

Please find attached a copy of the latest AIP Weekly Petrol Prices Report.

All data, charts and tables in this Report are based on the latest available market data to **Sunday**, **25 November 2018**.

For more detailed information on:

Pricing Facts – see www.aip.com.au/pricing/facts.htm

Terminal Gate Prices (wholesale) – see www.aip.com.au/pricing/tgp.htm

Pump Prices (retail) - see

www.aip.com.au/pricing/retail.htm

International Fuel Prices - see

www.aip.com.au/pricing/international.htm

In the AIP Weekly Petrol Prices Report:

- the data for international crude oil and petrol prices is supplied by S&P Global, Platts (see www.platts.com).
- the data for wholesale petrol prices is based on market data published by AIP member companies (BP, Viva Energy Australia, Mobil and Caltex) (see www.aip.com.au).
- the data for retail petrol prices is based on available market data supplied by MotorMouth (see www.motormouth.com.au).

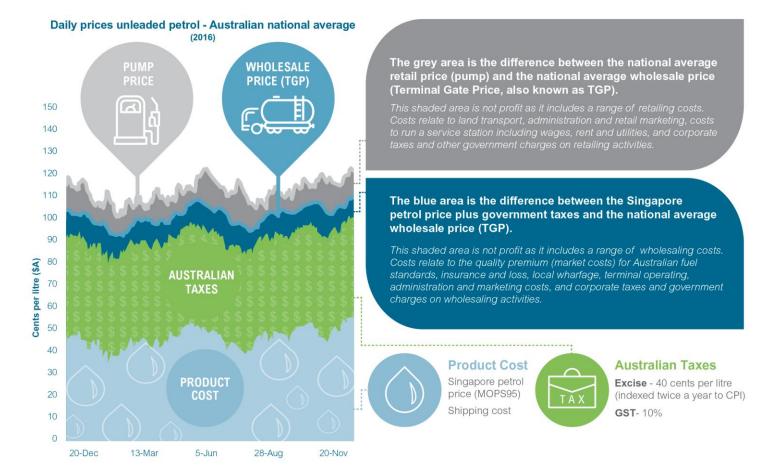
Should you have any questions about the material in this report, please contact AIP at aip@aip.com.au.

The Australian Fuel Market - An Overall Snapshot

Understanding Movements in Key Petrol Price Indicators

The Chart below provides an overall 'snapshot' of movements in key market indicators relevant to the price of petrol at the pump in Australia.

The Australian refining sector is a price taker. Domestic prices are closely linked to relevant international prices. The Singapore benchmark price of petrol (MOPS95 Petrol) is the key price benchmark for petrol in Australia. As the chart below shows, MOPS95 Petrol plus shipping costs and Australian taxes represents almost the entire wholesale price of petrol (around 95%)



Average Petrol retail price this week: 137.8 cents
Average Petrol wholesale price this week: 123.2 cents

NOTES

(1) MOPS95 Petrol: the international petrol prices are provided by Platts (Copyright © 2017 S&P Global Platts, all rights reserved), and represent the end of day assessment for the mean of Singapore prices for 95 Octane Petrol (MOPS95 Petrol). No portion of the publication may be photocopied, reproduced, retransmitted, put into a computer system or otherwise redistributed, without prior written Authorisation from Platts. Platts is a trademark of S&P Global. Information has been obtained from sources believed reliable. However, because of the possibility of human or mechanical errors by sources, S&P Global or others, S&P Global does not guarantee the accuracy, adequacy or completeness of any such information and is not responsible for any errors or omissions or for results obtained from use of such information.

(2) SHIPPING: is the weighted average of daily market shipping rates (Australian cents per litre) for journeys from Singapore to major Australian ports (weighted by the volume of fuel sales in the relevant State). Source data include Platts, Worldscale, Australian Petroleum Statistics and the Reserve Bank of Australia.

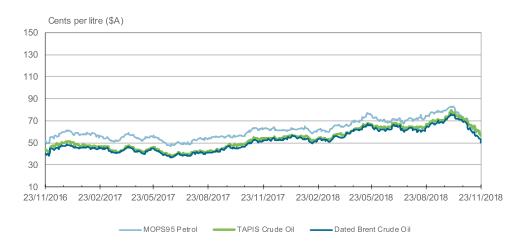
(3) TAXES: is excise and GST less any relevant state rebates weighted by the volume of petrol consumed in each State.

(4) NATIONAL AVERAGE WHOLESALE PRICES: are derived from capital city prices weighted by fuel volume consumed in each State.

(5) NATIONAL AVERAGE RETAIL PRICES: are calculated as the weighted average of each State/Territory's metropolitan and non metropolitan retail petrol prices, with the weights based on the number of registered petrol vehicles in each of these regions.

