Pacific fuel price monitor

Covering 4th quarter 2016 (October–December)

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1. PACIFIC FUEL PRICES AT A GLANCE

Figure 1: Regional retail prices including duty and taxes

![Average retail fuel prices including tax and duty - 4th quarter 2016](image)

1 Fuel prices per litre are expressed in US cents per litre (cpl) throughout this article.
### Overview

In Q4.2016, average fuel prices in Pacific Island countries and territories (PICTs) increased for diesel and decreased for mogas, kerosene and LPG compared to Q3.2016. For mogas, PICT fuel prices decreased by 1% and 0.28% for retail and wholesale tax inclusive, diesel retail and wholesale tax-inclusive both increased by 1%, kerosene decreased by 2% and 1% and LPG by 6% and 3% for retail and wholesale respectively, compared to Q3.2016.

### Mogas

Hawaii had the lowest tax inclusive retail price, followed closely by American Samoa and Fiji. Pre-tax lowest was Fiji (53.40 cpl), Sydney (53.68 cpl), Hawaii (55.47 cpl) and Samoa (60.37 cpl). Highest pre-tax prices were Niue (137.91 cpl), Tuvalu (128.57 cpl) and Wallis and Futuna (122.56 cpl). American Samoa had the lowest PICT wholesale price, followed by Papua New Guinea and Solomon Islands. The range (low to high price gap) of pre-tax fuel retail prices (Fiji compared with Niue) for mogas in PICTs was 84.50 cpl.

### ADO

Fiji and American Samoa had the lowest tax-inclusive retail price, followed by Papua New Guinea and Samoa. Pre-tax lowest was Fiji (43.05 cpl), Samoa (59.17 cpl), Vanuatu (60.35 cpl) and Tonga (61.12 cpl). Highest pre-tax costs were Niue (139.33 cpl) and Tuvalu (128.77 cpl). Papua New Guinea had the lowest PICT wholesale price, followed by Fiji, American Samoa and Samoa. The PICT retail pre-tax ‘low-to-high’ price gap (Fiji compared with Niue) for ADO was 96.28 cpl.

### Kerosene

Fiji had the lowest tax-inclusive retail kerosene prices, followed by Tonga and Kiribati. Pre-tax lowest were Fiji (51.71 cpl), Samoa (54.33 cpl) and Tonga (59.77 cpl). Papua New Guinea had the lowest wholesale kerosene price (40.76 cpl) followed by Fiji and American Samoa. The highest wholesale kerosene prices were in Niue, Vanuatu, and Wallis and Futuna. The PICT retail pre-tax ‘low-to-high’ price gap (Fiji compared with Palau) for kerosene was 154.34 cpl.

### LPG

The lowest retail LPG prices were in Fiji (USD 1.14 per kg), closely followed by Tonga and Kiribati. Palau had the highest LPG price (USD 5.51 per kg). The PICT pre-tax ‘low-to-high’ price gap (Fiji compared with Palau) for LPG was USD 4.37 per kg.

### Crude oil

Average Dated Brent crude oil prices increased by USD 4.50 per barrel compared to Q3.2016.
3. MOGAS (UNLEADED PETROL) PRICES

Figure 2: Retail tax-inclusive mogas price

Figure 3: Retail mogas prices sorted by pre-tax cost
Figure 4: Wholesale mogas prices sorted by pre-tax cost

Figure 5: Wholesale and retail mogas prices (including tax and duty)
**Key observations – Mogas**

- Most PICTs import 92 RON mogas. Niue, Cook Islands, New Caledonia, Vanuatu, and Wallis and Futuna import 95 RON, which is 4% more expensive than 92 RON.
- The Pacific-wide average pre- and after-tax retail price for mogas was 0.85 cpl and 1.11 cpl respectively.
- The average pre- and after-tax wholesale price for mogas was 0.70 cpl and 0.99 cpl respectively, which was the same as Q3.2016 prices.
- The pre-tax wholesale price was lowest in Papua New Guinea (42.03 cpl), New Zealand (43.26 cpl), Australia – Sydney (45.99 cpl) and Samoa (46.73cpl).
- The PICT pre-tax low to high wholesale price gap (Papua New Guinea compared with Niue) for mogas was 70.76 cpl.
- Average MOPS for mogas 92 and 95 RON during October–December was USD 38 cpl and 40 cpl respectively, with both fuel types recording an increase of 3 cpl when compared to July–September.
- Mogas-related retail tax rates in PICTs ranged from 1.32 cpl (Palau) to 64.87 cpl (New Zealand).
- Mogas-related wholesale tax rates in PICTs ranged from 5.24 cpl (Kiribati) to 45.16 cpl (Vanuatu).

