

# Annual Fuel Price Report 2016



The RACQ's Annual Fuel Price Report for 2016 provides an overview of fuel price movements during the year, with a focus on the key Brisbane capital city market.

## Key Points

- In 2016, ULP sold in Brisbane was the most affordable since our records began in 1980. The average weekly wage could be used to buy 1277 litres of ULP, an increase of 161 litres from 2015.
- The average price of unleaded petrol (ULP) in Brisbane for 2016 was 118.6 cents per litre (cpl), 11.5 cpl lower than 2015, and the cheapest since 2009 (117.8 cpl).
- Total margins on ULP sold in Brisbane were 24.7 cpl, 3.3 cpl lower than 2015, however retail margins were the highest on record at 11.0 cpl.
- The low ULP price in Brisbane and Queensland is primarily due to low oil prices throughout 2016.
- The average price of 95 RON Premium ULP (PULP 95) in Brisbane for 2016 was 130.0 cpl, 11.2 cpl lower than 2015. Retail margins, at 13.8 cpl, were 0.9 cpl higher than 2015.
- The average price of E10 in Brisbane for 2016 was 116.1 cpl, 11.4 cpl lower than 2015.
- The average price of diesel in Brisbane in 2016 was 119.1 cpl, 10.0 cpl lower than 2015. Retail margins, at 15.2 cpl, were 3.0 cpl higher than 2015.
- The Brisbane ULP price cycle increased in length during 2016. The average cycle length was 33.0 days, compared to 28.1 days in 2015.
- The price of Brent crude oil (in Australian dollars, A\$) fell to a twelve year low of 40.2 A\$ per barrel (A\$/bbl, 25.3 US\$/bbl) on the 21 January 2016. Brent was last this low in February 2004.
- The average price of ULP across Queensland in 2016 was 122.8 cpl, 12.6 cpl lower than 2015. The average price of diesel across Queensland in 2016 was 119.2 cpl, 13.8 cpl lower than 2015.
- Moranbah was the cheapest place to buy ULP and diesel (114.3 cpl and 110.2 cpl, respectively) in Queensland in 2016.

## Key Numbers

	Average Price	High Price (Date)	Low Price (Date)
<b>ULP Brisbane (cpl)</b>	118.6	136.1 (4/06/16)	96.6 (1/03/16)
<b>PULP 95 Brisbane (cpl)</b>	130.0	147.6 (3/06/16)	107.6 (1/03/16)
<b>Diesel Brisbane (cpl)</b>	119.1	131.5 (19/12/16)	111.0 (30/04/16)
<b>LPG Brisbane (cpl)</b>	66.4	71.3 (4/01/16)	64.1 (22-23/09/16, 2 & 14-17/10/16)
<b>Exchange Rate (A\$/US\$)</b>	0.7386	0.7812 (21/04/16)	0.6867 (20/01/16)
<b>Brent Crude (A\$/bbl)</b>	60.0	78.5 (30/12/16)	40.2 (21/01/16)

Source: RACQ calculations using Informed Sources, MotorMouth, Bloomberg and RBA data

## Summary of Price Movements in 2016

Table 1 summarises Brisbane ULP prices and margins for 2016, as well as wholesale prices and exchange rates, the prices of Asia Pacific regional benchmarks – Singapore MOGAS and Tapis crude, and the international crude oil benchmark – Brent.

**Table 1: Summary of Brisbane ULP Prices**

Date	Average ULP Retail Price (cpl)	Average TGP Price (cpl)	Brent Crude Oil (A\$/bbl)	Tapis Crude Oil (A\$/bbl)	MOGAS Price (A\$/bbl)	Exchange Rate (A\$/US\$)	Average Retail Margin (cpl)	Average Total Margin (cpl)
<b>Average for 2016</b>	118.6	106.5	60.0	62.1	75.2	0.7386	11.0	24.7
<b>Fourth Quarter 2016</b>	124.9	111.6	65.8	70.5	83.5	0.7277	12.2	25.7
<b>Third Quarter 2016</b>	114.5	104.6	61.9	63.7	72.2	0.7584	8.8	19.1
<b>Second Quarter 2016</b>	120.8	107.8	63.1	62.5	77.0	0.7454	11.9	26.7
<b>First Quarter 2016</b>	114.0	102.0	48.7	51.0	68.5	0.7215	10.9	27.5
<b>Average for 2015</b>	130.1	118.7	71.3	73.8	91.7	0.7527	10.3	28.0
<b>Average for 2014</b>	150.1	138.8	110.2	113.5	122.2	0.9028	10.2	21.6
<b>Average for 2013</b>	147.9	138.3	112.6	118.7	123.4	0.9686	8.5	19.5
<b>Average for 2012</b>	145.4	135.2	107.5	114.7	119.1	1.0359	9.5	20.4
<b>Average for 2011</b>	142.5	132.3	107.4*	113.2	116.2	1.0315	9.5	13.5

Source: RACQ calculations using Informed Sources, MotorMouth, FUELtrac, AIP, IRESS, Bloomberg and RBA data

\*Data limited to the third and fourth quarter of 2011

The average price of ULP in Brisbane in 2016 was 118.6 cpl, 11.5 cpl lower than 2015. 2016 was the cheapest year since 2009 when the average Brisbane ULP price was 117.8 cpl. At 114.0 cpl, the average ULP price in the first quarter of 2016 was the lowest quarterly price since the second quarter of 2009, when the price was 111.2 cpl.

Indicative retail margins on ULP sold in Brisbane, at 11.0 cpl, were the highest on record. Margins were 0.7 cpl or 6.8% higher than 2015. In 2009 (when retail prices were last this low) the average indicative retail margin was 4.5 cpl.

The price of the regional refined fuel benchmark (Singapore MOGAS) started the year at 75.2 A\$/bbl (47.3 cpl), rose to 84.9 A\$/bbl (53.4 cpl) in the second quarter, fell in the third quarter to 68.2 A\$/bbl (42.9 cpl) before ending the year stronger at 96.7 A\$/bbl (60.8 cpl).

Table 2 summarises Brisbane E10 and PULP 95 prices and margins for 2016 and the price differences compared to Regular ULP.

**Table 2: Summary of Brisbane E10 and PULP 95 Prices**

Date	Average E10 Retail Price (cpl)	Average E10 TGP Price (cpl)	E10 Retail Margin	E10 Price difference compared to ULP	Average PULP 95 Retail Price (cpl)	Average PULP 95 TGP Price (cpl)	PULP 95 Retail Margin	PULP 95 Price difference compared to ULP
Average for 2016	116.1	105.0	10.0	2.5	130.0	115.1	13.8	11.5
Fourth Quarter 2016	122.7	109.9	11.7	2.2	136.7	120.1	15.5	11.8
Third Quarter 2016	112.3	103.1	8.1	2.2	125.9	113.2	11.6	11.4
Second Quarter 2016	118.3	106.2	11.0	2.5	132.2	116.6	14.5	11.3
First Quarter 2016	111.1	100.6	9.4	3.0	125.4	110.7	13.6	11.3
Average for 2015	127.5	116.5	10.0	2.6	141.2	127.3	12.9	11.1
Average for 2014	147.2	136.7	9.4	-2.2	157.9	146.7	12.3	10.7
Average for 2013	145.5	136.3	8.1	-2.4	158.2	146.6	10.5	10.3
Average for 2012	143.1	133.1	9.3	-2.3	155.7	144.5	10.5	10.3
Average for 2011	141.8	131.3	9.8	-2.1	154.1	143.1	10.3	10.2

Source: RACQ calculations using Informed Sources, MotorMouth, FUELtrac, AIP, IRESS, Bloomberg and RBA data

The E10 and PULP 95 price in Brisbane largely followed the trends set by the ULP price. The price difference between E10 and ULP decreased in 2016 to 2.5 cpl, 0.1 cpl lower than 2015. Despite the price difference (compared to ULP), the lower energy content in E10 would still lead to higher cost per kilometre travelled (compared to ULP).

The price difference between PULP 95 and ULP increased in 2016 to 11.5 cpl, compared to 11.1 cpl in 2015 and 10.2 cpl in 2011.

At 10.0 cpl, retail margins on E10 were 1.0 cpl lower than ULP and the same as in 2015. Retail margins on PULP 95 were 2.8 cpl higher than ULP. This difference was similar in 2015.

## Summary of Diesel Price Movements in 2016

Table 3 summarises Brisbane diesel prices and margins for 2016, as well as wholesale prices and exchange rates, and the prices of Asia Pacific regional benchmarks – Singapore GASOIL and Tapis crude, and the international crude oil benchmark – Brent.

**Table 3: Summary of Brisbane Diesel Prices**

Date	Average Diesel Retail Price (cpl)	Average TGP Price (cpl)	Brent Crude Oil (A\$/bbl)	Tapis Crude Oil (A\$/bbl)	GASOIL Price (A\$/bbl)	Exchange Rate (A\$/US\$)	Average Retail Margin (cpl)	Average Total Margin (cpl)
<b>Average for 2016</b>	119.1	102.8	60.0	62.1	71.1	0.7386	15.2	25.2
<b>Fourth Quarter 2016</b>	124.8	109.2	65.8	70.5	80.9	0.7277	14.6	25.7
<b>Third Quarter 2016</b>	119.1	104.1	61.9	63.7	72.5	0.7584	13.9	23.2
<b>Second Quarter 2016</b>	115.9	104.0	63.1	62.5	72.7	0.7454	10.9	22.3
<b>First Quarter 2016</b>	116.4	93.7	48.7	51.0	57.5	0.7215	21.6	29.6
<b>Average for 2015</b>	129.1	115.8	71.3	73.8	87.9	0.7527	12.2	27.9
<b>Average for 2014</b>	155.4	140.4	110.2	113.5	125.7	0.9028	13.9	28.1
<b>Average for 2013</b>	153.4	141.7	112.6	118.7	129.6	0.9686	10.6	25.3
<b>Average for 2012</b>	149.3	138.2	107.5	114.7	124.8	1.0359	10.4	20.7
<b>Average for 2011</b>	145.2	136.4	107.4*	113.2	116.2	1.0315	8.2	16.6

Source: RACQ calculations using Informed Sources, MotorMouth, FUELtrac, AIP, IRESS, Bloomberg and RBA data

\*Data limited to the third and fourth quarter of 2011

The average price of diesel in Brisbane in 2016 was 10.0 cpl lower than the average price in 2015. Despite the substantial fall in the retail price, retail and total margins remained high in 2016. The average total margin in 2016 was 2.7 cpl lower than 2015 and 2.9 cpl lower than 2014. The retail margin increased by 3.0 cpl compared with 2015. Following a similar trend to MOGAS, the price of Singapore GASOIL strengthened across 2016.

## Brisbane Retail, Wholesale and Benchmark Prices

Oil and petrol are traded globally in very high volumes. Therefore, Australia is a price taker for all automotive fuels.

The price of regular unleaded petrol (ULP) sold in Brisbane is influenced by four key factors:

1. The cost of the crude oil
2. Production and transport costs
3. Government tax and excise
4. Refinery, wholesale and retail margins.

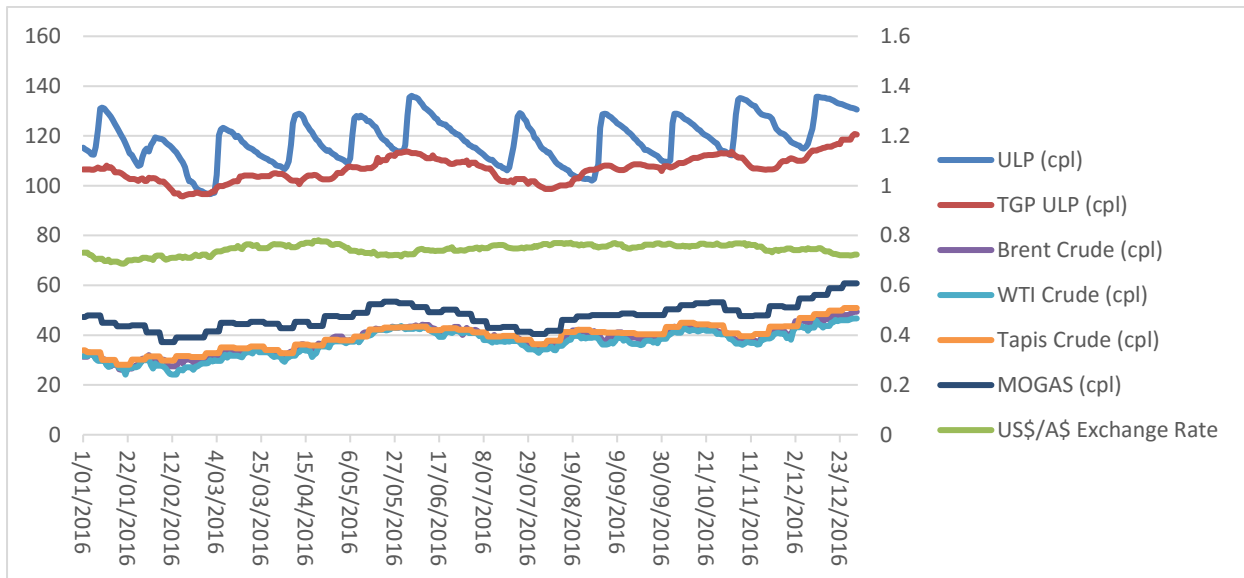
The Terminal Gate Price (TGP) is the key wholesale price for all liquid automotive fuels in the Australian market. TGP is strongly correlated to Singapore wholesale prices. For regular 91RON unleaded petrol (ULP) the refined product benchmark is MOGAS. The Singapore MOGAS price has historically been linked to the price of Tapis crude oil. However, in 2012 this started to change with Brent having a greater impact on the Singapore MOGAS price. In 2014 and 2015 the difference between the Tapis and Brent prices decreased. This trend continued in 2016. In 2016 the average price difference between Tapis and Brent was 2.1 A\$/bbl compared to 2.5 and 3.3 A\$/bbl in 2015 and 2014, respectively. While both prices are similar and are both highly correlated to MOGAS, Brent is considered to be the global benchmark oil price and should be considered of greater importance.

The convergence observed between the Brent and Tapis prices was also observed between West Texas Intermediate (WTI – the north American benchmark) and other benchmarks. Historically, because of a long-standing export ban of US-produced oil, the WTI price was lower than Brent and Tapis. In January 2016, the ban was lifted and the prices of WTI, Brent and Tapis started to converge.

