



**Australian Government**

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**The Treasury**

Senate Economics Legislation Committee

**Inquiry into the Price of Petrol in Australia**

Australian Treasury Submission

The views expressed in this submission are those of the Australian Treasury and do not necessarily reflect the views of the Treasurer or the Government.

September 2006

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## EXECUTIVE SUMMARY

The price of petrol in Australia is a combination of five main components: the international price of crude oil (40-50 per cent of the petrol price); the refiner margin (0-10 per cent)<sup>1</sup>; excise duty or customs duty (25-30 per cent); wholesale and retail costs and margins (5-15 per cent)<sup>2</sup>; and the goods and services tax (9 per cent).

The major determinant of the price of petrol in Australia is the **international price of crude oil**. It is the key input in the production of petrol; the largest element of the petrol price; and the key factor in underlying petrol price movements.

Crude oil is an international commodity, traded in global markets, with its price determined by international demand and supply. The international price of crude oil has increased significantly in recent years from around US\$27 per barrel in July 2002 to around US\$74 per barrel in July 2006, an increase of 176 per cent.

The increase in the international price of crude oil has been due to a variety of reasons, including increased international demand (particularly from China) and various international factors affecting supply, such as geopolitical tensions.

The increase in the price of crude oil has resulted in an increase in the international price of petrol, and a consequent increase in the retail price of petrol in Australia from around \$A0.85 per litre in July 2002 to around \$A1.33 per litre in July 2006.

The **refiner margin** (an industry term for the gross margin difference between the international price of petrol and the international price of crude oil) has fluctuated over time, reflecting international demand and supply factors in the petrol market, including increased demand for petrol and refinery capacity constraints.

In contrast to movements in the international price of crude oil, Government taxation on petrol has remained stable since the abolition of indexation of the excise duty on petrol in March 2001. Further, taxation of petrol has been declining as a proportion of the price of petrol as taxes have either been reduced or been constant in nominal terms as petrol prices have risen.

- **Excise duty (or customs duty on imported petrol)** is the second-largest component of the price of petrol in Australia, and is applied at a fixed rate of 38.143 cents per litre, following the Government's decisions in 2000 and 2001 to reduce the rate of excise duty on petrol by a total of around 8.2 cents per litre and remove excise indexation.
- The **goods and services tax (GST)** is levied on petrol at an ad valorem<sup>3</sup> rate, and accounts for around 9 per cent of the price of petrol.

**Wholesale and retail costs and margins** are another component of the price of petrol and have remained relatively stable over time.

Australia's petrol prices remain among the lowest in the OECD, largely due to the lower taxation imposed on petrol in Australia compared with other OECD member countries.

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1 The refiner margin is occasionally negative, and was actually - US\$2.97 in the week ending 1 September 2006.

2 Wholesale and retail costs and margins include the costs of wholesalers, distributors and retailers from the refinery gate to the petrol bowser, including freight/transport costs, administration and marketing costs, and the costs of running service stations such as wages, rent and utilities. This also includes a profit margin.

3 Ad valorem taxes are charged as a fixed proportion of the price of the commodity sold.

While the price of petrol has increased over the past 30 years, fuel expenditure has declined as a percentage of total household expenditure and households have greater capacity to purchase a wider range of goods and services.

Treasury's submission to this inquiry takes a broad perspective on the main factors affecting the price of petrol in Australia, primarily focusing on the international price of crude oil (and petrol); and the taxation arrangements applying to petrol in Australia (excise duty and GST), including comparison with other OECD countries.

Treasury's submission is intended to complement the Australian Competition and Consumer Commission's (ACCC) submission to this inquiry and accordingly, does not consider the various factors that affect movements in the price of petrol in local markets.

However, the submission outlines the role of the ACCC in its enforcement of the *Trade Practices Act 1974* (TPA), including discussion of the ACCC's general powers in relation to prohibiting anti-competitive conduct under Part IV of the TPA and the ACCC's price monitoring role.

In relation to the ACCC's price monitoring role, the submission notes the ACCC's current price monitoring activities and provides an overview of the powers provided to the Treasurer under the TPA to direct the ACCC to undertake additional prices surveillance.

However, in that context, Treasury considers that formal prices surveillance may have harmful side effects on the efficiency of an industry and may facilitate price coordination, not competition, and create an incentive for companies to charge the maximum notified price (rather than a lower one).

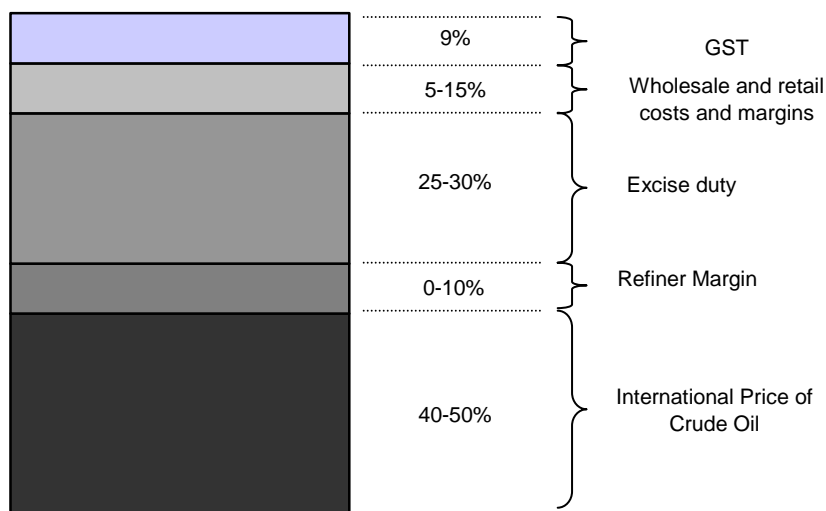
# THE PRICE OF PETROL IN AUSTRALIA

## Components of the price of petrol

The price of petrol in Australia is comprised of five main components: the international price of crude oil; the refiner margin; excise duty; wholesale and retail costs and margins; and the GST.

The following diagram broadly illustrates these components of the price of petrol, based on a price at the bowser of \$1.35 per litre.<sup>4</sup>

Diagram 1: Approximate components of the price of petrol in Australia



The international price of crude oil is the largest component of the price of petrol in Australia, comprising approximately 40-50 per cent of the retail petrol price. The international price of crude oil is denominated in US\$, and accordingly, movements in the A\$/US\$ exchange rate have an impact on petrol prices over time.

The refiner margin is an industry term referring to the difference between the international price of petrol and the international price of crude oil.<sup>5</sup> It is a gross margin and is not the profit that the refiner makes, as it does not take into account refiners' costs of production. The refiner margin commonly comprises around 0-10 per cent of the price of petrol in Australia, although at times it can be negative.

Excise duty (or customs duty on imported petrol) is the second-largest component of the price of petrol in Australia, comprising 25-30 per cent of the retail petrol price. It is applied as a volumetric tax (per litre of product) at a fixed rate of 38.143 cents per litre. Consequently, as the price of petrol rises, this share of the petrol price will fall.

Wholesale and retail costs and margins are the next main component of the price of petrol, accounting for 5-15 per cent of the retail price of petrol, and include the costs of

<sup>4</sup> These percentages are approximations only and may vary over time.

<sup>5</sup> In Australia, the most relevant benchmark for crude oil is Malaysian Tapis Crude Oil, and the most relevant petrol benchmark is the Singapore MOGAS 95. This submission also makes reference to West Texas Intermediate crude oil (the United States benchmark), which is a useful proxy for the global crude oil price.

wholesalers, distributors and retailers from the refinery gate to the petrol bowser, including freight/transport costs, administration and marketing costs, and the costs of running service stations such as wages, rent and utilities. This also includes a profit margin.<sup>6</sup>

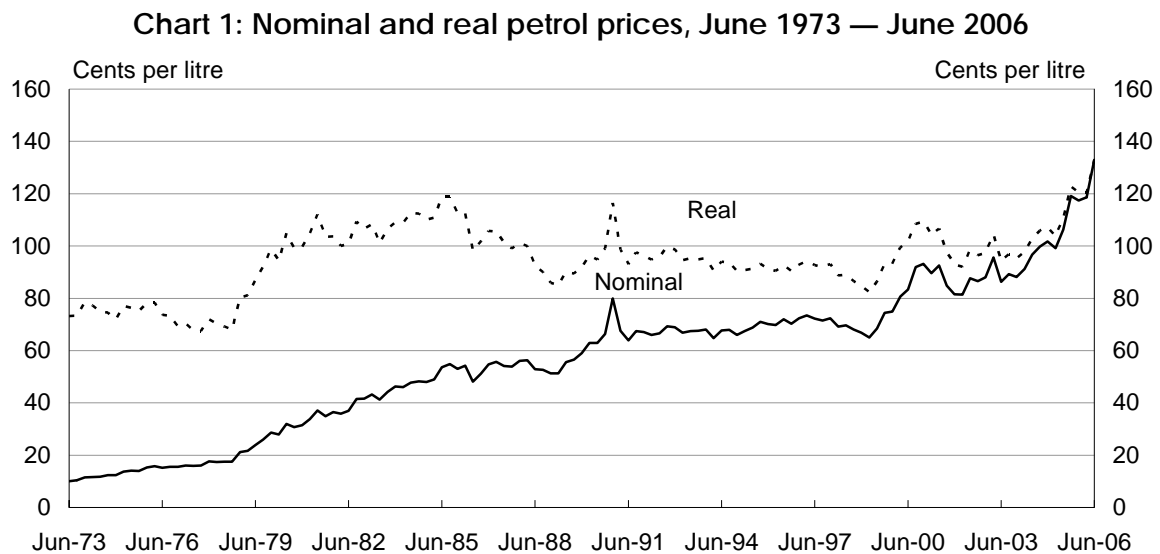
The GST is also levied on petrol at an ad valorem rate, and accounts for around 9 per cent of the retail price.

