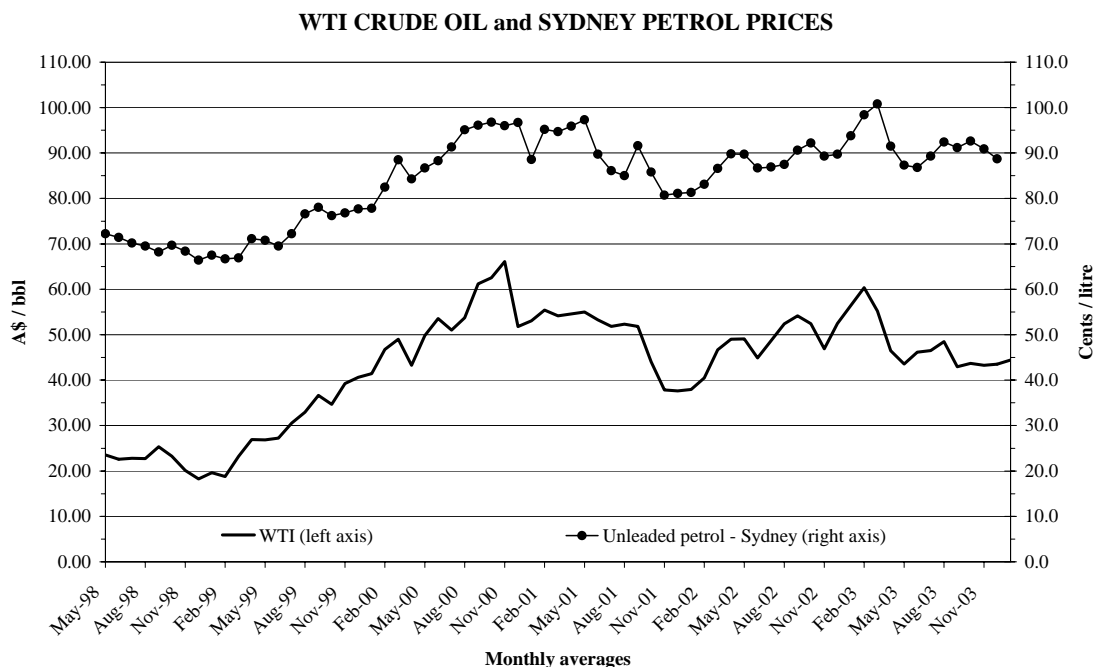
Some 90 per cent of the cost of producing petrol and diesel is the cost of purchasing crude oil. Crude oil prices vary daily on global supply and demand fundamentals. On the world scale, Australia is only a small producer of crude; nevertheless production of crude oil and condensate averaged 574,000 bbl/d in 2002–03. In the same year however Australian crude oil and condensate production only supplied 36.6 per cent of Australian refinery feedstock, with the balance being provided from imports. The bulk of crude oil and condensate production from the North West Shelf and other northern Australian oil fields is exported. On a theoretical basis, if total Australian production had been directed towards domestic refining, then Australia could have been some 85 per cent self sufficient.

Whilst there are a number of components making up the domestic petrol price, there is a broad correlation between petrol prices and world crude oil price in Australian dollars as shown in Figure 1. Although the price of the crude oil feedstock presently comprises some 35 per cent of the overall price, the other major price components vary to a much smaller extent than the crude oil price. A common broad rule of thumb is for an upward or downward movement in the world price of crude of one United States dollar per barrel, the Australian price of petrol would increase or decrease in the vicinity of 1c/L.

Because of competitive aspects in the domestic petrol market and movements in the exchange rate, there can be times when despite upward movements in the crude oil price, domestic petrol prices can trend downwards, as is evident in the latter part of 2003 and into 2004. Conversely, domestic petrol prices can trend upwards whilst world crude prices are trending downwards as was evident in the early to mid part of 2001.

A common theme that emerges in times of high world oil prices as at present is the call by some commentators to question why Australia has tied itself to the international crude oil market. It needs to be understood that oil is an internationally traded commodity and that it would be counter productive for Australia to attempt to insulate itself from changes in the international market (see Appendix B).

**Figure 1: West Texas Intermediate crude oil price vs. Sydney petrol prices**

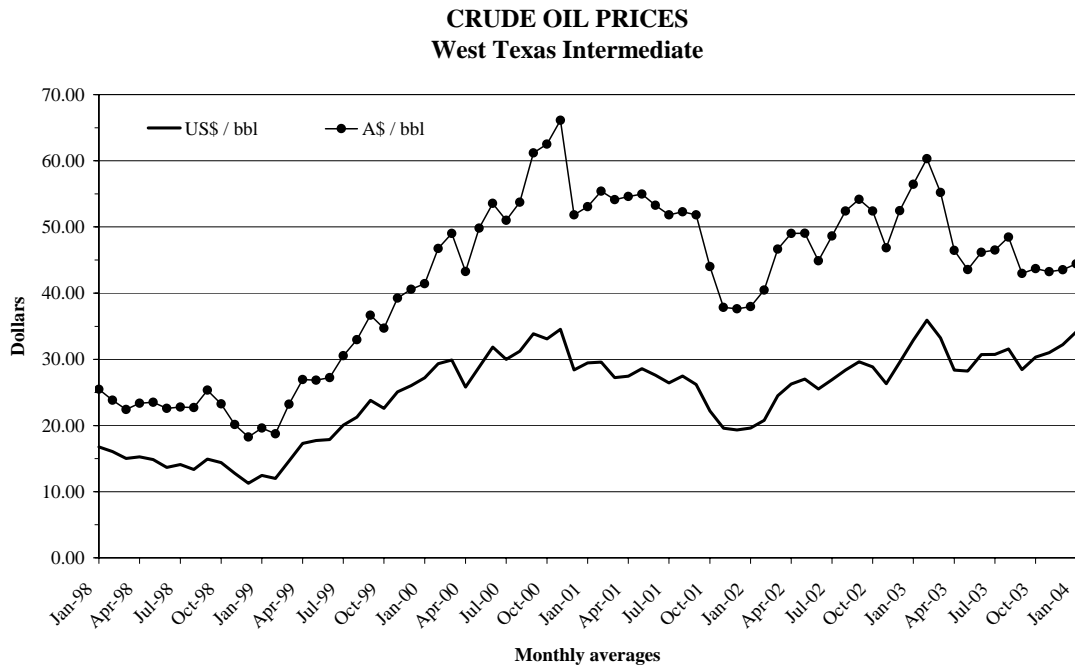


Source: Datastream. WTI – West Texas Intermediate.