Figure 1 displays the Brent crude oil price, the Tapis crude oil price, the average Brisbane TGP – the local wholesale price – for ULP, alongside the Brisbane retail price. These prices are all presented in Australian cents per litre (cpl). Brent, Tapis and MOGAS are internationally traded products bought and sold in US dollars. In Figure 1 the US\$ price has been converted to Australian dollars. Figure 2 similarly displays the diesel prices.

Most of the difference between the price of MOGAS (or GASOIL for diesel) and the TGP is government fuel excise and GST. The remainder is refinery and wholesale margins, shipping and other costs. The difference between the TGP and the Brisbane retail price is largely the retail margin, and to a smaller extent, local transport costs. In 2016 the Brisbane TGPs for ULP and diesel were closely correlated with the MOGAS and GASOIL price.

**Figure 1: Brisbane ULP Wholesale Price, Retail Price, Tapis, Brent and MOGAS Price, and the US\$/A\$ Exchange Rate in 2016**

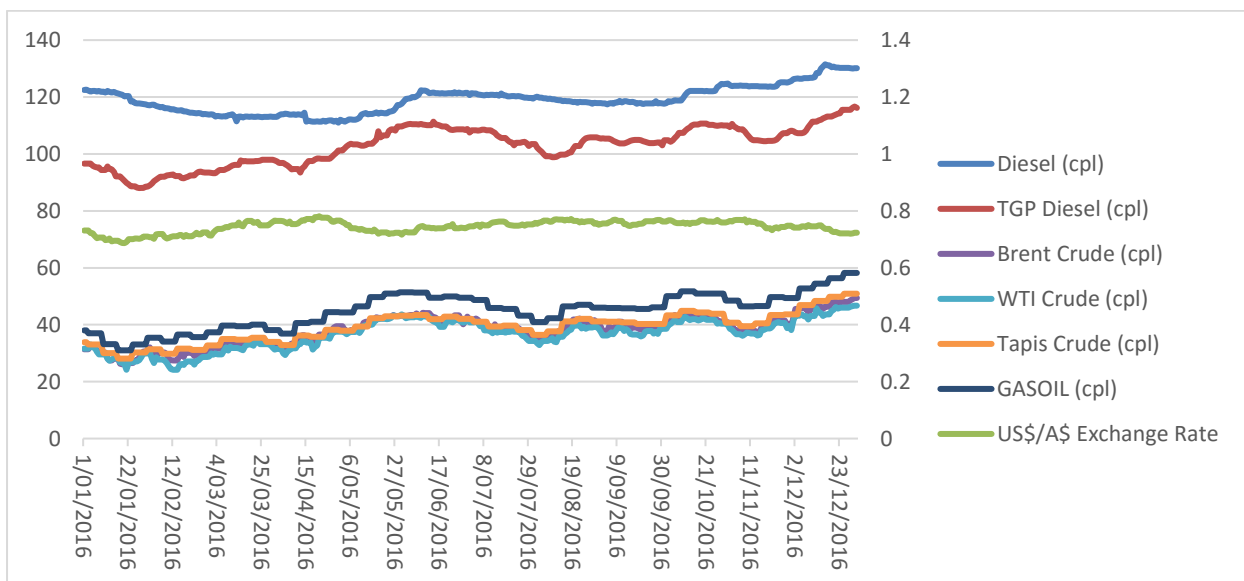


Source: FUELtrac, Informed Sources, MotorMouth, AIP, RBA and Bloomberg

In Figure 1 and 2 the fuel and oil prices are plotted against the left axis in cpl and the exchange rate in US dollars per Australian dollars plotted on the right axis.

Brisbane ULP retail prices were at their lowest during 2016 in August, when the monthly average was 108.2 cpl, the second cheapest month was February when the monthly average was 109.2 cpl. The lowest daily average of 96.6 cpl was recorded on 1 March 2016. This was the lowest daily average price observed in Brisbane for seven years. An average ULP price this low was observed on 14 January 2009, when the average price of ULP in Brisbane fell to 95.5 cpl.

**Figure 2: Brisbane Diesel Wholesale Price, Retail Price and Singapore Gasoil Price in 2016**



Source: FUELtrac, Informed Sources, MotorMouth, RBA, AIP and Bloomberg

The retail price of diesel in Brisbane followed a similar trend to the retail ULP price. Prices were relatively low in the first quarter, stronger in the second quarter, flat in the third before strengthening at the end of the year. Retail margins on diesel fluctuated throughout 2016, but remained at an elevated level. The Brisbane diesel TGP followed the trend set by Tapis, Brent and Singapore GASOIL. However, falls in the retail price did not match falls in the TGP. Subsequently, at several points in 2016 diesel retail margins were substantially higher than observed historically.

## Price Records

Like 2015, 2016 fuel pricing was dominated by low oil prices, low retail prices and high retail margins. In contrast many record high prices were observed in 2014. The collapse of the oil price that started in late 2014 continued throughout 2015 and 2016. Towards the end of 2016 following an agreement by OPEC and some non-OPEC countries to cut production, the oil price strengthened.

The price of Brent crude oil fell to a low of 40.2 A\$/bbl (25.3 US\$/bbl) on the 21 January 16. The Brent price was last as low as 40.0 A\$/bbl on 12 February 2004, in US\$ the Brent price was last as low as US\$25.0/bbl in May 2003.

The MOGAS price fell to a low of 59.2 A\$/bbl (or 37.2 cpl) on 13 February 2016. It was last this low on 31 December 2008 when it was 56.8 A\$/bbl.

The monthly average ULP price fell to a low of 108.2 cpl in August 2016. The ULP price in Brisbane was last this low in January 2009 when the price fell to 102.7 cpl. The monthly average diesel price fell to a low of 112.6 cpl in April 2016. The diesel price was last this low in June 2009 when the price fell to 112.1 cpl.

The record high retail prices observed in 2008 and 2014 remain the highest prices observed in Queensland. Table 4 shows the current and previous record high price across Queensland. Table 5 shows the record high ULP price for Queensland regional centres.

**Table 4: Summary of Record High Fuel Prices**

Record	Record highest price	Date Observed	Second highest price	Date Observed
Daily average ULP price in Brisbane	165.5 cpl	2 January 2014	165.4 cpl	24 July 2013
Monthly average highest ULP price in Brisbane	158.4 cpl	January 2014	154.7 cpl	December 2013
Daily average diesel price in Brisbane	177.7 cpl	15 July 2008	162.5 cpl	5 February 2014
Monthly average highest diesel price in Brisbane	176.7 cpl	July 2008	161.7 cpl	January 2014
Daily average LPG price in Brisbane	95.4 cpl	30 December 2013	95.0 cpl	2 January 2014
Monthly average LPG price in Brisbane	94.8 cpl	January 2014	91.1 cpl	December 2013

Highest ULP price in regional Queensland (monthly average)	178.9 cpl	January to November 2014 (observed in Weipa)	174.1 cpl	August 2013 (observed in Cloncurry)
Highest diesel price in regional Queensland (monthly average)	191.9 cpl	July 2008 (observed in Charleville)	177.4 cpl	January 2014 (observed in Cloncurry)

**Table 5: Record High Monthly Average ULP Prices in Regional Queensland**

Town/City	Record Price	Month Observed
Atherton	159.9	June 2014 and July 2014
Ayr	159.9	November 2013 to March 2014
Biloela	160.2	January 2014
Blackall	166.5	February 2014
Blackwater	159.1	January 2014
Bowen	160.2	January 2014
Brisbane	158.4	January 2014
Bundaberg	157.4	July 2008
Cairns	160.9	March 2014
Charleville	169.5	July 2008
Charters Towers	160.5	June 2014
Childers	157.1	August 2013 and January 2014
Cloncurry	174.1	August 2013
Cunnamulla	166.4	July 2008
Dalby	160.3	April 2014
Emerald	158.6	July 2008
Gladstone	159.4	March 2014
Gold Coast	158.4	January 2014
Goondiwindi	159.8	January 2014
Gympie	155.5	August 2013
Hervey Bay	156.5	August 2013
Ingham	159.1	January 2014
Innisfail	159.9	January 2014 to August 2013
Ipswich	157.0	January 2014
Kingaroy	158.4	September 2013
Longreach	168.4	February 2014



Mackay	158.0	January 2014
Mareeba	158.7	June 2014
Maryborough	157.0	August 2013
Miles	164.4	January 2014 and March 2014
Moranbah	165.7	February 2014
Mount Isa	162.5	September 2014
Rockhampton	159.5	January 2014
Roma	163.2	July 2008
Sunshine Coast	156.6	February 2014
Toowoomba	154.5	July 2008
Townsville	156.2	January 2014
Tully	159.9	January 2014 to August 2014
Warwick	155.2	July 2008
Weipa	178.9	January 2014 to November 2014
Yeppoon	158.0	March 2014

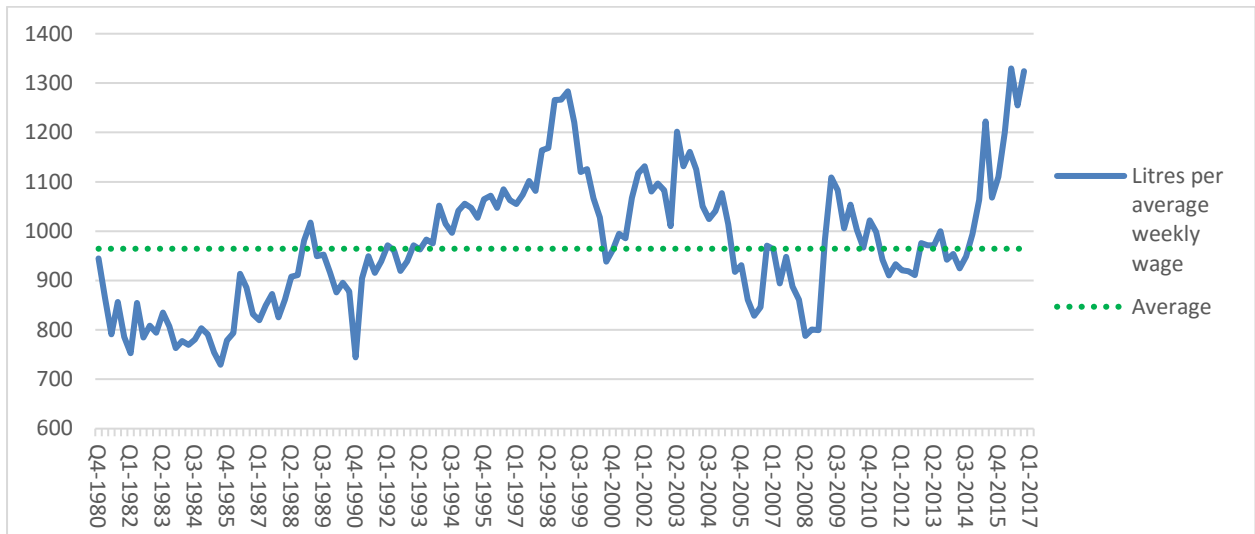
## Affordability of ULP in Brisbane

The affordability index compares the average price of ULP in Brisbane to the average weekly wage of employed persons in Australia. The index calculates how many litres of ULP could be purchased if the entire pre-tax average weekly wage was spent on fuel. The wage data used is the Average Weekly Ordinary Time Earnings (AWOTE) published by the ABS. In Figure 3 the solid blue line indicates the number of litres that could be purchased and the dotted green line indicates the average affordability from 1980 to 2016. Similarly, Figure 4 shows the affordability index from 2010 to 2016 (the blue line) and the average (the dotted green line).

In 2016, ULP sold in Brisbane was the most affordable on record (since 1980). The average weekly pre-tax wage could be used to buy 1277 litres of ULP, an increase of 161 litres from 2015.

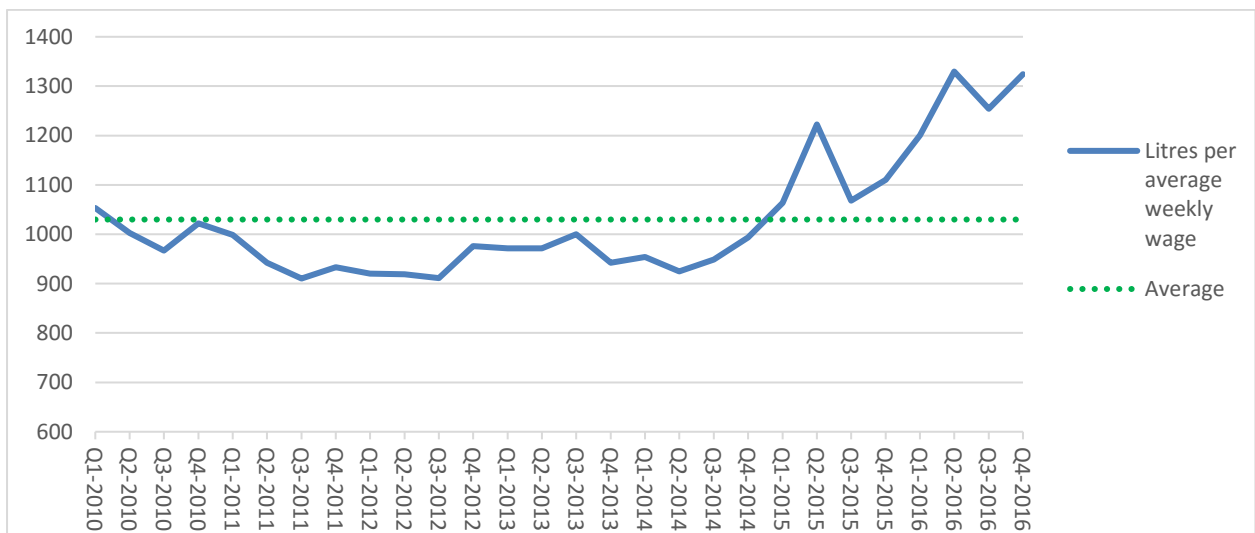
ULP affordability in Brisbane was consistently above average in the late 1990s and early 2000s. Affordability reached a low in mid-2008, just prior to the onset of the GFC. By 2009 this had reversed. With countries in economic decline and reduced demand for fuel, fuel affordability improved during the GFC. In recent years' affordability fell reaching a local low point in the first quarter of 2014. This corresponded to record retail prices observed in Queensland. Since 2014 fuel in Brisbane has become more affordable, with affordability reaching a record high of 1330 litres in the second quarter of 2016, with the fourth quarter being the second highest on record at 1324 litres.