This submission considers each of these components of the price of petrol and provides a broad overview of the key determinants of the price of petrol in Australia.

There are various other factors such as domestic market conditions that affect the price of petrol. Treasury notes these factors are outlined in the ACCC's submission to this inquiry and does not explore these issues further.

### Movements in petrol prices

As shown in Chart 1 below, the nominal retail price of petrol in Australia has increased from around \$0.10 per litre in the early 1970s to around \$1.33 per litre in the June quarter 2006. Petrol prices have also increased in real terms over this period, with petrol in the early 1970s around \$0.80 per litre in today's prices.



Source: ABS Cat. No. 6401.0, ABS Cat. No. 6403.0 and Australian Treasury derived.

Given crude oil prices are denominated in US dollars, the A\$/US\$ exchange rate has also been an important determinant in petrol prices over this period. Since its high in the 1970s, the Australian dollar has declined by 50 per cent against the US dollar, contributing to the higher petrol prices in Australian dollar terms.

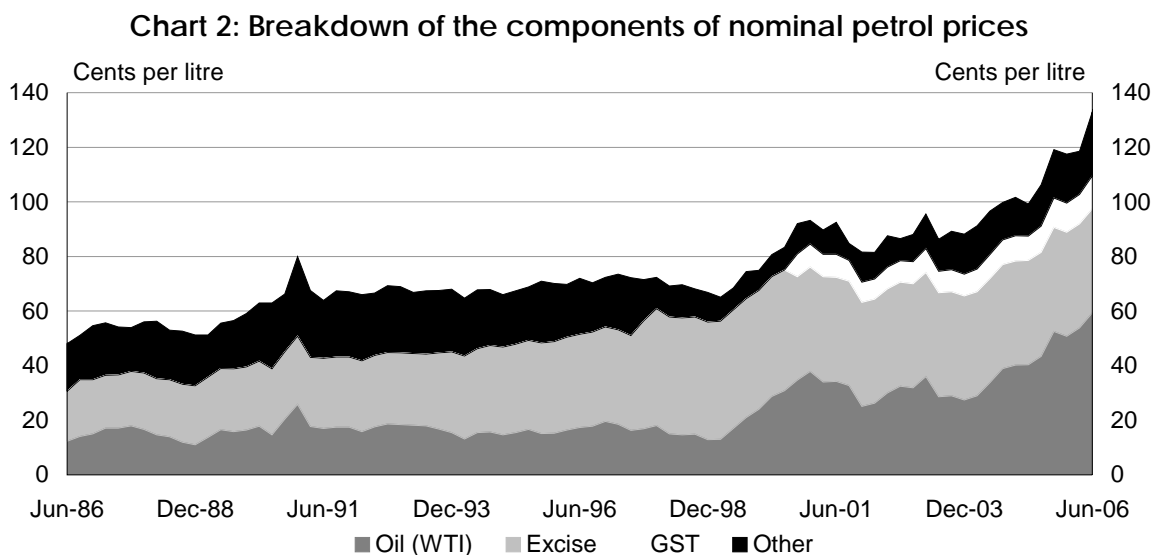
However, from July 2002 to July 2006, the A\$ has appreciated against the US\$ by around 36 per cent, serving to temper the recent increase in the price of petrol in Australia.

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<sup>6</sup> Australian Institute of Petroleum, submission to the Inquiry into the Price of Petrol in Australia, August 2006 p 26.

## Trends in the components of the price of petrol

The international price of crude oil has been an increasingly large component of the price of petrol in Australia over recent years and has been the primary driver of the rise in petrol prices over the past four years, with West Texas Intermediate crude oil prices rising by around 98 per cent in Australian dollar terms, since the June quarter 2002 (see Chart 2).



Source: ABS Cat. No 6401.0, ABS Cat. No. 6403.0, Reuters and Australian Treasury derived.<sup>7</sup>

## Household expenditure on fuel

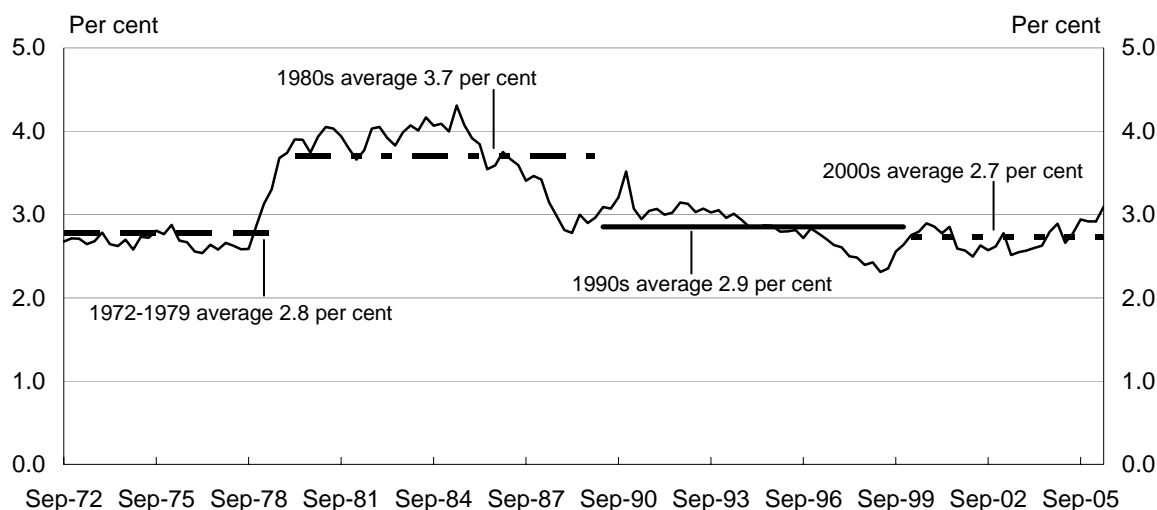
While the price of petrol has increased over the past 30 years, expenditure on petrol as a percentage of total household expenditure is currently at a similar level to that recorded 30 years ago and below levels recorded in the 1980s and 1990s.

Over the period from the September quarter 1972 to the December quarter 1979, households spent on average 2.8 per cent of their nominal total expenditure on fuel. This same average expenditure figure was 3.7 per cent throughout the 1980s, 2.9 per cent throughout the 1990s and 2.7 per cent over the period from the March quarter 2000 to the June quarter 2006 (see Chart 3).

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<sup>7</sup> This chart uses West Texas Intermediate for the price of crude oil.

**Chart 3: Fuel expenditure as a percentage of total household expenditure  
(nominal, seasonally adjusted)**



Source: ABS Cat. No. 5206.0.

A number of factors are likely to have influenced trends in average household fuel expenditure over recent decades. Strong growth in employment and low inflation has delivered strong real household income growth. As incomes have grown, the share of total expenditure on household necessities, such as fuel, has fallen since the 1980s as households have had greater capacity to purchase a wider range of goods and services.

## THE INTERNATIONAL PRICE OF CRUDE OIL

Crude oil is the key input to the production of petrol and comprises approximately 40-50 per cent of the price of petrol in Australia. Crude oil is a global commodity, traded in global markets, with its price determined by the interaction of international demand and supply.

Australian refineries use domestically sourced crude oil to meet some of the domestic demand for fuel products, although domestic oil production is insufficient to supply all of our transport needs. Australian refiners also purchase crude oil and refined products from a number of other countries, including Vietnam, Malaysia, Indonesia and Saudi Arabia. Australia also exports oil.<sup>8</sup>

- There is no specific indirect tax or tariff on the importation of crude oil where it is used as refinery input. Australian crude oil is subject to either crude oil excise or Petroleum Resource Rent Tax (PRRT), resource rent royalty, or state or territory royalties.
- These taxes are designed to provide a return to the community generally for the exploitation of natural resources. As crude oil is sold in a competitive market, these resource taxes have no effect on the price of crude oil but rather affect the return obtained by the producer.

There are many different types of crude oils worldwide. Australian crude oils tend to be light sweet crude, i.e. they are non-sulphurous, South East Asian crude oils tend to be sweet crude and Middle East crude oils tend to be sour crude, i.e. high in sulphur.

