

FACTS ABOUT PETROL PRICES & THE AUSTRALIAN FUEL MARKET

INTERNATIONAL PRICES

Crude oil, petrol and diesel are different products and are bought and sold in their own markets.

Each market is typically regionally-based and there are linkages and transactions between regional markets to balance global supply and demand.

Prices in regional markets reflect the supply and demand balance in each market and the physical characteristics and quality of each commodity.

Prices in regional markets can be volatile and can move in different directions from each other.

⇒ This can be due to the impact of factors and events unique to one market – such as supply and demand pressures in a region, hurricanes, wars and civil unrest.

This is why focusing on relevant markets and longer term price trends is more important than daily or week-to-week price movements.

Australia's regional market for petroleum products is the Asia-Pacific market.

Key crude oil pricing benchmarks for the Asia-Pacific market including Australia are Tapis, Dated Brent and Dubai – not West Texas Intermediate (the US market benchmark) widely reported in the media.

The Singapore price of unleaded petrol (MOPS95 Petrol) is the key petrol pricing benchmark for Australia.

⇒ To meet Australian demand, around 20% of petrol is imported (mostly from Singapore and South Korea). Singapore is the regional refining and distribution centre and among the world's largest.

If Australia's petrol prices were below Singapore prices, Australian fuel suppliers would have no commercial incentive to import to Australia (because sales of that fuel would be at a loss here). In addition, Australian refiners would have an incentive to export production.

'Refiner margins' are the differences between product prices and crude oil prices – both of which are set by the market, not by oil companies (e.g. a Singapore petrol 'refiner margin' = MOPS95 Petrol price minus the relevant crude oil price).

AUSTRALIAN WHOLESALE PRICES

Australian wholesale prices for petrol and diesel (including spot Terminal Gate Prices or TGPs) are closely linked to the Singapore prices of petrol and diesel – not to crude oil prices.

⇒ This relationship has been in place for many years. According to public statements, Australian fuel wholesalers use a pricing methodology very similar to that used by the ACCC when wholesale prices were regulated by government. This pricing methodology is called import parity pricing or IPP and it is based on what it would cost to import fuel into Australia.

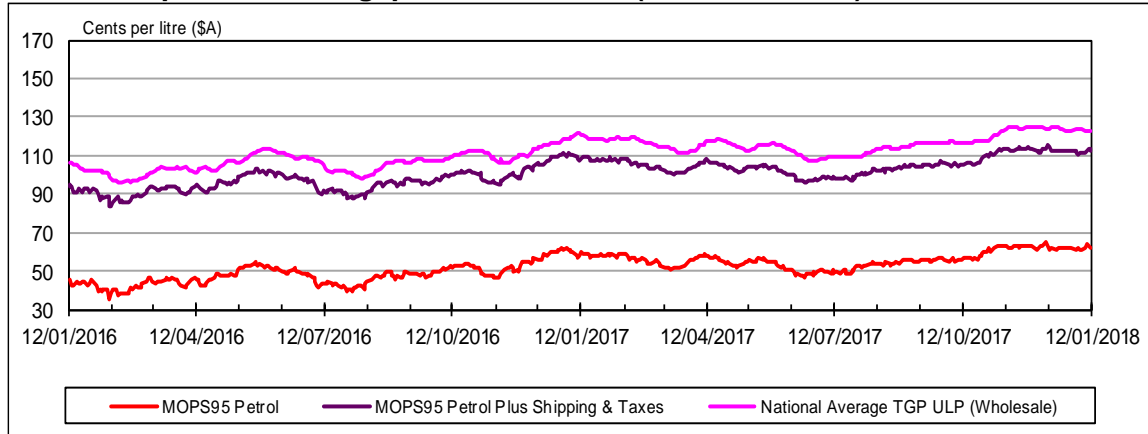
Recent movements in Singapore petrol prices and Australian TGPs are shown in Figure 1.

The Singapore price of petrol plus shipping costs and Australian taxes represents almost the entire wholesale price of petrol – typically around 95% (as shown in the chart below).

