Pacific Fuel Price Monitor

Covering Third Quarter 2016 (July–September)

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1. PACIFIC FUEL PRICES AT A GLANCE

Figure 1: Regional retail prices including duty and taxes

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

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Overview

In Q3.2016 average fuel prices in Pacific Island countries and territories (PICTs) increased for mogas, diesel, kerosene and LPG compared to Q2.2016. For mogas, PICT fuel prices increased by 3% and 6% for retail and wholesale tax inclusive, diesel by 6% and 9%, kerosene increased by 4% and 8% and LPG by 12% and 16% for retail and wholesale respectively, compared to Q2.2016.

Mogas

Hawaii had the lowest tax inclusive retail price followed closely by American Samoa and Fiji. Pre-tax lowest was Sydney (49.73 cpl), Hawaii (55.05 cpl), Fiji (56.86 cpl) and Tonga (57.83 cpl). Highest pre-tax costs were Niue (140.19 cpl), Tuvalu (126.90 cpl) and Wallis and Futuna (126.73 cpl). PNG had the lowest PICT wholesale price, followed by American Samoa and Solomon Islands. The PICT retail pre-tax ‘low-to-high’ price gap (Australia Sydney compared with Niue) for mogas was 90.47 cpl. Volume weighted, the best performing mogas markets were Fiji, American Samoa, Samoa and Tonga.

ADO

Fiji and American Samoa had the lowest tax inclusive retail price, followed by New Zealand and Papua New Guinea. Pre-tax lowest was Fiji (35.49 cpl), Australia (45.59 cpl), Samoa (52.03 cpl) and Vanuatu (55.74 cpl). Highest pre-tax costs were Niue (141.64 cpl) and Tuvalu (131.52 cpl). Papua New Guinea had the lowest PICT wholesale price, followed by Fiji, American Samoa and New Zealand. The PICT retail pre-tax ‘low-to-high’ price gap (Fiji compared with Niue) for ADO was 98.09 cpl. Volume weighted, the best performing ADO markets were Tonga, Fiji and Samoa.

Kerosene

Fiji had the lowest tax inclusive retail kerosene prices, followed by Tonga and American Samoa. Pre-tax lowest was Fiji (51.99 cpl), Samoa (55.04 cpl) and Tonga (58.59 cpl). Papua New Guinea had the lowest wholesale kerosene price (40.93 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 150.70 cpl.

LPG

The lowest retail LPG prices were in Fiji (USD 1.26 per kg), closely followed by Tonga and Tuvalu. 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 4.25 per kg.

Crude oil

Average Dated Brent crude oil prices slightly increased by USD 0.10 per bbl compared to Q2.2016.
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

Wholesale mogas sorted by underlying pre-tax prices

**Figure 5:** Wholesale and retail mogas prices (including tax and duty)

Mogas price 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 has a higher cost than 92 RON.
- The Pacific-wide retail average pre- and after-tax retail price for mogas was 87 cpl and 112 cpl respectively.
- Average pre- and after-tax wholesale price for mogas was 70 cpl and 99 cpl.
- Pre-tax wholesale price was lowest in New Zealand (38.29 cpl), Papua New Guinea (40.48 cpl), Australia – Sydney (41.81 cpl) and Samoa (47.35 cpl).
- The PICT pre-tax ‘low to high’ wholesale price gap (New Zealand compared with Wallis and Futuna) for mogas was 78.15 cpl.
- Average MOPS for mogas 92 and 95 RON during July–September period was 35 cpl and 37 cpl respectively.
- Mogas related retail tax rates in PICTs ranged from 1.32 cpl (Palau) to 45.92 cpl (Vanuatu).
- Mogas related wholesale tax rates in PICTs ranged from 5.10 cpl (Kiribati) to 42.08 cpl (French Polynesia).

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
Key observations – diesel fuel

- Pre-tax and duty, Fiji, American Samoa and New Zealand have the lowest retail ADO costs and prices, closely followed by Port Moresby and Australia (Sydney). 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, New Caledonia, Wallis and Futuna, and Vanuatu import 10 ppm diesel for automotive use, factors that contribute to price variations among PICTs.

- The Pacific-wide average pre- and after-tax retail price for ADO was 84 cpl and 108 cpl.

- Papua New Guinea had the lowest tax inclusive wholesale prices, followed by Fiji and American Samoa. Pre-tax wholesale price was lowest in New Zealand (37.60 cpl), PNG (41.64 cpl), Australia (Sydney) (41.81cpl) and Samoa (46.94 cpl).

- The PICT pre-tax ‘low to high’ wholesale price gap (New Zealand compared with Niue) for ADO was 78.10 cpl.

- The Pacific-wide average pre- and post-tax wholesale price for ADO was 67 cpl and 92 cpl.

- Average MOPS for gasoil 10 ppm and 500 ppm during July–September period was 35 cpl and 34 cpl respectively.

- ADO retail tax rates between PICTs range from 1.32 cpl (Palau) to 44.80 cpl (Vanuatu).