### The exchange rate

World crude oil prices are set in US dollars. Therefore a key factor for the Australian market is the conversion of the world price into Australian dollars via movements in the US\$/A\$ exchange rate. These movements and relationships are illustrated in Figure 2. Movements in these measures may counter or can reinforce each other. For example, a strengthening world oil price can be offset by an appreciating A\$ with conversion of the world oil price to A\$. This feature was apparent in the relative movements of the two currencies during the later part of 2003 and into 2004. Conversely, a strengthening world oil price can be further boosted in A\$ terms by a depreciating A\$ as evidenced for much of 2000.

Figure 2: West Texas Intermediate crude oil price and conversion to \$A



Sources: Datastream; FuelTrac.

### International petrol prices

International prices for petrol, as with other commodities freely traded on the world market, are set by supply and demand factors, rather than production costs. The international refined benchmark for the Asia Pacific region is the Singapore refinery price (Singapore Mogas 95 Unleaded). Refiner margins for domestic refineries are the difference between international refined product prices and the cost of crude oil (sourced either domestically or internationally). Whilst imports of refined petroleum product account for around 10 per cent of the domestic refined petroleum product market, it is not commonly appreciated that its price largely determines the Australian wholesale market price. The reasoning is that if prices were out of alignment, one market would predominate. Imports of refined petroleum product over the last three years are shown in Table 1.

Imported refined petrol is mainly sourced from Asian refineries that are usually much larger than Australia's. For example, the Jurong/Pulau Ayer Chawan and Pulae Bukom refineries of ExxonMobil and Shell in Singapore have capacities of 587,000 and 458,000 bbl/d<sup>2</sup>, compared to Australia's largest of 130,500 bb/d. As a result, Asian refineries have better economies of scale and as a general rule have lower operating costs.

**Table 1: Imports of refined petroleum product (megalitres ML)**

	Imports of unleaded automotive gasoline	Total sales of automotive gasoline	Percentage of imports on total sales	Imports of automotive diesel oil	Total sales of automotive diesel oil	Percentage of imports on total sales
2000–01	1,188.7	15,213.8	7.8	1,129.0	12,952.4	8.7
2001–02	1,436.2	16,308.8	8.8	1,280.3	13,441.2	9.5
2002–03	1,686.1	17,173.5	9.8	1,645.6	13,888.0	11.8

Source: Department of Industry, Tourism and Resources. Note: unleaded automotive gasoline is petrol and automotive diesel oil is diesel.

Other factors impact on the cost of delivered refined product to Australia. Firstly, demand for automotive diesel oil in the Asian economies tends to be particularly strong and excess associated petrol production is made readily available for the export market. Surplus supply in the Asian market can exert downward pressure on petrol prices in Australia. Equally, if petrol supply in the Asian market is tight, because of say strong demand in China and India, then the international petrol price will increase and these increases will be felt in Australia.

### The significance of the import parity indicator

The IPI is a benchmark used to determine the Australian refinery price—which is effectively the wholesale price. The lower the IPI, the lower the Australian refinery price and vice versa. The IPI is commonly confused with the term 'world parity pricing' which referred to a number of previous Australian Governments' pricing formulae for crude oil prior to the deregulation of the crude oil market in 1988 (see Appendix B).

The ACCC used the IPI before deregulation on 1 August 1998 to determine maximum endorsed wholesale prices. The IPI comprised three components:

- the import parity component—the 'landed cost' for ex-refinery petrol stock from Singapore (incorporating the spot price for fuel, freight, wharfage, insurance and loss, and the Australian/US dollar exchange rate)
- the assessed local component—which incorporates downstream terminalling, marketing and distribution costs as well as return on assets employed in that sector, and
- State subsidies, Commonwealth excise (currently at 38.143 c/L) and the GST.<sup>3</sup>

The IPI is a base indicator across Australia for fuel delivered into a service station and adjustment has to take into account the various state subsidies that apply.<sup>4</sup> Whilst the IPI is no longer determined by the ACCC it is used by various groups to monitor price trends, as for example in the AAA petrol price charts (see Figure 3).

## Domestic factors

### Price cycles and retail outlet competition

Despite motorists' frustrations with continual fluctuations of petrol pump prices in the major metropolitan markets, it is claimed<sup>5</sup> that this feature and associated competition keep Australia's petrol prices amongst the lowest in the world. As explained, petrol prices are made up of a number of components including product cost, tax and refiner and retailer's gross margins. Competition between retail outlets also has a major bearing on the pump price.

