

The RACQ publishes comprehensive monthly analysis of petrol price movements for major capital city markets and Queensland regional centres. This report draws on that information to provide an overview of fuel price movement in 2011, with a focus on the key Brisbane capital city market.

## **Key Points**

- Considering the international benchmark prices, the price of ULP and Diesel in Brisbane was broadly in-line with expectations throughout 2011.
- The average price of unleaded petrol (ULP) in Brisbane for 2011 was 142.5 cents per litre (cpl), 14.9 cpl higher than 2010. Total ULP margins were 13.5 cpl, 1.9 cpl less than 2010. The average price of Diesel in Brisbane in 2011 was 147.1 cpl, 19.5 cpl more than the 2010 average.
- The average price of ULP across Queensland in 2011 was 146.1 cpl, 14.8 cpl higher than 2010. The average price for Diesel across Queensland in 2011 was 151.4 cpl, 18.6 cpl more than the 2010 average.
- The most expensive day to buy ULP in Brisbane was 15 October 2011, when the average price was 154 cpl. This is below Brisbane's highest recorded average price of 162.1 cpl on 11 July 2008.
- Brisbane experienced a highly dynamic ULP price cycle with more frequent movements in the cheapest price day of the week, compared to 2010. In the second half of 2011 the cycle was typically 11 days long, but on occasions up to 13 days. The unpredictable price cycle made it difficult for motorists to determine the cheapest day to buy fuel.
- On average, the 2011 price difference between Brisbane and the average of other capitals was less than in 2010. The average ULP price in Brisbane was 0.7 cpl higher than Sydney, 1.9 cpl higher than Perth, and 3.6 cpl higher than Adelaide (the cheapest capital city market). The price difference between Brisbane and Melbourne increased to 2.8 cpl.
- 2011 saw an increasing disconnect between the price of Tapis crude oil and MOGAS 95 (the Asia-Pacific refined ULP benchmark price). While this impacted the relevance of Tapis as a predictor for Australian price movements, Tapis remains the most appropriate benchmark oil price to use when analysing Brisbane ULP prices.
- Toowoomba was the cheapest place to buy ULP in Queensland and Townsville the cheapest place to buy Diesel.

## **Key Numbers**

	Average Price	High Price (Date)	Low Price (Date)
ULP (cpl)	142.5	154.0 (15 Oct)	123.6 (5 Jan)
PULP (cpl)	152.2	164.3 (15 Oct)	133.2 (4 Jan)
Diesel (cpl)	145.3	154.0 (29 Mar to 5 Apr)	131.3 (2 to 4 Jan)
Exchange Rate (A\$/US\$)	1.032	1.106 (28 Jul)	0.950 (4 Oct)
Tapis Crude (A\$/bbl)	114.7	125.5 ( 12 May)	92.2 (2 Jan)

Source: RACQ calculations using MotorMouth, FUELtrac, Bloomberg and RBA data

## Summary of ULP Price Movements in 2011

Table 1 displays a summary of the Brisbane ULP prices and margins for 2011, as well as wholesale prices and exchange rates, and the prices of Asia Pacific regional benchmarks – MOGAS 95 and Tapis crude.

Date	Average ULP Retail Price (cpl)	Average IPIP Price (cpl)	Tapis Crude Oil (A\$/bbl)	MOGAS 95 Price (A\$/bbl)	Exchange Rate (A\$/US\$)	Average Retail Margin (cpl)	Average Total Margin (cpl)
Average for 2011	142.5	133.9	113.2	116.2	1.0315	7.9	13.5
Fourth Quarter 2011	144.5	132.0	117.7	116.2	1.0110	10.1	13.3
Third Quarter 2011	142.5	134.8	115.2	117.8	1.0499	6.6	13.7
Second Quarter 2011	143.3	135.2	115.3	118.2	1.0625	7.9	12.3
First Quarter 2011	138.5	133.7	105.3	112.4	1.0039	5.7	14.7
Average for 2010	127.6	120.2	91.3 <sup>1</sup>	95.7	0.9197	6.7	15.4 <sup>2</sup>

Table 1: Summary of Brisbane ULP Prices

Source: MotorMouth, FUELtrac, AIP, Bloomberg and RBA and RACQ calculations

The average price of ULP was 14.9 cpl greater than the average price in 2010. This increase in price occurred largely in the first quarter of 2011.

Indicative fuel company margins in 2011 were lower than in 2010. The average total margin in 2011 was 1.9 cpl lower than 2010. However, the distribution of margins was different in 2011. Refinery margins were low and often calculated as being less than zero, and the retail margins were high compared to previous years. This was particularly evident in the fourth quarter of 2011.

The price of the regional benchmark products rose sharply in the first quarter of 2011, but remained relatively stable for the rest of the year.

## Brisbane Retail, Wholesale and Benchmark Prices

Oil and petrol are traded globally in high volumes; because of this 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) and Import Parity Indicator Price (IPIP) are the key wholesale prices for all liquid automotive fuels in the Australian market. Both are strongly correlated to Singapore

<sup>&</sup>lt;sup>1</sup> March to December data only, no data for January and February

<sup>&</sup>lt;sup>2</sup> July to December data only, no data for January to June

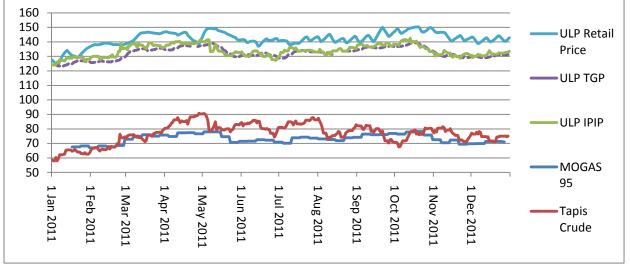
wholesale prices. For regular 91 RON unleaded petrol (ULP) the refined product benchmark is MOGAS 95. The Singapore MOGAS price has historically been linked to the price of Tapis crude oil.