<sup>8</sup> The main destination for Australia's oil exports is Singapore, followed by New Zealand and South Korea.



Australian light sweet crude oils are unsuitable for producing the range of refined petroleum products required in Australia. As such, the import and export of oil reflects the qualities of oils produced in Australia compared to the qualities needed by refiners to produce a full range of petroleum products.

Australian light sweet crude oils are sold for a premium price in North Asia and the United States. The heavier oils imported by Australia are cheaper oils.

The import and export of oil also reflects the geographic size of Australia and the location of oil fields at opposite corners of the continent (Bass Strait and North West Shelf). Oil produced in the North West Shelf area is predominantly exported.

Australia is a net oil importer to the value of around 1½ per cent of Gross Domestic Product (GDP). Therefore, we have been negatively affected by the recent increases in oil prices to some extent. However, this is more than offset by Australia being a net energy exporter at around 1¾ per cent of GDP and benefiting from the increase in prices of non-oil based energy resources.

According to the Australian Bureau of Agriculture and Resource Economics (ABARE)<sup>9</sup> data, the value of Australia's imports of crude oil and petroleum products rose from \$15.1 billion in 2004-05 to \$21.1 billion in 2005-06. This is more than offset by an estimated rise in the value of Australia's overall energy exports from \$28.4 billion to \$39.3 billion over the same period. ABARE notes that Australia currently exports 52 per cent of the energy it produces, with projections for this to increase further to 61 per cent by 2029-30 on the back of growth in export demand for coal and liquefied natural gas.

The following table shows the world's top ten oil producers, consumers, exporters and importers in 2005.

**Table 1: The Worlds top ten oil producers, consumers, exporters and importers in 2005**

| Producers    | mb/d  | % of world | Consumers    | mb/d  | % of world | Exporters    | mb/d | % of world | Importers | mb/d  | % of world |
|--------------|-------|------------|--------------|-------|------------|--------------|------|------------|-----------|-------|------------|
| Saudi Arabia | 10.89 | 13         | US           | 20.66 | 25         | Saudi Arabia | 8.84 | 18         | US        | 12.99 | 26         |
| Russia       | 9.48  | 11         | China        | 6.59  | 8          | Russia       | 6.82 | 14         | Japan     | 5.41  | 11         |
| US           | 7.47  | 9          | Japan        | 5.41  | 6          | Norway       | 2.69 | 5          | China     | 3.14  | 6          |
| Iran         | 4.24  | 5          | Russia       | 2.66  | 3          | Iran         | 2.66 | 5          | Germany   | 2.46  | 5          |
| Mexico       | 3.76  | 4          | Germany      | 2.60  | 3          | Venezuela    | 2.40 | 5          | S Korea   | 2.17  | 4          |
| China        | 3.62  | 4          | India        | 2.59  | 3          | UAE          | 2.35 | 5          | France    | 1.87  | 4          |
| Norway       | 3.06  | 4          | Canada       | 2.26  | 3          | Nigeria      | 2.35 | 5          | India     | 1.70  | 3          |
| Canada       | 3.01  | 4          | Brazil       | 2.18  | 3          | Kuwait       | 2.19 | 4          | Italy     | 1.66  | 3          |
| Venezuela    | 2.97  | 4          | S Korea      | 2.17  | 3          | Iraq         | 1.82 | 4          | Spain     | 1.57  | 3          |
| UAE          | 2.88  | 3          | Saudi Arabia | 2.06  | 2          | Algeria      | 1.71 | 3          | Taiwan    | 1.00  | 2          |
| World        | 84.3  | 100        | World        | 83.7  | 100        | World        | 50.0 | 100        | World     | 50.0  | 100        |

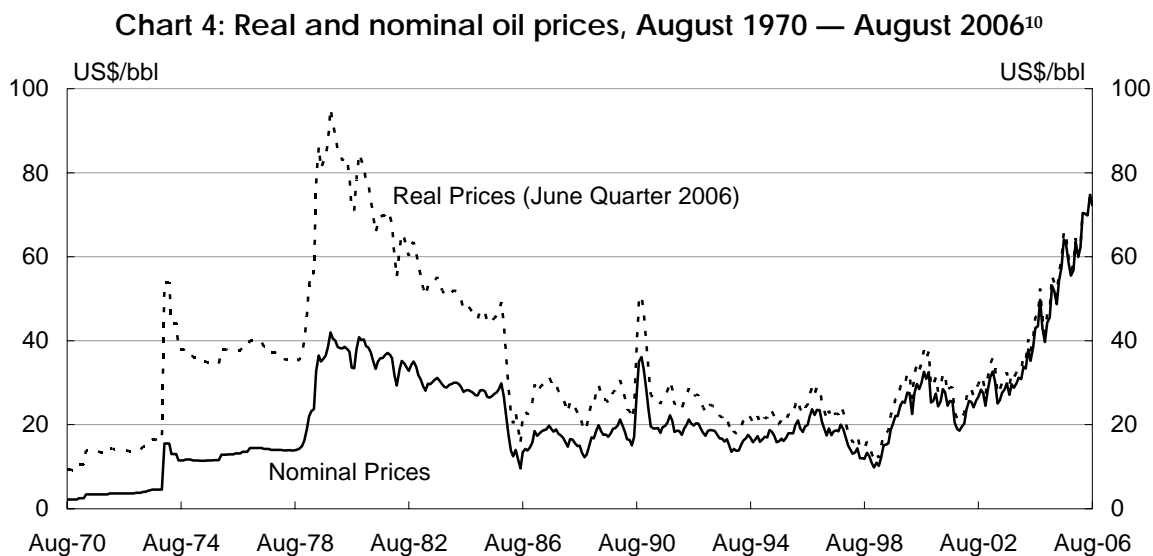
Source: International Energy Agency, BP Statistical Review, DB Global Markets.

9 ABARE, *Australian Commodities*, June quarter 2006.

## Movements in the price of crude oil

The international price of crude oil has increased significantly in recent years. The commonly quoted West Texas Intermediate (WTI) crude oil price has almost tripled since July 2002, reaching around US\$74 per barrel in July 2006.

However, in real terms, the price of oil remains below the peak associated with the second oil price shock in 1979, which was equivalent to around US\$94 per barrel in today's prices, as illustrated in Chart 4, showing movements in the real and nominal oil prices over the last 30 years.



Source: Reuters, Australian Treasury derived.

## International demand for crude oil

Unlike previous oil price shocks, an important factor behind the recent significant rise in crude oil prices has been the strong growth in international demand.

The recovery in world economic growth, following the global slowdown of 2001 and 2002, saw demand pick up strongly in 2003, with oil demand growing at its fastest pace in three decades.

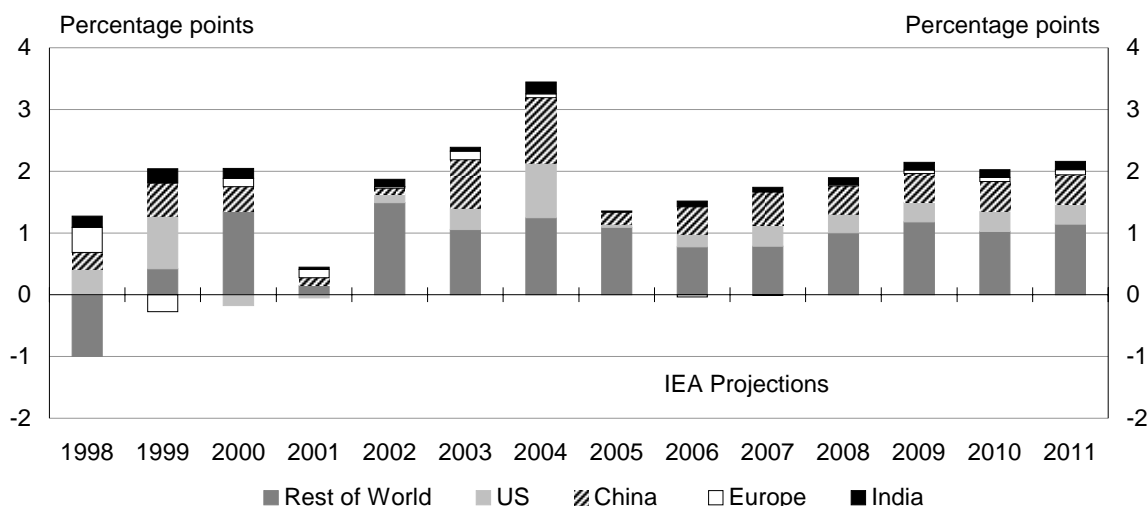
Underpinning this strong growth in oil demand has been the significant increase in consumption by the United States, China and South-East Asia. While only making up less than one-fifth of world oil consumption, China and other non-OECD member countries in Asia accounted for around half of the growth in world oil consumption over the last few years.

OECD countries were large contributors to world oil consumption growth during the 1980s and 1990s. However, since 2000 the OECD member countries' contribution has declined (see Chart 5), largely attributable to sluggish economic growth in Japan and many industrial European countries.