Well developed price cycles are evident in the metropolitan markets of Sydney, Melbourne, Brisbane, Adelaide and Perth. Canberra, Darwin and Hobart—do not exhibit regular cycles.<sup>6</sup> At the top of the pricing cycle the retailers' margin is usually about 9 to 10 c/L. Discounts begin to be offered by retail outlets to attract greater sales volume. The discounts are matched by other stations to remain competitive. Once discounting starts in an area, competition ensures it quickly spreads to other stations. Prices are normally discounted for about a week and the retailer's margin falls considerably. Revenue shortfalls are partly offset by non-fuel sales. When petrol price margins become unsustainably low (say with retailer's margin between 2 and 4 c/L and anecdotal evidence suggests that they sometimes even become negative) some retailers will raise prices in order to bring some profitability back to their sales. This is usually followed by other retailers who raise their prices.<sup>7</sup>

A Royal Automobile Club of Victoria survey of motorists' attitudes has found they are unhappy with price fluctuations but prefer them to higher overall prices.<sup>8</sup> Motorists can take advantage of the cycles by buying at the low point in the developed cycle. The ACCC has examined the practice of price cycles and concluded that actions to limit their operation could lead to overall higher average retail prices. Furthermore, the ACCC recommended that there be a consumer awareness initiative to increase consumers' understanding of price cycles, and to help consumers buy petrol at times when prices are relatively low.<sup>9</sup> The ACCC has not identified any incidence of price collusion or raising prices prior to public holidays or weekends—other than movements within the established cycle—by the oil majors, an anecdotal claim raised by a number of commentators.

### Taxation

The taxation on petrol, the single largest component of the petrol price, is applied by the Commonwealth Government and comprises the petroleum product excise and the GST. The Commonwealth Government petrol and diesel excise is currently set at 38.143 c/L (other products have lower rates). Formerly excise increases were indexed to the consumer price index (CPI) twice yearly in February and August. This was discontinued in March 2001 following concerted community and pressure group lobbying to abandon indexation. This was in response to prices hovering around \$1 per litre at that time and the claim that

the Commonwealth would be 'double dipping'—as excise increased with indexation, so would GST revenue.

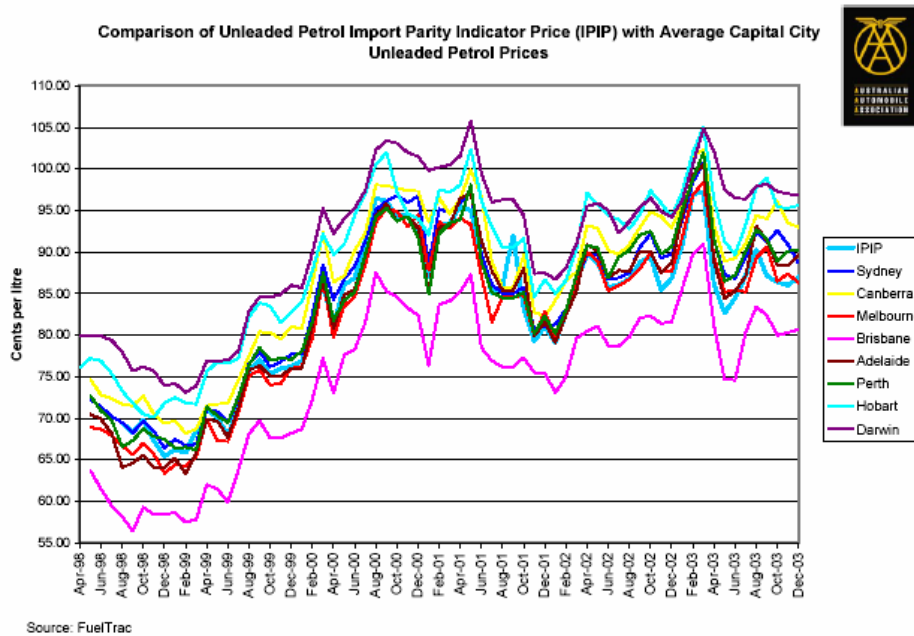
While it is true that the Commonwealth Government collects the GST, all GST revenue is passed to the States (net of administration costs).<sup>10</sup> The GST component depends on the pump price. The GST component is determined by dividing the pump price by eleven. As rural and regional petrol prices are mostly higher than in metropolitan areas, so is the GST component.

The former State Franchise fees levied on petrol sales, collected by the Commonwealth Government on behalf of the states since August 1997, were discontinued with the introduction of the GST in July 2000. Queensland did not have a State Franchise fee and the fee was not the same rate in the rest of the states. Because it is unlawful under the Australian Constitution to apply different levels of federal taxes to different localities, the Commonwealth Government collected an additional excise of 8.1 c/L (in August 1997). Where this amount was greater than the State Franchise fee, the State governments paid a subsidy—equivalent to the difference—to the oil companies so that the price of petrol remained unchanged. Most state governments have since cut out the subsidy but Queensland still subsidises the full amount—now 8.354 c/L (the 8.1 c/L has been indexed by the CPI). Victoria pays 0.429 c/L and the Northern Territory 1.1 c/L.<sup>11</sup> Subsidies also apply in northern New South Wales (in six designated regions that move south from the Queensland border), and non-metropolitan regions of South Australia.

## **Petrol prices in Australia**

Petrol price information is widely available—probably now more so than ever before. Petrol prices and price data series in a number of formats—recent and archived prices—are shown on a number of websites including the AAA, the major oil companies such as Mobil, Shell, BP & Caltex, the ACCC and the AIP. Petrol prices are also published by the Australian Bureau of Statistics (ABS). Recent average capital city unleaded petrol prices trends are shown in Figure 3. The price movements in Figure 3 are compared to movements in the IPI (see Section on the significance of the IPI).