International Market Trends

Figure 1: Comparison of Singapore petrol price (mops95 petrol) with crude oil prices



NOTE: Australia is part of the Asia-Pacific fuel market (Singapore is the regional refining/distribution centre) and relevant pricing benchmarks in this market are Singapore petrol prices for unleaded petrol (MOPS95 Petrol) and Tapis and Dated Brent for crude oil. Prices for MOPS95 Petrol and for Tapis and Dated Brent crude oil are provided by S&P Global, Platts. Platts have publicly reported that countries across the Asia-Pacific region including Australia are increasingly moving to using Dated Brent as the relevant crude pricing benchmark for crude oil contract purposes and spot transactions. Caltex Australia has also indicated in public statements a shift to Dated Brent crude pricing. For information on crude oil pricing and Dated Brent pricing in Asia see http://www.aip.com.au/pricing/crude.htm.

Figure 2: Difference between market prices

MOPS95 Petrol price minus Tapis Crude Oil price



NOTE: The refiner margin above is the difference between market prices for MOPS95 Petrol and Tapis. It is not a figure determined by refiners.

Cents per litre (A\$)	TAPIS CRUDE OIL	DATED BRENT CRUDE OIL	MOPS95 PETROL
Average: Last Week (to Friday 23/11/18)	58.7	53.3	58.5
Average: Previous Week (to Friday 16/11/18)	62.0	57.3	60.7
Average: Last 4 Weeks	64.0	59.3	63.4
Average: Last 12 Weeks	69.9	66.9	73.4
Average: Last 12 Months	62.2	60.3	68.4

PLEASE NOTE

Differences/margins between market prices or benchmarks are used as indicators of general trends in the petroleum market, **they do not represent profits** accruing to oil companies at the refining, wholesale or retail segments of the market. For each market segment, <u>a range of costs</u> would need to be deducted to determine actual profits.

Australian Wholesale Market Trends

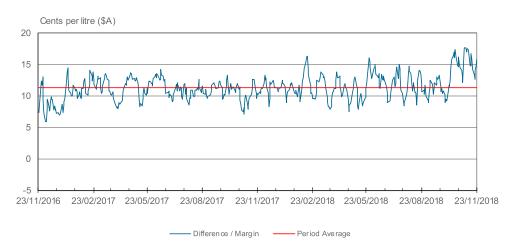
Figure 3: Comparison of Australian TGP ULP (or 'wholesale price') with Singapore petrol price (mops95 petrol)



NOTE: The MOPS95 Petrol prices and Shipping rates are provided by S&P Global, Platts, see Notes on page 2.

Figure 4: Difference between market prices

National Average TGP ULP minus MOPS95 Petrol (plus Shipping & Taxes)



MOPS95 PETROL		Cents per litre (A\$)
Average: Last Week	(to Friday 23/11/18)	58.5
Average: Previous We	eek (to Friday 16/11/18)	60.7
Average: Last 4 Wee	ks	63.4
Average: Last 12 We	eks	73.4
Average: Last 12 Mor	nths	68.4

TGP U	LP (National Average)	Cents per litre (A\$)
Average:	Last Week (to Friday 23/11/18)	123.2
Average:	Previous Week (to Friday 16/11/18)	127.0
Average:	Last 4 Weeks	130.0
Average:	Last 12 Weeks	138.5
Average:	Last 12 Months	131.3

PLEASE NOTE

Differences/margins between market prices or benchmarks are used as indicators of general trends in the petroleum market, they do not represent profits accruing to oil companies at the refining, wholesale or retail segments of the market. For each market segment, a range of costs would need to be deducted to determine actual profits. For example, at the wholesale level, a range of costs (including 'landed costs' and 'wholesaling costs') would need to be deducted to determine actual profits at the wholesale level. These 'landed costs' include the costs of the quality premium (market cost) for Australian fuel standards, insurance and loss, and local wharfage costs. The standard 'wholesaling costs' include terminal operating costs, administration and wholesale marketing costs and corporate taxes and government charges on wholesaling activities.

Average Terminal Gate Prices (TGP's) Across Australia

Week ended 23 November 2018

UNLEADED PETROL (cents per litre \$A)

	Monday 19 November 2018	Tuesday 20 November 2018	Wednesday 21 November 2018	Thursday 22 November 2018	Friday 23 November 2018
Sydney	124.2	123.6	122.9	122.4	122.2
Melbourne	124.0	123.4	122.7	122.2	121.9
Brisbane	124.3	123.7	123.0	122.5	122.2
Adelaide	124.3	123.7	122.9	122.5	122.2
Perth	124.0	123.5	122.8	122.4	122.1
Darwin	128.9	128.3	127.6	127.1	126.8
Hobart	129.2	128.7	128.0	127.5	127.3

NOTES: Daily TGP data are published by all wholesale fuel suppliers. AIP's website presents average TGP data for each weekday – see www.aip.com.au/pricing/tgp.htm. This data has been prepared by ORIMA Research Pty Ltd on behalf of AIP, using information from BP Australia, Caltex, Viva Energy Australia, and ExxonMobil Australia. Prices shown are the average TGP for unleaded petrol across each of these companies for the day.