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<sup>10</sup> WTI was not traded electronically until 1983 and therefore, for the purposes of this chart, another indicator 'Brent oil' prices is used.

Chart 5: Contribution to world consumption growth



Source: International Energy Agency, Australian Treasury.

### International supply of crude oil

The notable increase in oil demand has placed considerable pressure on crude oil production capacity. With OPEC production capacity remaining static and oil demand increasing sharply between 2002 and mid-2004, excess capacity was reduced to historically low levels.

The International Energy Agency estimates that spare production capacity has declined from around 5.2 million barrels per day in 2002 to an estimated 2.6 million barrels per day in mid-2006. In this period, spare capacity reached a low of less than 1 million barrels per day.

The generally low level of excess capacity in global oil production reflects the low level of investment during the 1990s, when low real oil prices (see Chart 4) provided little incentive for oil companies to invest.

Despite higher oil prices over the last few years, world oil project investment has been relatively slow to respond. In addition, the rising costs of exploration and infrastructure have added to investment bottlenecks.

Further, supply stability remains a crucial determinant of overall risks in the current marketplace. Markets remain concerned over potential economic sanctions against Iran, political unrest in Venezuela and violence in the Middle East that may prompt a decrease in total OPEC crude oil exports.

While industry crude oil stocks remain slightly above the average of the past five years, geopolitical tensions and supply outages, such as ongoing violence in the Middle East and a shut-down in production in Alaska, continue to weigh on oil markets.<sup>11</sup>

Increasing exploration and production is the key to boosting non-OPEC oil supplies and raising OPEC spare capacity in the medium term.

- Current crude oil prices remain well above costs, encouraging producers to accelerate the completion of new projects. The International Energy Agency estimates that

<sup>11</sup> OECD International Energy Agency, *Oil Market Report*, August 2006.

company oil exploration and production investment budgets have risen by over 20 per cent in 2005 and 2006.

- Between 2006 and 2008, new facilities in non-OPEC countries capable of producing around 9 million barrels per day in gross terms are projected to come on line.<sup>12</sup>

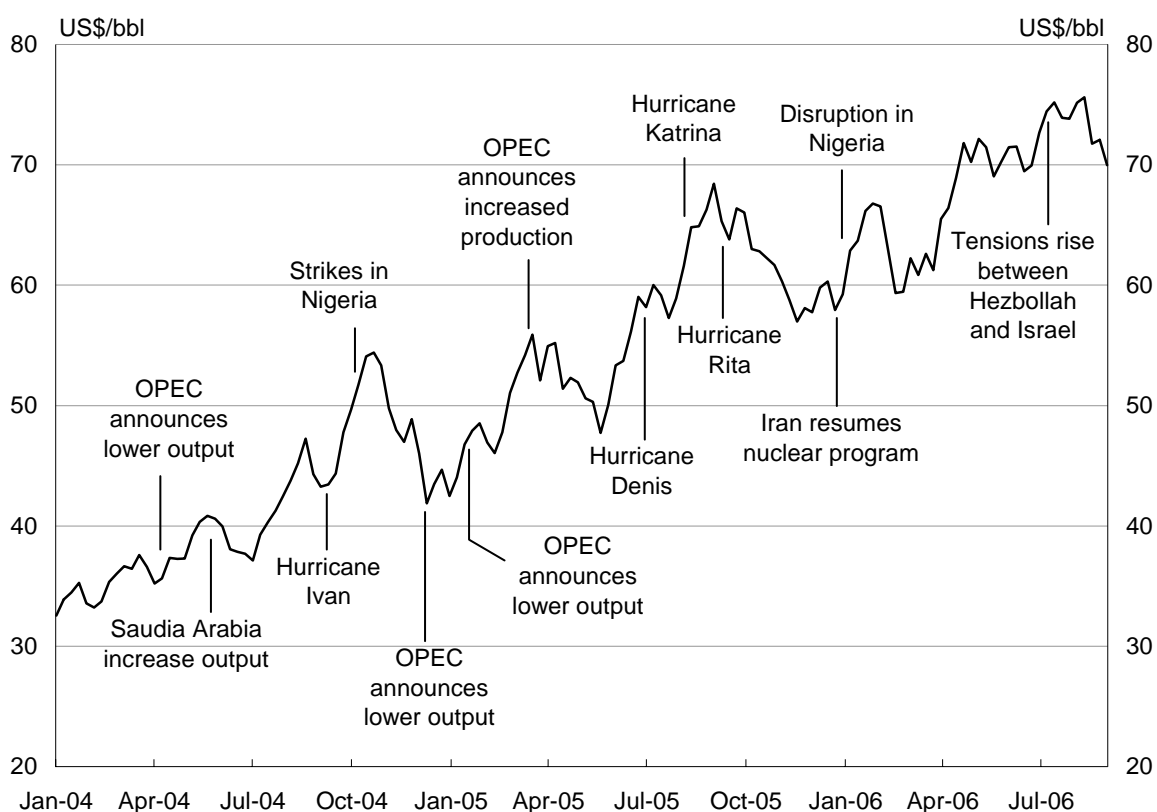
The International Energy Agency forecasts OPEC capacity to rise by around 10 per cent, to 36.3 million barrels per day by 2011 from an average of 33 million barrels per day in 2006.

### Crude oil price sensitivity

The combination of solid growth in crude oil consumption, low excess production capacity and risks to supply has caused oil prices to become highly sensitive to actual and potential disruptions to supply.

In that context, prices have risen sharply in response to events such as hurricanes and geopolitical tensions. Chart 6 shows the sensitivity of the price of WTI to various global events.

**Chart 6: West Texas Intermediate crude oil price and key events**



Source: Reuters, ABARE.

### Crude oil futures price

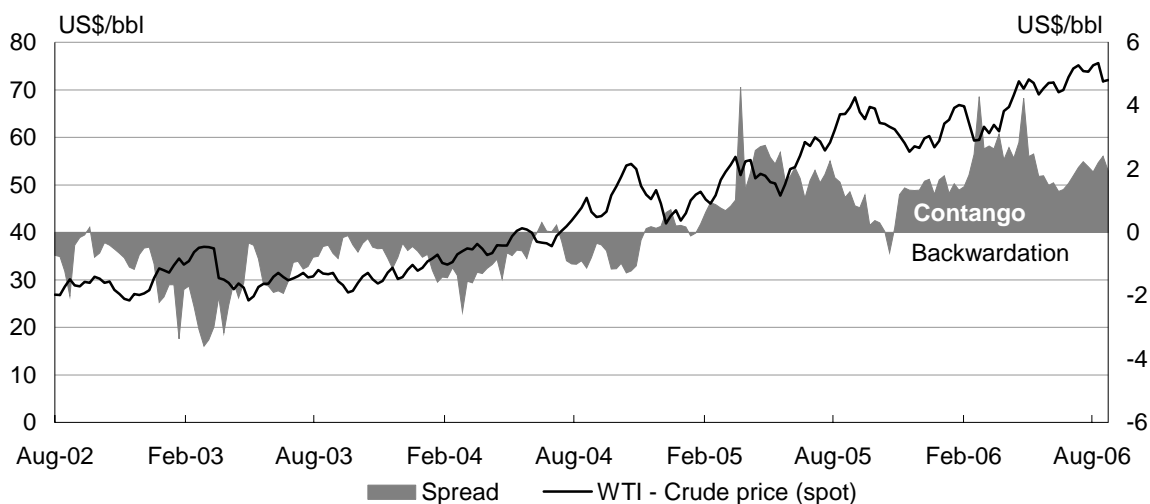
Prices for near-term contracts for WTI crude oil have been persistently lower than prices for later delivery for much of the last two years, indicating that participants are confident

<sup>12</sup> International Energy Agency, *Medium Term Oil Market Report*, July 2006.

that immediate supplies are adequate but remain concerned about the availability of crude oil in future periods. This situation is referred to as 'contango'.

Between 2003 and mid-2005, the three-month-ahead futures price tended to be below the market price. However, since early 2005 the three-month-ahead futures price has been largely at or above the current market price, as illustrated in Chart 7.

**Chart 7: WTI Price difference between spot (market price) and three-month-ahead contract**



Source: Reuters, Australian Treasury.

## REFINER MARGIN

The refiner margin is the difference between the international price of petrol and the international price of crude oil. It is a gross margin and is not the profit that the refiner makes, as it does not take into account refiners' costs of production. The refiner margin comprises around 0-10 per cent of the price of petrol in Australia.

There are separate international markets for crude oil and petrol and whilst there is generally a correlation between the prices of the two products, sometimes demand and supply factors in the international petrol market cause these prices to diverge. This means that the gross refiner margin is not constant over time.