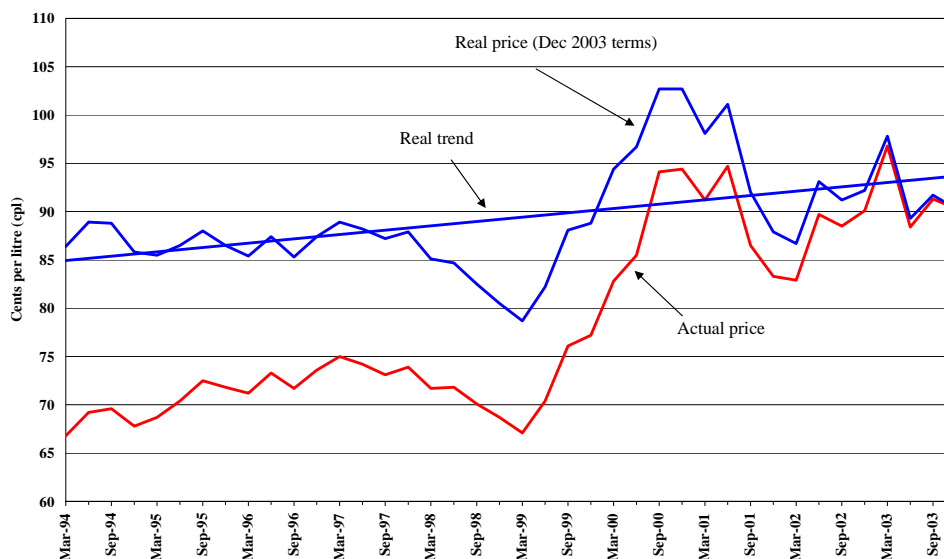
Figure 3: Average capital city petrol prices (April 1998 to December 2003)



Source: Australian Automobile Association [www.aaa.asn.au](http://www.aaa.asn.au)

The price data clearly show the volatility and movement of unleaded petrol prices over the last six years.<sup>12</sup> An analysis of prices in real terms indicates price increases have only been relatively modest over the last decade. Although average capital city prices have increased from the March quarter 1994 to the December quarter 2003 in actual terms from 66.8 to 90.3 c/L, an increase of 35.2 per cent, the increase in real terms (after removing the effect of inflation) of 4.5 per cent over this period has been modest. Average capital city retail prices over the last decade in both actual and real terms, are shown in Figure 4.

Figure 4: Average capital city petrol price trends



Data Sources: ABS (6401.0, 6403.0)

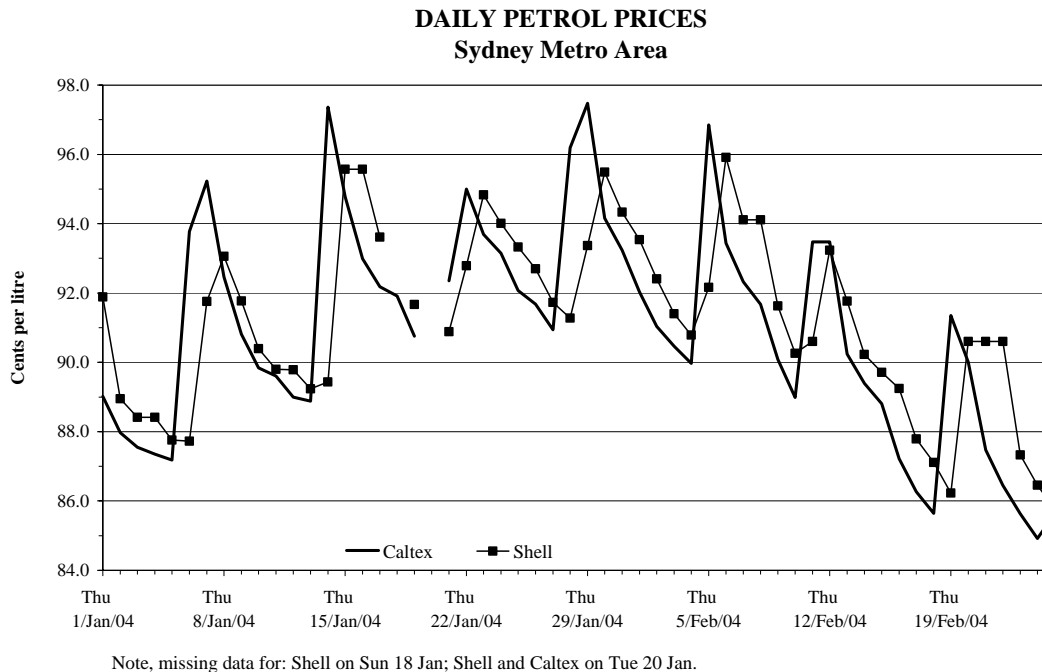
In addition to the above data, there is a plethora of information explaining the background to petrol pricing and the rationale for petrol price fluctuation. For example, the ACCC site has comprehensive links to information relating to petrol price cycles, factors affecting petrol prices, what determines petrol prices in Australia and country petrol prices (see [Petrol price information](#)).

### Metropolitan price cycles

The price cycle in the Sydney metropolitan market is shown in Figure 5. Price cycles are also a feature of the metropolitan markets in Melbourne, Brisbane, Adelaide and Perth. The data shows clearly for two of the major oil companies—Caltex and Shell—a regular cycle of pricing with Caltex leading Shell to the low point in the cycle by a day. The data for the period shown from early January 2004 to mid February 2004 demonstrates that the low point in the cycle usually occurs in the early part of the week with the high part of the cycle occurring towards the latter part of the week.



Figure 5: Price cycles Sydney



Source: AAA

### City/country price differential

Country petrol prices are usually higher than in the major metropolitan retail outlets. There have been recurring claims of profiteering because of this differential. There are however reasons for the price differential. A country service station typically sells less than half the amount of fuel of a metropolitan service station. Hence there is less opportunity to reduce the operating margin on fuel sales taking into consideration the overall viability of the business. Furthermore, there are generally lower sales of higher profit non-fuel items in the country. Another factor is that competition in the country is less intense than in city areas and consumers cannot benefit from the significant discounting associated with pricing cycles that are evident in city markets. Additionally there are higher distribution costs associated with a country retail outlet. Because of the wide geographic spread of country service stations and the relatively small quantities they sell, it is often impractical to supply these service stations directly from terminals. Consequently, most country service stations are supplied by distributors who incur their own operational costs which they seek to recover.