Explaining the time lag between changes in Singapore prices and changes in Australian wholesale petrol prices

Generally, there is a <u>short time lag</u> of 1-2 weeks between changes in Singapore prices and changes in Australian prices.

- ⇒The lag can be seen in <u>FIGURE 3</u> on the previous page. That is, see the slight delay in the peaks and troughs in the pink line (National Average TGP) compared to the **purple line** (MOPS95 Petrol plus Shipping & Taxes).
- ⇒Importantly, this time lag occurs whether:

 <u>prices are going up</u> (when the lag slows price rises to consumers)
 or <u>prices are going down</u> (when the lag delays price falls).
- ⇒The lag is a result of using a <u>rolling average</u> of Singapore prices as part of the wholesale pricing methodology (very similar to that used by the ACCC when wholesale prices were regulated by government). The pricing methodology is called import parity pricing (IPP).
- ⇒The use of rolling averages smooths day-to-day price volatility.
- ⇒Not accounting for this lag, introduced by the rolling average, leads to <u>incorrect conclusions</u> about how Singapore prices flow through to prices in Australia.

The very close relationship between changes in MOPS95 Petrol and changes in Australian TGPs can be seen by applying a rolling average to the MOPS95 Petrol data (a 7 day rolling average is used in the Chart to the right to illustrate this).



Australian Retail Market Trends

Figure 5: Comparison of Australian pump price with Australian TPG

Average Retail Price versus Average Wholesale Price

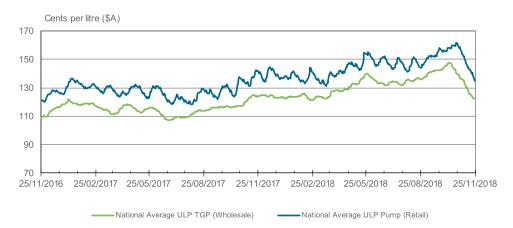
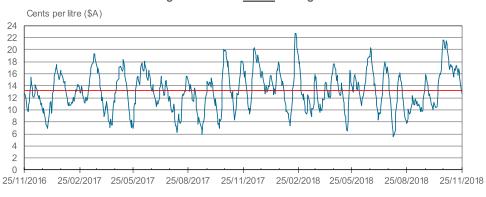


Figure 6: difference between market prices

Australian Average Retail Price minus Average Wholesale Price



—— Difference / Margin —— Period Average

Wholesale: TGP ULP (National Average)	Cents per litre (A\$)
Average: Last Week (to Friday 23/11/18)	123.2
Average: Last Week (to Friday 16/11/18)	127.0
Average: Last 4 Weeks	130.0
Average: Last 12 Weeks	138.5
Average: Last 12 Months	131.3

Retail: Pump Price ULP (National Average)	Cents per litre (A\$)
Average: Last Week (to Sunday 25/11/18)	137.8
Average: Last Week (to Sunday 18/11/18)	143.1
Average: Last 4 Weeks	146.6
Average: Last 12 Weeks	152.7
Average: Last 12 Months	144.9

PLEASE NOTE

- (1) The data for **retail petrol prices** is based on available market data supplied by MotorMouth (see www.motormouth.com.au). (2) There is a **time lag** between changes in Australian wholesale (TGP) petrol prices and the change in retail petrol prices which needs to be taken into account when comparing relative price movements. According to the ACCC, this time lag can be longer during times of significant volatility in international and wholesale petrol prices.
- (3) Differences/margins between market prices or benchmarks are used as indicators of general trends in the petroleum market, they do not represent profits accruing to oil companies at the refining, wholesale or retail segments of the market. For each market segment, a range of costs would need to be deducted to determine actual profits. For example at the retail level, a range of standard retailing costs would need to be deducted to determine actual profits. These costs include:
- \Rightarrow land transport costs (of getting fuel from the terminal gate to the petrol bowser)
- ⇒ administration and retail marketing costs
- ⇒ the costs of running service stations like wages, rent and utilities
- ⇒ corporate taxes and other government charges on retailing activities

Summary: Retail Petrol Price Trends

Across States/Territories

Week ended 25 November 2018

'NATIONAL AND STATE' AVERAGE PRICES (cents per litre \$A)

	Weekly Average	Weekly Change	Low	High
National Average	137.8	-5.3	134.9	140.5
NSW / ACT	136.1	-4.9	134.5	138.4
Victoria	133.9	-8.6	130.7	137.5
Queensland	133.8	-5.8	132.4	135.9
South Australia	150.3	3.6	140.3	159.4
Western Australia	143.2	-5.5	138.1	150.6
Northern Territory	163.5	-1.5	163.3	164.3
Tasmania	161.2	-1.6	160.3	161.8