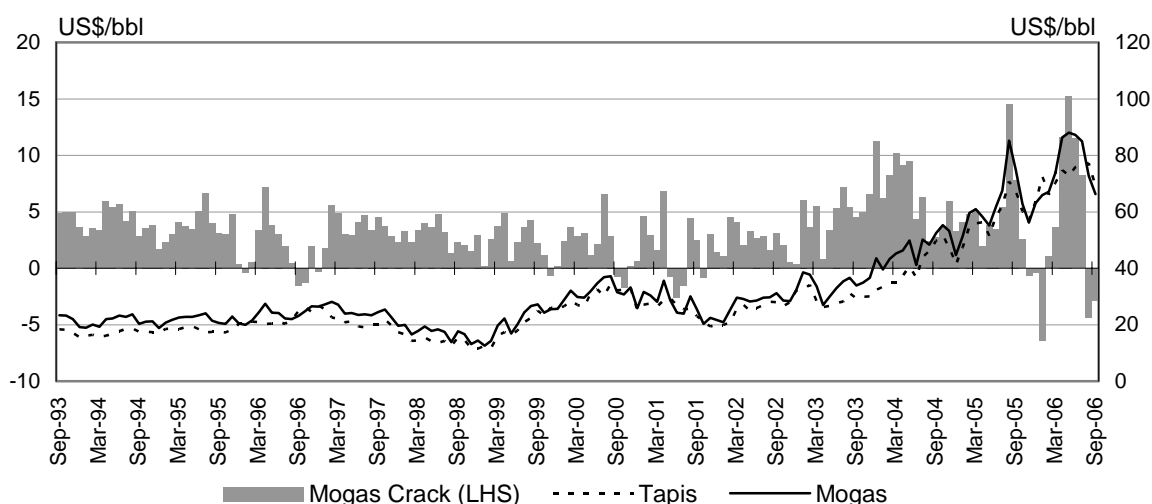
### Movements in refiner margin

In 2006, there has been a higher-than-usual gross refiner margin, attributed to factors in the international petrol market, such as capacity constraints in refineries and higher demand for petrol.

However, in recent months, the gross refiner margin has been declining, and in the week ending 1 September 2006, was actually negative, settling below the four-year range at minus US\$2.91 per barrel.

Chart 8 illustrates the gross refiner margin over the past thirteen years.

**Chart 8: Margin between Tapis Oil and Singapore Mogas 95**



Source: Reuters, Australian Treasury derived.

### International price of petrol

The international price of petrol in Australia is based on the Singapore price for petrol (Singapore MOGAS 95), adjusted for Australian fuel standards (discussed over the page) and the costs of transporting the product to Australia.<sup>13</sup>

- If the price of petrol in Australia was not based on the Singapore price, and was priced significantly less than international prices (for example, if domestic prices were mandated, or capped) Australian refineries would simply export petrol overseas and there would be no commercial incentive to import petrol. This could result in shortages in Australia.

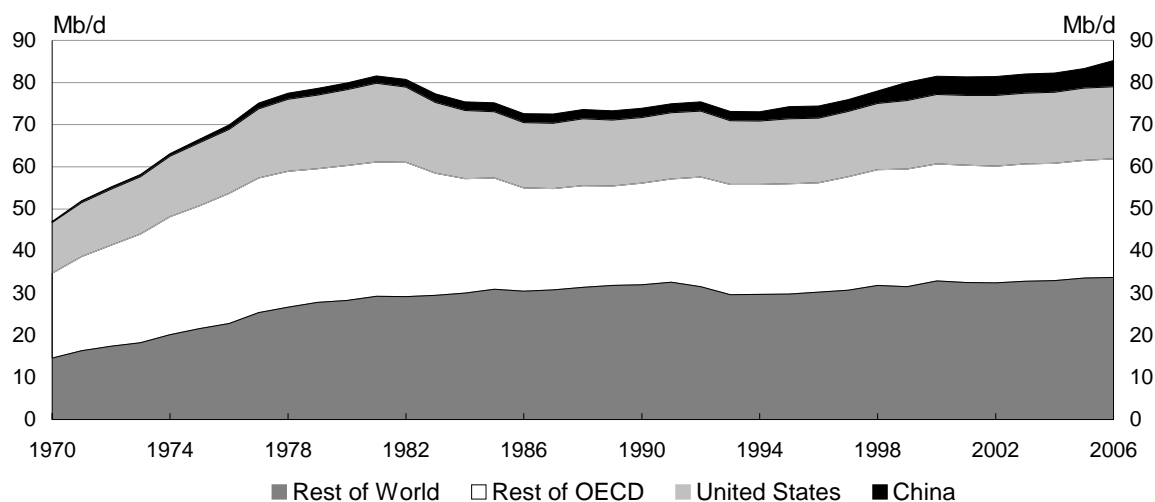
The price of Singapore MOGAS 95 has increased by around 200 per cent since July 2002, to average over US\$85 per barrel in July 2006. However, in recent weeks the price of Singapore MOGAS 95 has declined, and was around US\$74 per barrel as at 1 September 2006.

The increase in international petrol prices in recent years has been largely due to economic growth in China and other east Asian countries which has resulted in strong demand for petrol, putting pressure on refinery capacity and upward pressure on petrol prices.

Further, there has been a general lack of sizeable investment in global refining capacity over the past two decades. For example, the United States, which currently accounts for around one-fifth of global refinery capacity, has not built any new refineries since 1976, and has lower production capacity now than in the early 1980s, as shown in Chart 9.

<sup>13</sup> Singapore is used as the price benchmark for most fuel because it is: close to Australia; the largest refining centre in the region; and the largest source of competitive petrol imports.

Chart 9: Global refinery capacity



Source: Energy Information Administration, ABARE.

As a result, growth in global refinery capacity has been below growth of global refined product consumption, leading to upward pressure on the prices of refined products relative to crude oil prices.<sup>14</sup>

In the short term, global refinery capacity utilisation is expected to remain high, leaving consumers vulnerable to supply shortages, particularly in the event of lengthy refinery outages.

Further, despite easing constraints in the medium term, markets remain concerned about a lack of spare refining capacity and the potential for further upward pressure on retail prices for refined petroleum products.

## Cleaner fuel standards

The Government is implementing cleaner fuel standards to ensure that Australia's fuel and consequently our urban environments remain amongst the cleanest in the world. In particular, cleaner fuel is delivering significant environmental and health gains through reducing vehicle emissions that are known to cause respiratory problems and degrade the environment. The cleaner fuel standards are also facilitating the adoption of more fuel-efficient and less polluting engine technologies.

These cleaner fuel standards may have an influence on the domestic price of fuel in Australia at the margin. However, it is difficult to determine the actual cost to the downstream petroleum industry of complying with the cleaner fuel standards, due to the lack of publicly available information. Further, it is difficult to determine the actual cost of the cleaner fuel standards that is passed on to consumers.

- That said, the cost to industry is significantly reduced by Government subsidies, such as the Cleaner Fuels measure (announced in the 2003-04 Budget). This measure

<sup>14</sup> There are seven refineries that produce petrol in Australia. These are located in Queensland, New South Wales, Victoria, and Western Australia. BP, Caltex and Shell operate two refineries each and Mobil operates one. The capacity of these refineries is relatively small compared to the refineries in the Asia-Pacific region. In the short term, refinery capacity is relatively fixed in Australia as capital investment is required to build new refineries (Source: Australian Institute of Petroleum, submission to the Inquiry into the Price of Petrol in Australia, August 2006 p 4).

encourages the early supply of premium unleaded petrol with 50 parts per million or less of sulphur and diesel with 10 parts per million or less of sulphur in advance of these fuels becoming the mandatory standards on 1 January 2008 and 1 January 2009 respectively. It delivered on the Government's *Measures for a Better Environment* commitment to encourage the early supply of cleaner fuels, as announced by the Prime Minister in May 1999.

- In relation to petrol, the Cleaner Fuels measure provides a grant of 1.1 cents per litre to suppliers of premium unleaded petrol with 50 parts per million or less of sulphur. The grant is available from 1 January 2006 to 31 December 2007. This grant is subsidising part of the capital cost of upgrading refineries and/or the costs of acquiring cleaner feedstock for refineries.
- In relation to diesel, the Cleaner Fuels measure is proposed to provide a grant of 1 cent per litre to suppliers of diesel with 10 parts per million or less of sulphur. The grant is proposed to be available from 1 January 2007 to 31 December 2008. Again, this proposed grant subsidises part of the capital cost of upgrading refineries and/or the costs of acquiring cleaner feedstock for refineries.

Countries in the Asia-Pacific region are also mandating cleaner fuels over the next decade. As demand for higher quality fuels increases, refineries in the region will produce cleaner fuels as standard products rather than as boutique fuels for specific markets. This is expected to increase supply of cleaner fuels and reduce refinery price premiums.<sup>15</sup>

## TAXATION OF PETROL

Indirect taxes imposed on petrol account for approximately 34-39 per cent of the retail price of petrol in Australia. Petrol is subject to the GST, however, the main form of taxation on petrol is excise, levied on domestic production, and the corresponding customs duty levied on imported petrol.