**Figure 3: ULP Affordability Index for Brisbane 1980 – 2016**



Source: RACQ calculations using Informed Sources, MotorMouth, AIP and ABS data

**Figure 4: ULP Affordability Index for Brisbane 2010 – 2016**

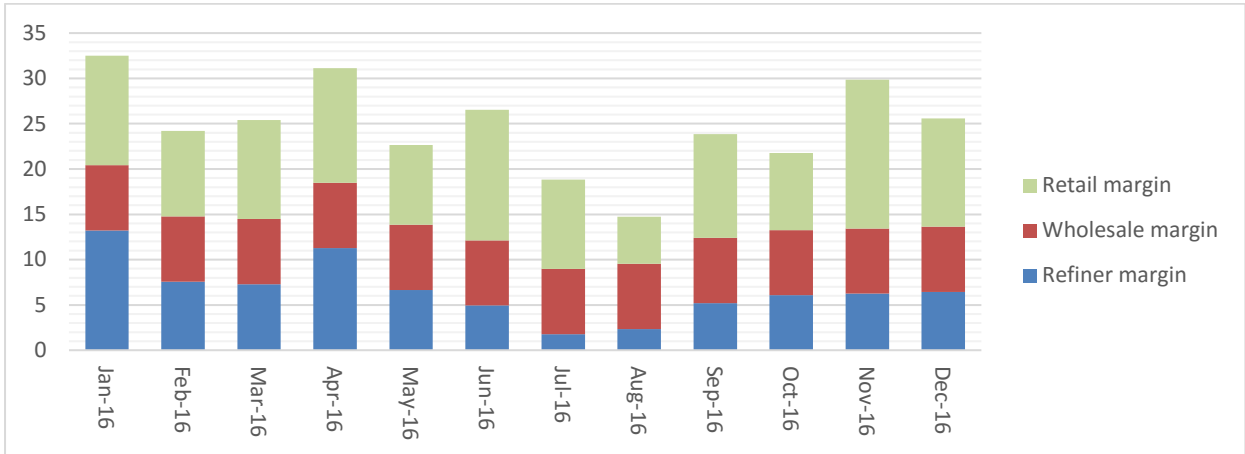


Source: RACQ calculations using Informed Sources, MotorMouth, AIP and ABS data

### Fuel Margins

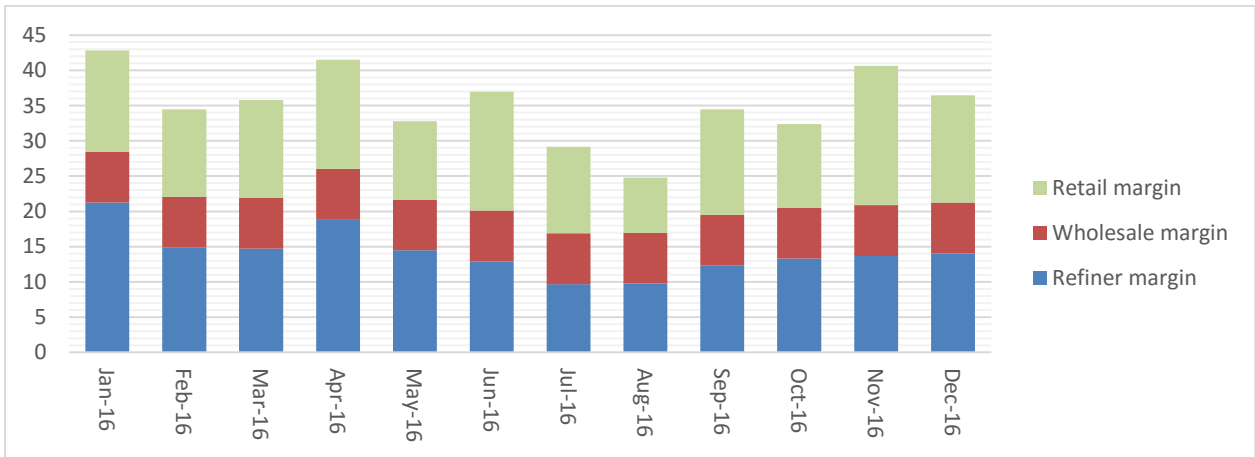
Figures 5, 6 and 7 present the total margins for ULP, PULP 95 and diesel respectively. In each figure the total size of the bar indicates the average total margin for each month. The blue section of the bar indicates the refiner margin, the red section indicates the wholesale margin and the green section indicates the retail margin. The retail margin is calculated from the observed retail price less the wholesale price and estimated local freight costs of 1.05 cpl. The refiner and wholesale margins are calculated using the wholesale price less the shipping costs, and less the 7-day lagged Brent crude price and other costs. With limited data available to RACQ, it is not possible to fully differentiate between the refiner and wholesale margins. The wholesale margin is therefore assumed to be 7.2 cpl. If the calculated daily retail or refiner margin falls below zero and returns a negative number, the wholesale margin is reduced to compensate for this discrepancy.

**Figure 5: Brisbane ULP Margins**



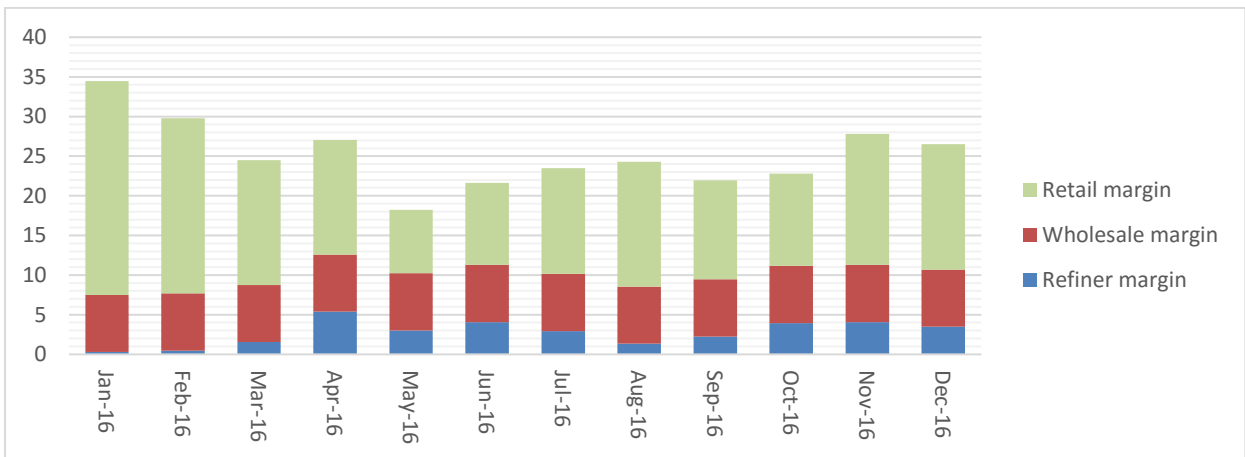
Source: RACQ calculations using Informed Sources, FUELtrac, MotorMouth, Bloomberg data

**Figure 6: Brisbane PULP 95 Margins**



Source: RACQ calculations using Informed Sources, FUELtrac, MotorMouth, Bloomberg data

**Figure 7: Brisbane Diesel Margins**



Source: RACQ calculations using Informed Sources, FUELtrac, MotorMouth, Bloomberg data

The average total margin on ULP in 2016 was 24.7 cpl, 4.3 cpl lower than the 2015 average of 28.0 cpl, 3.1 cpl greater than the 2014 average of 21.6 cpl, 5.2 cpl greater than the 2013 average of 19.5 cpl, and 4.3 cpl higher than the 2012 average of 20.4 cpl.

The average total margin on PULP 95 in 2016 was 35.2 cpl, 3.5 cpl lower than the 2015 average of 38.7 cpl, 3.9 cpl greater than the 2014 average of 31.3 cpl, 6.4 cpl greater than the 2013 average of 28.8 cpl, and 9.9 cpl higher than the 2012 average of 25.3 cpl.

The average total margin for diesel in 2016 was 25.2 cpl, 2.7 cpl lower than the 2015 average of 27.9 cpl, 2.9 cpl lower than the 2014 average of 28.1 cpl, 0.1 cpl lower than the 25.3 cpl in 2013, and 4.5 cpl higher than the 20.7 cpl in 2012.

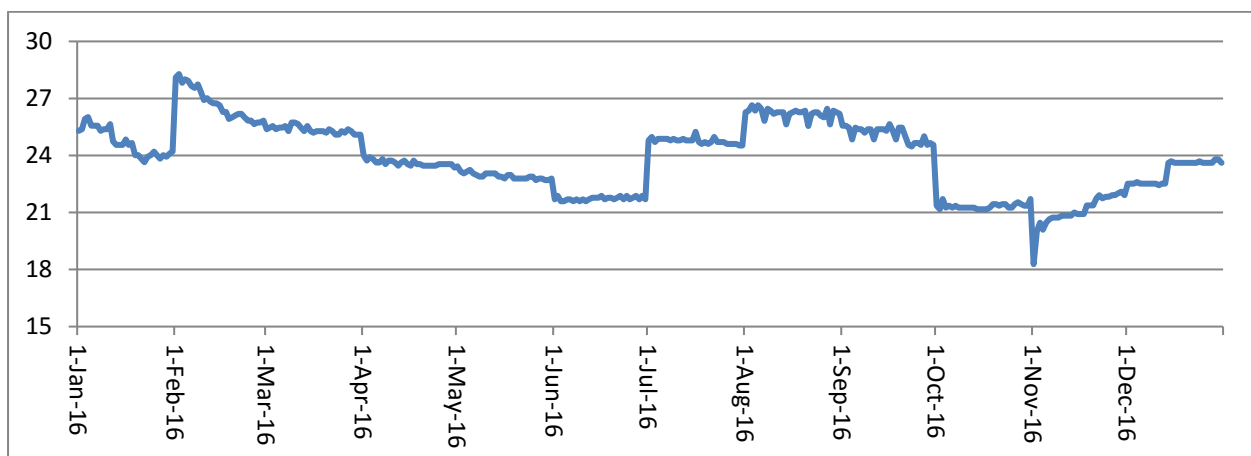
The retail margin for diesel was greater than ULP. Retail margins on diesel were 15.2 cpl, compared to 11.0 cpl for ULP. Refiner margins, however are higher for ULP than for diesel.

Data on LPG pricing is limited and it is not possible to calculate retail, wholesale and refinery margins for LPG. An alternative measure calculates the difference between the international benchmark price (the Saudi Aramco Contract Price – the Saudi CP) and the pre-tax retail price. The Saudi CP is calculated monthly. It is the average of all the wholesale contracts for propane and butane gas, negotiated by the Saudi Arabian state-owned Aramco oil company. This price is published on the first business day of each month and it remains fixed for the whole month.

Historically the price difference between the Brisbane retail LPG price and the Saudi CP has been about 14.0 cpl. In 2016 the average price difference was 23.8 cpl, 3.6 cpl greater than in 2015 (20.2 cpl), 4.9 cpl greater than in 2014 (18.9 cpl) and 8.7 cpl greater than in 2013 (15.1 cpl).

Figure 8 displays an indicative measure of total margins for LPG. This measure is the difference between the Saudi CP and the pre-tax retail price.

**Figure 8: Brisbane LPG, Difference between the Pre-tax Retail Price and the Saudi CP 2016**



### The Brisbane ULP Price Cycle

Prior to 2011, the ULP price cycle was relatively stable in Brisbane. The cycle was consistently seven days long, and the cheapest day to buy petrol generally fell on the same day each week. This has not been

the case since early 2011. As Figures 9 and 10 illustrate, both the cheap day and the price cycle length varied significantly in 2016.

There were 11 complete price cycles in Brisbane during 2016, the same as 2015 but fewer than 2014, 2013 and 2012 when there were 14, 23 and 29 cycles, respectively. The first price cycle observed in Brisbane started on 10 December 2015 and continued to 6 January 2016. The last cycle started on 6 December 2016 and continued into 2017.

The average cycle length was 33.0 days (compared to 32.8, 22.8, 16.2 and 12.6 days in 2015, 2014, 2013 and 2012, respectively). The longest cycle lasted 51 days (30 May 2016 to 19 July 2016) and the shortest lasted 21 days (7 January 2016 to 27 January 2016). The cycle length variability was less in 2016 compared to 2015. In 2015 the longest cycle lasted 83 days and shortest 14 days.

Of the 11 price hikes observed in 2016, Tuesday was the most common days for a hike to start. One hike started on Monday, 4 on Tuesday and 3 on Wednesday, only one started on Thursday, no price hikes started on Friday or Saturday and 2 started on Sunday

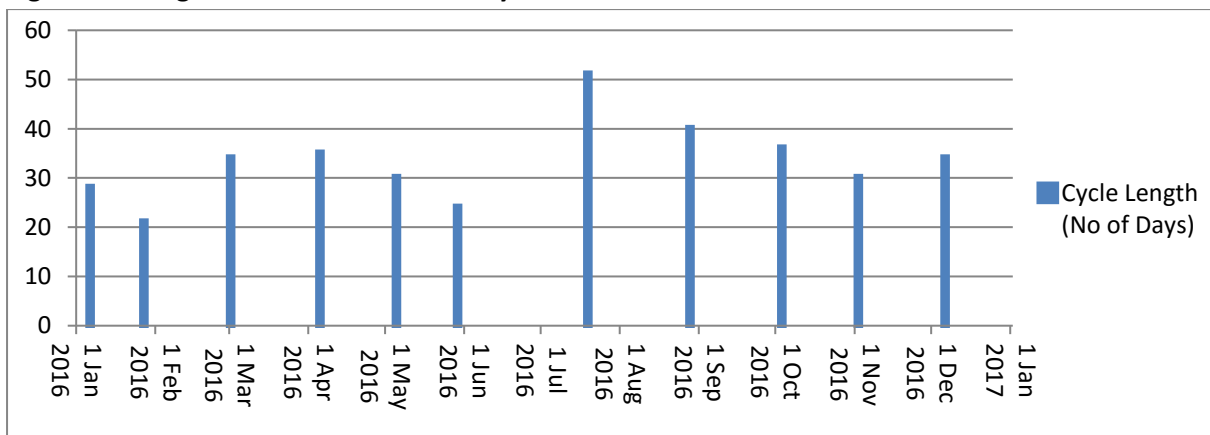
The level of price cycle variability reinforces the need for motorists to be regularly informed about fuel prices so they can purchase petrol at the low end of the cycle, when it is cheapest.