- ADO related wholesale tax rates between PICTs range from 1.92 cpl (Papua New Guinea) to 44.63 cpl (Vanuatu).
5. KEROSENE PRICES

Figure 10: Retail tax-inclusive kerosene prices

![Retail kerosene tax-inclusive price chart]

- **Taxes (Duty plus VAT)**
- **Kerosene Retail Pre-Tax Price**
- **Pacific Average Pre-tax Retail Price**
- **Platts Benchmark Jet/kerosene**

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

![Retail kerosene sorted by underlying cost chart]
Figure 12: Wholesale kerosene prices sorted by underlying pre-tax cost

![Wholesale kerosene prices sorted by underlying pre-tax cost](image)

Figure 13: Wholesale and retail prices of kerosene (including tax and duty)

![Wholesale and retail prices of kerosene](image)
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 98 cpl and 111 cpl respectively.
- Average MOPS for Asian jet fuel (the main end-use for kerosene) during the July – September period was 35 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 (40.93 cpl), Samoa (43.03 cpl) and Fiji (51.53 cpl).
- The PICT pre-tax ‘low to high’ wholesale price gap (Papua New Guinea compared with Niue) for kerosene was 98.46 cpl.
- Kerosene-related retail tax rates in PICTs range from zero (Kiribati and Fiji) to 38.02 cpl (Wallis and Futuna).
- Kerosene-related wholesale tax rates in PICTs ranged from zero (Kiribati, Papua New Guinea and Fiji) to 38.02 cpl (Wallis and Futuna).

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 decreased in the third quarter compared to the previous quarter by 33.33 USD per metric tonne. Saudi CP for butane and propane for the quarter averaged at USD 307 and USD 292 per metric tonne respectively.

Figure 15: Regional prices of LPG (including tax and duty)

Key observations LPG
- Average Saudi Aramco LPG butane and propane decreased by 20% to 0.292 cpl and by 6% to 0.325 cpl respectively.
- Between July and September 2016, Fiji had the lowest LPG retail and wholesale prices at USD 1.26 per kg and USD 1.17 per kg respectively and Palau had the highest retail price USD 5.51 per kg and Wallis and Futuna for wholesale price of USD 3.43 per kg.
- Average PICTs for LPG for retail and wholesale increased slightly compare to Q2.2016 by USD 0.46 per kg and USD 0.56 per kg respectively.
In Q3.2016, Dated Brent crude oil price slightly increased by 1% from USD 46.34 per bbl to USD 46.71 per bbl compared to Q2.2016. Near to the end of the third quarter, OPEC called a special meeting and agreed to limit production to 32.5–33 million barrels per day. As a result, MOPS daily price rose by 4%–5% for all fuel products from 28 to 29 September before stabilising on 30 September. Also, the Brexit vote, the fishing ban in China and the construction of an oil pipeline in USA were some of the associated factors that determined MOPS fuel price in Q3.2016.

**Singapore fuel prices**

In Q2.2016, Singapore free-on-board (FOB) prices for mogas 92 decreased by 5% and kerosene prices also decreased by less than 11 cpl. FOB fuel price comparison for Q2.2016 v Q3.2016 is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Q2.2016 Average (cpl)</th>
<th>Q3.2016 Average (cpl)</th>
<th>Difference (cpl)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gasoline 92</td>
<td>54.71</td>
<td>52.19</td>
<td>−2.52</td>
</tr>
<tr>
<td>Diesel 500 ppm</td>
<td>54.18</td>
<td>54.11</td>
<td>−0.07</td>
</tr>
<tr>
<td>Kerosene</td>
<td>54.39</td>
<td>54.28</td>
<td>−0.11</td>
</tr>
<tr>
<td>Dated Brent</td>
<td>46.39</td>
<td>46.44</td>
<td>0.05</td>
</tr>
</tbody>
</table>

In comparison to the second quarter of 2016, the price of Dated Brent crude oil in the third quarter of 2016 slightly increased (in USD per bbl terms) by 0.05 from 46.39 to 46.44.
Observations – refineries margin
- For Q3.2016 in comparison to Q2.2016, the refineries margin declined for all petroleum products, with mogas 97, 95 and 92 recording the highest drop by 26%, 26% and 31% respectively.
- Kerosene, diesel 10 ppm and diesel 500 ppm for this period were reduced by 2%, 4% and 2% respectively.

8. EXCHANGE RATES

In the third quarter Euro and XPF currencies weakened against the US dollar compared to the second quarter due to the Brexit vote. Also Samoa’s Tala currency weakened by 5%, while Australia (AUD), Fiji (FJD), New Zealand (NZD), Papua New Guinea (PGK) Solomon Islands (SBD), Tonga (TOP) and Vanuatu (Vatu) strengthened against the US dollar compared to the previous month.

9. PICT FUEL-PRICING METHODOLOGIES

- 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 previous quarter.
- American Samoa reviews prices on a fortnightly basis.
- Niue and Cook Islands 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.

Price data sources
- Singapore data are sourced from [www.facebook.com/PetrolWatchSingapore](http://www.facebook.com/PetrolWatchSingapore).
- Data for Saudi Aramco LPG prices were adapted from [http://gasenergyaustralia.asn.au/](http://gasenergyaustralia.asn.au/).
- Figures 18 and 19 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 (The McGraw-Hill Companies, Inc.) under subscription.
- Figure 20 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
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>
<thead>
<tr>
<th>Conversion</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Litres to USG</td>
<td>3.785</td>
</tr>
<tr>
<td>Litres to barrel</td>
<td>159</td>
</tr>
<tr>
<td>USG to barrel</td>
<td>42</td>
</tr>
</tbody>
</table>

Note: A more detailed petroleum glossary can be accessed from the PRDR website: [http://prdrse4all.spc.int/production/node/1523](http://prdrse4all.spc.int/production/node/1523)

For further information on PICT fuel pricing, please contact:

Mr Solomone Fifita, Deputy Director Energy (solomonef@spc.int) or
Ms Tirisa Wainibalagi, Assistant Petroleum Officer (tirisaw@spc.int)