- Excise and customs duty is imposed at the fixed rate of 38.143 cents per litre of petrol, and makes up a significant proportion of total Australian Government tax revenue.
- Excise collected from petrol is estimated to be around \$7.3 billion in 2006-07, or around 3.4 per cent of total Australian Government tax revenue. This is only \$30 million (or 0.4 per cent) higher than in 2005-06, and is a decline in real terms.

The Australian Government has implemented a number of recent initiatives to reduce the level of fuel excise levied on petrol, both as a set amount and as a proportion of the price of petrol.

- The proportion of the pump price of unleaded petrol attributable to taxes has declined substantially in recent years from around 66 per cent of the price of petrol in the March quarter 1999 to around 38 per cent in the June quarter 2006. This is because taxes have either been reduced or have been constant in nominal terms as the price of petrol has risen.

On 1 July 2000, as part of the Government's 'tax reform package', a broad-based GST was introduced on most goods and services. Excise on petrol was reduced by 6.7 cents per litre. Additionally, in March 2001, the Government further reduced petrol

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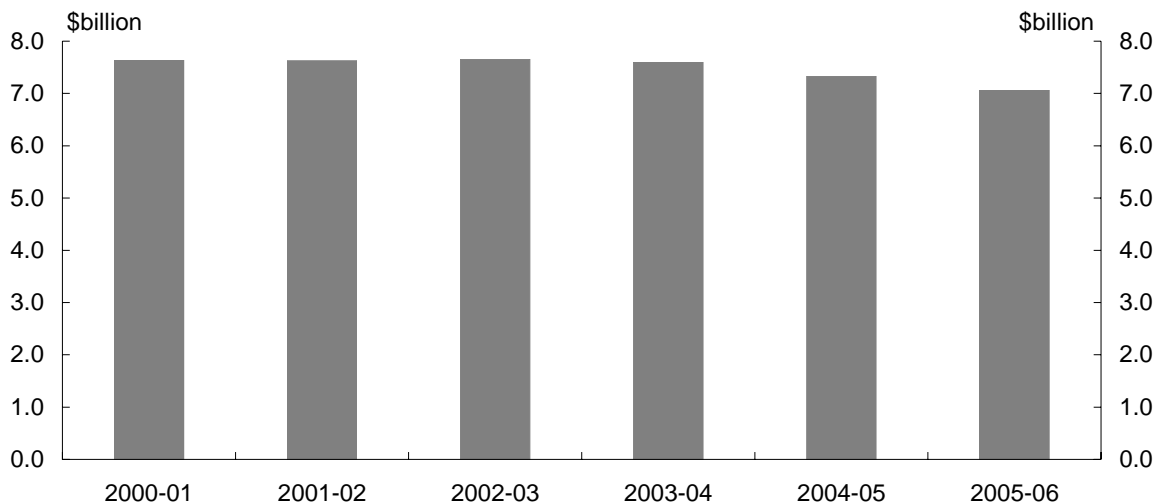
15 Australian Institute of Petroleum, submission to the Inquiry into the Price of Petrol in Australia, August 2006 p 51.



and diesel excise by 1.5 cents per litre and abolished the half-yearly indexation of fuel excise.

If the Government had not taken these actions, petrol excise would currently be around 54.9 cents per litre, which is around 16.8 cents or 44 per cent higher than the current fuel excise rate.

Chart 10: Real petrol excise receipts (2003-04 dollars)



- Real outcomes/estimates in 2004-05 prices.

2005-06 uses the 2006-07 Budget excise estimates.

Source: Budget Papers.

While the excise is fixed at 38.143 cents per litre, the total level of indirect tax on petrol will vary with the price, as GST is imposed on an ad valorem basis.

It should be noted that all GST revenue, including that on petrol, is paid to the States and Territories. The GST is a broad based indirect tax and exemptions add to the complexity of the tax system and tend to create anomalies. To limit this complexity, GST applies to a wide range of goods and services, including many (including fuel) that various members of the community may consider are necessities.

- Increased GST revenue from petrol does not necessarily translate into an increase in overall GST revenue because there may be reduced household spending elsewhere.

### Fuel tax credits

In 2004 the Government announced major reforms to the fuel tax system in its Energy White Paper, *Securing Australia's Energy Future*. These are set out in the *Fuel Tax Act 2006*, which took effect from 1 July 2006.

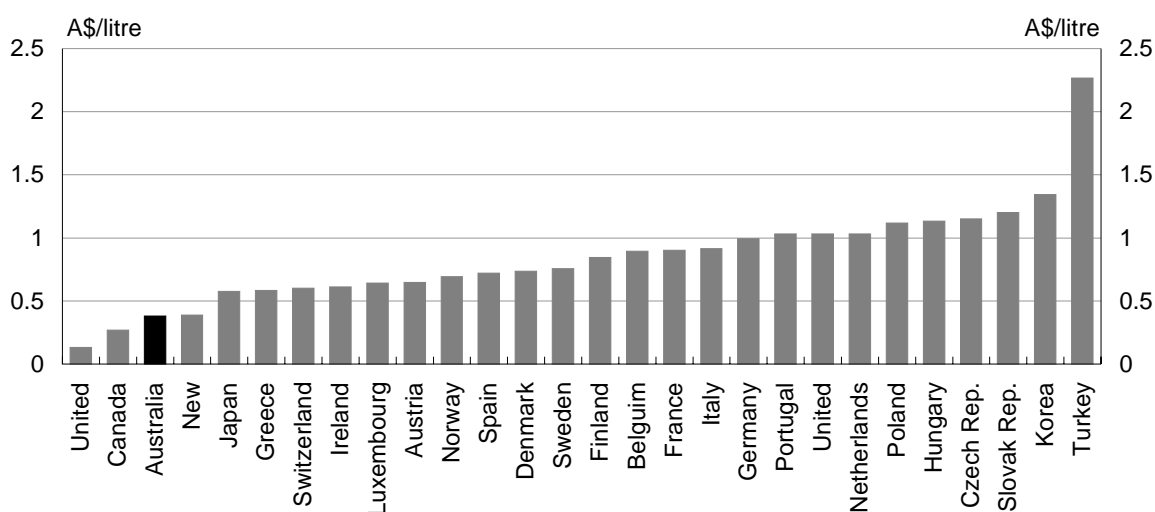
Once fully implemented, the reforms will extend a full fuel tax credit for all fuels, including petrol, used off-road for business purposes and a partial credit for all fuels used on-road in heavy vehicles for business purposes.

## International comparison of petrol taxes

Australia's taxation of petrol is very low by world standards.

Chart 11 shows the nominal excise rates on unleaded petrol in OECD countries as at 1 January 2006. Where countries levy more than one specific tax on unleaded petrol, the total combined rate is shown. As Chart 11 indicates, Australia's excise rate of 38.143 cents per litre is the third-lowest specific tax rate on unleaded petrol of the OECD-30 countries shown and is less than half the unweighted average rate of A\$0.843 per litre. As noted previously, excise as a percentage of the petrol price in Australia is around 25-30 per cent, compared to the OECD average of 43.8 per cent.<sup>16</sup>

Chart 11: Unleaded petrol excise duty rates, OECD-30, as at 1 January 2006<sup>(a)</sup>



(a) Rates have been converted to Australian dollars using OECD purchasing power parities. Mexico levies excise duty on unleaded petrol at an ad valorem rate. Hence, the rate per litre varies according to international petrol prices and is not included in the comparison. Data for Iceland is unavailable.

(b) In Canada and the United States, both the federal governments and the state/provincial governments levy taxes on unleaded petrol. An average rate has been calculated for the states and provinces by the OECD/European Environment Agency, and the combined rates are shown.

Source: Australian Treasury estimates based on OECD and European Environment Agency data.

According to the International Energy Agency (Energy Prices and Taxes, Quarterly Statistics, Second Quarter 2006), Australia is one of only five other comparable OECD countries that has either had a fixed or lower rate of excise on unleaded petrol since 2001.<sup>17</sup>

Chart 12 combines the impact of specific taxes with the impact of general consumption taxes (VAT/GST/sales taxes) on unleaded petrol prices.