**Figure 9: Brisbane Cheap Days in 2016**

Monday											*										
Tuesday				*		*				*										*	
Wednesday	*		*																	*	
Thursday							*														
Friday																					
Saturday																					
Sunday								*					*								
		Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016								

Source: RACQ calculations using MotorMouth and Informed Sources data

**Figure 10: Length of the Brisbane Price Cycle 2016**



Source: RACQ calculations using MotorMouth and Informed Sources data

## Comparison of Brisbane Prices to Other Capital City Prices

In 2016 Brisbane ULP cost more than Adelaide, Melbourne, Sydney and Perth, but was cheaper than Hobart, Canberra and Darwin. On average, the discrepancy between Brisbane and the other east coast capitals was greater in 2016 compared to 2015. Table 6 presents the average price difference, in cpl, of the Brisbane ULP retail price compared to the other capital cities. In Table 6 the value of 4.6 cpl for Adelaide in 2016 indicates that the average 2016 price of ULP in Brisbane was 4.6 cpl greater than Adelaide's. The negative value in 2016 of -1.8 cpl for Canberra indicates the average ULP price in Brisbane was 1.8 cpl lower than the average Canberra price.

**Table 6: Increase in the Average Brisbane Retail Price of ULP Compared to the Other Capitals**

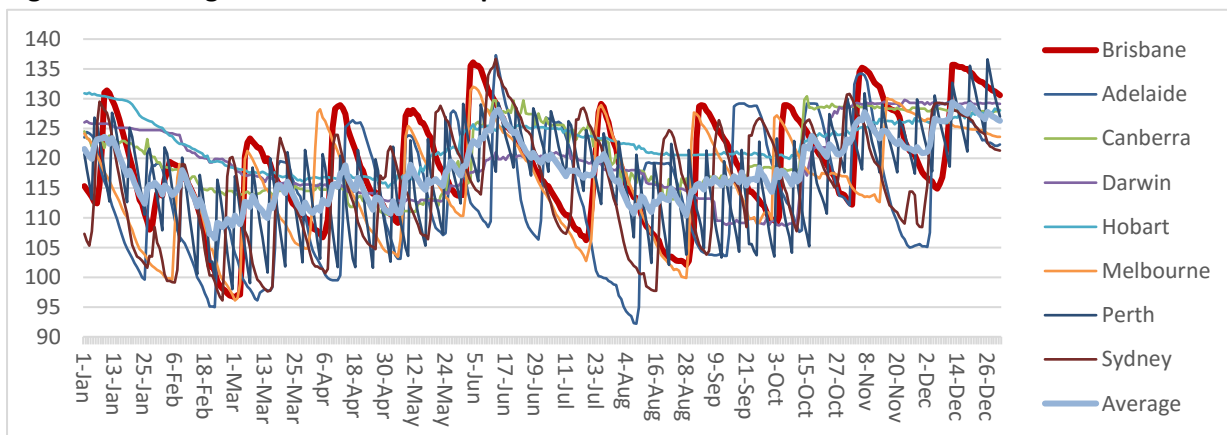
	Adelaide	Canberra	Darwin	Hobart	Melbourne	Perth	Sydney
2016	4.6	-1.8	-0.9	-3.9	2.8	2.1	2.9
2015	3.2	-0.2	-2.1	-5.9	4.2	1.7	1.4
2014	5.5	-3.7	-19.0	-7.4	5.6	2.3	4.7
2013	3.8	-5.6	-17.1	-9.4	3.6	1.7	2.9
2012	3.6	-2.5	-12.4	-5.1	4.8	2.4	3.9
2011	3.6	0.0	-7.3	-5.0	2.8	1.9	0.7
2010	3.9	0.4	-6.0	-6.2	1.6	2.3	1.9

The relatively high price of Brisbane ULP and high retail margins compared to Adelaide, Melbourne, Sydney and Perth are partly due to the dominance of the major brands in the Brisbane fuel market, as well as the absence of an aggressive fuel discounter. The level of daily discounting tends to be less vigorous in Brisbane compared to the other large capitals.

The average Brisbane retail margin on ULP was 11.0 cpl in 2016. This was higher than the capital city average of 9.8 cpl. Those cities with lower retail margins compared to Brisbane were Adelaide with 7.4 cpl, Darwin with 8.0 cpl, Sydney with 9.1 cpl, Melbourne with 9.2 cpl, Perth with 9.4 cpl and Hobart with 10.7 cpl. Only Canberra had higher retail margins at 13.7 cpl.

Figure 11 displays the average prices of ULP for the state and territory capital cities. The Brisbane price is represented by the red line and the average of all capitals is represented by the pale blue line. Prices in the other capital cities are represented by the different coloured lines identified in the legend. The tabulated monthly data is presented in Table 10.

**Figure 11: Average ULP Prices for all Capital Cities 2016**



Source: RACQ calculation using Informed Sources and MotorMouth data

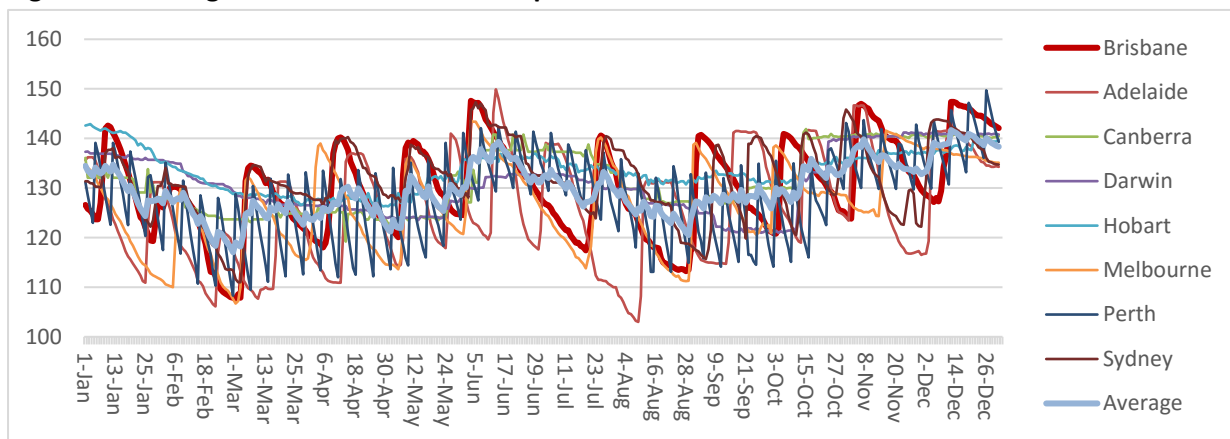
Table 7 presents the average price difference, in cpl, of the Brisbane PULP 95 retail price compared to the other capital cities.

**Table 7: Increase in the Average Brisbane Retail Price of PULP 95 Compared to the Other Capitals**

	Adelaide	Canberra	Darwin	Hobart	Melbourne	Perth	Sydney
2016	4.3	-1.5	-1.0	-3.4	3.2	2.0	-1.8
2015	2.6	0.4	-5.7	-5.7	4.7	1.9	0.1
2014	4.6	-3.7	-18.9	-8.2	5.3	1.9	2.2
2013	3.6	-4.8	-17.1	-9.7	4.0	1.9	1.6

Figure 12 displays the average prices of PULP 95 for the state and territory capital cities. The Brisbane price is represented by the red line and the average of all capitals is represented by the pale blue line. Prices in the other capital cities are represented by the different coloured lines identified in the legend. The tabulated monthly data is presented in Table 11.

**Figure 12: Average PULP 95 Prices for all Capital Cities 2016**



Source: RACQ calculation using informed Sources and MotorMouth data

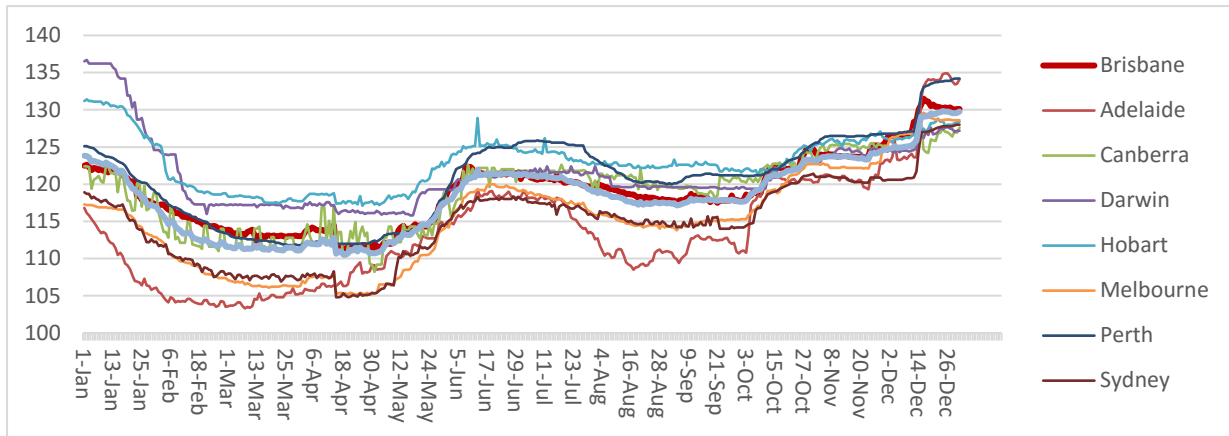
Figure 13 displays the average prices of diesel for the state and territory capital cities. The Brisbane price is represented by the red line and the average of all capitals is represented by the pale blue line. Prices in the other capital cities are represented by the different coloured lines identified in the legend. The tabulated monthly data is presented in Table 12.

Table 8 presents the average price difference, in cpl, of the Brisbane diesel retail price compared to the other capital cities.

The average Brisbane retail margin on diesel was 15.2 cpl in 2016, 3.0 cpl higher than in 2015 (12.2 cpl) and 1.3 cpl higher than 2014 (13.9 cpl). Diesel retail margins in Brisbane were higher than all the other capitals except Canberra and Perth. Adelaide, Sydney, Melbourne, Darwin and Hobart with average diesel retail margins of 11.4 cpl, 11.4 cpl, 11.8 cpl, 13.9 cpl and 14.7 cpl respectively, were lower than Brisbane. The average diesel retail margins in Canberra were 15.5 cpl and Perth were 17.2 cpl.



**Figure 13: Average Diesel Prices for all Capital Cities 2016**



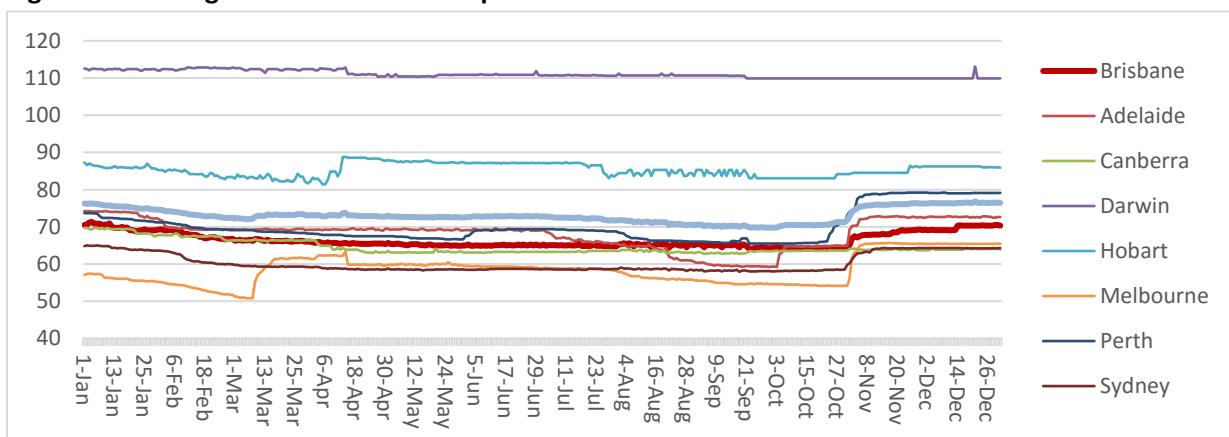
Source: RACQ calculations using Informed Sources and MotorMouth data

**Table 8: Increase in the Average Brisbane Retail Price of Diesel Compared to the Other Capitals**

	Adelaide	Canberra	Darwin	Hobart	Melbourne	Perth	Sydney
2016	5.4	0.1	-2.4	-3.8	3.8	-1.6	4.2
2015	3.7	0.8	-7.8	-8.0	5.2	-4.2	2.9
2014	3.0	-1.6	-16.0	-8.6	4.2	-2.4	2.4
2013	1.4	-0.7	-13.3	-5.7	3.6	-0.6	1.7
2012	-0.2	-1.2	-9.8	-5.5	3.3	-1.2	1.3
2011	1.1	-0.6	-7.1	-6.2	2.9	0.8	-0.9
2010	4.0	0.5	-5.9	-6.2	1.7	2.3	2.0

Figure 14 displays the average prices of LPG for the state and territory capital cities. The Brisbane price is represented by the red line and the average of all capitals is represented by the pale blue line. Prices in the other capital cities are represented by the different coloured lines identified in the legend. The tabulated monthly data is presented in Table 13.

**Figure 14: Average LPG Prices for all Capital Cities 2016**



Source: RACQ calculations using Informed Sources and MotorMouth data



The average Brisbane price of LPG was 66.4 cpl, 0.6 cpl lower than in 2015 (67.0 cpl), 16.15 cpl lower than the 2014 price of 82.5 cpl and 8.5 cpl lower than the average for 2013 (74.9 cpl). This was lower than the capital city average (73.0 cpl). Melbourne, with an average LPG price of 58.5 cpl, had the lowest LPG price. Sydney (60.2 cpl) and Canberra (64.5 cpl) were also cheaper than Brisbane. At an average price of 111.0 cpl, Darwin was the dearest of all the Australian capitals for LPG. The average price difference, in cpl, of the Brisbane LPG retail price compared to the other capital cities is shown in Table 9.

**Table 9: Increase in the Average Brisbane Retail Price of LPG Compared to the Other Capitals**

	Adelaide	Canberra	Darwin	Hobart	Melbourne	Perth	Sydney
2016	-1.8	1.9	-44.6	-18.9	7.9	-3.7	6.2
2015	2.6	-1.5	-45.7	-18.7	13.5	-7.4	4.3
2014	1.0	-4.9	-33.3	-16.7	9.3	-6.5	3.0
2013	-1.3	-5.4	-35.8	-18.2	7.4	-4.2	0.7
2012	0.6	-1.2	-28.7	-10.8	8.5	-4.0	3.8

Tables 10, 11, 12 and 13 display the average ULP, PULP 95, diesel and LPG retail prices for all Australian capital cities.