⇒ Australian taxes include excise (38 cents per litre) and GST (10%).

The remaining 5% of TGPs is accounted for by insurance, a quality premium for Australian fuel standards, local wharfage and terminal costs, and a wholesale marketing margin (where competitively possible).

FIGURE 1: Comparison of Singapore Petrol Price (MOPS95 Petrol) with Australian ULP TGP



Note: MOPS95 Petrol prices and Shipping rates are provided by S&P Global, Platts.

Generally, there is a **short time lag** of 1-2 weeks between changes in Singapore prices and changes in Australian wholesale prices.

- ⇒ The lag can be observed in Figure 1 above (i.e. see the slight delay in the peaks and troughs in the **pink line** (National ULP TGP) compared to the **purple line** (MOPS95 Petrol plus Shipping & Taxes).
- ⇒ The lag is a result of using a rolling average of Singapore prices; the rolling average smooths price volatility from day-to-day.
- ⇒ Importantly, this time lag occurs whether prices are going up (when the lag slows price increases to consumers) or going down (when the lag delays price falls).
- ⇒ Not accounting for this lag leads to incorrect conclusions about how Singapore prices flow through to prices in Australia.
- ⇒ According to the ACCC, “the lag may be longer during times of significant (international) price volatility”.

Daily TGP data are published by all wholesale suppliers. AIP’s website presents average TGP data – see www.aip.com.au/pricing/tgp.htm and the website extract in Figure 2.

- ⇒ Australian Government Oilcode regulations require the publication of TGPs by all wholesale suppliers on a daily basis.

FIGURE 2: Average Terminal Gate Prices: Unleaded Petrol (cents per litre)
(Wholesale spot price for bulk purchase at the terminal)

	Monday 8 January 2018	Tuesday 9 January 2018	Wednesday 10 January 2018	Thursday 11 January 2018	Friday 12 January 2018
Sydney	122.9	122.7	122.6	122.6	122.9
Melbourne	122.6	122.3	122.3	122.2	122.6
Brisbane	123.0	122.7	122.7	122.6	122.9
Adelaide	122.7	122.4	122.4	122.4	122.7
Perth	122.7	122.5	122.4	122.5	122.9
Darwin	127.4	127.2	127.1	127.1	127.3
Hobart	127.8	127.5	127.5	127.5	127.9

All values are in cents per litre and are inclusive of GST.

RETAIL OR PUMP PRICES

Once fuel leaves the terminal gate (where TGP's apply), retail prices vary across metropolitan and regional areas, reflecting local area factors and competition.

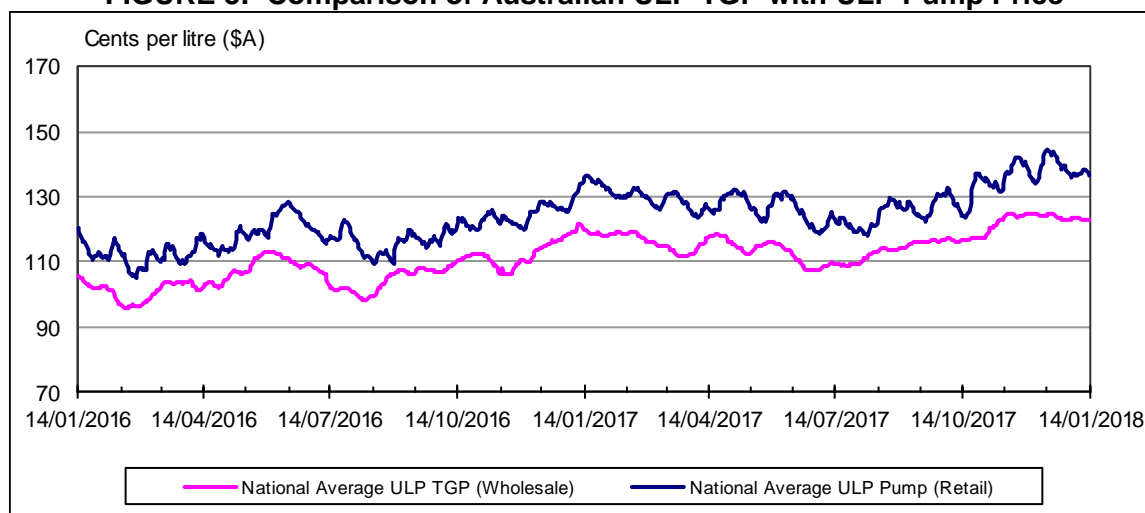
- ⇒ Figure 3 shows the relationship between recent movements in national average ULP TGP's and national average ULP pump prices.

