

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**, **11 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).

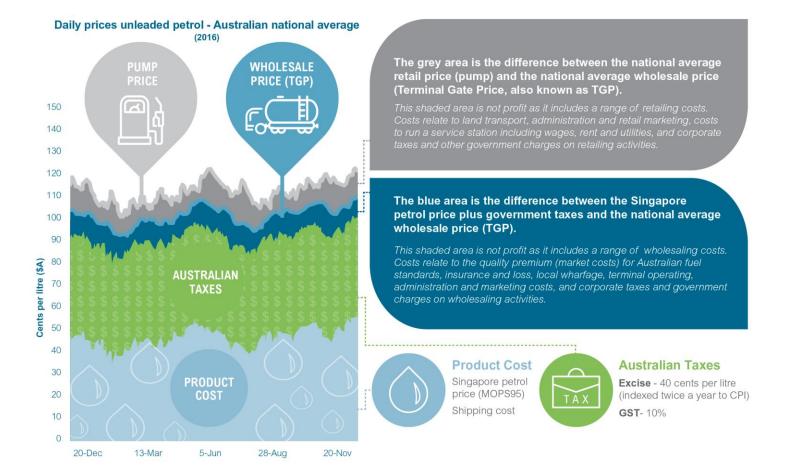
Should you have any questions about the material in this report, please contact AIP at aip@aip.com.au.

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: 149.4 cents
Average Petrol wholesale price this week: 133.2 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.

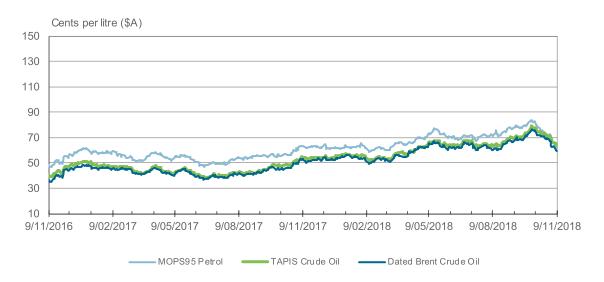
(3) TAXES: is excise and GST less any relevant state rebates weighted by the volume of petrol consumed in each State.

(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

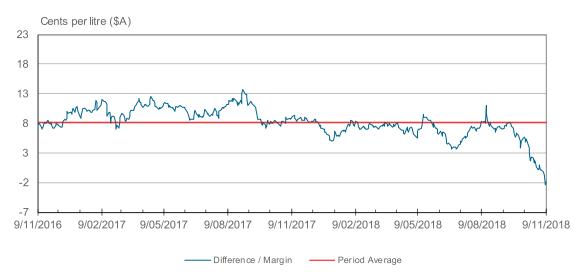
Figure 1: Comparison of Singapore petrol price (mops95 petrol) with crude oil prices



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 09/11/18)	65.4	60.9	64.3
Average: Previous Week (to Friday 02/11/18)	69.9	65.7	70.3
Average: Last 4 Weeks	70.2	66.8	71.1
Average: Last 12 Weeks	71.0	68.3	75.8
Average: Last 12 Months	61.9	60.1	68.5

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.

Australian Wholesale Market Trends

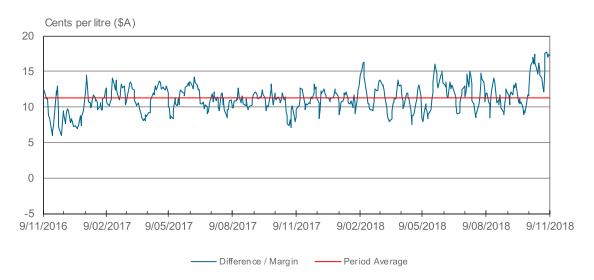
Figure 3: Comparison of Australian TGP ULP (or 'wholesale price') with Singapore petrol price (mops95 petrol)



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\$)	TGP ULP (National Average)	Cents per litre (A\$)
Average: Last Week (to Friday 09/11/18)	64.3	Average: Last Week (to Friday 09/11/18)	133.2
Average: Previous Week (to Friday 02/11/18)	70.3	Average: Previous Week (to Friday 02/11/18)	136.7
Average: Last 4 Weeks	71.1	Average: Last 4 Weeks	139.1
Average: Last 12 Weeks	75.8	Average: Last 12 Weeks	140.4
Average: Last 12 Months	68.5	Average: Last 12 Months	131.2

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 9 November 2018

UNLEADED PETROL (cents per litre \$A)

	Monday	Tuesday	Wednesday	Thursday	Friday
	5 November 2018	6 November 2018	7 November 2018	8 November 2018	9 November 2018
Sydney	135.3	134.5	133.3	132.1	130.6
Melbourne	135.0	134.2	133.1	131.8	130.4
Brisbane	135.4	134.5	133.4	132.2	130.7
Adelaide	135.3	134.5	133.3	132.1	130.7
Perth	135.1	134.1	132.9	132.0	130.5
Darwin	140.0	139.2	138.0	136.8	135.3
Hobart	140.5	139.4	138.1	136.9	135.4

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.