Figure 1 displays the Tapis crude oil price, the TGP and IPIP – the wholesale prices – for ULP, alongside the Brisbane retail price. These prices are all presented in Australian cents per litre (cpl). Tapis and MOGAS 95 are internationally traded products bought and sold in US dollars. In Figure 1 the US\$ price has been converted to Australian dollars.

The difference between the price of MOGAS 95 and the IPIP or TGP is largely government excise and GST, refinery and wholesale margins, shipping and other costs. The difference between the TGP or IPIP and the Brisbane retail price is largely the retail margin, and to a smaller extent, local transport costs.

There is differing opinion about which is the most appropriate wholesale price: the TGP or the IPIP. The IPIP is calculated based on the MOGAS 95 price, with costs built in for shipping, insurance and other production and transport costs, fuel excise and GST. Alternatively, the TGP is a price published by the fuel refiners and it is the advertised price for the sale of wholesale fuel. This price is based on a minimum size, or bulk purchase from the terminal. The actual wholesale price paid by franchised fuel retailers will differ somewhat form the TGP based on their specific contractual arrangements.

Figure 1 shows that there is a strong correlation between the TGP and IPIP prices for unleaded petrol. At points some minor divergence can be seen. However, across the whole year both follow a similar trend. The wholesale price of ULP rose strongly through the first 4 months of 2011 and reached a high point in early May. The price softened mid-year before reaching a second high in October. After softening through October, the wholesale price remained relatively stable for the remainder of the year.





Source: FUELtrac. MotorMouth, AIP and Bloomberg

Brisbane IPIP was closely correlated with the MOGAS price. This is to be expected as the IPIP is calculated using the lagged MOGAS 95 price. Less clear is the relationship between the Tapis and MOGAS prices. While they trended together for the first quarter of 2011, in the second quarter the Tapis price continued to rise while the MOGAS price stabilised. For the second half of 2011 there was little correlation between the Tapis and MOGAS prices. This disconnect suggests that Tapis is becoming a less reliable predictor for Australian price movements. This is discussed below in the section on international benchmark crude prices.

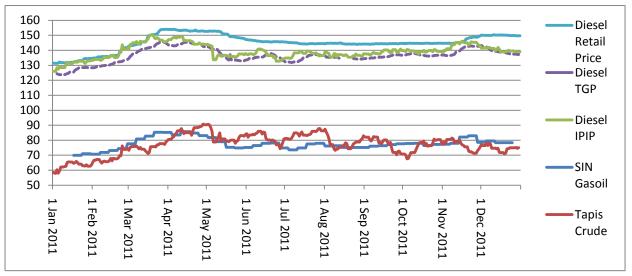


Figure 2: Brisbane Diesel Wholesale Price, Retail Price and Singapore Gasoil Price

Source: FUELtrac. MotorMouth, AIP, Bloomberg

Figure 2 displays the Tapis crude oil price, the Terminal Gate Price (TGP) and Import Parity Indicator Price (IPIP) – the wholesale prices – for diesel, and the Brisbane retail price, presented in Australian cents per litre (cpl). Tapis and Singapore Gasoil are internationally traded products bought and sold in US dollars. In Figure 2 the US\$ price has been converted to Australian dollars.

The difference between the price of Singapore Gasoil and the IPIP or TGP is largely government excise and GST, as well as refinery and wholesale margins, shipping and other costs. The difference between the TGP or IPIP and the Brisbane retail price is the retail margin, and to a lesser extent, local transport costs.

The retail price, the IPIP and TGP for Diesel follow a similar trend to the Singapore Gasoil price. The retail price has been quick to respond to price rises in the benchmark prices, but slow to respond when benchmark prices fall.

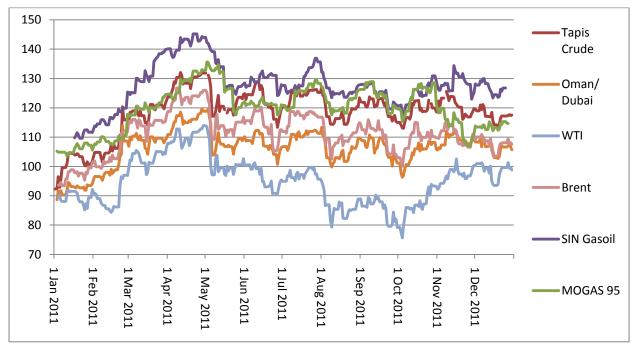
The Singapore Gasoil price, like MOGAS 95, does not appear strongly linked to the Tapis price. This further suggests that the price of Tapis plays a less significant role in the price of fuel in the Asia Pacific region.

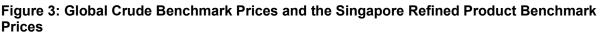
The price of Diesel rose strongly through the first four months of 2011 and reached a high point in April. The price was flat through April and early May, before softening and remaining flat until mid-November. An increase in the Singapore Gasoil price saw the retail price increase in November. Despite a drop in Singapore Gasoil in December, the Brisbane retail price remained high.

### **Changes in the International Benchmark Prices**

The cost of oil increased strongly in early 2011. This was in response to uncertainty in the international oil markets caused by political unrest in North Africa and the Middle East.

Figure 3 displays the price of major crude oil benchmark prices relevant to the Australian fuel market. This figure also displays the price of the refined fuel benchmark prices relevant to Australia: the MOGAS 95 price – the wholesale ULP price in Singapore; and Singapore Gasoil – the wholesale Diesel price in Singapore. These prices are presented in US\$ per barrel.