'METROPOLITAN' AVERAGE PRICES (cents per litre \$A)

	Weekly Average	Weekly Change	Low	High
National Metropolitan Average	132.7	-5.8	129.0	136.1
Five Major Capital City Average	134.4	-4.4	129.3	139.1
Sydney	125.9	-5.9	124.0	128.5
Canberra	160.4	-3.6	158.8	163.7
Melbourne	130.1	-9.7	126.4	134.3
Brisbane	126.0	-6.4	124.5	127.9
Adelaide	150.9	6.4	138.2	162.2
Perth	139.3	-6.2	132.2	148.4
Darwin	153.5	-1.5	153.4	154.2
Hobart	161.9	-1.2	160.9	162.8

'REGIONAL' AVERAGE PRICES (cents per litre \$A)

	Weekly Average	Weekly Change	Low	High
National Regional Average	148.2	-4.2	146.8	150.1
NSW / ACT	146.4	-3.6	145.1	148.0
Victoria	144.4	-5.7	142.6	146.5
Queensland	148.6	-4.5	147.2	150.9
South Australia	148.5	-4.5	146.3	151.2
Western Australia	157.2	-3.0	156.0	158.9
Northern Territory	190.6	-1.6	190.3	191.7
Tasmania	160.7	-1.9	159.9	161.2

For average weekly retail (pump) prices for petrol and diesel across Australian cities and towns, please see www.aip.com.au/pricing/retail.htm

- (1) The data for retail petrol prices is based on available market data supplied by MotorMouth (see www.motormouth.com.au).
- (2) The National Average Retail Price is calculated as the weighted average of each State/Territory's metropolitan and non metropolitan retail petrol prices, with the weights based on the number of registered petrol vehicles in each of these regions.
- (3) The National Metropolitan Average price is calculated as the weighted average of the retail petrol prices across each capital city, where the weights are based on the number of vehicles using petrol registered in each city.
- (4) The Five Major Capital City Average is the unweighted average of the prices for Sydney, Melbourne, Brisbane, Adelaide and Perth.
 (5) The Regional Average price is calculated as the weighted average of the retail petrol prices for the non-metropolitan regions in each State/Territory, where the weights are based on the number of vehicles using unleaded petrol.

 (6) The vehicle data source is ABS Motor Vehicle Census, 2011, Cat No 9309.0.
- (7) 'Weekly Low' and 'Weekly High' are based on the lowest and the highest average daily prices in the relevant area.
- The average daily price for each region (eg. Geelong) is calculated as a straight numerical average of all 'price points' provided for that day. Aggregate daily prices are based on a weighted average of all regions (eg. Geelong, Ballarat, Wodonga etc) in the relevant area (eg. Victoria) where weights are based on the number of vehicles using unleaded petrol in each region.
- (8) Weekly Average prices are a straight average of the seven days.
- (9) Weekly Change is the change compared with the Weekly Average last week.

 For more information on data methodology, please see the AIP Website (www.aip.com.au/pricing/retail.htm).

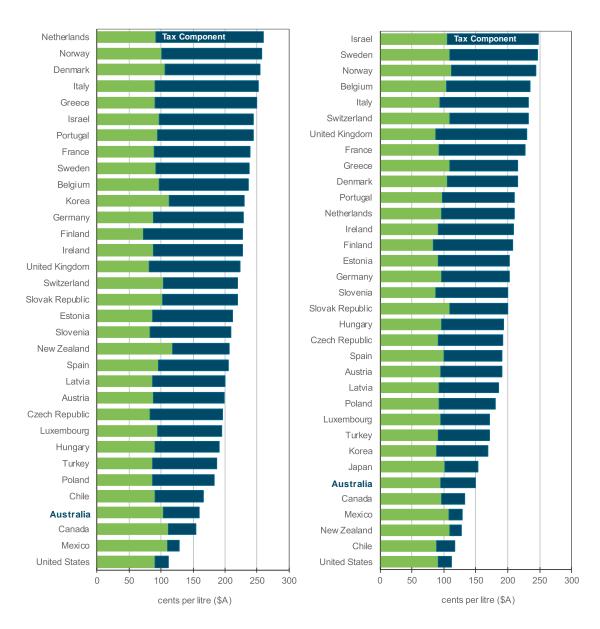
Petrol and Diesel Prices & Taxes in OECD Countries

June Quarter 2018

The Charts show Australia has among the lowest petrol and diesel prices of all OECD countries.

Petrol Prices and Taxes in OECD Countries

Diesel Prices and Taxes in OECD Countries



Source: Australian Petroleum Statistics, Office of the Chief Economist