**Table 10: Average ULP Prices for all Capital Cities**

	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016	Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	2016 Ave	2015 Ave	2014 Ave	2013 Ave	2012 Ave	2011 Ave	2010 Ave
Adelaide	112.7	105.3	106.3	112.8	114.9	116.8	113.0	109.7	116.3	118.2	117.3	124.2	114.0	126.9	144.6	144.1	141.7	138.9	123.6
Brisbane	118.4	109.2	114.1	117.1	118.9	126.6	115.4	108.2	120.0	120.2	126.4	128.0	118.6	130.1	150.1	147.9	145.4	142.5	127.6
Canberra	122.2	116.1	114.4	113.5	113.5	126.3	124.0	115.9	116.9	124.5	128.5	127.9	120.3	130.3	153.8	153.6	147.9	142.4	127.1
Darwin	125.3	121.3	116.4	114.6	113.5	119.5	119.7	116.1	110.3	118.0	129.2	129.2	119.4	132.2	169.1	165.0	157.9	149.7	133.5
Hobart	128.9	121.2	117.3	116.7	119.0	125.2	124.1	121.2	120.7	122.5	125.8	127.0	122.5	136.0	157.5	157.3	150.4	147.5	133.8
Melbourne	111.8	106.8	110.4	115.7	114.5	124.2	113.8	109.1	116.8	119.6	121.7	125.2	115.8	125.9	144.5	144.2	140.6	139.6	125.9
Perth	118.8	110.0	111.0	111.1	113.6	123.1	120.0	113.2	111.0	115.2	123.3	127.0	116.5	128.4	147.8	146.2	143.1	140.6	125.3
Sydney	112.3	106.8	108.8	110.6	117.9	125.4	117.4	109.7	117.5	119.0	117.3	125.3	115.7	128.7	145.4	145.0	141.5	141.8	125.6
Average	118.8	112.1	112.3	114.0	115.7	123.4	118.4	112.9	116.2	119.7	123.7	126.7	117.8	129.8	151.5	150.4	146.1	142.9	127.8

Source: RACQ calculations using Informed Source data (2016), MotorMouth data (2016 to 2012 data) and FUELtrac (2011 and 2010 data)

**Table 11: Average PULP 95 Prices for all Capital Cities**

	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016	Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	2016 Ave	2015 Ave	2014 Ave	2013 Ave
Adelaide	124.6	117.1	118.0	124.1	126.7	128.6	124.8	120.9	128.1	130.0	129.2	136.5	125.7	138.6	155.5	155.0
Brisbane	129.7	120.5	125.5	128.5	130.1	138.1	126.7	119.3	131.7	131.9	138.3	139.9	130.0	141.2	160.1	158.6
Canberra	131.4	125.7	124.3	124.5	125.6	136.5	136.5	128.3	128.3	136.3	140.6	140.4	131.5	140.8	163.8	163.5
Darwin	136.4	132.3	127.3	125.9	124.9	131.8	131.6	127.7	122.5	130.3	140.5	140.8	131.0	146.9	179.0	175.7
Hobart	140.2	132.1	128.2	127.6	130.2	136.1	134.5	131.9	132.2	133.6	136.7	138.3	133.5	146.9	168.3	168.3
Melbourne	122.3	117.5	121.3	126.3	124.9	135.4	125.0	119.9	128.1	131.1	133.3	136.7	126.8	136.5	154.8	154.6
Perth	129.5	121.0	122.0	122.3	125.0	135.0	131.9	124.6	122.5	126.9	135.8	139.5	128.0	139.3	158.2	156.7
Sydney	130.7	123.6	128.5	133.5	132.7	140.1	131.4	127.7	130.2	132.7	131.2	139.5	131.8	141.1	157.9	157.1
Average	130.6	123.7	124.4	126.6	127.5	135.2	130.3	125.0	127.9	131.6	135.7	139.0	129.8	141.4	162.2	161.2

Source: RACQ calculations using Informed Source data (2016) and MotorMouth data (2016 to 2013 data)

**Table 12: Average Diesel Prices for all Capital Cities**

	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016	Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	2016 Ave	2015 Ave	2014 Ave	2013 Ave	2012 Ave	2011 Ave	2010 Ave
Adelaide	120.5	115.4	113.1	112.6	114.1	121.2	120.5	118.7	118.0	121.4	124.1	129.0	119.1	125.4	152.4	151.9	149.5	146.0	123.6
Brisbane	110.5	104.3	104.5	107.0	111.5	117.5	116.8	110.3	111.8	119.1	120.9	129.4	113.7	129.1	155.4	153.4	149.3	147.1	127.6
Canberra	119.8	113.1	112.0	113.0	113.4	120.8	121.6	120.5	119.6	122.2	125.0	125.8	118.9	128.3	157.0	154.0	150.5	147.7	127.1
Darwin	132.6	119.6	117.1	116.7	117.4	121.0	121.7	120.0	119.5	121.0	124.2	126.0	121.4	136.9	171.4	166.6	159.1	154.2	133.5
Hobart	129.3	120.1	118.0	118.0	119.5	125.0	123.9	122.5	122.4	122.9	125.9	127.2	122.9	137.1	164.0	159.1	154.8	153.3	133.8
Melbourne	115.7	109.3	106.4	106.3	109.2	118.6	117.9	114.9	114.8	119.3	122.6	127.9	115.3	123.9	151.2	149.7	146.0	144.2	125.9
Perth	122.4	115.7	112.4	112.1	114.4	123.9	125.4	121.2	121.0	122.5	126.4	130.8	120.7	133.3	157.8	154.0	150.5	146.3	125.3
Sydney	116.0	109.5	107.5	106.3	110.0	117.5	117.1	115.2	114.5	118.5	120.7	124.6	114.8	126.2	153.0	151.7	148.0	148.0	125.6
Average	120.9	113.4	111.4	111.5	113.7	120.7	120.6	117.9	117.7	120.9	123.7	127.6	118.4	130.0	157.8	155.0	151.0	148.4	127.8

Source: RACQ calculations using Informed Sources (2016), MotorMouth data (2016 to 2012 data) and FUELtrac (2011 and 2010 data)

**Table 13: Average LPG Prices for all Capital Cities**

	Jan-2016	Feb-2016	Mar-2016	Apr-2016	May-2016	Jun-2016	Jul-2016	Aug-2016	Sep-2016	Oct-2016	Nov-2016	Dec-2016	2016 Ave	2015 Ave	2014 Ave	2013 Ave	2012 Ave
Adelaide	69.8	67.8	66.3	65.6	65.2	65.0	65.0	65.1	64.8	64.3	68.2	69.8	66.4	64.4	81.5	76.6	75.0
Brisbane	73.6	69.5	69.3	69.3	69.2	69.1	66.7	63.4	59.6	64.1	72.2	72.6	68.2	67.0	82.5	75.3	75.6
Canberra	69.0	67.4	66.4	64.1	63.2	63.2	63.4	63.4	63.0	63.5	63.9	64.0	64.5	68.5	87.4	80.7	76.8
Darwin	112.3	112.6	112.3	111.6	110.6	110.9	110.7	110.7	110.4	109.9	109.9	110.0	111.0	112.7	115.8	111.2	104.2
Hobart	86.1	84.3	83.0	86.4	87.5	87.2	86.3	84.6	84.2	83.3	84.8	86.1	85.3	85.7	99.2	93.6	86.4
Melbourne	56.1	53.3	58.0	60.9	59.8	59.3	58.7	56.3	54.9	54.3	64.9	65.4	58.5	53.6	73.2	68.0	67.1
Perth	72.3	70.0	68.7	67.7	67.0	69.1	69.1	66.6	65.9	66.9	78.4	79.1	70.1	74.4	89.0	79.6	79.6
Sydney	64.3	61.2	59.4	58.7	58.5	58.6	58.6	58.6	58.2	58.3	63.7	64.3	60.2	62.7	79.5	74.6	71.8
Average	75.4	73.3	72.9	73.0	72.6	72.8	72.3	71.1	70.1	70.6	75.7	76.4	73.0	64.4	88.5	82.4	78.9

Source: RACQ calculations using Informed Source data (2016) and MotorMouth data (2016 to 2012 data)

## Regional Queensland

Table 14 (presented at the end of this report) displays the average monthly price of ULP in major Queensland cities and towns. The average price for ULP across Queensland centres in 2016 was 122.8 cpl, 12.6 cpl lower than 2015 (135.6 cpl), 34.0 cpl lower than 2014 (156.8 cpl), 31.5 cpl lower than 2013 (154.3 cpl), 27.3 cpl lower than 2012 (150.1 cpl) and 22.1 cpl lower than 2011 (144.9 cpl). These prices are indicative only, they are not a true reflection of the average price of ULP in Queensland. These prices do not include all centres in Queensland and they are not weighted by number of retailers, sales volumes or population. The value has been calculated using only the centres listed in Table 14.

Table 15 displays the average monthly price of diesel in major Queensland cities and towns. The average price for diesel across Queensland in 2016 was 119.2 cpl, 13.8 cpl lower than 2015 (133.0 cpl), 40.1 cpl lower than 2014 (159.3 cpl), 37.1 cpl lower than 2013 (156.3 cpl), 34.0 cpl lower than 2012 (153.2 cpl), and 30.7 cpl lower than the 2011 average (149.9 cpl).

Table 16 displays the average monthly cost of LPG across Queensland. The average price for LPG across Queensland in 2016 was 87.6, 2.3 cpl lower than 2015 (89.9 cpl), 14.5 cpl lower than 2014 (102.1 cpl), 3.2 cpl lower than 2013 (90.8 cpl), and 2.8 cpl lower than 2012 (90.4 cpl).

In Tables 14, 15 and 16 the green shading highlights centres where the average monthly price was less than or the same as the price in Brisbane. The red shading highlights centres where the average monthly price was more than 10 cpl greater than the Brisbane price.

At an average of 114.3 cpl, Moranbah was the cheapest place to buy ULP in Queensland in 2016. The Moranbah average price was 4.3 cpl lower than the average price of 118.6 cpl in Brisbane. Ayr, the cheapest centre in 2015, was the second cheapest in 2016. At 115.0 cpl, Ayr was 3.6 cpl cheaper than Brisbane. Toowoomba, Ipswich, Bundaberg, Maryborough, Gladstone and Childers were also cheaper than Brisbane. Cunnamulla, with an average ULP price of 144.5 cpl, was the most expensive centre listed in Table 14.

Moranbah also had the cheapest diesel in Queensland during 2016 at an average of 110.2 cpl, 8.9 cpl cheaper than the Brisbane price of 119.1 cpl. Ayr (the cheapest centre in 2015) was the second cheapest in 2016 at 111.4 cpl, 7.7 cpl cheaper than Brisbane. Bowen, Maryborough, Bundaberg, Childers, Charters Towers, Emerald, Dalby, Gympie, Townsville, Kingaroy, Miles, Blackwater, Goondiwindi, Gladstone, Ipswich, Sunshine Coast, Mackay, Warwick, Toowoomba, Rockhampton, Ingham and Charleville were also cheaper than Brisbane. Cunnamulla, with an average diesel price of 140.1 cpl, was the most expensive of all centres listed in Table 15 for diesel fuel.

At an average of 66.4 cpl, Brisbane had the cheapest LPG in Queensland during 2016. The average LPG price in the Gold Coast was 1.5 cpl dearer than Brisbane, Ipswich was 2.6 cpl dearer, the Sunshine Coast and Toowoomba were both 3.1 cpl dearer.

Longreach recorded the most expensive LPG with an average price of 110.5 cpl. However, the number of centres for which LPG prices were available dropped substantially in 2016 and 2015. 26 prices were available in 2016 (23 in 2105) compared to 36 in 2014.

LPG in most regional centres was substantially more expensive than Brisbane. Of the 22 regional towns and cities listed in Table 16, all except Toowoomba recorded an average LPG price at least 15 cpl greater than the Brisbane price. LPG sold in Ipswich, the Gold Coast and the Sunshine Coast was 1.5 cpl to 3.0 cpl dearer than Brisbane.

In Tables 17 and 18 the green shading highlights centres where the average monthly indicative retail margin was considered fair according to the RACQ Fair Fuel Price Benchmark. The RACQ Fair Fuel Price service calculates a benchmark price based on the international price of oil and refined fuel, the TGP and fair costs and margins.

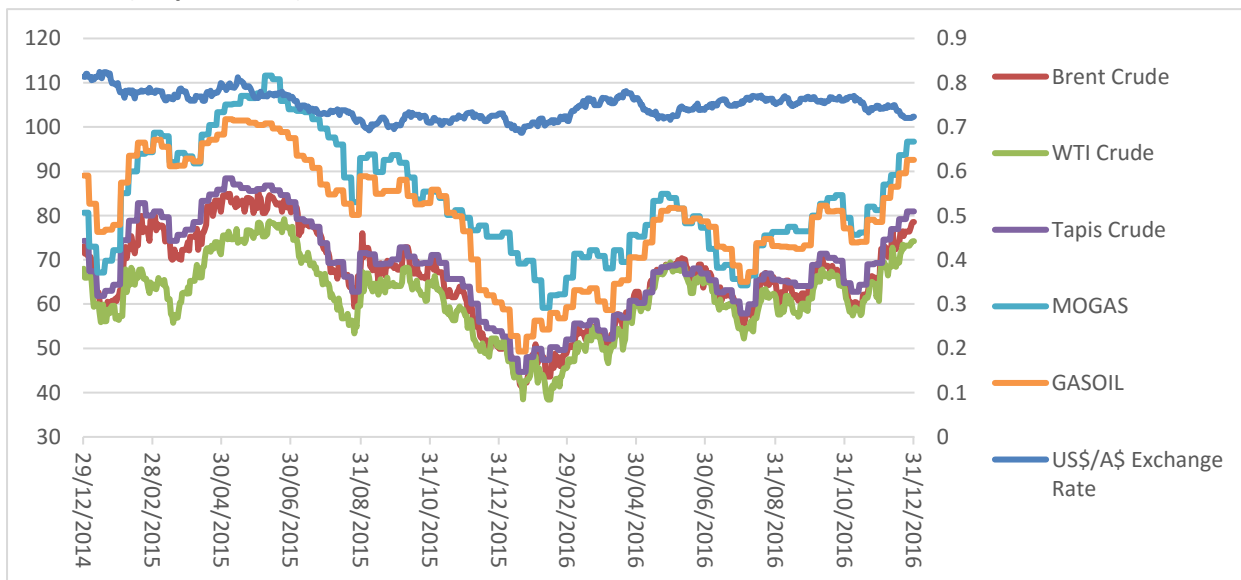
Retail margins for ULP and diesel in Queensland started 2016 high, softened in the second quarter, strengthened in the third and ended the year softer. In April, May and June of 2016 ULP and diesel in many of Queensland’s towns and cities was sold for a fair price. In December 2016, a fair ULP and diesel price was observed in about two thirds of centres in Queensland. In 2016 ULP and diesel in Moranbah and Ayr was sold for a fair price for 10 or 11 months.