**4. AUTOMOTIVE DIESEL PRICES**

Figure 6: Retail tax inclusive diesel prices
Figure 7: Retail diesel prices sorted by pre-tax cost

Figure 8: Wholesale diesel prices sorted by underlying pre-tax prices
Figure 9: Regional prices of diesel (including tax and duty)

Key observations – diesel fuel

- Pre-tax and duty, Fiji, American Samoa and Vanuatu have the lowest retail ADO costs and prices, closely followed by Tonga and American Samoa. Palau imposes the lowest amount of tax and duty but is mid-ranking in terms of comparative retail sales price.
- The majority of PICTs import 500 ppm sulphur (S) ADO for land transport. Palau has specifications of 50 ppm. American Samoa, Cook Islands, Niue, Wallis and Futuna, and Vanuatu import 10-ppm diesel for land transport. Noticeably, these are contributing factors to price variations among PICTs.
- The Pacific-wide average pre- and after-tax retail price for ADO was 0.88 cpl and 1.09 cpl.
- Papua New Guinea had the lowest tax-inclusive wholesale prices, followed by Fiji and American Samoa.
- The pre-tax wholesale price was lowest in New Zealand (41.29 cpl), followed by Papua New Guinea (41.52 cpl), Samoa (45.745 cpl) and Fiji (52.32 cpl).
- The PICT pre-tax ‘low to high’ wholesale price gap (New Zealand compared with Niue) for ADO was 72.53 cpl.
- The Pacific-wide average pre- and post-tax wholesale price for ADO was 0.71 cpl and 0.93 cpl.
- Average MOPS for gasoil 10 ppm and 500 ppm during October–December was both 0.38 cpl and both increased by 0.04 respectively compared to July–September.
- ADO retail tax rates between PICTs ranged from 1.32 cpl (Palau) to 44.35 cpl (Vanuatu).
- ADO related wholesale tax rates in PICTs ranged from 1.85 cpl (Papua New Guinea) to 44.18 cpl (Vanuatu).
5. KEROSENE PRICES

Figure 10: Retail tax-inclusive kerosene prices

Figure 11: Retail kerosene prices sorted by underlying pre-tax cost
Figure 12: Wholesale kerosene prices sorted by underlying pre-tax cost

Figure 13: Wholesale and retail prices of kerosene (including tax and duty)
**Key observations – Kerosene**

- Fiji had the lowest retail kerosene prices and Papua New Guinea had the lowest wholesale prices. Highest prices were found in Palau and Niue.
- The Pacific-wide average pre- and after-tax retail price for kerosene was 96 cpl and 109 cpl respectively.
- Average MOPS for Asian jet fuel (the main end-use for kerosene) during October–December was 38 cpl.
- Papua New Guinea had the lowest tax inclusive wholesale prices, followed by Fiji and American Samoa.
- Pre-tax wholesale price was lowest in Papua New Guinea (40.76 cpl) followed by Samoa (42.41 cpl) and Fiji (50.49 cpl).
- The PICT pre-tax ‘low to high’ wholesale price gap (Papua New Guinea compared with Niue) for kerosene was 96.36 cpl.
- Kerosene-related retail tax rates in PICTs ranged from zero (Kiribati) to 37.18 cpl (Wallis and Futuna).
- Kerosene-related wholesale tax rates in PICTs ranged from zero (Kiribati, Papua New Guinea and Fiji) to 37.18 cpl (Wallis and Futuna).

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**6. LIQUEFIED PETROLEUM GAS (LPG) PRICES**

*Figure 14: Saudi Contract Price (CP) butane and propane price vs Dated Brent (crude oil)*
The international benchmark for the cost of LPG in the Asia-Pacific region is the Saudi Aramco Contract Price, also known as the ‘Saudi CP’. It increased in the fourth quarter for propane and butane by 78 USD per metric tonne and 103 USD per metric tonne respectively, compared to the previous quarter. Saudi CP for butane and propane for the quarter averaged at USD 410 and USD 370 per metric tonne respectively.

Figure 15: Regional prices of LPG (including tax and duty)
7. INTERNATIONAL PRICING MARKET TRENDS

Figure 16: Comparison – Singapore gasoline, jet fuel/kerosene, diesel and Dated Brent

In Q4.2016, the Dated Brent crude oil price increased by 10% from USD 46.44 per barrel to USD 50.94 per barrel compared to Q3.2016. In order to speed up oil market stabilisation, reduce fuel volatility and create new investment, OPEC agreed to reduce output by 1.2 million bpd from 1 January 2017. Non-OPEC member, Russia, also agreed to reduce its oil consumption by 300,000 bpd gradually and was optimistic that by March 2017 it would be producing 200,000 bpd. However, Gary Ross (OPEC Watcher) mentioned, ‘They are all enjoying higher prices and compliance tends to be good in the early stages. But then as prices continue to rise, compliance will erode.’