Source: AIP, Bloomberg, RBA

The price of Tapis increased strongly at the beginning of 2011 after starting the year selling for US\$ 92.28 (A\$ 91.38). The price of Tapis reached a maximum price of US\$ 132.08 (A\$ 121.12) on 28 April. The high price of Tapis coincided with the Australian dollar reaching its strongest point. This buffered Australian fuel prices from much of the Tapis price increase. In the second half of 2011, the price of Tapis fluctuated around the 120 US\$/bbl (116 A\$/bbl) price.

The oil price increase early in 2011 was caused by uncertainties about supply due to the political unrest in North Africa and the Middle East, especially Libya. Depending on the data source, Libya is said to be the 12<sup>th</sup> or the 18<sup>th</sup> largest oil producer, and at 1.6 million barrels per day, it has substantial oil production. The oil price stabilised somewhat after Saudi Arabia committed to increase production, to cover any shortfall in Libyan production.

In March 2011, in the aftermath of the Japanese tsunami, the price of oil fell as a consequence of reduced Japanese economic activity. Following this, Japanese demand increased as gas and oil replaced lost nuclear electricity generating capacity. This placed upward pressure on the oil price. By contrast, poor economic performance in Europe and North America was thought to have a dampening effect on the oil price throughout 2011. In 2011 the US economy post-Global Financial Crisis (GFC) recovery was weaker than initially expected. As a result, US petrol sales contracted (2.1% in quarters one and two) and stock-piled fuel reserves reached their highest volume for the year in June.

More broadly, there was international pressure in 2011 for OPEC to increase production quotas, however OPEC oil ministers meeting in June for their 159<sup>th</sup> OPEC Conference, maintained production at significantly below pre-GFC levels. In December 2008, at the height of the GFC, OPEC cut production quotas by 4.2 million barrels per day (14% of OPEC's total production, which amounted to approximately a 6% drop in total global production). OPEC has maintained this production level at every meeting since.

There was also uncertainty in 2011 about whether any spare capacity existed to increase quotas. With Libyan production off-line and Saudi Arabia increasing production to compensate, there may have been minimal spare capacity. Some reports suggested that Saudi Arabia had the potential to extract 15 million barrels per day (it is currently extracting 12.5 million barrels per day), however unnamed Saudi sources (cited by Bloomberg.com) suggested that Saudi Arabia was already extracting at maximum capacity.

Changes in the price of crude oil affect the Australian market through changes in the prices of Singapore refined product benchmarks – MOGAS 95 and Gasoil, the ULP and Diesel benchmarks respectively.

Figure 3 shows that there is only a weak relationship between the MOGAS 95 and Singapore Gasoil and each of the various benchmark crudes (Brent, West Texas Intermediate (WTI), Oman/Dubai and Tapis). Although not particularly strong, the most evident correlation between MOGAS and Gasoil and the crudes is with Tapis.

Tables 2 and 3 display the results of a Pearson's correlation analysis between MOGAS 95 and Gasoil, Brisbane ULP and Diesel retail prices compared to the Tapis, Oman/Dubai, WTI and Brent benchmark crudes.

A Pearson's r-value of greater than 0.7 indicates a strong correlation between two sets. The analysis in Table 2 indicates that while there are correlations between the benchmark refined fuel products and the benchmark crude oils, they are not strong. Within the Table 2 data sets, the Tapis crude price appears the most closely correlated with MOGAS 95 (the Pearson's r-value is 0.66), whereas Diesel is most strongly correlated with the Oman/Dubai price (with an r-value of 0.68). Within the Table 3 data sets, the Tapis crude price appears the most closely correlated with the Brisbane retail ULP price (the Pearson's r-value is 0.58) although this correlation is significantly weaker than the correlation between MOGAS 95 and Tapis. Diesel is strongly correlated with the Oman/Dubai price (with an r-value of 0.79) and Tapis (with an r-value of 0.78).

Refined Fuel		MOGAS 9	5		Singapore Gasoil					
Crude Oil	Tapis	Oman/ Dubai	WTI	Brent	Tapis	Oman/ Dubai	WTI	Brent		
Pearson's r-value	0.66	0.58	0.20	0.60	0.61	0.68	0.65	0.59		

Source: RACQ calculations using AIP, Bloomberg and RBA data

#### Table 3: Pearson's Correlation Analysis comparing Benchmark Refined Fuels and Crude Oils

Refined Fuel		Brisbane ULP	Retail	Brisbane Diesel Retail				
Crude Oil	Tapis Oman/ Dubai V			Brent	Tapis	Oman/ Dubai	WTI	Brent
Pearson's r-value	0.58	0.51	0.14	0.47	0.78	0.79	0.64	0.73

Source: RACQ calculations using AIP, Bloomberg and RBA data

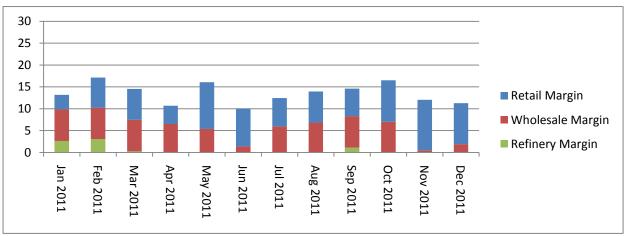
The results in Table 2 and 3 suggest that when analysing ULP prices in Brisbane, Tapis remains the most appropriate benchmark oil price. However, Tapis is becoming increasingly thinly traded and at some point it may no longer be the most appropriate benchmark oil for Australia.

