

Welcome to 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, 30 October 2022

For more detailed information on:

Pricing Facts - see https://www.aip.com.au/facts-about-prices

Terminal Gate Prices (wholesale) - see https://aip.com.au/pricing/terminal-gate-prices

Pump Prices (retail) - see

https://aip.com.au/pricing/pump-prices

International Fuel Prices - see

https://aip.com.au/pricing/internationalprices/international-market-watch

In the AIP Weekly Petrol Prices Report:

- the data for international crude oil and petrol prices is supplied by Argus Media - see www.argusmedia.com/.
- the data for wholesale petrol prices is based on market data published by AIP member companies (BP, Viva Energy Australia, Mobil and Ampol) - 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.

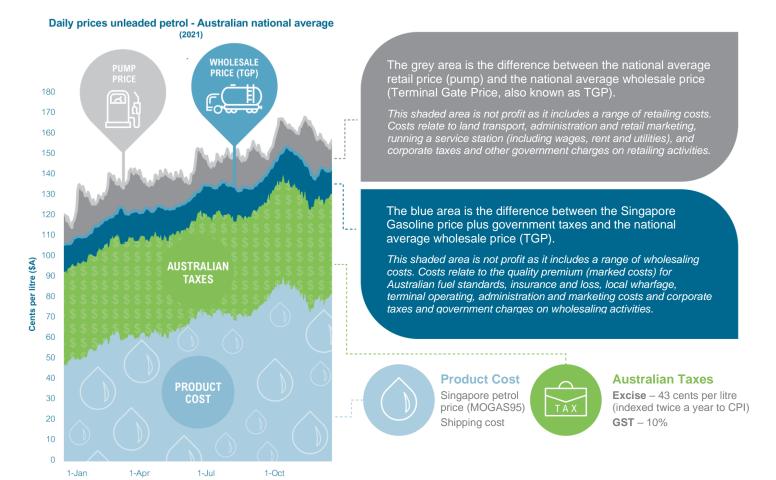
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The Australian Fuel Market - An Overall Snapshot

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 (MOGAS95) is the key price benchmark for petrol in Australia. As the chart below shows, MOGAS95 Petrol plus shipping costs and Australian taxes represents almost the entire wholesale price of petrol.



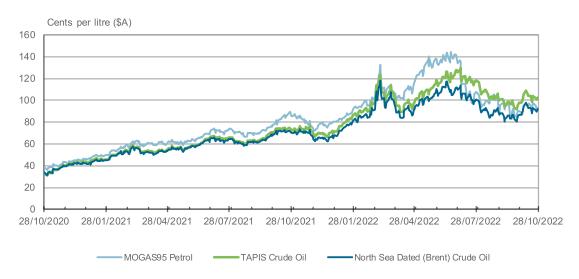
Average Petrol retail price this week: 184.8 cents Average Petrol wholesale price this week: 175.5 cents

(1) MOGAS95 PETROL: the international petrol prices are provided by the Argus Media Group, and represent the end of day assessment for the midpoint of Singapore prices for 95 Octane Petrol (MOGAS95). The Australian Institute of Petroleum obtains confidential proprietary data from the Argus Media group under license, from which data the Australian Institute of Petroleum conducts and publishes its own calculations and opinions. Argus makes no warranties, express or implied, as to the accuracy, adequacy, timeliness, or completeness of its data or the Australian Institute of Petroleum's calculations or opinions, or their fitness for any particular purpose. Argus shall not be liable for any loss or damage arising from any party's reliance on Argus' data or the Australian Institute of Petroleum's calculations or opinions, and disclaims any and all liability related to or arising out of use of Argus' data and/or the Australian Institute of Petroleum's calculations and opinions to the full extent permissible by law. For further information about Argus products and services, see www.argusmedia.com

- (2) SHIPPING: AIP estimate, based on various sources (e.g. Argus, ACCC, 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

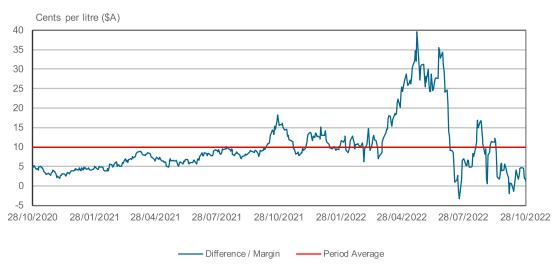
Figure 1: Comparison of Singapore petrol price (MOGAS95) with crude oil prices



NOTE: Australia is a significant part of the Asia-Pacific fuel market. The Australian market looks to Singapore, which is the regional refining and distribution centre, for relevant pricing benchmarks for petrol prices for unleaded petrol (Argus 95R gasoline/MOGAS95) and to Tapis and North Sea Dated (Brent) for crude oil. Argus Media publishes prices for Tapis and Dated Brent ("North Sea Dated" in Argus terminology). Countries across the Asia-Pacific region including Australia use North Sea Dated and its derivatives as benchmarks for crude oil contract purposes and spot transactions. For information on crude oil pricing in Asia see http://www.aip.com.au/pricing/crude.htm.