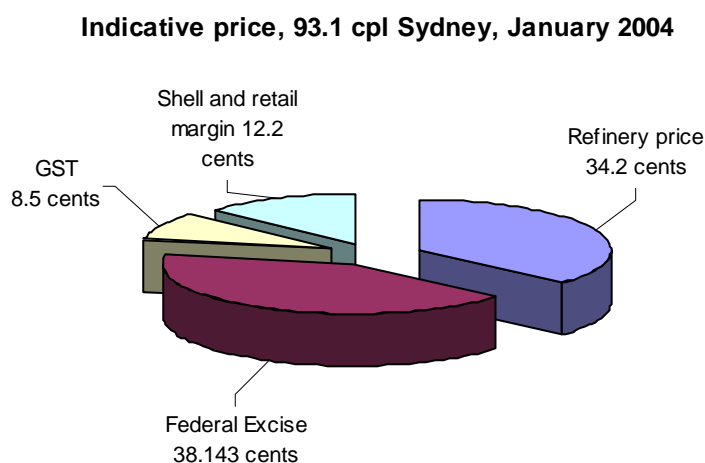
In an effort to compensate country people for the higher costs of fuel caused by the imposition of the GST, the Commonwealth introduced a Fuel Sales Grant Scheme (FSGS) whereby registered retailers were provided with grants of one cent per litre in non-

metropolitan zones and two cents per litre in so-called remote zones. The scheme was introduced on 1 July 2000 as part of *A New Tax System*.<sup>13</sup> In January 2004, the Government proposed the FSGS end from 1 July 2006 and the funds be used to improve land transport infrastructure in regional and outer metropolitan areas. It is readily apparent that it was difficult for the consumer to see benefit given the rebate was so small in relation to the retail price. Some commentators had suggested it was difficult to see if the rebates had in fact been passed onto the consumer, but the ACCC was unable to confirm this in one of its investigations.

## Fuel price dissection and indicative prices

Whilst there is a wealth of information available to the general public on petrol pricing as outlined above, less information is now available on fuel price *components*. The AIP previously published an indicative price for the major capital cities comprising a number of components—petroleum product excise, state franchise fees, refinery feedstock, and the margins of the oil refiner, the marketer and retailer. This practice was discontinued in 1998 coinciding with the abandonment of the setting of a maximum endorsed wholesale price for petrol and diesel by the ACCC. The provision of the components of an indicative petrol price did not head off the recurring call for Federal and State inquiries into petroleum product pricing and repeated claims of profiteering by the oil majors. The Shell Company now publishes an indicative price comprising a refinery price, tax and the Shell and retail margin (see [www.shell.com.au](http://www.shell.com.au)). Pricing components of domestically refined petrol now available are shown in Figure 6.

Figure 6: Petrol price components



Source: Shell Australia [www.shell.com.au](http://www.shell.com.au)

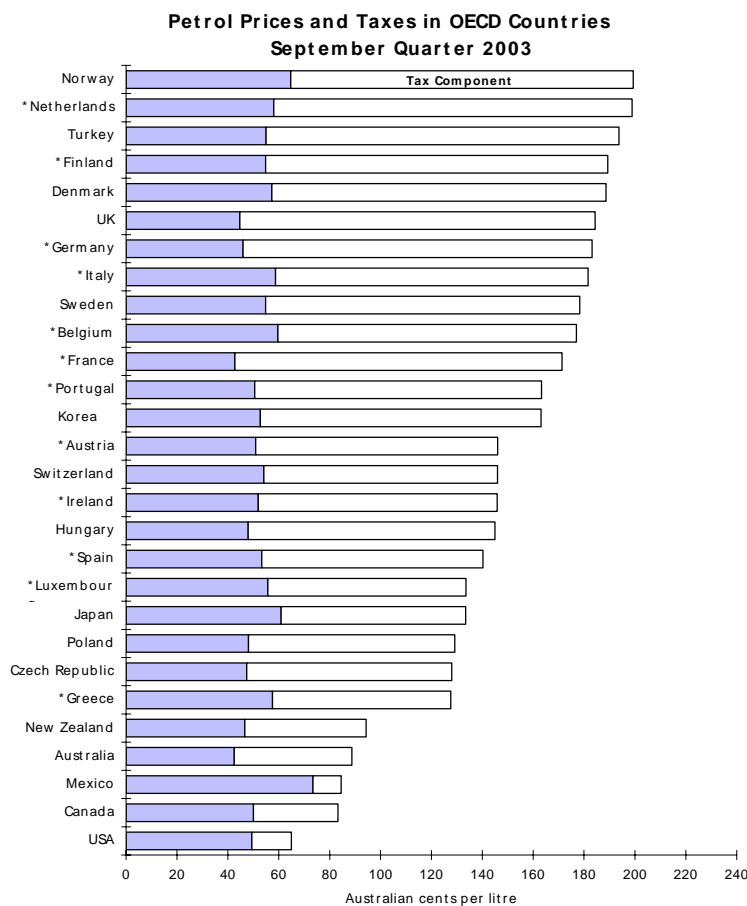
The refinery price includes the cost of purchasing crude oil and the refinery margin. Crude oil is the basic feedstock for the manufacture of refined petroleum products (including

petrol and diesel) and its price has a major bearing on petrol pump prices (see Appendices B and C for more information on crude oil pricing in Australia and the Australian refining industry).

### International petrol price comparison

Australia's retail petrol prices remain amongst the lowest in OECD countries. For example, in the September quarter 2003, Australia had the fourth cheapest petrol prices as shown in Figure 7. Additionally, despite the fact that taxes comprise some 50 per cent of the indicative petrol price (see Figure 6, Petrol price components), petrol taxes in Australia rank as the fourth lowest in OECD countries.

Figure 7: Petrol prices in OECD Countries



Source: Department of Industry, Tourism and Resources. Note \* Country now reporting in Euro currency.

## Current and emerging issues

A number of issues related to petrol pricing are addressed under the following headings. These include petroleum product retailing, the entry of supermarkets into retailing and the effects of new fuel standards.