Globally, Brent is becoming the most widely used benchmark price. The Brent price is the average price from 15 oil fields in the North Sea. WTI is the price of crude oil supplied from terminals in Cushing, Oklahoma and is not considered relevant outside North America

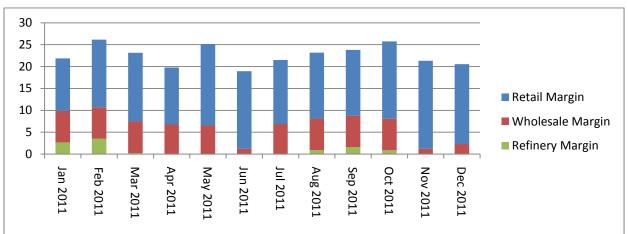
### **Fuel Margins**

Figures 4, 5 and 6 present the total margins for ULP, PULP (Premium Unleaded Petrol) 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 retail margin, the green section indicates the refiner margin and the red section indicates the wholesale margin. The retail margin is calculated from the observed retail price less the wholesale price and local freight costs of 0.7 cpl. The refiner and wholesale margins are calculated using the wholesale price less the shipping costs, and less the 7-day lagged Tapis 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. This means that in some months, the average wholesale margin is less than 7.2 cpl.



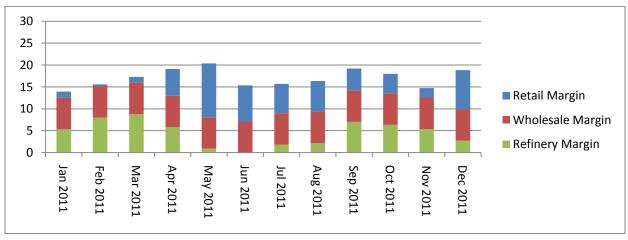


Source: RACQ calculations using FUELtrac. MotorMouth, Bloomberg data



## Figure 5: Brisbane PULP 95 Margins

Source: RACQ calculations using FUELtrac. MotorMouth, Bloomberg data



### Figure 6: Brisbane Diesel Margins

Source: RACQ calculations using FUELtrac. MotorMouth, Bloomberg data

The average total margin for ULP in 2011 was 13.5 cpl, compared to 15.4 cpl in 2010. The average margin for PULP in 2011 was 22.6 cpl, compared to 21.7 cpl, and the average margin for Diesel was 17.0 cpl in 2011 compared to 12.6 cpl in 2010.

The retail margin of PULP is substantially greater than ULP. Given that the PULP IPIP price is only slightly higher than ULP; the margins enjoyed by fuel companies on the sale of PULP are exceptionally high. The TGP for PULP in 2011 was 6.6 cpl higher than the IPIP price. This indicates that the increased margins on PULP are largely enjoyed by the fuel refiners and wholesalers. Of the 9.1 cpl increase in total margins and only a small fraction is likely to be collected by the retailers.

In 2011 the average margin on Diesel was higher than ULP. This is the reverse of the trend seen in 2010, when the average ULP margin was higher than Diesel. In 2010 it is likely that the Diesel price was depressed as a result of the global financial crisis, since most Diesel is used for freight and industrial purposes. Somewhat improved economic conditions may have contributed to the increase in margins on Diesel during 2011. However, there may be further changes in the way Diesel is priced in the future, as its use as a fuel for light vehicles in Australia and overseas is increasing. This increased use of Diesel in general passenger vehicles may affect the market for Diesel and cause further changes in price down the track.

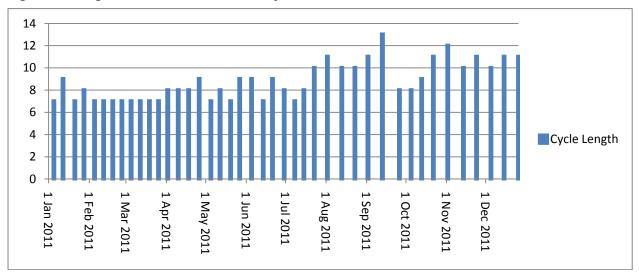
## The Brisbane ULP Price Cycle

In previous years, 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 was not the case in 2011. As shown in Figures 7 and 8, both the cheap day and the price cycle length varied significantly.

In the first quarter of 2011 the cycle was seven days long and Saturday was the cheap day. In April the cycle got longer and the cheap day progressed through the week. From April to August the cycle averaged eight days long. Each week the cheap day progressed one day on into the next week.

From August to the end of 2011, the length of the cycle changed often. The shortest cycle was eight days long while the longest was 13 days. During this period the cheap day changed every week and there was no discernable pattern to these movements.

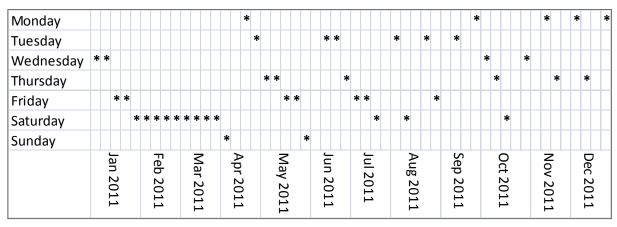
This price cycle variability reinforces the need for motorists to remain well informed about fuel prices so they can purchase petrol at the low end of the cycle, when it is cheapest.



#### Figure 7: Length of the Brisbane Price Cycle

Source: RACQ calculations using MotorMouth data

## Figure 8: Brisbane Cheap Days



Source: RACQ calculations using MotorMouth data

## Ethanol and Ethanol Blended Fuels

In 2010 Queensland saw a wide-scale roll-out of E10 (an ethanol blended fuel comprising 10% ethanol and 90% ULP). This was in response to the Queensland Government proposing a mandate for ethanol to constitute a minimum of 5% by volume of ULP sold from the start of 2011. The Queensland Government announced late in 2010 that it would delay the legislated mandate, citing a lack of domestic production as the reason. The Queensland ethanol mandate remains suspended.