The TGP is typically around 95% of retail prices (as also shown in Figure 3 below).

Apart from TGP, the retail or pump price in Australia also reflects all the costs of getting the fuel from the refinery/terminal to the bowser.

- ⇒ This includes transport costs, admin and marketing costs, and service station running costs like wages, rent and utilities. The ability to cover costs depends on local area competition.
- ⇒ A small proportion of the pump price (3-5%) is received by fuel retailers to cover these costs and leave a small margin. ACCC analysis shows retail sector net profit on petrol over the last 12 years averaged 1.35 cent per litre.

FIGURE 3: Comparison of Australian ULP TGP with ULP Pump Price



Retail prices in many metropolitan areas typically follow a discounting cycle (the saw tooth pattern shown in the chart above).

- ⇒ Customers in many capital cities will be familiar with these discounting cycles, which have typically occurred on a weekly basis. Highly visible price boards allow customers to take advantage of low prices and competitors to observe price discounting.
- ⇒ Petrol prices fall steadily due to service station operators aggressively discounting to attract customers. However, maximum discounts can only be sustained for short periods before prices are restored. This is typified by a lift in prices before the discounting cycle starts again.
- ⇒ ACCC analysis clearly shows that petrol prices do not increase because of long weekends or public holidays.

Consumers clearly benefit by buying heavily discounted petrol at the low point in the cycle.

- ⇒ The ACCC provides advice on low price days of the week and they estimate that 60% of petrol sales are below the average price of the cycle. **The presence of a discounting cycle is a clear demonstration of vigorous competition.**

The major oil companies directly own and operate only a limited number of service stations across Australia (around 10%) and these are largely in metropolitan areas.

CITY VERSUS COUNTRY PRICES

Retail fuel prices are more stable in regional areas because of a general absence of discounting.

- ⇒ The general absence of price discounting in regional/country areas also means that regional prices appear to be higher than fully discounted or average city prices.
- ⇒ Retail margins are typically higher in the country compared with major capital cities, due to lower fuel volumes and shop sales over which to spread service station operating costs.
 - The average customer base per service station is around 2,000 people in regional Australia (and well below in many towns) whereas metro service stations typically have a customer base of around 4,000 to 5,000 people.
 - Regional service stations typically see 1 tanker per 2-3 weeks versus 1 tanker per day at some city sites.
- ⇒ Freight is typically around 1.5 to 4 cents per litre greater for country than city delivery.
- ⇒ Distribution costs may be significant for some country areas where fuel must be stored in depots and double-handled, rather than being delivered directly from coastal terminals.
- ⇒ Competitive forces and costs also vary greatly between country towns, so that pump prices do not just reflect freight and handling differences.

Retail prices in regional areas are largely set by independent owner/operators (including those who sell fuel supplied by one of the major brands under licence).

PRICES & COMPETITION

While the price of fuel has increased on the back of strong Asian and domestic demand, Australian customers continue to enjoy low petrol prices by international standards.

- ⇒ Figure 4 shows Australia has among the lowest petrol prices of all OECD countries.

When comparing Australian petrol prices to other countries, allowance must be made for different government taxes and tax rates on petrol and for any subsidies and road user charges (eg. in New Zealand) that don't apply here.

- ⇒ Many countries in the Asian region heavily subsidise retail fuel sales.

Australia has low relative fuel prices because the Australian petroleum market is fundamentally competitive.