### Petroleum product retailing

Petroleum retailing and marketing are dominated by the major oil refiners in Australia (see Appendix C)—Mobil, Shell, BP and Caltex.<sup>14</sup> These refiners are in turn owned by the world's largest, second largest, third largest and eighth largest oil companies respectively—ExxonMobil, Royal Dutch/Shell Group, BP PLC and ChevronTexaco.

According to the Australian Institute of Petroleum (AIP), there were around 8300 service station outlets as at the end of 2000<sup>15</sup> (see [Service Station link](#)). The AIP survey details the types of service stations operating in the retail market. These include service stations operated by:

- the refiner-marketer (direct operation, commission agency or similar and franchise)
- the owner-dealer supplied ex-terminal by an oil major
- the independent networks
- the supermarket networks, and
- various types of distributors (with refiner-marketer equity, with refiner-marketer branding and other non-branded sites).

Often petrol price discussions do not distinguish between the upstream—that is oil and gas exploration, development and production—and downstream sectors, which includes petroleum refining, marketing and retailing. Whilst oil majors have equity in both sectors, the economics of these sectors have decidedly different characteristics. For example, crude oil price increases do not necessarily lead to higher profitability in the downstream sector.

Whilst there are a number of factors currently affecting petrol retail prices (see Section on 'Factors affecting petrol prices') competition between the retail outlets is also a determinant. The retail outlets of the 'refiner-marketers' and those 'supplied by a distributor with refiner-marketing equity groupings' have probably drawn most scrutiny and attracted most critical comment from consumer bodies over pricing issues.

The refiner-marketers—the oil majors—directly control only a very small number of petrol retail sites (175), because of the legislative constraints of the *Petroleum Retail Marketing Sites Act 1980*. However they exert a broader influence when their close

business associations with other categories such as commission agencies, or similar (140), franchise (2018) and distributor with refiner-marketer equity (2200) are included.

## **Trends emerging in the petroleum retailing sector**

There have been significant changes since the AIP service station survey undertaken in 2000, especially following the recent forays of Coles into petrol retailing in Australia. Woolworths is already firmly established in the petroleum retailing sector having opened their first petrol retail outlet in 1996.

Prior to the entry by the Woolworths chain into petrol retailing, competition with the oil majors was largely provided by the independent networks. However, the number of retail outlets operated by these networks was small in comparison to the retail outlets linked to the oil majors.

The oil majors claim that petroleum refining, marketing and retailing have not been a highly profitable business. As a result, there have been significant changes over the past decade or so including the rapid decline in the number of petrol retail outlets—down from around 20,000 in the 1970s to the current 8000 or so. Further, petroleum retailing is now closely associated with retail convenience outlets and substantial income is generated from non-fuel sales in most petrol retail outlets.

Probably of most significance to petrol retailing in the past decade is the entry of the major supermarket chains. Woolworths entered the petrol retailing market in October 1996 at Dubbo, New South Wales. The strategy revolved around providing discounts on petrol prices in association with a threshold level of grocery purchases from their supermarkets. Prior to an announcement of a joint venture with Caltex<sup>16</sup> in late 2003, Woolworths had built a national network of around 290 petrol retail sites. The Woolworths venture with Caltex was a response to the Coles/Shell petrol retailing alliance strategy announced earlier in 2003.

The Woolworths/Caltex association aims to extend a discount petrol offer to customers nationwide at up to 450 service stations. The Woolworths/Caltex venture is subject to regulatory review by the ACCC, third party consents and execution of transaction documentation. The proposed final arrangements would see all of the Woolworths sites become jointly branded while Caltex would jointly brand 130 of its sites that are near Woolworths stores. It is expected the Caltex sites involved in the venture will include company-operated sites and franchisees selling fuel under a commission agency agreement. At the time of the announcement Caltex indicated it would continue to support Caltex franchisees within the remaining Caltex and Ampol network of about 1650 service stations. However, recent press reports indicate Caltex franchisees are far from happy with the Woolworth/Caltex association. A group of Caltex franchisees has set up an entity called the Caltex Ampol National Action Group, which has taken legal action against Caltex for what it claims is a breach of franchise agreements, unconscionable conduct and breach of fiduciary duty. The group is seeking unspecified damages stemming from the

adverse commercial impact on Caltex franchisees that are not included in the petrol discount scheme with Woolworths. The Federal Court has ordered both parties to attend private mediation in order to achieve an outcome.<sup>17</sup>

Prior to the Woolworths/Caltex joint venture, Coles Myer and Shell had announced a commercial alliance in petrol retailing. The alliance, when fully rolled out, will see a Coles Myer subsidiary become operator of Shell's core retail property network of 584 service stations across Australia. The roll out commenced with around 150 sites in Victoria from July 2003 and is expected to be completed nationally by mid 2004. Shell will supply fuel products and Coles Myer will purchase the rights to operate Shell sites from multi-site franchisees for a total amount of less than \$100 million.<sup>18</sup> Coles Myer have matched the existing Woolworths discount fuel offer by providing a 4 c/L discount on Shell when customers spend more than \$30 at Coles or BiLo supermarkets and Liquorland. In addition, Coles Myer has added additional Fly Buy points to purchases from supermarkets, liquor and fuel purchases.