Singapore fuel prices
Noticably in Q4.2016, Singapore free-on-board (FOB) prices for mogas 92, diesel 500 ppm, kerosene and Dated Brent increased by 15%, 11%, 11% and 10% respectively. FOB fuel price comparison for Q3.2016 versus Q4.2016 is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Q3.2016 Average (USD/barrel)</th>
<th>Q4.2016 Average (USD/barrel)</th>
<th>Difference (USD/barrel)</th>
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<tbody>
<tr>
<td>Gasoline 92</td>
<td>52.19</td>
<td>60.24</td>
<td>8.05</td>
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<tr>
<td>Diesel 500 ppm</td>
<td>54.11</td>
<td>60.29</td>
<td>6.18</td>
</tr>
<tr>
<td>Kerosene</td>
<td>54.28</td>
<td>60.52</td>
<td>6.23</td>
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<tr>
<td>Dated Brent</td>
<td>46.44</td>
<td>50.94</td>
<td>4.50</td>
</tr>
</tbody>
</table>
Figure 17: Difference between market prices

Observations – refiners margin
- For Q4.2016, in comparison with Q3.2016, the refiners margin increased for all petroleum products, with mogas 97, 95 and 92 recording the highest by 33%, 43% and 62% respectively.
- Kerosene, diesel 10 ppm and diesel 500 ppm for the fourth quarter increased by 22%, 21% and 22% respectively.

8. EXCHANGE RATES

In the fourth quarter, AUD, Euro, FJD, NZD, PGK, WST, SBD, TOP, Vatu and XPF currencies weakened against the US dollar compared to the third quarter. This could be associated with the USA Presidential Election held in November 2016 and the increase in US interest rate of 0.03% in December 2016. Overall in Quarter 4 2016, the Euro, Papua New Guinea PGK, Samoa WST and New Caledonia/Wallis Futuna XPF were at their lowest against USD.
Samoa, Tonga, Papua New Guinea, Wallis and Futuna, New Caledonia, Vanuatu and Solomon Islands carry out price reviews on a monthly basis.

Fiji reviews petroleum product prices on a quarterly basis. Price change is based on MOPS prices of the previous quarter.

American Samoa reviews prices on a fortnightly basis.

Niue and Cook Island price changes are carried out on an "ad hoc" basis. Price change is mostly influenced by either a major surge or fall in international market prices.

Kiribati has held its fuel prices constant since 2012.

9. PICT FUEL-PRICING METHODOLOGIES

- Data for Saudi Aramco LPG prices were adapted from [http://gasenergyaustralia.asn.au/](http://gasenergyaustralia.asn.au/).
- Figures 16 and 17 are generated using daily MOPS data sourced from Platts Asia-Pacific/Arab Gulf Marketscan.
- Prices for diesel, gasoline and jet/kerosene prices are provided by Platts (S&P Global Platts) under subscription.
- Figure 18 derives from [www.oanda.com](http://www.oanda.com)
Abbreviations and definition of key terms

ADO  automotive diesel oil or diesel fuel
After–tax price  prices including tax and duty
Bbl  barrel (of oil), approximately 159 litres
bpd  barrels per day
cpl  cents per litre
DPK  dual purpose kerosene (i.e. jet fuel and domestic use)
FOB  free-on-board
Gasoil  refinery designation of diesel fuel
kl  kilolitres (thousand litres)
Mogas  motor gasoline – normally unleaded
MOPS  Mean of Platts Singapore
MR  medium range tankers, generally 20,000–30,000 metric tonnes
Pacific-wide  All surveyed Pacific Island countries (excluding Australia and New Zealand)
ppm  parts per million
Retail price  fuel price at retail/service stations, also called pump price
Pre-tax price  price excluding tax and duty
Pump price  refer to retail price
RON  research octane number
S  sulfur content (usually in diesel fuel)
ULP  unleaded petrol
USD per bbl  US dollars per barrel
USD per l  US dollars per litre
USG  US gallon

Conversions

<table>
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<th>Conversion</th>
<th>Factor</th>
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<td>Litres to USG</td>
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<tr>
<td>Litres to barrel</td>
<td>159</td>
</tr>
<tr>
<td>USG to barrel</td>
<td>42</td>
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</tbody>
</table>

Note: A more detailed petroleum glossary can be accessed from the PRDR website:
http://prdrse4all.spc.int/system/files/petroleum_glossary.pdf

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