This is a view shared by many government/ACCC reviews of the petroleum market and by many informed commentators and analysts, including the International Energy Agency.

All the way along the crude oil and products supply chains there are several large and numerous smaller market participants constantly driving market competition.

PROFITS OF MAJOR OIL COMPANIES

The profits made by fuel suppliers are volatile (due to the nature of the market) and are typically a very small proportion of the final or retail price.

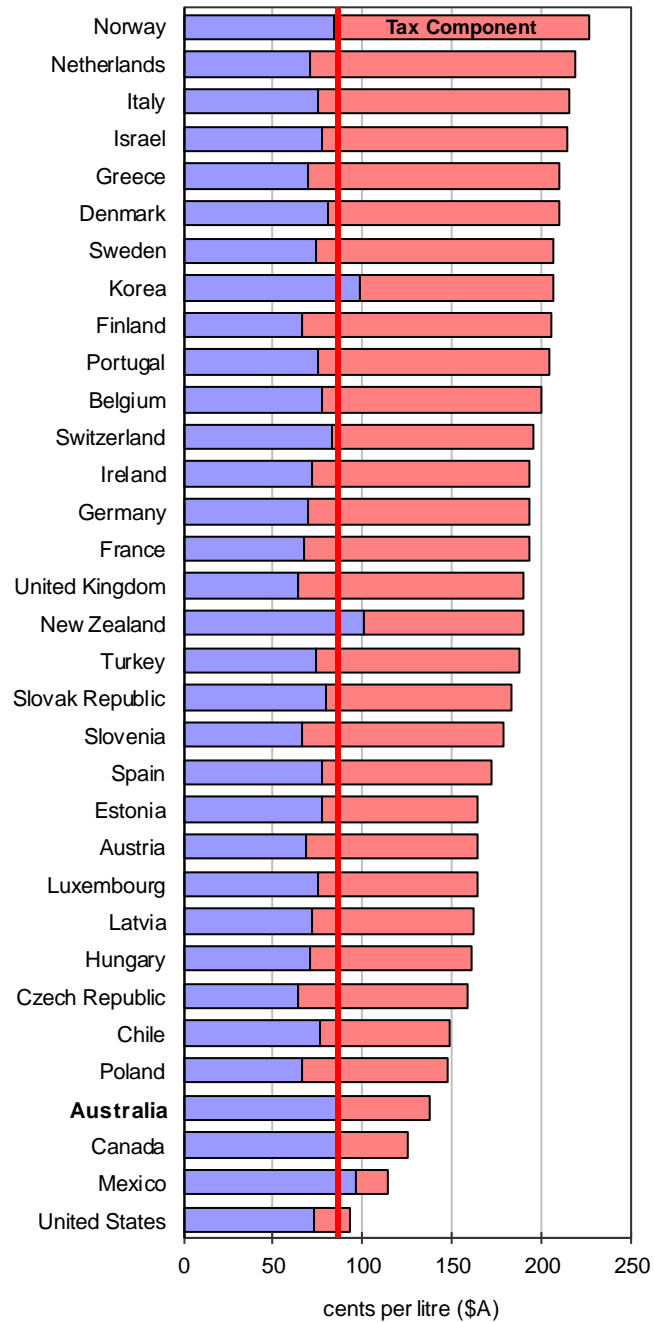
- ⇒ For example, average annual net profit over the last 12 years made by fuel suppliers (across refining, wholesaling and retailing operations) is around 2 cents per litre of all fuels sold.

There have been investments of over \$3 billion by the industry since 2004 in the cleaner fuels program to help enhance fuel supply reliability.

- ⇒ These investments are generating significant environmental benefits, particularly air quality improvements in metro areas (especially for particulate emissions from diesel engines).

Over the past decade, the major oil companies have invested over \$10 billion in Australia, compared with industry net profits over the same period of around \$8.8 billion.

FIGURE 4 - Petrol Prices & Taxes in OECD Countries (June Quarter 2017)



Source: Australian Petroleum Statistics, Office of the Chief Economist