The independent franchise supermarket chain IGA also entered into the petrol discounting market in late 2003. The chain has offered a similar discount, however only available on Fridays, to the Woolworths/Caltex and Coles Myer/Shell alliance on any petrol purchase. IGA had trialled its original petrol discount offer in Queensland and it was extended in late 2003 to New South Wales, South Australia, the ACT and the Northern Territory. IGA maintains its offer is superior to that offered by Coles Myer/Shell and Woolworths/Caltex outlets as customers can buy their petrol at any major fuel chain or from independents and qualify for a rebated discount.<sup>19</sup>

Independent retail outlets and the Service Station Association Ltd have expressed concern regarding the alliances of the supermarket chains with the oil majors. They claim that the discounts currently being offered by the alliances—including where, in a number of cases, retail prices are below wholesale—has the effect of forcing independents from the market thus substantially reducing competition. They maintain that the ability of motorists to be able to enjoy cheap petrol rests with the continuation of diversity of suppliers and hence diversity of competition in the market place. They conclude that if independent operators can't survive, then neither would effective competition, and prices will inevitably rise.<sup>20</sup>

Whilst the ACCC was aware of claims that the discount schemes being offered by the supermarket/oil major alliances would reduce the number of independent operators, it maintains that a number of factors had seen the number of retail outlets fall from 20,000 in the 1970s to about 8000 on 2003. It found that the introduction of the shopper docket schemes—associated with the alliances of the supermarket chains with the oil majors—had encouraged competition and had lowered prices in the retail fuel market.<sup>21</sup>

A major problem for the independents and the oil majors not associated with the supermarket alliances—BP and Mobil—is competing in a market where the discounts offered in petrol retailing are being more than offset by increased sales and the higher

margins applying in the broader supermarket chain market. Petrol retailing is a notoriously low margin business.

Gross margins run at only 3 or 4 cents a litre compared with 25 per cent-plus gross margins in Woolworths supermarkets. On its current volume, if the most common 4 cents discount per litre were applied to all sales, Woolworths would sacrifice about \$70 million of petrol margin. That would make sense if the discounts generated more than \$270 million a year of additional supermarket sales, which it appears they do. It is this relationship which makes the petrol discount concept work—the cost of the discount is small relative to the margins generated on increased supermarket sales.<sup>22</sup>

### **Deregulation of the refined petroleum products market**

The second term Howard Government introduced a number of reforms to the refined petroleum products market. Firstly, there was the abandonment of the setting of the maximum endorsed wholesale price for petrol and diesel by the ACCC. This had involved the ACCC and its predecessor, the Prices Surveillance Authority (PSA), setting a maximum wholesale price for petrol and diesel for declared companies (refiners/marketers). Second, the oil majors committed to providing access to bulk terminals owned by the refiners, thus allowing bulk purchases of refined product by interested parties on commercial terms. Bulk purchases were however not available to service station franchised operators who operate under exclusive supply contracts. As part of the deregulatory process at that time the Government intended to repeal the *Petroleum Retailing Marketing Franchise Act 1980* and the *Petroleum Marketing Sites Act 1980* and establish a mandatory Oilcode. These further reforms did not proceed as agreement between all stakeholders was not forthcoming.

The third Howard Government has revisited the deregulatory process. In March 2003 the Minister for Industry Tourism and Resources released a package aimed at replacing the 1980 Franchise and Sites Acts with a national Oilcode. The Oilcode, which would apply to all market participants, includes a national terminal gate price to promote transparency, minimum standards for petrol re-selling agreements and a dispute resolution scheme.<sup>23</sup>

### **Fuel standards**

The implementation of increasingly tighter fuel standards are likely to have an impact on the price motorists pay for fuel in the coming years. Australian standards are being aligned with European standards through the Commonwealth's *Fuel Quality Standards Act 2000* which established the first national regulations to ensure consistent fuel quality across Australia. The Commonwealth is currently undertaking a review of this Act and assessing whether the cleaner fuels which underpin the introduction of improved vehicle technologies are consistently available.<sup>24</sup>

## Conclusions

There are around 8,000 service station outlets in Australia—down from around some 20,000 in the 1970s. Whilst retail outlet numbers continue to decline, probably the most significant change in the petrol retailing sector in Australia during the last few years is the concerted forays of the supermarket chains into the market with discount petrol offers. While Woolworths was already firmly established in the petroleum retailing sector having opened their first petrol outlet in 1996, Coles Myer entered the market and both Woolworths and Coles Myer formed alliances with an oil major—Woolworths with Caltex and Coles with Shell—during 2003. Additionally the independent supermarket chain IGA also entered into a petrol discounting scheme in late 2003.

Petrol retailing has been a notoriously low margin business. The entry of the supermarket chains into such a business is based on a model of increasing sales in the supermarket chains—where margins are higher—whilst sacrificing even greater proportions of the low margins available in petrol retailing. These alliances present commercial pressures for independent retailers and even the oil majors—BP and Mobil—who are outside the alliances.

Petrol prices and archived data are readily available from a number of websites including the oil majors, consumer bodies and motoring organisations such as the AAA. In addition, there is a plethora of information contained on a number of these sites; in particular the ACCC providing information relating to petrol price cycles, understanding petrol price information, what determines petrol prices in Australia and the city-country price differential.

The price data show that petrol prices are volatile and move broadly in line with world crude oil prices. Other factors currently affecting petrol prices include changes in international prices for refined products, movements in the Australian/US dollar exchange rate, the level of federal taxes (i.e. excise and GST and State government rebates), local price cycles and retail outlet competition. Whilst petrol price rises are of particular concern to motorists, an analysis of prices in real terms indicates price increases have only been relatively modest over the last decade. Furthermore, fuel prices in Australia remain amongst the lowest in OECD countries.

The international price of imported refined product (petrol and diesel) largely determines the Australian refinery wholesale price—a benchmark price often referred to as the import parity indicator (IPI) The IPI is commonly confused with the term 'world parity pricing' which referred to a number of previous Australian Governments' pricing formula for crude oil prior to the deregulation of the crude oil market in 1988. Whilst the IPI is no longer determined by the ACCC it is used to monitor price trends by motoring organisations such as the AAA.

There have been a plethora of inquiries into the Australian petroleum products market—some forty seven—over the last few decades. These have come about following high



profile media claims and counter claim of oil company profiteering and price collusion amongst industry participants. Despite this and the fact that there have been relatively few measures implemented as outcome from the above inquiries, there are recurring calls for additional regulation of the market or for further inquiries when petrol prices hover towards the \$1 per litre mark.