### International Benchmark Prices

The global price of oil increased substantially during 2016. The Brent price (in A\$) increased 57.4% over the course of the year from A\$49.9 (US\$36.5) to A\$78.5 (US\$56.8) an increase of A\$28.6.

As can be observed in Figure 15, the Tapis and WTI crude oil prices, and the MOGAS and GASOIL Singapore wholesale prices, followed a similar trend as the Brent crude oil price.

**Figure 15: Global Crude Benchmark Prices and the Singapore Refined Product Benchmark Prices 2015 and 2016 (A\$ per barrel)**



Source: AIP, Bloomberg, RBA

The Australian dollar started 2016 relatively soft, with a local low point observed on 20 January 2016 of 68.67 US\$ cents. The Australian dollar then strengthened in the first and second quarter of 2016 reaching a local high of 78.12 US\$ cents on 21 April 2016. On 4 May 2016, the Reserve Bank of Australia lowered the cash rate by 25 basis points to 1.75% which led to a brief fall in the value of the A\$, but by

the beginning of the third quarter the A\$ started to strengthen. On 3 August 2016, the Reserve Bank of Australia again lowered the cash rate by 25 basis points to a record low of 1.50%. The value of the A\$ then slowly softened, ending 2016 at 72.36 US\$ cents.

Oil prices in 2016 were dominated by an oversupply of oil and soft economic growth leading to low demand for oil, subsequently oil prices were low compared to recent years.

In January 2016, the US Government ended its long imposed prohibition of oil exports. The oil export ban was imposed during the oil crisis of the 1970s. The price of Brent and WTI converged as WTI was no longer land locked. This can be observed in Figure 15, in 2015 a marked difference can be seen between the WTI and Brent prices, this difference diminishes in 2016.

In an effort to bolster supplies OPEC, especially Saudi Arabia, sought agreement to limit oil production. Rumours of deals persisted throughout 2016. On a few occasions when a deal looked more likely, markets responded and the price of oil increased. This effect was first observed in February and March, when rumours caused an increase in the oil price, and a subsequent fall when a production cut did not eventuate. Rumours again become louder and again effected the oil price in October. A production cut deal was finally made in late November.

OPEC nations met on 30 November and conditionally agreed to cut oil production by 1.2 million barrels per day (bbl/day). This was the first production cut in eight years. The deal was conditional on non-OPEC producers cutting 600,000 bbl/day. Following the news of this deal, the price of oil rose sharply. In opening trade on 1 December, the Brent price rose by 8.8% to 50.5 US\$/bbl.

OPEC and non-OPEC producers (including Russia) met on 9 December 2016 and agreed to production cuts. Russia agreed to a 300,000 bbl/day cut, Mexico a 100,000 bbl/day cut, with several other nations agreeing to smaller cuts. The total reduction was 558,000 bbl/day, enough to satisfy OPEC and triggered their 1.2 million bbl/day cut. This agreement led to an overnight increase in the price of Brent of 6%. Price increases were observed when the agreement was made, even though the production cuts were not due until 1 January 2017.

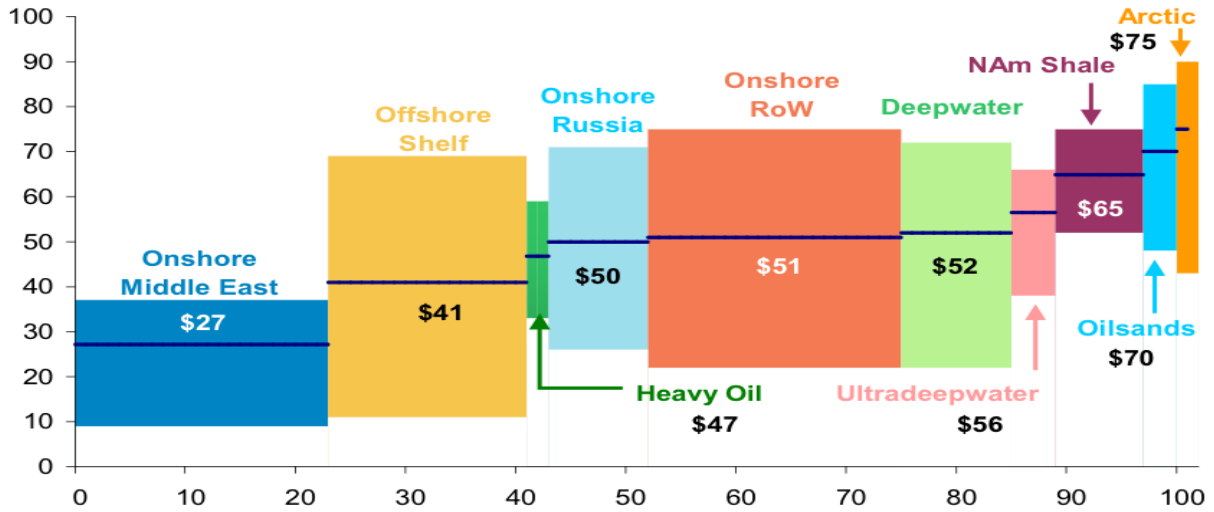
Uncertainty following the UK referendum on EU membership (Brexit), caused oil price to soften in June and July. However, the effect of Brexit was short-lived and oil prices soon returned a slow strengthening trend.

Production of oil in the USA fell in 2016. At the beginning of 2016 the US produced about 9.2 million bbl/day due to the use of improved processes for extracting shale oil contributing to oversupply of oil. This was the highest since 1986 and only 1.1 million barrels short of US peak production in 1970. Falling oil prices led to a decrease in oil production and the rig count. By the end of 2016 US oil production had fallen to 8.8 million bbl/day, however this was still close to the US oil production levels observed in the 1980s.

Figure 16 (produced by Morgan Stanley), shows an estimate of the breakeven price of different oil production. This chart was produced in May 2014. Efficiency savings may have reduced the breakeven cost somewhat.

**Figure 16: Breakeven Price of Global Oil Production**

(x-axis: total liquids production; y-axis: avg Brent-equivalent breakeven price\*, \$/bbl)



Source: Rystad Energy, Morgan Stanley Commodity Research estimates

At US\$36.5/bbl, the oil price at the beginning of 2016 was lower than the average breakeven price for North American shale oils and other non-conventional oil production, only Middle East onshore production would generate any returns. However, by the end of 2016 the price of Brent had increased to US\$56.8/bbl. This price was higher than the estimated average breakeven cost for Russian and Rest of World onshore production, and deep water production, at about US\$50/bbl, and Middle East offshore shelf production (US\$41/bbl). This price was also higher than the breakeven cost of the more efficient North American Shale oil, estimated to be US\$50/bbl.

**Data Sources**

Data presented in this report uses RACQ calculations based on FUELtrac, Informed Sources, MotorMouth.com.au, Australian Institute of Petroleum (AIP), Reserve Bank of Australia (RBA), Australian Bureau of Statistics (ABS), IRESS and Bloomberg.com data.

**17 January 2017**

**RACQ Public Policy Department**

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Table 14: Average ULP Prices for Queensland Regional Centres

	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	2016 Ave	2015 Ave	2014 Ave	2013 Ave	2012 Ave	2011 Ave	2010 Ave	2009 Ave
Brisbane	118.4	109.2	114.1	117.1	118.9	126.6	115.4	108.2	120.0	120.2	126.4	128.0	118.6	130.1	150.1	147.9	145.4	142.5	127.6	117.9
Atherton	127.7	121.3	119.9	119.9	120.2	128.8	126.2	125.9	125.9	127.0	129.9	129.9	125.2	138.4	158.0	154.5	149.7	nd	nd	nd
Ayr	110.1	105.9	104.0	114.3	123.1	129.4	120.8	108.2	107.0	121.1	118.1	117.5	115.0	123.1	152.1	155.7	147.2	nd	nd	nd
Biloela	127.3	122.2	118.0	118.2	120.7	128.4	129.9	129.2	127.9	128.8	129.8	129.7	125.8	138.5	154.3	154.5	149.2	nd	nd	nd
Blackall	147.7	147.7	139.4	140.2	138.4	138.9	138.1	137.1	137.4	138.0	137.0	138.6	139.9	151.4	165.1	164.0	160.6	nd	nd	nd
Blackwater	131.7	126.7	126.0	126.3	126.9	129.3	129.9	128.6	127.9	127.9	128.1	127.9	128.1	135.8	157.5	154.0	150.9	nd	nd	nd
Bowen	118.4	114.9	108.2	111.1	119.6	127.3	122.3	119.3	119.0	128.3	129.9	129.8	120.7	137.8	156.9	155.1	150.8	144.6	130.4	120
Bundaberg	119.5	115.7	115.1	114.9	117.1	124.4	118.2	112.8	111.5	117.7	119.9	120.9	117.3	130.7	152.9	151.8	146.9	142.1	126.2	119.3
Cairns	128.8	122.2	121.7	121.9	123.5	130.1	130.6	129.9	130.2	130.4	130.6	131.0	127.6	140.3	158.8	155.6	150.7	144.2	128.6	118.4
Charleville	125.5	119.2	118.0	118.6	119.7	125.0	126.1	125.3	124.2	124.9	128.2	129.4	123.7	131.4	158.9	159.5	156.9	152.1	139.8	131.3
Charters Towers	123.3	119.7	119.9	119.7	119.6	127.8	127.9	123.9	122.9	127.2	128.1	128.2	124.0	137.3	156.7	154.2	151.7	146.2	131.5	122.5
Childers	119.6	114.6	113.1	113.8	118.3	126.1	121.2	116.0	116.4	119.7	120.5	122.2	118.5	132.0	152.6	152.2	147.9	nd	nd	nd
Cloncurry	nd	nd	nd	nd	nd	nd	nd	130.4	129.9	129.9	129.9	129.9	130.0	145.1	170.3	171.6	168.0	159	nd	nd
Cunnamulla	146.4	144.6	141.4	141.4	141.9	146.0	146.4	146.1	145.4	145.4	145.4	nd	144.5	150.9	162.9	162.9	162.3	154.3	nd	nd
Dalby	120.7	118.5	118.6	118.3	118.6	121.4	120.1	118.4	117.1	120.2	119.8	119.8	119.3	133.1	155.7	153.0	149.1	139.9	nd	nd
Emerald	132.6	129.6	128.2	127.8	123.0	129.4	130.3	128.6	125.9	125.9	125.6	125.4	127.7	134.8	154.9	154.6	150.3	144.5	130.6	118.5
Gladstone	118.8	112.3	109.5	110.1	113.4	126.0	123.1	114.4	114.7	124.0	127.0	128.0	118.5	133.1	156.1	152.9	148.6	141.4	130.5	120.2
Gold Coast	119.2	108.2	113.4	116.9	117.2	127.2	114.0	107.4	118.3	119.3	128.4	129.7	119.2	130.0	148.9	147.3	145.0	142.5	127.9	118.8
Goondiwindi	124.8	122.8	121.9	120.8	120.7	122.4	121.3	118.9	118.0	118.7	120.1	120.9	121.0	137.2	155.6	153.3	150.4	145	129.4	117.1
Gympie	119.3	114.6	113.5	114.5	119.8	127.8	121.9	116.2	117.9	125.6	127.5	125.4	120.4	130.0	149.9	149.5	147.0	144.6	nd	nd
Hervey Bay	125.2	120.3	118.8	119.4	122.6	130.0	131.0	121.1	118.2	125.4	127.4	128.1	124.0	134.9	150.6	151.1	146.9	142.4	129	119.1
Ingham	124.6	119.0	114.7	114.5	116.2	128.2	129.0	128.0	115.1	121.9	122.1	122.4	121.3	138.1	155.7	154.1	150.6	nd	nd	nd
Innisfail	127.7	119.6	100.1	106.7	119.9	128.0	129.9	128.1	124.9	124.9	125.2	126.7	121.8	137.7	158.0	156.6	151.2	nd	nd	nd
Ipswich	117.7	109.6	112.7	115.7	113.1	125.8	112.7	107.9	120.3	117.7	125.2	124.8	116.9	129.2	149.3	148.5	146.0	142.4	128	118
Kingaroy	124.1	119.6	116.9	116.9	117.5	127.8	128.5	120.4	119.9	120.6	120.9	122.5	121.3	135.5	153.7	152.0	148.4	142.3	128.7	117.1
Longreach	131.3	127.8	126.8	127.2	128.0	133.2	132.7	129.9	129.7	130.1	132.5	132.1	130.1	144.1	167.0	160.7	158.5	152.2	136.9	126.4
Mackay	115.1	108.0	102.5	104.5	116.9	128.3	129.1	127.7	125.0	124.5	124.3	126.0	119.4	133.4	151.9	152.6	144.5	142.2	127.4	115.9
Mareeba	125.9	119.1	117.5	116.9	116.7	125.4	126.5	125.8	124.3	123.9	124.0	124.7	122.6	138.9	157.6	154.7	150.3	nd	nd	nd
Maryborough	117.9	115.4	112.9	112.8	117.2	123.6	122.2	116.8	115.7	118.4	121.0	122.6	118.1	129.4	150.9	150.2	147.1	142.5	128.7	119.1
Miles	124.3	119.1	118.1	120.4	117.1	119.3	119.5	117.0	114.2	118.1	119.9	121.2	119.0	134.8	157.9	158.5	156.4	nd	nd	nd
Moranbah	114.5	106.5	99.0	101.5	109.9	119.4	119.6	118.9	119.6	120.4	120.4	121.6	114.3	130.2	160.7	159.0	153.8	nd	nd	nd
Mount Isa	132.1	123.2	119.9	119.2	119.3	127.9	127.5	123.6	120.3	119.8	120.9	120.5	122.8	142.5	158.6	158.6	155.3	150.5	134.9	124.2
Rockhampton	119.0	114.9	113.0	113.3	114.9	128.7	129.7	127.8	127.0	126.8	126.8	127.2	122.4	134.6	155.5	154.6	150.2	145.8	131.6	121.6
Roma	129.2	126.3	122.9	122.7	120.1	127.8	129.7	125.3	121.0	120.1	119.6	119.9	123.7	138.4	157.3	153.4	149.8	146.4	132.2	122.5
Sunshine Coast	119.0	112.1	115.4	120.2	120.3	127.9	119.5	115.6	124.7	122.6	120.8	128.9	120.6	129.7	147.4	145.7	143.9	142.7	128.2	118.4
Toowoomba	121.3	112.4	107.4	109.5	114.5	126.3	123.8	110.9	107.7	121.1	122.3	120.2	116.5	132.4	150.7	147.7	146.3	136.3	123.6	112.2
Townsville	119.7	118.2	117.2	117.4	117.7	128.0	127.8	115.0	113.0	127.1	129.6	129.6	121.7	135.8	152.5	152.1	147.6	141.6	126.7	115.8
Tully	126.8	120.6	110.3	116.4	117.7	124.9	124.9	124.9	124.9	125.1	124.9	125.0	122.1	135.7	157.8	156.6	151.9	nd	nd	nd
Warwick	119.3	112.4	107.2	106.7	114.3	126.3	123.4	120.0	117.2	127.8	129.9	129.7	119.5	129.9	148.8	146.3	146.0	141.8	128.4	116.2
Whitsunday	nd	nd	nd	nd	nd	nd	nd	121.1	118.8	121.9	124.1	124.6	122.1	nd	nd	nd	nd	nd	nd	nd
Yeppoon	118.1	114.4	112.3	113.3	115.3	128.5	129.9	128.8	127.9	127.9	127.9	128.0	122.7	133.4	154.8	152.9	148.7	nd	nd	nd