In early 2011 there were changes in the pricing and availability of E10. Many fuel retailers went back to selling ULP in preference to E10. The increase in ULP pumps was likely due to ethanol supply shortages following flooding at the Dalby Bio-refinery and storm damage affecting production at the Sucrogen Sarina mill. BP found they could no longer access sufficient ethanol and converted their E10 tanks and pumps to regular ULP. Throughout the second half of 2011 ethanol availability remained low and prices high, with Coles Express and Shell removing many E10 pumps in October.

Table 4 displays the change in availability of ULP in South East Queensland (SEQ) from October 2010 to August 2011.

Date	Percentage of sites in SEQ not selling ULP
October 2010	16%
February 2011	5%
August 2011	2%

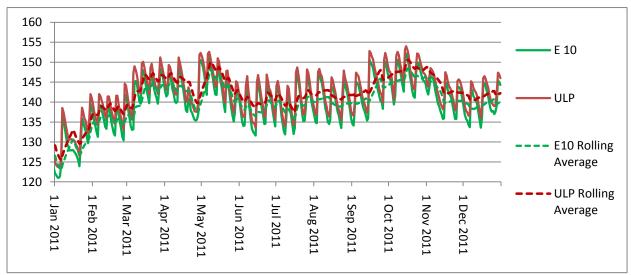
### Table 4: Percentage of Petrol Station Not Selling ULP in SEQ

Source: MotorMouth

Figure 9 displays the average price of E10 and ULP in Brisbane. The red line shows the daily average price of ULP with the dashed red line showing the rolling average. Similarly, the solid and dashed green lines show the daily and rolling average price of E10.

The average discount for E10 compared to ULP in 2011 was 2.1 cpl. This was 0.5 cpl less than the 2.6 cpl price difference in 2010. Using E10 in place of ULP increases fuel consumption by 2 to 3%. Therefore, E10 needs to be between 2.9 and 4.2 cpl less than ULP before it is cheaper in real terms and represents a cost saving. <sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Calculated using the Brisbane average ULP price of 142.5 cpl



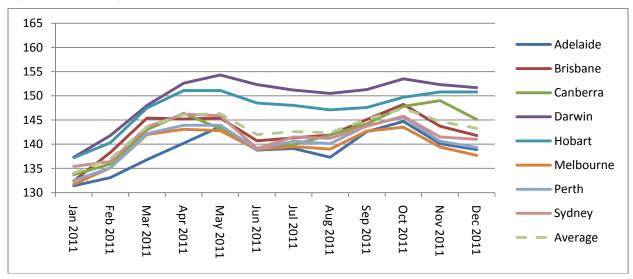
#### Figure 9: Average Brisbane Retail Price of E10 and ULP

Source: MotorMouth

## **Comparison of Brisbane Prices to Other Capital City Prices**

Figure 10 displays the average prices of ULP for the state and territory capital cities. The Brisbane price is represented by the dark red line and the average of all capitals is represented by the hashed pale green line. Prices in the other capital cities are represented by the different coloured lines as per the key displayed to the right of both figures. The tabulated data is presented in Table 6.





#### Source: FUELtrac

Brisbane was more expensive than Sydney, Melbourne, Perth and Adelaide, but cheaper than Hobart and Darwin. The average price in Brisbane was the same as that in Canberra and close to the average of all the capitals.

On average, the 2011 price difference between Brisbane and the other east coast capitals was less than in 2010. Table 5 presents the average price increase, in cpl, comparing the Brisbane retail price of ULP to the other capital cities. In Table 5 the value of 3.6 for Adelaide in 2011 indicates that the average price of ULP in Brisbane in 2011 was 3.6 cpl greater than in Adelaide. The negative value for Darwin indicates the average ULP price in Darwin was greater than the average Brisbane Price.

Comparing the average ULP price in Brisbane to Adelaide, Sydney, Canberra and Perth there was a lessening of the price difference in 2011 compared to 2010, however, comparing Brisbane to Melbourne the price difference increased. Comparing Brisbane the average of Adelaide, Sydney,

Melbourne, Canberra and Perth the price difference is slightly lower (1.8 cpl) in 2011 than 2010 (2.0 cpl).

The change in the price difference seen between Brisbane and the other capitals was in part due to unusually low price of ULP in January. During the SEQ floods the price cycle broke down in Brisbane, the price reached the low point and stayed low for another week while the price increased in the other capitals. The price difference was sufficiently large for long enough to affect the yearly averages.

	Adelaide	Canberra	Darwin	Hobart	Melbourne	Perth	Sydney
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

Table 5: Increase in the Average Brisbane Retail Price of ULP Compared to the Other Capitals

The relatively high price of ULP and relatively high retail margins in Brisbane compared to Adelaide, Melbourne, Sydney and Perth is due partly to the dominance of the major supermarket brands in the Brisbane fuel market and the absence of a major discounter. The daily amount of discounting tends to be less vigorous and lower in Brisbane compared to the other large capitals.

In the other capitals, especially Adelaide, the independent retailers are the most aggressive discounters. To maintain market share the major fuel retailers match the price set by the independent retailers. Independents in Brisbane do not heavily discount their fuel, preferring to follow the price trend set by the major fuel retailers.

In the second half of 2011 some retailers, predominantly the independents, were holding a low price for longer during the price-rise phase of the petrol cycle. This practise increases the retailers' market share in the price rise phase of the cycle, but has the side effect of lengthening the whole price cycle.

The average Brisbane retail margin on ULP was 7.9 cpl in 2011. This was below the capital city average (8.7 cpl) however Adelaide (4.5 cpl), Melbourne (5.7 cpl), Perth, (7.2 cpl) and Sydney (7.5 cpl) had lower retail margins.

Adelaide was consistently the cheapest capital city for ULP. This is a reflection of the high level of competition in the Adelaide petrol market. Unlike Brisbane, the Adelaide independent fuel retailers pursue a high volume, low price policy.