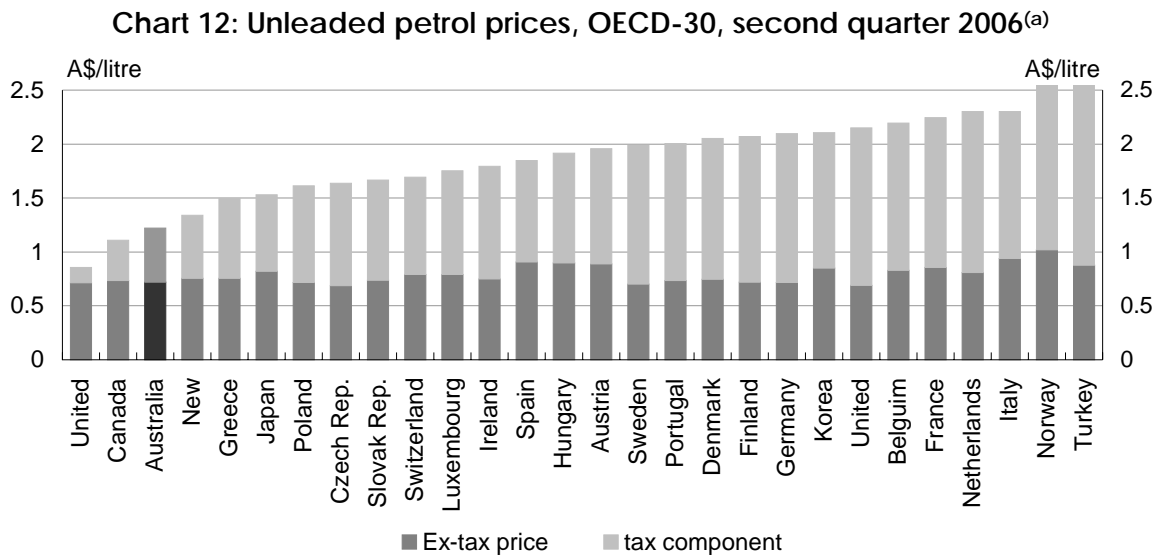
Under this combined measure, which illustrates the total tax impost on consumers, the average (unweighted) level of tax included in petrol prices for the OECD countries shown was A\$1.075 in the second quarter of 2006. This is approximately 55.4 per cent of the unweighted average retail petrol price in OECD countries.

<sup>16</sup> Note that these averages are unweighted averages.

<sup>17</sup> Mexico levies excise duty on unleaded petrol at an ad valorem rate. Hence, the rate per litre varies according to international petrol prices and is not included in the comparison. Data for the United States and Iceland were unavailable.

In comparison, the level of tax included in unleaded petrol prices in Australia for this quarter was less than half this amount at A\$0.500 per litre – the third-lowest of the OECD-30 countries for which comparable data is available.

The chart also indicates that Australia’s petrol prices are the third-lowest of the OECD countries shown.



(a) Converted to Australian dollars using OECD purchasing power parities. Data is for the second quarter of 2006 or the latest available. Mexico levies excise duty on unleaded petrol at an ad valorem rate; hence the rate per litre varies according to international petrol prices and is not included in the comparison. Data for Iceland is unavailable. Source: Australian Treasury estimates based on OECD and European Environment Agency data.

## WHOLESALE AND RETAIL COSTS AND MARGINS

A small component of the retail price of petrol (around 5-15 per cent) reflects the costs and profits of wholesalers/distributors and retailers.

### Wholesale costs and margins

Petrol in Australia is sold at a wholesale level from either refiners/marketers, or independent wholesalers (which either import petrol, or wholesale the petrol of refiners/marketers).<sup>18</sup>

The wholesale price in Australia is often called the terminal gate price (TGP)<sup>19</sup> and comprises the international price of petrol (which tends to reflect a rolling average of the Singapore MOGAS price plus various costs including transport, insurance and wharfage), plus:

- Government taxes (including excise and GST on fuel sold from the terminal);
- a wholesale margin; and

<sup>18</sup> The ACCC’s submission to this inquiry provides an overview of the wholesale and retail markets for petrol.

<sup>19</sup> This is the price that fuels are sold on a ‘spot’ basis to any approved customers with a tanker of 30,000-35,000 litre capacity that meets strict safety requirements.

- a terminal operating margin (representing a return on investment to the supplier for the cost of establishing and operating the terminal).

The Oilcode Reform Package that the Australian Government introduced into Parliament will require all wholesale suppliers to provide a TGP and make it publicly available.<sup>20</sup>

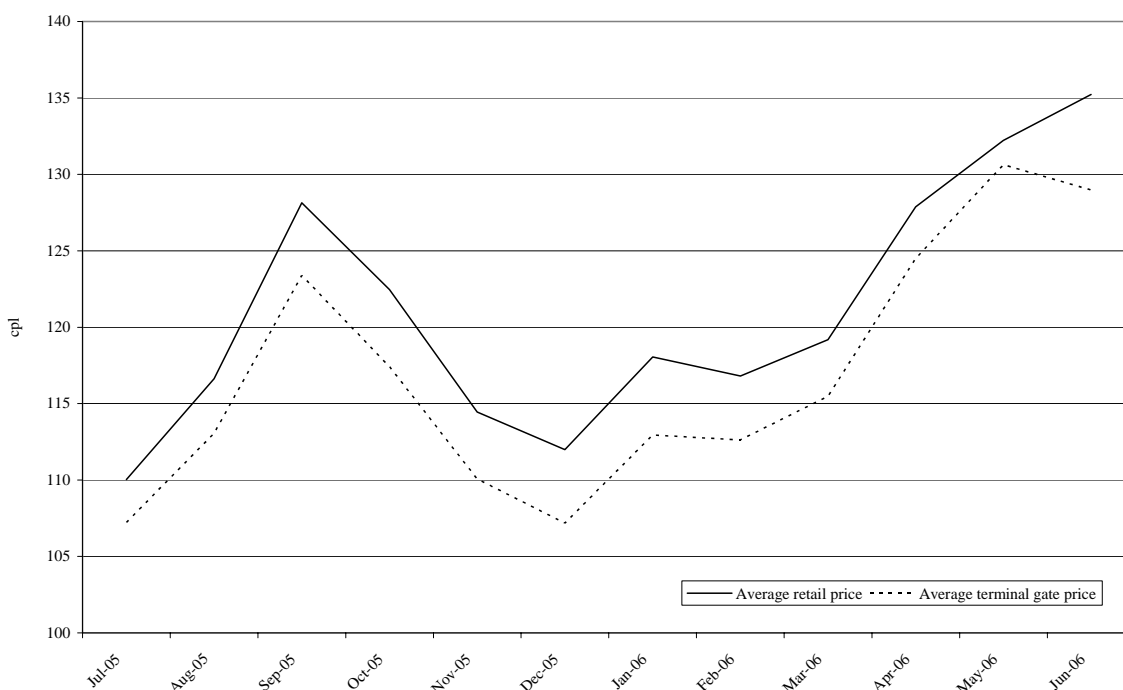
This builds on the current voluntary provision of TGP by oil companies, however it is not as prescriptive as the Victorian and Western Australian arrangements (which require wholesale suppliers to provide their TGP publicly using a set formula) and will ensure that customers have the flexibility to negotiate individual supply agreements. The Oilcode does not prevent wholesale suppliers from providing discounts to the posted TGP.

## Retail price

The retail price of petrol in Australia reflects the costs of distributors and retailers getting petrol from the refinery gate to the petrol bowser. It includes the TGP, plus freight/transport costs, administration and marketing costs, the costs of running service stations ie wages, rent, utilities and amounts for retailer profit.<sup>21</sup>

As shown by Chart 13, movements in retail prices closely follow changes in the TGP, indicating a relatively constant retail margin over time.

**Chart 13: Five largest metropolitan cities average monthly retail prices and TGP**



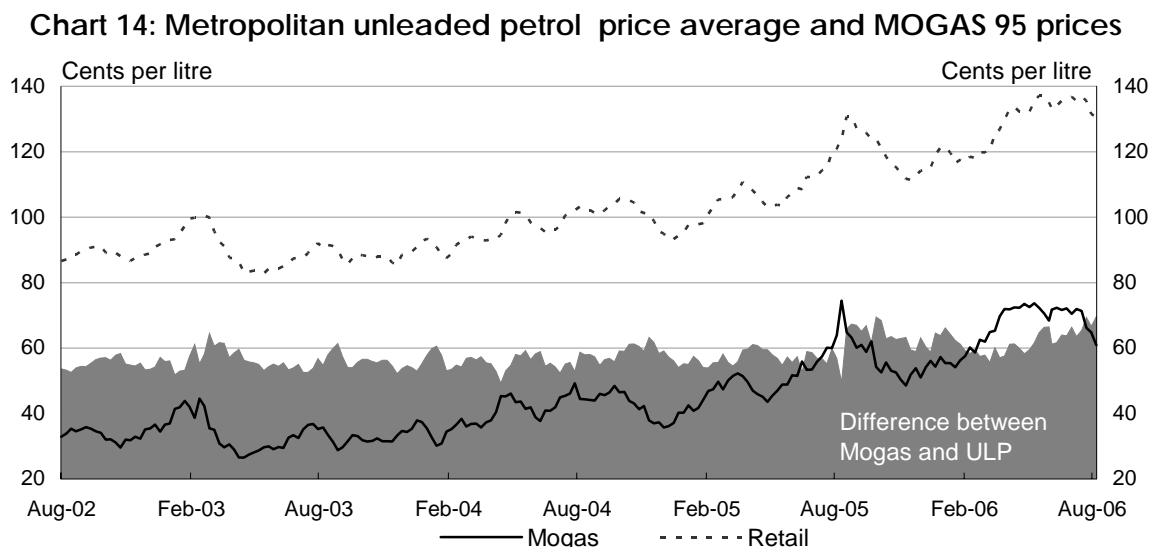
Source: ACCC, submission to Senate Inquiry into the price of petrol in Australia (reproduced with permission).