Figure 2: Difference between market prices

MOGAS95 Petrol Price Minus North Sea Dated (Brent) Crude Oil price



NOTE: The refiner margin above is the difference between market prices for MOGAS95 and Brent. It is not a figure determined by refiners.

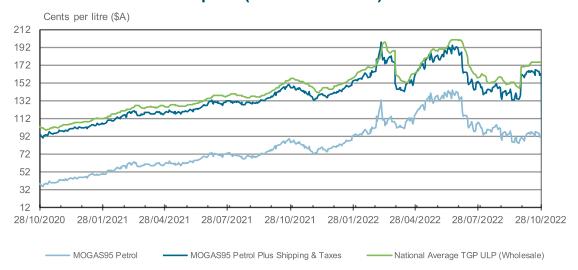
Cents per litre (A\$)	TAPIS CRUDE OIL	NORTH SEA DATED (BRENT) CRUDE OIL	MOGAS95 PETROL
Average: Last Week (to Friday 28/10/22)	101.7	90.9	93.2
Average: Previous Week (to Friday 21/10/22)	102.5	91.5	94.9
Average: Last 4 Weeks	102.9	92.0	93.7
Average: Last 12 Weeks	101.2	88.5	94.8
Average: Last 12 Months	97.7	89.2	102.2

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, <u>a range of costs</u> would need to be deducted to determine actual profits.

Australian Wholesale Market Trends

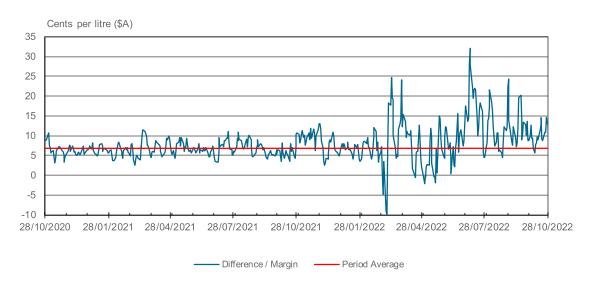
Figure 3: Comparison of Australian TGP ULP (or 'wholesale price') with Singapore petrol price (MOGAS95 Petrol)



NOTE: The MOGAS95 Petrol prices and shipping rates are provided by Argus Media Group, see Notes on page 2.

Figure 4: Difference between market prices

National Average TGP ULP minus MOGAS95 Petrol (plus shipping and taxes)



Cents per litre (A\$) 175.5 175.6 173.7 160.7

MOGAS95 PETROL	Cents per litre (A\$)	TGP ULP (National Average)
Average: Last Week (to Friday 28/10/22)	93.2	Average: Last Week (to Friday 28/10/22)
Average: Previous Week (to Friday 21/10/22)	94.9	Average: Previous Week (to Friday 21/10/22)
Average: Last 4 Weeks	93.7	Average: Last 4 Weeks
Average: Last 12 Weeks	94.8	Average: Last 12 Weeks
Average: Last 12 Months	102.2	Average: Last 12 Months

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 30 October 2022

UNLEADED PETROL (cents per litre \$A)

	Monday	Tuesday	Wednesday	Thursday	Friday
	24 October 2022	25 October 2022	26 October 2022	27 October 2022	28 October 2022
Sydney	176.5	176.5	176.3	176.3	176.1
Melbourne	175.3	175.2	175.2	175.1	174.9
Brisbane	175.6	175.6	175.5	175.6	175.4
Adelaide	176.5	176.9	176.7	176.8	176.6
Perth	173.7	173.9	173.7	173.8	173.6
Darwin	178.4	178.6	178.5	178.6	178.6
Hobart	180.0	180.4	180.2	180.2	180.2

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, Ampol, 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

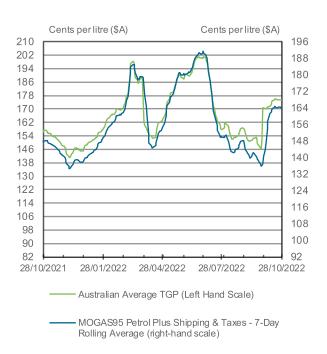
Singapore prices and changes in Australian wholesale petrol prices

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 **green line** (National Average TGP) compared to the **blue line** (MOGAS95 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 incorrect conclusions about how Singapore prices flow through to prices in Australia.