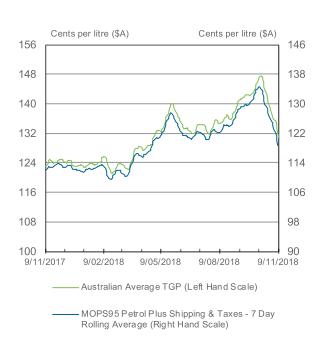
Explaining the time lag between changes in Singapore prices and changes in Australian wholesale petrol prices

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

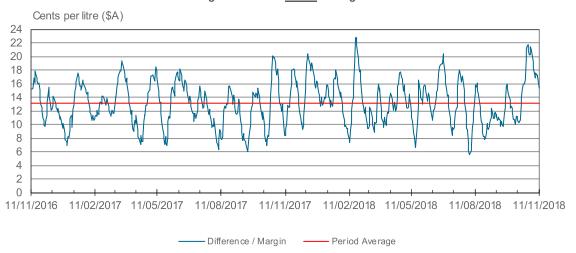
Figure 5: Comparison of Australian pump price with Australian TPG

Average Retail Price versus Average Wholesale Price



Figure 6: difference between market prices

Australian Average Retail Price minus Average Wholesale Price



Wholesale: TGP ULP (National Average)	Cents per litre (A\$)
Average: Last Week (to Friday 09/11/18)	133.2
Average: Last Week (to Friday 02/11/18)	136.7
Average: Last 4 Weeks	139.1
Average: Last 12 Weeks	140.4
Average: Last 12 Months	131.2

Retail:	Pump Price ULP (National Average)	(A\$)
Average:	Last Week (to Sunday 11/11/18)	149.4
Average:	Last Week (to Sunday 04/11/18)	156.1
Average:	Last 4 Weeks	156.3
Average:	Last 12 Weeks	153.6
Average:	Last 12 Months	144.8

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:
- ⇒ land transport costs (of getting fuel from the terminal gate to the petrol bowser)
- ⇒ administration and retail marketing costs
- \Rightarrow 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 11 November 2018

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

	Weekly Average	Weekly Change	Low	High
National Average	149.4	-6.7	146.1	152.1
NSW / ACT	146.7	-5.9	144.4	149.4
Victoria	151.3	-7.5	147.8	155.6
Queensland	147.5	-7.1	144.2	151.0
South Australia	145.7	-15.0	139.4	153.0
Western Australia	154.5	-2.4	149.9	160.3
Northern Territory	166.6	-3.7	165.5	168.2
Tasmania	164.3	-0.3	164.1	164.4

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

	Weekly Average	Weekly Change	Low	High
National Metropolitan Average	145.9	-8.8	141.7	149.6
Five Major Capital City Average	145.1	-9.8	140.1	149.5
Sydney	139.3	-9.0	136.0	143.4
Canberra	164.4	-0.8	164.3	164.6
Melbourne	149.9	-8.8	145.6	154.8
Brisbane	142.5	-9.6	138.1	147.1
Adelaide	141.8	-19.2	133.8	151.1
Perth	152.2	-2.7	146.0	159.4
Darwin	157.0	-4.8	155.7	158.9
Hobart	163.7	-0.7	163.4	164.1

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

	Weekly Average	Weekly Change	Low	High
National Regional Average	156.3	-2.7	155.2	157.8
NSW / ACT	153.9	-2.7	152.8	155.2
Victoria	155.3	-3.7	154.0	157.8
Queensland	156.8	-2.5	155.6	158.2
South Australia	156.7	-3.2	155.6	158.5
Western Australia	162.9	-1.4	161.8	163.7
Northern Territory	192.7	-0.9	192.2	193.4
Tasmania	164.7	-0.1	164.6	164.9

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).

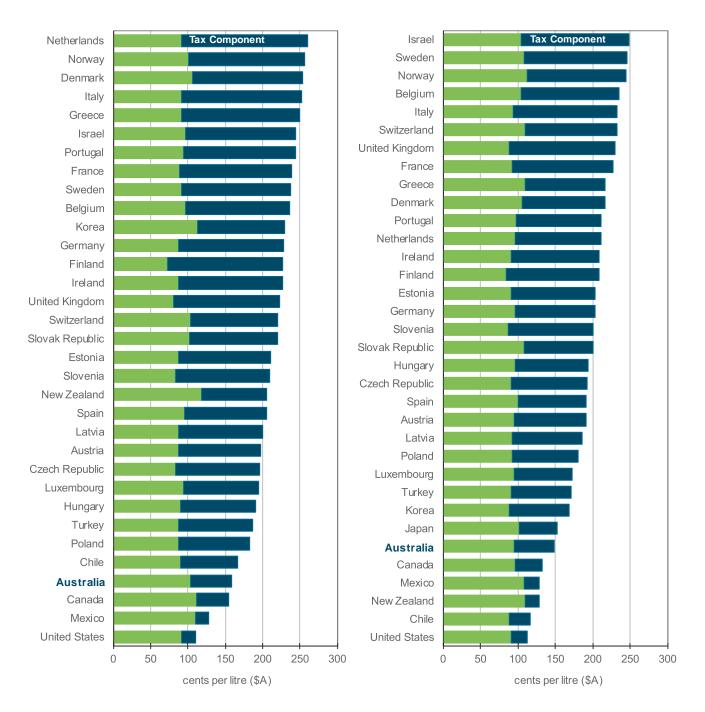
Petrol and Diesel Prices & Taxes in OECD Countries

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