Source: RACQ calculations using Informed Sources data (2016), MotorMouth data (2016 to 2012) and FUELtrac data (2011, 2010 and 2009 data)



Table 15: Average Diesel Prices for Queensland Regional Centres

	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	2016 Ave	2015 Ave	2014 Ave	2013 Ave	2012 Ave	2011 Ave	2010 Ave	2009 Ave
Brisbane	120.5	115.4	113.1	112.6	114.1	121.2	120.5	118.7	118.0	121.4	124.1	129.0	119.1	129.1	155.4	153.4	149.3	147.1	137.6	117.8
Atherton	125.2	120.9	nd	nd	nd	nd	nd	120.1	119.9	122.0	124.9	126.6	122.8	nd	nd	nd	152.9	nd	nd	nd
Ayr	104.1	97.5	106.0	109.9	nd	nd	nd	109.6	112.9	118.8	119.9	122.6	111.4	123.4	153.9	153.8	149.5	nd	nd	nd
Biloela	118.5	110.4	107.1	110.9	115.6	122.6	125.3	125.1	123.9	124.9	129.8	132.7	120.6	134.0	157.0	156.8	153.0	nd	nd	nd
Blackall	129.2	125.6	122.0	123.2	122.3	126.0	125.8	123.5	123.2	124.0	123.8	122.1	124.2	141.1	166.7	166.2	162.0	nd	nd	nd
Blackwater	122.7	113.9	111.5	109.9	111.2	120.2	122.6	115.8	115.3	117.2	121.5	126.3	117.4	133.2	157.9	156.2	152.4	nd	nd	nd
Bowen	111.2	105.0	101.5	105.2	112.9	119.0	115.9	113.0	111.3	119.9	121.4	123.3	113.3	129.6	154.1	154.2	149.8	147.6	130.1	132.0
Bundaberg	111.9	100.9	101.1	103.5	112.6	122.5	121.5	116.3	115.2	119.5	122.2	123.4	114.3	128.2	154.9	154.4	151.1	147.9	138.2	130.8
Cairns	127.5	120.2	119.6	119.6	121.2	128.7	129.2	126.2	125.0	125.3	130.0	133.0	125.5	138.6	164.5	158.8	154.0	151.0	139.4	133.0
Charleville	118.0	109.7	103.7	108.3	113.4	122.6	124.5	124.3	123.9	123.9	125.2	127.6	118.8	133.6	163.0	162.6	160.2	155.1	140.4	132.4
Charters Towers	110.4	106.5	104.8	109.9	114.1	119.6	119.7	117.4	116.8	117.3	117.5	119.9	114.5	134.0	158.0	156.1	151.7	150.3	132.4	134.2
Childers	116.8	105.6	105.5	107.4	nd	nd	nd	115.5	115.5	119.4	121.1	118.9	114.4	127.9	154.5	154.2	150.1	nd	nd	nd
Cloncurry	nd	ndd	nd	nd	nd	nd	nd	128.2	128.2	128.5	129.1	128.6	128.5	143.9	173.0	174.5	172.1	164.8	nd	nd
Cunnamulla	145.3	138.2	134.9	136.9	139.6	144.0	144.7	146.4	146.6	146.6	128.8	128.9	140.1	150.6	165.6	166.8	168.8	159.1	nd	nd
Dalby	113.2	111.6	111.1	110.8	113.0	119.8	119.1	118.0	117.9	118.4	118.6	119.7	115.9	131.2	158.4	154.1	150.0	146.1	nd	nd
Emerald	123.6	112.7	108.1	105.7	108.7	117.8	117.5	116.3	115.7	116.8	118.9	123.4	115.5	133.5	156.8	156.4	152.0	148.8	131.1	139.2
Gladstone	115.6	106.2	105.3	107.1	114.6	125.3	126.6	119.6	115.9	121.1	126.0	127.7	117.6	132.1	157.3	156.3	152.1	147.1	131.0	131.8
Gold Coast	122.1	116.5	114.5	114.0	114.7	120.8	120.6	120.0	119.2	122.2	124.8	129.3	119.9	129.6	156.4	153.8	150.5	nd	nd	nd
Goondiwindi	119.7	112.6	110.6	109.8	115.1	120.9	121.8	119.6	117.5	119.1	121.4	122.1	117.5	131.2	156.9	154.2	149.7	147.1	138.2	131.1
Gympie	108.6	102.0	103.8	105.5	115.5	123.5	122.5	118.5	118.9	123.4	123.8	126.4	116.1	128.4	152.4	152.0	149.1	nd	nd	nd
Hervey Bay	119.4	112.6	112.3	117.4	124.6	129.4	129.0	126.3	124.5	124.7	126.7	125.0	122.7	133.1	154.5	154.3	150.6	147.0	130.0	118.0
Ingham	120.5	114.4	112.5	113.1	113.3	122.5	124.2	123.9	116.3	118.1	121.5	123.2	118.6	132.5	158.0	154.9	149.6	nd	nd	nd
Innisfail	127.2	120.1	102.9	104.3	114.0	126.2	127.9	124.2	119.9	120.0	120.7	123.3	119.2	135.0	163.7	159.3	154.5	nd	nd	nd
Ipswich	119.1	115.5	111.8	110.2	111.6	120.2	120.6	118.9	116.5	119.0	122.1	126.6	117.7	127.7	154.6	152.5	148.2	146.0	138.0	131.7
Kingaroy	114.1	110.1	108.1	108.6	112.3	119.5	119.7	118.9	118.9	120.3	121.7	123.1	116.3	129.7	156.1	155.0	151.7	148.3	139.8	118.5
Longreach	129.3	120.1	112.7	113.7	118.1	126.9	126.6	123.4	122.9	124.2	127.1	127.6	122.7	140.7	167.2	162.5	160.1	157.0	137.8	119.8
Mackay	116.3	108.9	101.6	103.2	115.2	127.1	125.9	124.2	121.5	122.7	123.6	125.3	118.0	132.6	158.2	156.8	150.9	146.9	139.9	137.5
Mareeba	124.4	118.9	118.6	117.8	116.8	120.3	120.1	120.1	118.8	120.2	124.3	126.1	120.5	135.4	164.3	157.7	153.3	nd	nd	nd
Maryborough	111.4	102.7	102.6	105.5	112.6	120.3	119.6	116.0	115.6	118.6	120.8	122.3	114.0	127.1	153.7	153.0	149.7	146.7	138.7	119.4
Miles	113.1	109.3	109.5	111.5	116.0	123.1	123.4	120.4	118.9	119.6	120.1	121.2	117.2	134.2	160.7	158.6	155.8	nd	nd	nd
Moranbah	109.5	99.5	93.4	94.4	105.8	114.5	116.2	115.9	115.4	117.1	120.5	120.2	110.2	130.8	162.9	161.9	156.1	nd	nd	nd
Mount Isa	131.3	125.0	123.3	122.9	121.9	125.3	123.5	120.8	119.4	119.7	122.9	123.5	123.3	138.9	161.3	162.4	156.4	154.0	132.6	119.4
Rockhampton	117.3	103.8	103.9	106.6	113.4	123.8	124.9	124.7	123.0	123.6	127.2	129.9	118.6	132.4	157.6	155.5	151.9	150.0	132.4	137.0
Roma	122.8	119.4	115.9	115.6	121.9	131.1	132.0	128.9	127.7	127.1	126.3	126.8	124.6	134.1	157.3	155.1	152.7	149.6	133.1	133.5
Sunshine Coast	118.8	113.3	112.1	111.5	112.2	119.5	119.4	118.0	117.9	121.8	123.5	126.7	117.9	128.0	155.8	153.3	150.0	147.3	139.1	135.0
Toowoomba	120.8	113.9	111.2	111.2	115.1	124.1	123.5	117.8	117.2	120.5	122.5	122.8	118.4	132.9	157.6	153.9	150.3	147.0	138.1	118.5
Townsville	113.0	108.0	105.6	109.5	116.6	125.1	123.7	112.4	111.8	120.5	122.7	124.2	116.1	132.5	155.3	152.7	148.1	145.3	138.5	118.0
Tully	124.3	117.8	105.7	107.7	114.4	124.9	125.7	131.6	132.4	132.5	130.2	123.4	122.6	128.3	162.6	157.8	153.1	nd	nd	nd
Warwick	118.8	116.0	113.6	115.3	120.3	123.0	120.4	120.0	116.7	117.9	118.2	119.6	118.3	132.0	155.5	152.7	149.1	146.8	139.4	118.8
Whitsunday	124.5	118.2	112.2	113.2	123.6	131.0	129.1	125.9	125.1	129.7	131.3	131.3	124.6	nd	156.2	153.1	149.0	nd	nd	nd
Yeppoon	117.8	103.7	102.4	105.5	113.2	nd	nd	128.0	125.3	126.5	129.9	131.6	119.9	130.8	156.3	154.0	nd	nd	nd	nd

Source: RACQ calculations using Informed Sources data (2016), MotorMouth data (2012 to 2016) and FUELtrac data (2011, 2010 and 2009 data)

Table 16: Average LPG Prices for Queensland Regional Centres

	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	2016 Ave	2015 Ave	2014 Ave	2013 Ave	2012 Ave
Brisbane	69.8	67.8	66.3	65.6	65.2	65.0	65.0	65.1	64.8	64.3	68.2	69.8	66.4	67.0	82.5	74.9	75.6
Atherton	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Ayr	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	110.7	101.9	87.0
Biloela	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	108.6	nd	nd
Blackall	88.3	88.3	94.9	95.3	95.3	95.3	95.3	95.3	104.0	117.0	117.0	117.0	100.3	88.3	98.1	91.7	104.9
Blackwater	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	107.6	100.8	99.5
Bowen	105.9	105.9	99.6	98.9	100.1	98.9	98.9	nd	nd	nd	nd	nd	102.5	106.0	114.0	97.3	92.2
Bundaberg	94.5	92.7	91.2	90.0	90.1	90.1	90.0	90.0	90.0	89.9	89.5	89.9	90.7	95.2	100.0	90.8	88.1
Cairns	104.2	104.0	104.1	94.9	90.0	91.4	91.4	97.4	100.0	98.0	94.3	93.0	96.9	103.2	106.5	99.6	95.2
Charleville	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	109.9	nd	nd
Charters Towers	90.9	90.9	88.8	90.7	87.2	85.9	85.9	85.9	85.9	85.9	87.7	88.4	87.8	91.4	105.0	98.3	95.4
Childers	90.6	89.8	87.9	87.9	nd	nd	nd	nd	nd	nd	nd	nd	89.0	nd	105.1	95.6	89.5
Cloncurry	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	124.6	nd	133.2
Cunnamulla	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Dalby	89.5	89.5	89.5	89.8	nd	nd	nd	nd	nd	nd	nd	nd	89.5	89.7	98.0	90.3	90.4
Emerald	93.0	93.1	92.9	93.7	94.2	94.4	94.6	91.4	90.2	90.2	90.1	90.1	92.3	90.3	97.7	92.2	92.6
Gladstone	89.9	89.9	89.5	89.1	89.8	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.8	90.6	98.5	95.6	90.3
Gold Coast	72.2	69.9	68.6	67.2	66.4	66.4	66.2	66.4	66.0	66.1	68.7	70.3	67.9	68.5	83.3	75.9	76.9
Goondiwindi	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	nd	92.8	86.9	86.3
Gympie	85.5	84.1	84.1	86.0	86.1	85.5	85.2	83.8	79.7	78.1	82.5	82.8	83.6	88.3	95.3	85.8	85.8
Hervey Bay	93.1	93.1	93.0	91.0	90.5	90.8	91.1	91.5	90.4	89.6	89.2	89.4	91.1	92.5	101.1	85.6	87.3
Ingham	90.9	90.9	90.9	90.9	90.9	90.9	nd	nd	nd	nd	nd	nd	90.9	91.0	98.4	94.6	92.4
Innisfail	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Ipswich	72.1	70.8	69.6	68.7	68.4	67.8	67.8	67.8	67.7	67.4	69.5	70.6	69.0	68.6	83.9	75.7	76.7
Kingaroy	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	101.3	86.9	81.8
Longreach	109.9	109.9	109.9	109.9	109.9	110.6	107.3	110.9	110.9	110.9	110.9	110.9	110.5	nd	101.2	nd	106.0
Mackay	93.9	93.9	93.0	92.5	92.1	92.2	92.1	92.1	92.0	92.0	92.1	98.7	93.1	94.1	101.1	90.7	91.7
Mareeba	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	114.7	97.9	96.3
Maryborough	87.3	86.0	85.5	85.7	86.6	87.7	86.1	85.5	85.2	85.4	87.2	87.9	86.3	88.1	106.3	95.0	92.3
Miles	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	104.9	98.8	93.4
Moranbah	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Mount Isa	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	95.7	95.7	91.3
Rockhampton	90.1	89.9	89.8	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	90.1	97.3	94.8	90.4
Roma	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	111.9	110.9	85.9	108.9	110.9	117.1	101.2	95.1
Sunshine Coast	73.9	72.0	70.6	67.7	67.5	67.4	67.3	67.8	67.4	68.0	72.0	71.9	69.5	69.4	84.3	75.1	77.0
Toowoomba	72.3	69.5	68.9	68.9	69.0	69.2	69.0	68.7	68.7	69.8	69.8	69.9	69.5	70.2	89.7	75.4	77.4
Townsville	83.8	82.0	81.0	80.3	80.5	80.4	80.0	80.2	80.1	85.0	85.9	85.9	82.1	87.5	94.3	91.5	90.8
Tully	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	95.8	nd	nd
Warwick	80.5	80.5	80.5	80.5	79.9	79.9	85.9	86.6	80.1	79.9	79.9	79.9	81.2	83.9	nd	85.5	87.8
Whitsunday	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	98.9	92.6	84.6
Yeppoon	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	89.9	90.1	96.3	90.8	88.3