The very close relationship between changes in MOGAS95 Petrol and changes in Australian TGPs can be seen by applying a rolling average to the MOGAS95 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 TGP

Average Retail Price versus Average Wholesale Price

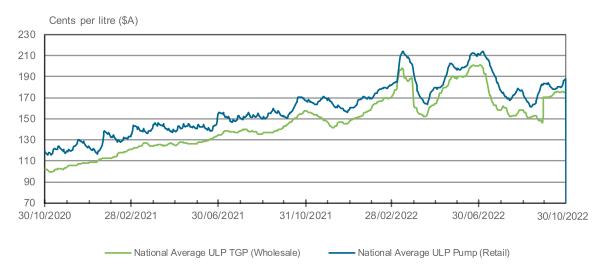
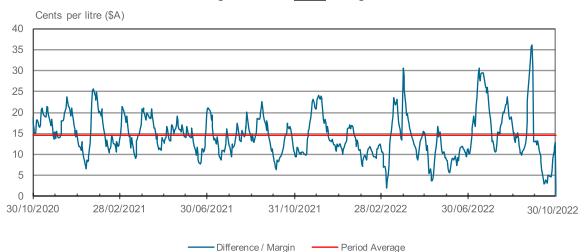


Figure 6: difference between market prices

Australian Average Retail Price minus Average Wholesale Price



Wholesale: TGP ULP (National Average)	Cents per litre (A\$)
Average: Last Week (to Friday 28/10/22)	175.5
Average: Last Week (to Friday 21/10/22)	175.6
Average: Last 4 Weeks	173.7
Average: Last 12 Weeks	160.7
Average: Last 12 Months	166.4

Retail: Pump Price ULP (National Average)	Cents per litre (A\$)
Average: Last Week (to Sunday 30/10/22)	184.8
Average: Last Week (to Sunday 23/10/22)	180.0
Average: Last 4 Weeks	181.5
Average: Last 12 Weeks	175.2
Average: Last 12 Months	180.6

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
- ⇒ 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 30 October 2022

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

	Weekly Average	Weekly Change	Low	High
National Average	184.8	4.8	180.3	188.2
NSW / ACT	183.0	5.0	179.1	187.4
Victoria	186.9	8.6	180.3	194.1
Queensland	182.6	4.9	177.8	188.2
South Australia	185.0	3.6	176.8	200.4
Western Australia	185.5	-3.6	182.1	189.2
Northern Territory	202.0	1.7	201.9	202.0
Tasmania	194.6	1.2	194.4	194.8

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

	Weekly Average	Weekly Change	Low	High
National Metropolitan Average	184.8	6.8	178.3	189.8
Five Major Capital City Average	184.2	5.5	177.6	187.1
Sydney	181.7	9.0	174.6	189.6
Canberra	187.3	0.3	187.1	187.4
Melbourne	189.3	11.5	180.5	199.0
Brisbane	182.2	7.2	175.0	190.6
Adelaide	184.8	4.7	173.8	205.6
Perth	183.2	-4.8	178.7	187.8
Darwin	189.7	1.8	189.7	189.8
Hobart	194.4	1.4	194.1	194.6

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

	Weekly Average	Weekly Change	Low	High
National Regional Average	184.7	0.5	184.5	185.0
NSW / ACT	184.2	0.4	183.9	184.4
Victoria	180.2	0.7	179.8	180.6
Queensland	183.3	0.6	183.0	183.8
South Australia	185.4	0.2	185.2	185.6
Western Australia	194.0	1.2	193.6	194.3
Northern Territory	235.4	1.2	234.8	235.6
Tasmania	194.8	1.0	194.5	194.9

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

- (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).

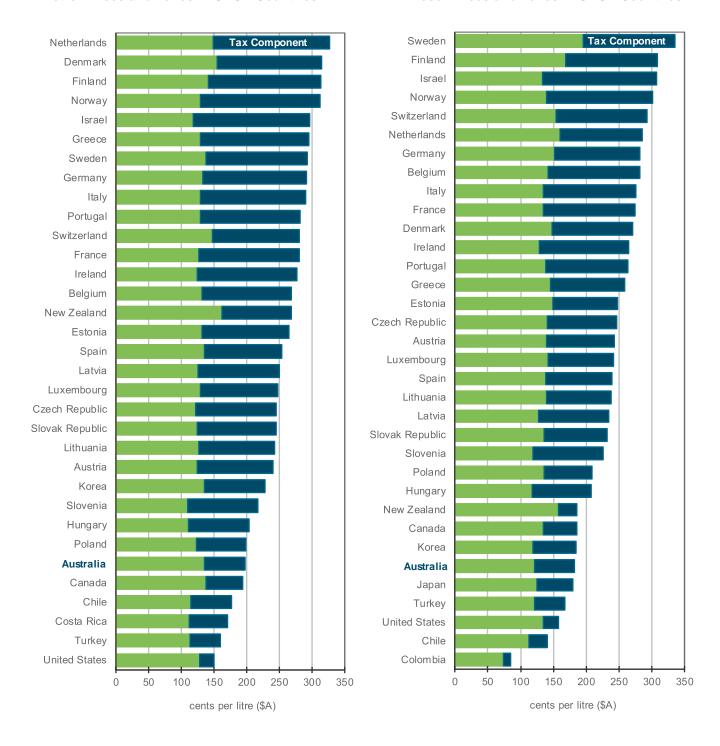
Petrol and Diesel Prices & Taxes in OECD Countries

March Quarter 2022

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