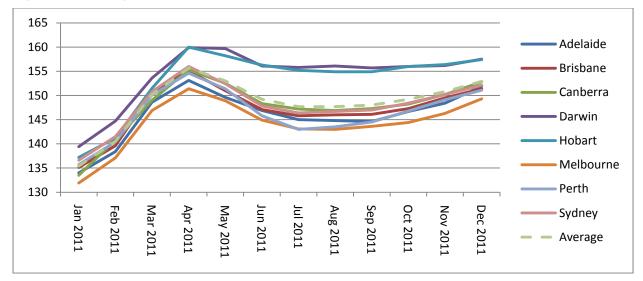


Figure 12: Average Diesel Prices for all Capital Cities

Source: FUELtrac

Tables 6 and 7 display the average ULP retail price and retail margins for all Australian capital cities.

	Jan- 2011	Feb- 2011	Mar- 2011	Apr- 2011	May- 2011	Jun- 2011	Jul- 2011	Aug- 2011	Sep- 2011	Oct- 2011	Nov- 2011	Dec- 2011	2011 Average	2010 Average
Adelaide	131.4	133.1	136.8	140.2	143.6	138.8	139.1	137.3	142.6	144.7	140.1	138.9	138.9	123.6
Brisbane	132.4	138.3	145.4	145.2	145.4	140.7	141.3	141.9	145.1	148.2	143.7	141.8	142.5	127.6
Canberra	133.7	135.9	143	146.4	143.2	139	139.9	141.9	144.2	147.8	149	145.1	142.4	127.1
Darwin	137.3	141.8	148	152.6	154.3	152.3	151.2	150.5	151.3	153.5	152.3	151.7	149.7	133.5
Hobart	137.2	140.3	147.5	151.1	151.1	148.5	148	147.1	147.6	149.7	150.8	150.8	147.5	133.8
Melbourne	131.7	135.1	142	143.1	142.8	138.9	139.5	139	142.7	143.5	139.4	137.7	139.6	125.9
Perth	132.5	135.1	142.2	143.9	143.9	139	140.6	140.1	143.8	145.6	140.6	139.3	140.6	125.3
Sydney	135.4	136.4	143.6	146.2	145.9	139.1	141.5	141.2	143.7	145.8	141.5	141	141.8	125.6
Average	134	137	143.6	146.1	146.3	142	142.6	142.4	145.1	147.4	144.7	143.3	142.9	127.8

## Table 6: Average ULP Prices for all Capital Cities

Source: FUELtrac

### Table 7: Average Diesel Prices for all Capital Cities

	Jan- 2011	Feb- 2011	Mar- 2011	Apr- 2011	May- 2011	Jun- 2011	Jul- 2011	Aug- 2011	Sep- 2011	Oct- 2011	Nov- 2011	Dec- 2011	2011 Average	2010 Average
Adelaide	134	138.4	148.6	153.1	149.6	146.9	145	144.8	144.6	146.7	148.4	151.9	146.0	123.6
Brisbane	135.1	139.6	150.7	155.1	151	147.1	145.8	146	146.1	147.3	149.5	151.4	147.1	127.6
Canberra	133.5	140.8	149	155.3	152.5	148.3	147.2	146.9	147.3	148.2	150.2	152.8	147.7	127.1
Darwin	139.4	144.7	153.6	159.9	159.7	156.1	155.8	156.1	155.7	156	156.2	157.5	154.2	133.5
Hobart	137.2	141.2	151.5	160	158.2	156.3	155.2	154.9	154.9	156	156.4	157.4	153.3	133.8
Melbourne	131.9	137.1	146.9	151.4	148.9	144.9	143.1	143	143.6	144.4	146.3	149.3	144.2	125.9
Perth	135.7	140.4	150.1	154.6	151.4	145.8	143	143.5	144.5	146.8	149.1	151.1	146.3	125.3
Sydney	136.6	141.5	150.8	156	152.4	147.8	146.4	146.7	147	148.4	150.2	152.1	148.0	125.6
Average	135.4	140.5	150.2	155.7	153	149.2	147.7	147.7	148	149.2	150.8	152.9	148.4	127.8

Source: FUELtrac

The price of Diesel is consistently 4 to 6 cpl more expensive than ULP in Australian capital cities.

Figure 11 displays the average prices of Diesel for the state and territory capital cities. The Brisbane price is represented by the dark red line and the average of all capitals is represented by the hashed pale green line. Prices in the other capital cities are represented by the different coloured lines as per the key displayed to the right of both figures.

In 2011 Melbourne was the cheapest city in which to buy Diesel. Adelaide and Perth were also cheaper than Brisbane for buying Diesel. Brisbane was cheaper than Canberra, Sydney, Hobart and Darwin.

The average Brisbane retail margin on Diesel was 7.2 cpl in 2011. This was below the capital city average (8.9 cpl) and only Melbourne (4.6 cpl) and Adelaide (6.3 cpl) had a lower retail margin.

The retail margin on Diesel in Brisbane was 0.7 cpl lower than the retail margin of ULP. The retail price of Diesel in Brisbane was 4.6 cpl higher than ULP. This suggests that the Diesel-ULP price difference was due to the increased cost of production rather than increased margins. However, the average Diesel price can be up to 10 cpl greater than ULP on the cheapest days of the ULP price cycle.

### **Regional Queensland**

Table 8 in displays the average monthly price of ULP in major Queensland cities and towns. The average price for ULP across Queensland in 2011 was 146.1 cpl, 14.8 cpl higher than 2010. Table 9 displays the average monthly price of Diesel in major Queensland cities and towns. The average price for Diesel across Queensland in 2011 was 151.4 cpl, 18.6 cpl higher than the 2010 average.