Source: RACQ calculations using Informed Sources (2016) and MotorMouth data (2016 to 2012)

**Table 17: Average ULP Indicative Retail Margins for Queensland Regional Centres**

	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	2016 Ave	2015 Ave	2014 Ave	2013 Ave
Brisbane	12.2	9.6	10.9	12.7	8.9	14.5	9.9	5.2	11.4	8.5	16.4	11.9	11.0	9.9	10.2	8.5
Atherton	18.1	18.1	13.2	12.1	6.6	13.2	17.4	19.3	13.7	11.8	16.3	10.4	14.1	16.7	15.4	12.3
Ayr	0.3	2.6	-2.9	6.3	9.3	13.6	11.7	1.4	-5.4	5.6	4.3	-2.3	3.7	-0.5	8.8	12.7
Biloela	30.0	25.1	16.8	16.1	10.5	13.8	19.0	22.2	18.5	15.3	18.3	12.6	18.1	15.2	11.0	10.8
Blackall	31.6	38.1	26.2	25.8	18.3	16.8	22.8	24.0	18.8	16.4	17.0	12.6	22.3	nd	nd	nd
Blackwater	19.7	21.2	17.0	16.2	11.0	11.4	18.7	19.7	13.5	10.5	12.3	6.1	14.7	9.9	11.7	7.8
Bowen	7.4	10.4	0.2	2.0	4.7	10.5	12.1	11.4	5.4	11.8	15.0	8.9	8.3	13.8	13.2	11.7
Bundaberg	10.0	12.6	8.5	7.1	3.7	9.0	9.3	6.2	-0.5	2.6	6.5	1.4	6.3	7.3	10.3	9.1
Cairns	19.9	19.8	15.7	14.9	10.6	15.3	22.5	24.0	18.7	15.9	17.7	12.2	17.2	17.9	16.5	13.7
Charleville	12.2	12.2	7.5	6.9	2.4	5.7	13.4	14.8	8.3	5.9	10.9	6.0	8.8	3.1	11.3	11.9
Charters Towers	11.2	14.0	10.7	9.4	3.5	9.8	16.5	14.8	8.1	9.5	12.1	6.1	10.5	13.3	13.0	10.7
Childers	10.6	12.1	7.0	6.6	5.3	11.2	12.9	10.0	4.9	5.1	7.6	-0.7	7.7	nd	nd	nd
Cloncurry	nd	nd	nd	nd	nd	nd	nd	25.1	19.1	16.1	17.8	13.4	18.5	15.6	21.2	22.7
Cunnamulla	32.1	36.9	30.0	28.8	23.3	25.7	32.7	34.7	28.6	25.3	23.3	nd	29.8	24.0	15.6	15.6
Dalby	12.6	16.9	13.4	12.0	6.6	7.4	12.7	13.4	6.5	6.6	7.9	1.8	9.8	11.4	14.7	12.0
Emerald	19.9	23.4	18.4	16.9	6.3	10.8	18.4	18.9	10.7	7.7	9.0	2.8	13.5	10.1	10.3	9.5
Gladstone	9.7	9.7	3.3	2.8	0.3	11.0	14.9	8.4	3.1	9.5	14.1	9.1	8.0	10.3	13.3	9.8
Gold Coast	12.5	7.9	9.6	11.9	6.5	14.5	8.0	3.8	9.0	7.0	17.7	13.0	10.1	9.5	9.0	7.5
Goondiwindi	15.4	19.8	15.4	13.2	7.4	7.0	12.5	12.5	6.0	3.6	6.7	1.5	10.0	13.1	12.0	9.8
Gympie	11.7	13.5	8.8	8.7	8.2	14.2	15.0	11.6	7.8	12.5	16.0	7.8	11.3	8.5	9.0	8.7
Hervey Bay	16.3	17.9	12.8	12.4	9.8	15.3	22.9	15.3	6.9	11.0	14.7	9.3	13.7	13.0	9.3	9.8
Ingham	14.5	15.4	7.5	6.3	2.1	12.2	19.6	20.9	2.5	6.2	8.0	2.4	9.8	nd	nd	nd
Innisfail	18.0	16.4	-6.7	-1.2	6.3	12.3	21.0	21.4	12.6	9.6	11.5	7.1	10.6	14.6	15.0	14.1
Ipswich	10.6	9.0	8.5	10.3	2.1	12.8	6.3	3.8	10.7	5.0	14.2	7.7	8.4	8.7	9.4	9.1
Kingaroy	16.1	18.0	11.8	10.6	5.5	13.8	21.2	15.4	9.3	7.0	9.0	4.5	11.8	12.8	11.6	9.9
Longreach	14.4	17.4	12.8	12.2	7.1	10.4	16.6	16.1	10.3	7.7	11.8	5.4	11.8	12.5	15.5	8.8
Mackay	5.5	4.9	-4.1	-3.3	3.4	12.8	20.3	21.2	12.9	9.5	10.9	6.6	8.4	10.5	8.8	9.8
Mareeba	16.4	16.1	11.0	9.2	3.2	9.9	17.8	19.3	12.2	8.8	10.6	5.3	11.6	15.6	14.3	12.0
Maryborough	9.5	13.4	7.4	6.1	4.8	9.2	14.4	11.4	4.8	4.4	8.7	4.2	8.1	7.2	9.3	8.7
Miles	15.1	16.3	11.7	12.8	3.7	4.0	10.9	10.6	2.4	3.2	6.7	1.9	8.2	nd	nd	nd
Moranbah	2.9	1.4	-9.6	-8.2	-5.6	2.0	8.9	10.5	5.6	3.4	5.1	0.2	1.4	4.2	14.5	13.1
Mount Isa	14.1	11.7	4.9	3.1	-2.6	4.0	10.3	8.6	-0.3	-3.7	-1.0	-7.4	3.4	12.2	8.6	nd
Rockhampton	8.8	11.2	5.7	4.9	0.8	12.6	20.4	20.7	14.4	11.2	12.8	7.2	10.9	11.2	12.1	10.9
Roma	18.5	22.0	15.0	13.7	5.4	11.1	19.6	17.6	7.8	3.8	5.0	-0.8	11.5	14.4	13.9	10.1
Sunshine Coast	12.1	11.7	11.4	15.0	9.5	15.0	13.3	11.7	15.2	10.1	10.0	12.1	12.2	8.3	6.7	5.1
Toowoomba	14.0	11.6	3.0	4.0	3.3	13.1	17.2	6.6	-2.1	8.3	11.2	3.0	7.8	11.1	10.1	7.1
Townsville	10.7	15.7	11.1	10.2	4.8	13.1	19.5	9.0	1.4	12.5	16.7	10.7	11.3	13.4	10.4	10.3
Tully	16.6	16.8	3.0	7.9	3.5	8.7	15.5	17.6	12.1	9.2	10.9	-8.2	9.4	nd	nd	nd
Warwick	11.8	11.3	2.5	0.9	2.8	12.8	16.5	15.4	7.2	14.7	18.4	12.3	10.5	8.4	8.0	5.5
Whitsunday	nd	nd	nd	nd	nd	nd	nd	13.2	5.5	5.6	9.4	3.9	7.4	nd	nd	nd
Yeppoon	7.5	10.4	4.7	4.5	0.8	12.0	20.1	21.4	14.9	11.9	13.5	7.6	10.7	9.3	10.9	8.5

Source: RACQ calculations using informed Sources, MotorMouth and FUELtrac data

Table 18: Average Diesel Indicative Retail Margins for Queensland Regional Centres

	Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016	Jul 2016	Aug 2016	Sep 2016	Oct 2016	Nov 2016	Dec 2016	2016 Ave	2015 Ave	2014 Ave	2013 Ave
Brisbane	28.7	23.2	17.2	15.8	8.4	10.1	13.6	17.0	13.7	12.5	17.2	16.0	15.2	12.2	13.9	10.6
Atherton	32.1	24.7	nd	nd	nd	nd	nd	13.8	11.2	9.1	14.1	10.2	11.9	nd	14.7	nd
Ayr	8.1	1.7	5.9	10.6	nd	nd	nd	3.7	4.6	6.4	9.5	6.7	6.1	9.4	13.4	8.3
Biloela	21.2	13.3	5.9	8.8	5.4	8.0	14.4	18.1	14.5	11.3	18.3	15.6	12.9	12.7	nd	10.9
Blackall	26.1	22.6	14.9	15.3	6.2	5.5	9.0	10.6	8.0	4.5	6.4	-0.9	10.6	nd	9.4	nd
Blackwater	23.8	15.1	8.6	6.1	-0.7	3.9	10.0	7.1	4.1	1.9	8.3	7.5	8.0	11.2	12.7	7.9
Bowen	14.1	7.9	0.3	3.3	2.7	4.5	5.1	6.0	1.9	6.3	9.9	6.3	5.7	9.2	nd	8.3
Bundaberg	15.1	4.2	0.4	1.9	2.9	8.4	11.1	9.7	6.3	6.4	11.2	6.7	7.0	10.4	11.2	8.2
Cairns	31.8	24.8	19.9	19.2	12.7	15.7	19.8	20.7	17.0	13.1	19.9	17.3	19.3	20.8	9.2	14.1
Charleville	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	13.5	10.4	11.3
Charters Towers	12.0	8.2	2.4	6.8	2.8	3.9	7.7	9.2	6.3	2.5	4.7	1.6	5.7	13.1	20.8	10.3
Childers	20.5	9.4	5.3	7.9	nd	nd	nd	9.5	7.0	6.8	10.6	2.8	9.0	nd	13.5	nd
Cloncurry	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	22.7	13.1	23.2
Cunnamulla	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	16.5	nd	15.9
Dalby	17.9	16.4	11.7	10.6	4.7	7.1	10.2	13.0	10.5	6.8	9.1	4.5	10.2	15.6	22.7	9.5
Emerald	23.9	13.1	4.4	1.2	-3.9	0.8	4.1	6.8	3.9	0.8	4.9	3.8	5.3	11.1	16.5	9.2
Gladstone	19.6	10.3	5.2	6.2	5.6	11.9	16.8	13.7	7.7	8.7	15.7	11.8	11.1	13.6	15.6	11.0
Gold Coast	28.1	22.6	16.5	15.1	7.8	9.4	12.9	16.3	13.1	11.8	16.5	15.4	15.5	11.6	11.1	10.4
Goondiwindi	23.0	16.0	9.9	8.3	5.4	6.8	11.5	13.1	8.7	6.1	10.4	5.5	10.4	14.7	13.6	7.1
Gympie	13.7	7.2	5.0	5.8	7.8	11.3	14.0	13.9	11.9	12.2	14.7	11.7	10.8	9.8	11.6	7.6
Hervey Bay	23.3	16.7	12.2	16.5	15.6	15.9	19.3	20.5	16.3	12.3	16.3	9.1	16.1	11.3	9.8	9.4
Ingham	24.2	18.3	12.2	12.0	4.0	4.7	14.2	17.7	7.7	5.4	10.8	7.0	11.5	nd	11.3	nd
Innisfail	30.7	23.8	2.5	3.0	4.6	12.4	17.7	17.8	11.1	7.0	9.8	6.8	12.2	19.3	nd	14.0
Ipswich	24.7	21.3	13.5	11.0	4.3	8.5	12.6	14.8	10.1	8.4	13.5	12.4	12.9	12.9	19.3	9.5
Kingaroy	18.7	14.9	8.8	8.5	0.5	-1.1	10.7	13.9	11.5	8.7	12.2	8.0	9.6	12.2	12.9	9.4
Longreach	25.5	16.3	4.8	5.0	1.3	5.6	9.1	9.8	6.9	4.0	9.0	3.9	8.4	14.7	12.2	8.4
Mackay	20.5	13.3	1.8	2.6	6.5	13.9	16.5	18.6	13.6	10.6	13.5	9.6	11.7	14.9	14.7	11.7
Mareeba	28.1	22.8	18.4	16.8	7.6	6.6	10.1	13.9	10.2	7.4	13.6	9.9	13.8	19.8	14.9	12.1
Maryborough	15.6	7.2	2.9	5.0	4.0	7.2	10.2	10.5	7.8	6.6	10.9	6.8	7.9	10.4	19.8	7.9
Miles	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	10.4	nd
Moranbah	11.8	1.9	-8.4	-8.1	-4.9	-0.6	4.8	8.4	5.5	3.0	8.5	2.6	2.0	16.5	nd	13.7
Mount Isa	27.2	20.9	15.1	13.9	4.8	3.8	5.6	6.7	3.0	-0.9	4.4	-0.6	8.6	10.2	16.5	nd
Rockhampton	20.2	6.8	2.8	4.7	3.3	9.3	14.1	17.8	13.8	10.1	15.8	12.9	11.0	13.3	10.2	9.7
Roma	24.8	21.6	13.9	12.8	11.0	15.7	20.4	21.2	17.6	12.8	14.1	8.9	16.2	12.2	13.3	8.2
Sunshine Coast	24.6	19.2	13.9	12.5	5.2	8.0	11.6	14.2	11.7	11.3	15.0	12.7	13.3	13.4	12.2	9.1
Toowoomba	26.2	19.6	12.7	11.9	7.7	12.2	15.3	13.5	10.6	9.7	13.8	8.5	13.5	15.2	15.2	9.7
Townsville	17.8	13.0	6.3	9.5	8.4	12.5	14.8	7.4	4.4	8.9	13.1	9.1	10.4	12.1	12.1	8.5
Tully	27.3	21.0	4.7	5.9	4.4	10.5	14.9	24.6	23.0	18.7	18.8	6.3	14.9	nd	nd	nd
Warwick	24.0	21.3	14.8	15.7	12.6	10.8	12.0	15.4	9.8	6.8	9.1	4.9	13.1	12.9	12.9	8.4
Whitsunday	nd	nd	nd	nd	nd	nd	nd	19.1	15.8	16.3	19.9	14.4	17.1	nd	nd	nd
Yeppoon	20.5	6.3	0.8	2.2	4.3	nd	nd	20.8	15.6	12.6	18.1	14.2	12.7	11.4	11.4	7.4

Source: RACQ calculations using informed Sources, MotorMouth and FUELtrac data