<sup>20</sup> The Oilcode Reform Package will also repeal the Petroleum Retail Marketing Franchise Act 1980 and the Petroleum Retail Marketing Sites Act 1980, and introduce a mandatory industry code, the Trade Practices (Industry Codes – Oilcode) Regulations 2005 prescribed under section 51AE of the TPA.

<sup>21</sup> Australian Institute of Petroleum, submission to the Inquiry into the Price of Petrol in Australia, August 2006 p26.

Apart from movements in retail prices being consistent with changes in the TGP, the retail price of petrol also mirrors changes in the international price of petrol.

Chart 14 shows the correlation between the Singapore MOGAS 95 unleaded price and retail prices in Australia. Adjusting for a lag of about 2-4 weeks, changes in the Singapore MOGAS 95 price and changes in the price of petrol in Australia are closely correlated and the difference between these indicators has been relatively constant over time.



Source: Australian Institute of Petroleum, Reuters, Australian Treasury.

While movements in the retail price of petrol largely reflect changes in international factors, the Australian Government takes an active role, where necessary, to encourage efficiency and to assist the competitiveness of the petrol market.

## GOVERNMENT INTERVENTION

Where necessary, the Government intervenes in markets to improve efficiency and correct market failure. In relation to competition in a market, this intervention can include action by the ACCC to investigate breaches of the *Trade Practices Act 1974* (TPA).

If necessary, the Treasurer also has a range of powers available to monitor and regulate prices. However price regulation can reduce the efficiency of the market through facilitating price coordination.

### The ACCC's general powers under the TPA

Part IV of the TPA prohibits corporations from engaging in anti-competitive conduct. The equivalent state and territory legislation prohibits the same conduct engaged in by non-corporations, such as individuals and partnerships.

Part IV does not directly regulate price levels. Instead, it promotes the existence of competitive markets. Competition maximises welfare and increases productivity, benefiting consumers through lower prices and greater choice.

The prohibitions in Part IV that may be relevant to conduct in the petrol industry are:

- agreements which substantially lessen competition (section 45);
- exclusionary provisions (section 45);
- price fixing (sections 45 and 45A);
- misuse of market power (section 46);
- exclusive dealing (section 47); and
- resale price maintenance (section 48).

Breaches of Part IV can result in a penalty of up to \$10 million for corporations. Government amendments currently before Parliament provide that the maximum pecuniary penalty for corporations for most breaches of the TPA will be raised to be the greater of \$10 million or three times the benefit from the contravention or, where the gain cannot be readily ascertained, 10 per cent of the value of annual turnover.

## Overview of Part IV provisions relevant to the petrol industry

### Agreements which substantially lessen competition (section 45)

Agreements which have the purpose or likely effect of substantially lessening competition in a market are prohibited under section 45. This catches a broad range of conduct. In particular, conduct which reduces price competition is frequently considered to lessen competition substantially.

### Agreements which contain an exclusionary provision (section 45)

Agreements between persons in competition with each other which have the purpose of restricting the supply or acquisition of goods or services from particular persons or classes of persons are prohibited under section 45. This type of conduct is also known as a 'primary boycott'.

Exclusionary provisions are frequently adopted to punish a trader for not abiding by group trading rules, such as discounting along with other traders.

Exclusionary provisions are per se prohibitions<sup>22</sup> – breaches are presumed to be anti-competitive, and as such it is not necessary to prove the impact on competition.

### Agreements which fix prices (section 45A)

Agreements to fix prices are prohibited under section 45A. There are some exceptions for joint ventures and collective bargaining groups.

Price fixing arrangements are per se prohibitions.

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<sup>22</sup> Exclusionary provisions and horizontal price fixing are prohibited under the TPA without needing to analyse their purpose or effect on competition. In the case of price fixing, section 45A explicitly *deems* such arrangements to have the purpose or effect of substantially lessening competition. In relation to exclusionary provisions, there is no requirement under section 45 or section 4D to prove that the arrangement has the purpose of substantially lessening competition.

#### **Misuse of market power (section 46)**

Section 46 states that a corporation with a substantial degree of market power must not take advantage of that power for the purpose of eliminating or substantially damaging a competitor, preventing the entry of a person into a market, or deterring or preventing a person from engaging in competitive conduct.

#### **Exclusive dealing (section 47)**

Section 47 prohibits the supply of goods or services on the condition that the purchaser will not acquire goods or services from a competitor of the supplier, or on condition that the purchaser will not resupply goods to particular persons or classes of persons in particular places, or will only do so to a limited extent.

Third line forcing is a form of exclusive dealing. It involves supplying goods or services on condition that the purchaser acquire goods or services from a particular third party. Third line forcing is a per se prohibition, whereas all other forms of exclusive dealing are not.

#### **Resale price maintenance (section 48)**

It is prohibited to supply goods or services on the basis that the acquirer will not advertise or resell those goods or services below a specified price. However, suppliers are permitted to specify recommended prices or maximum prices.

### **ACCC actions against anti-competitive conduct in the petrol industry**

The ACCC is empowered to investigate and take action in relation to breaches of the TPA. The ACCC has extensive powers to investigate alleged breaches of the TPA, including the power to obtain information, documents and evidence relating to a matter that constitutes or may constitute a contravention of the TPA.

Notably, the ACCC has successfully used its powers under the provisions of Part IV to bring actions against petroleum distributors and retailers for price-fixing.

The ACCC has successfully brought actions under section 45 against petrol price-fixing arrangements in Brisbane and Ballarat. In the Ballarat case in 1999-2000, the fines imposed totalled \$20.105 million, plus costs.

### **ACCC price monitoring**

The ACCC monitors petrol, diesel and automotive liquefied petroleum gas (LPG) prices at around 3,600 of the approximately 6,500 retail fuel sites across Australia (just over 55 per cent). Approximately a quarter of the monitored sites are in rural/regional areas. This assists in enforcement of the TPA and provides transparency to consumers.

The ACCC's petrol price monitoring provides information to consumers through its publications and the ACCC petrol price cycle website (which provides pricing information to consumers to enable them to purchase petrol when prices are relatively low).

On 8 August 2006, the Government announced that the ACCC will extend monitoring of fuel prices to include ethanol blended fuel (commonly known as E10). The ACCC will provide a report on the price differential between E10 and unleaded petrol on a quarterly basis. The report will be publicly available on the ACCC's website and will be a valuable addition to the information the ACCC already provides to consumers on fuel prices.

The ACCC also conducts additional random monitoring in remote areas and investigates complaints about price changes.

#### **Scope of ACCC's petrol price monitoring**

The ACCC currently monitors:

- the retail prices of petrol, diesel, LPG and E10;
- international crude oil and petrol prices;
- published terminal gate prices for unleaded petrol of the refiner/marketers (namely BP, Caltex, Mobil and Shell) and some independents; and
- the city-country retail price differential.

#### **Price surveillance**

In addition to price monitoring, the TPA provides the Treasurer with powers to direct the ACCC to undertake additional forms of prices surveillance.

- Inquiry under the TPA: The Treasurer may choose to conduct an inquiry into prices in a service or industry. The Treasurer may also specify certain companies, and these companies may not increase prices during the inquiry period without ACCC approval.
- Prices notification under the TPA: The Treasurer may 'declare' goods or services and certain companies which supply these goods or services. These companies must then notify the ACCC of proposed price increases in respect of the notified good or service. The ACCC may approve a proposed (or smaller) price increase within 21 days.
  - The ACCC's determination is not enforceable, but a penalty applies for increasing prices during the prescribed 21-day period unless the ACCC has agreed to the price increase. Initially, the maximum price a company may charge is the highest price it has charged for a similar product in the previous 12 months.

Governments need to be careful that their intervention does not distort an already competitive market, resulting in inefficient market outcomes. For example, formal prices surveillance may have harmful side effects on the efficiency of an industry and may facilitate price coordination, not competition, and create an incentive for companies to charge the maximum notified price (rather than a lower one).

Price oversight methods also impose varying costs on business, due to the requirement for businesses to identify, collect and provide to the ACCC relevant data on prices, costs and profits.

#### **Criminal penalties for serious cartel conduct**

The Government is developing legislation to introduce criminal penalties for serious cartel conduct.

The criminal cartel offence will prohibit a person from making or giving effect to an agreement between competitors that contains a provision to fix prices, restrict output,



divide markets, or rig bids, where the agreement is made or given effect to with the intention of dishonestly obtaining a benefit.

The maximum penalties for the offence will be:

- for individuals – a term of imprisonment of five years and a fine of \$220,000; and
- for corporations – a fine that is the greater of \$10 million or three times the value of the benefit from the cartel, or where the value cannot be determined, 10 per cent of annual turnover.

The criminal cartel offence will be targeted at serious cartel conduct that causes large scale or significant economic harm. Minor breaches will ordinarily be addressed through civil proceedings.