## **Appendix A: Inquiries into the petroleum products market**

Following the announcement of the Fuel Taxation Inquiry terms of reference in 2001<sup>25</sup>, a number of commentators made reference to the large number of inquiries into petroleum products over the past few decades. One of the background papers produced in association with the Fuel Taxation Inquiry outlined documentation of previous inquiries and reports—some forty seven—on petroleum products (see: [Fuel inquiries](#)). Most previous reports into petroleum products have focussed on pricing issues. In addition to these, the Australian Labor Party conducted two committees of inquiries into the Australian petroleum industry in 1991 and 2001. Also the ACCC has prepared further reports since the Fuel Taxation Inquiry into national petrol price movements and an assessment of reducing fuel price variability.

Since 1939, when price controls were introduced at the outbreak of World War II, there has been continuously some form of government regulation of petroleum products in Australia. Except during war, the Commonwealth's role has been confined to surveillance or monitoring of prices. The Commonwealth established the Prices Justification Tribunal in 1973. The Tribunal was succeeded by the Petroleum Products Pricing Authority in 1981 and the Prices Surveillance Authority (PSA) in 1984. The role of the PSA was absorbed into the responsibilities of the ACCC in 1995. Formal price surveillance of oil companies ceased from 1 August 1998, as was the setting of the maximum endorsed wholesale price. These arrangements were replaced by an independent price monitoring system for 100 country towns which is monitored by the AAA and its constituent members. The ACCC continues to monitor petrol prices, with a particular focus on hot spots.<sup>26</sup>

Despite the numerous inquiries and reports that have been conducted, much contention still remains, especially in relation to petrol pricing. It is apparent that when petrol prices edge towards the \$1 per litre mark, it isn't long before some form of regulatory intervention into the market is called for or yet another investigation or inquiry is demanded based on the claim of profiteering by oil companies. For example, profiteering claims were made in early 2004 by the Service Station Association.<sup>27</sup>

## **Appendix B: Crude oil pricing in Australia**

From 1977 to 1 January 1988, Australian crude oil production was priced via an import parity pricing formula. This effectively took the prevailing world crude price into account but applied a number of other factors such as the cost of importing crude oil. Up until 1977, the price of crude oil produced in Australia was largely set independently of the world market. The world crude oil market experienced a severe shock in the early seventies, with the West Texas Intermediate price rising from an average of \$US3.87 a barrel to \$US10.37 a barrel in 1974. The rationale in Australia at that time was that the indigenous price of crude should be cheap, as it was being produced in plentiful supply from the then relatively new Gippsland basin (in Bass Strait) oil fields. However, as time progressed Australia moved to the concept of import parity pricing.

It has been argued that attempts to hold down the price of Australian crude oil artificially in order to prevent increases at the retail level would have a number of adverse impacts. First it would induce Australian producers to export oil rather than supply the domestic market in order to take advantage of the higher international prices. Second, it would reduce the incentive to conserve a scarce resource—crude oil—which is already in decline in Australia. Finally, artificially holding down Australian crude oil prices would discourage investment in oil exploration and development with serious long-term consequences to our ability to supply our own needs.<sup>28</sup>

The then Hawke Government fully deregulated the domestic crude oil market on 1 January 1988 and as a consequence Australia now both sells and buys crude oil on the prevailing world market.

The ability of companies in Australia to trade internationally ensures that 'the' domestic price reflects 'the' international price, since any differences between the two prices would result in imports or exports as the case may be.

Unfortunately some commentators still refer to the term 'import parity pricing', which is now defunct, and they have been confusing this term with the IPI.

## Appendix C: The Australian refining industry

Australia currently has eight main refineries owned by the four major oil companies (Caltex, BP, Mobil and Shell) located in the capital cities—Sydney, Melbourne, Adelaide, Perth and Brisbane. These companies also have either crude oil or refined product terminals at most major Australian ports. The total capacity of the Australian refineries is around 860,000 barrels of oil per day (bbl/d), although Mobil Oil Australia announced in early 2003 that it intended to cease operations at its Adelaide Refinery at Port Stanvac which reduces overall capacity to 782,000 bbl/d. The capacities of the individual refineries including the mothballed Port Stanvac refinery are shown in Table 2.

**Table 2: Australian refinery capacities (bbl/d)**

<b>Company</b>	<b>Location</b>	<b>Capacity bbl/d</b>
Caltex/Ampol	Lytton, Qld	100 000
	Kurnell, NSW	116 000
BP/Amoco	Kwinana, WA	138 500
	Bulwer Island, Qld	86 500
Mobil	Altona, Vic	135 000
	Port Stanvac, SA	78 000
Shell	Geelong, Vic	119 000
	Clyde, NSW	86 000

Source: AIP

In relation to the Port Stanvac closure, Mobil Oil Australia<sup>29</sup> announced that this is a small refinery and under current market conditions cannot compete with the much larger lower cost regional Asian refineries. Mobil's Port Stanvac refinery has recorded significant financial losses over many years. Mobil however has also maintained that the international refining business has the potential to improve, and proposed to maintain the refinery in a condition that would allow a re-start should future operations be viable.<sup>30</sup>

Australia's refineries are dated and small compared to new capacity being brought on line in Asia. Australia's oldest refinery, at Clyde in NSW, was built in 1928. Most of the others were built in the 1950s and 1960s, the two newest being Lytton and Bulwer Island in Queensland, built in 1965. Major capital investment programs undertaken at most refineries in the early 1990s were largely related to the production of unleaded petrol. More recently major capital investment programs at some refineries have been directed at the production of cleaner fuels and further investment will be required at most refineries in order to produce product to comply with more stringent fuel standards.

The Australian petrol and diesel market comprises both domestically produced product and imports (see Table 1). To the consumer, the domestically produced and imported products are not differentiated. The two types of products must be price competitive: otherwise one could prevail over the other in the market.

## Endnotes

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