In Tables 8 and 9 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 136.3 cpl, Toowoomba was the cheapest place to buy ULP in Queensland in 2011. The Toowoomba average price was substantially lower than the average Brisbane price of 142.5 cpl. The price of ULP in Toowoomba was low due to high sales volumes, low freight costs and a highly competitive fuel market. Dalby, Gladstone, Townsville, Warwick, Bundaberg, Mackay, Caloundra, Kingaroy, Ipswich and Hervey Bay were also cheaper than Brisbane.

Weipa, with an average ULP price of 170.4 cpl, was the most expensive of all centres listed in Table 8, in which to buy fuel. Normanton and Cloncurry, with an average ULP price of 161.9 and 159.0 cpl respectively, were the second and third most expensive centres.

At an average of 145.3 cpl, Townsville was the cheapest place to buy Diesel in Queensland in 2011. The average Diesel price in Brisbane was 147.1 cpl. Unlike 2010 there were many centres cheaper than Brisbane for Diesel. Townsville, Caloundra, Ipswich, Dalby, Caboolture, Maryborough, Warwick, Mackay, Toowoomba and Hervey Bay were all cheaper than Brisbane. At 147.1 cpl, the price on the Gold Coast and in Gladstone was the same as Brisbane, and the Sunshine Coast, at 147.3 cpl, was only marginally more expensive.

Weipa, with an average Diesel price of 170.4 cpl, was the most expensive of all centres listed in Table 7 in which to buy Diesel fuel in Queensland. Normanton, Cloncurry and Cunnamulla with average Diesel prices of 165.0 cpl, 164.8 cpl and 159.1 respectively, were the second, third and fourth most expensive centres.

### **Data Sources**

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

#### 17 January 2012 RACQ Public Policy Department

For further information please contact RACQ Public Policy on 07 3872 8622

	Jan 2011	Feb 2011	Mar 2011	Apr 2011	May 2011	Jun 2011	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	2011 Average	2010 Average	2009 Average
Brisbane	132.4	138.3	145.4	145.2	145.4	140.7	141.3	141.9	145.1	148.2	143.7	141.8	142.5	127.6	117.9
Bowen	134.9	137.2	143.7	146.4	147.1	147	146.2	146.2	146.4	146.7	146.6	146.4	144.6	130.4	120
Bundaberg	130.6	133.9	142.2	145.9	146.8	144.1	143.1	142.8	143.3	144.5	143.9	143.9	142.1	126.2	119.3
Caboolture	133.2	139.2	146.1	145.8	145.5	140.8	141.9	141.3	145.4	148.6	144.4	143	142.9	nd	nd
Cairns	134.6	136.9	143.1	146.1	146.9	146.9	145.8	145.9	145.8	146	145.9	145.9	144.2	128.6	118.4
Caloundra	133.1	137.3	145.4	144.4	145.6	140.8	141.5	142.1	144.5	147.5	143.3	141.5	142.3	127.4	117.9
Charleville	141.8	141.9	153.2	156.4	156.7	153.6	152.8	152.2	154.9	155.8	153.5	152.9	152.1	139.8	131.3
Charters Towers	135	137.3	144	147	149	149.1	148.9	148.9	149.1	149	149	148.2	146.2	131.5	122.5
Cloncurry	148.1	151.4	156.4	160.2	161.1	160.4	160.1	160.1	160.4	162.7	163.2	164.4	159.0	nd	nd
Cunnamulla	138.1	144.6	152.5	156.5	158.7	157.8	156.9	156.9	157	157.5	157.6	157.2	154.3	nd	nd
Dalby	126.7	130.1	142.2	145.5	144.9	141.4	139.8	139.5	140.4	143	142.6	142.3	139.9	nd	nd
Emerald	134.4	135.3	143.7	146.3	146.9	145.7	146.3	146.3	146.5	148.2	146.9	146.9	144.5	130.6	118.5
Gladstone	135.2	136.5	143.3	141	141.3	140.8	140.7	140.6	143.4	145.9	144.4	143.3	141.4	130.5	120.2
Gold Coast	133.2	138.2	145.1	145.3	145.2	140.6	141.2	141	145.3	148.2	143.8	142.4	142.5	127.9	118.8
Goondiwindi	135.9	133	142.4	145.2	146.3	146.8	146.9	148	148.3	149.3	149	148.8	145.0	129.4	117.1
Gympie	135.1	137.3	144	146.8	148	146.2	146.2	145.8	147.1	149.3	145.7	143.7	144.6	nd	nd
Hervey Bay	132.9	135.2	142.2	144.7	144.9	142.8	142.7	142.8	144.4	146.5	145.3	143.9	142.4	129	119.1
Ipswich	132.3	137.8	144.8	144.7	145	141.2	141.2	142.6	145.2	148	144	141.4	142.4	128	118
Kingaroy	130.9	133	143	144.5	145.9	143.9	143.9	143.9	144.4	145.7	144.1	143.9	142.3	128.7	117.1
Longreach	139.8	143.6	151.6	155	156.7	155.7	153.9	153.9	153.9	154.1	154.5	154	152.2	136.9	126.4
Mackay	133.9	134.8	143.6	145	145.1	144.7	143.1	142.9	143.1	144.1	142.9	142.8	142.2	127.4	115.9
Maryborough	133.4	135.4	143.5	145.3	145.7	143.1	142.8	143.1	144	146.2	144.8	143.1	142.5	128.7	119.1
Mount Isa	140.7	143.9	150.8	153.9	154	150.3	150.3	151.5	152.5	153.9	152.7	151	150.5	134.9	124.2
Normanton	152.1	153.3	154.9	169.5	168.4	161.1	161.4	163.5	165.3	168.4	164.1	161.1	161.9	146.4	135.4
Rockhampton	136	138.1	146.9	150.6	149.5	145.2	144.8	144.7	147.5	149	148.7	149	145.8	131.6	121.6
Roma	135	135.7	146.3	147.1	149.6	149.9	149	148.9	148.9	148.9	148.9	148.9	146.4	132.2	122.5
Sunshine Coast	133.5	136.8	144.1	145.5	146.1	142.5	142.4	143	144.9	147.2	144.2	142.7	142.7	128.2	118.4
Toowoomba	129.7	130	135.2	138.8	139.8	134.8	133.8	133.9	138	141.6	140.5	139.8	136.3	123.6	112.2
Townsville	133.9	136	143.3	146	146.5	143.6	141.1	140.3	141.5	143.2	141.9	141.7	141.6	126.7	115.8
Warwick	131.1	133.2	143.6	146.3	146.4	142.8	141.9	141.6	142.4	144.9	143.8	143.8	141.8	128.4	116.2
Weipa	163.6	164.3	172.3	173.7	169.4	170.1	170.5	172	174.4	nd	172.3	171.6	170.4	156.8	155

## Table 8: Average ULP Prices for Queensland Regional Centres

Source FUELtrac

	Jan 2011	Feb 2011	Mar 2011	Apr 2011	May 2011	Jun 2011	Jul 2011	Aug 2011	Sep 2011	Oct 2011	Nov 2011	Dec 2011	2011 Average	2010 Average	2009 Average
Brisbane	135.1	139.6	150.7	155.1	151	147.1	145.8	146	146.1	147.3	149.5	151.4	147.1	127.6	117.8
Bowen	134	139.3	148.5	154.5	153.8	149.9	147.1	147	147.4	148	149.6	152.2	147.6	130.1	122
Bundaberg	133.2	138.6	149.4	155.7	153.6	149.7	148.9	148.5	147.5	148.1	149.8	152.1	147.9	128.2	120.8
Caboolture	135.7	140.4	151	155	149.6	146.1	144.7	145.1	145.4	147	149.4	150.9	146.7	nd	nd
Cairns	132.8	137	149.7	155.9	155.5	154.8	154.7	154.7	154.6	153.9	154	154.2	151.0	129.4	123
Caloundra	132.2	138.3	148	152.9	150.1	147.1	145.9	145.8	145.9	145.9	147.7	149.9	145.8	126	116.8
Charleville	142.9	145.3	157.3	163.5	161.9	156.3	155.1	154.3	154.2	154.7	156.2	159.4	155.1	140.4	132.4
Charters Towers	135.2	139.9	150.2	155.1	155	152.6	152.8	152.8	152.8	152.6	152.2	152	150.3	132.4	124.2
Cloncurry	149.1	153	159.8	168.1	169.5	168.2	168.4	167.7	167.6	168	168.3	169.8	164.8	nd	nd
Cunnamulla	146.6	150.7	160.5	166.1	162.5	159.8	159.4	159.2	159.2	159.9	161.9	162.9	159.1	nd	nd
Dalby	132.6	136.4	149.1	155.2	152.5	147	145.3	144.5	145	146.9	148.7	150.2	146.1	nd	nd
Emerald	136.5	139.6	151.2	156.7	153.3	149.4	148.2	148.6	148.6	149.2	151.3	153.2	148.8	131.1	129.2
Gladstone	134.7	138.3	148.8	154	150.5	147.5	147.1	147	147.2	147.7	149.8	152.5	147.1	131	121.8
Gold Coast	135.8	140.6	151.2	154.9	149.9	146.8	145.6	145.8	146.1	147.5	149.9	151.4	147.1	128.2	121.1
Hervey Bay	133.8	138.2	149.2	154.7	153.5	149	146.9	146.3	146.4	147	148.4	150.7	147.0	130	118
lpswich	132.7	136.9	147.9	152.6	151.2	147.4	146.1	146	145.6	146.4	148	151.3	146.0	128	121.7
Kingaroy	134.8	139	149.4	155.7	153.1	149.1	148	148.1	148.8	149.6	151.2	152.2	148.3	129.8	118.5
Longreach	144.9	149.8	160.1	164.8	160.2	157.5	156.4	157	157	157.9	159.5	159.4	157.0	137.8	119.8
Mackay	131.2	135.8	148.1	153.6	152.9	149.8	148	147.9	147.9	147.9	149.2	149.9	146.9	129.9	127.5
Maryborough	133.7	138.1	149.1	153.8	152.2	148.5	146.6	146.2	146.1	146.7	148.9	150.9	146.7	128.7	119.4
Mount Isa	138.4	143.5	155.7	163.9	160.7	157.4	152.1	152.1	152.7	153.9	158.1	159.1	154.0	132.6	119.4
Normanton	152.9	155.9	157.5	178.8	171	164.5	163.3	165.1	165.2	167	166.9	171.3	165.0	146.8	136.3
Rockhampton	137	140.7	151.3	156.7	154.4	150.8	150.3	150.5	150.6	151.2	152.4	154	150.0	132.4	127
Roma	138.7	141.6	152.4	156.5	153.6	150.2	149.1	149	149.1	150	151.3	153.1	149.6	133.1	123.5
Sunshine Coast	135.3	139.5	149.8	155	151.7	148	146.7	146.6	146.7	147.6	149.4	151.4	147.3	129.1	125
Toowoomba	134.2	137.6	148.9	155.9	152	147.7	146.3	146.2	146.1	147.7	149.7	151.6	147.0	128.1	118.5
Townsville	133.8	138.4	149	153.8	149.9	144.6	143.2	143.8	144.1	145.5	148.2	149.2	145.3	128.5	118
Warwick	134.9	138.4	150.6	156.4	150.5	146.7	145	145.4	145.6	147.5	149.3	150.8	146.8	129.4	118.8
Weipa	160.8	165	175.7	177.9	170	169.4	167.9	167.9	169.2	170.5	175.5	175.3	170.4	153.3	141.2

# Table 9: Average Diesel Prices for Queensland Regional Centres

Source: FUELtrac