



Independent  
Consumer &  
Competition  
Commission

# Understanding fuel pricing in Papua New Guinea

Answers to some frequently asked questions

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# Independent Consumer & Competition Commission

Papua New Guinea's Consumer Watchdog and Economic Regulator

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## Introduction

Fuel prices are of great concern to all Papua New Guineans. This booklet is intended to provide consumers with an understanding of fuel pricing in Papua New Guinea by presenting answers to some frequently asked questions. These include:

- How are fuel prices determined in PNG and what influences movements in them?
- Why do fuel prices change every month?
- Why do fuel prices vary between locations in PNG?
- What is the role of the Independent Consumer and Competition Commission (ICCC) in fuel pricing?

The ICCC plays an active role in monitoring the ex refinery price of petrol, diesel and kerosene prices in PNG and also domestic transport costs. The wholesale and retail margins component of fuel prices is price controlled in PNG and the margins are determined by the ICCC following a public inquiry.

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# Question 1

## What factors determine fuel prices in PNG?

The level of fuel prices in PNG is determined by a combination of factors. These include:

- international refined petroleum products prices
- the PNG kina / United States dollar exchange rate
- international shipping freight rates
- domestic shipping and road freight rates
- wholesale and retail margins
- excise duties
- Goods and Services Tax (GST)

The main factors contributing to movements in domestic fuel prices are explained in more detail in the section opposite.

### Main influences on fuel price movements

#### International

##### *International refined petroleum products prices*

Under the terms of the Project Agreement between the PNG Government and InterOil Limited, the owner and operator of the Napa Napa refinery, prices ex the refinery are set using a formula based on international price of fuel delivered into PNG. Movements in fuel prices ex the refinery in PNG follow international refined petroleum products price movements. The benchmarks for petrol, diesel and kerosene are the posted prices of refineries in Singapore of Mogas 92 Unleaded (petrol), 0.05 PCT Gsl (low sulphur diesel) and Jet A-1 (kerosene) respectively. An average of the daily posted prices of the products is taken for all trading days of a month, and a monthly average is determined from these. These average prices are the prices charged for refined petroleum products ex the Napa Napa refinery rather than the crude oil price.

##### *The PNG Kina / United States Dollar Exchange Rate*

Since the price of refined petroleum prices in Singapore is expressed in US dollars, the price in PNG will change with movements in the PNG kina / US dollar exchange rate. Thus, the international prices are converted into a kina value based on the latest average monthly PGK/USD exchange rate.

### *International shipping freight rates*

As part of the Project Agreement, fuel prices ex the refinery in PNG include the cost of shipping of fuel from Singapore to PNG. The freight cost is based on the monthly Average Freight Rate Assessment (the AFRA rate). This is an average single voyage assessment rate for 30,000 metric tonne vessels carrying full clean cargoes on a voyage from Singapore to PNG during a given month. The AFRA rate is published by the London Tanker Brokers Limited.

### *Key influences*

Changes in the international price for refined fuel products and movements in the PNG kina / US dollar exchange rate are the main influences on movements in the overall level of domestic fuel prices.

There is a time lag of 1 month between changes in Singapore posted prices and prices at the bowser in service stations in PNG, due to the pricing formula used by InterOil Limited for its product from the Napa Napa refinery. This essentially means that international fuel products price movements in one month affect domestic fuel prices in PNG in the next month.

## Domestic

### *Domestic shipping and road freight*

Shipping freight rates are the rates applying to shipment of fuel products from the refinery to the mainports and outerports throughout PNG. There is a single standard cost applied to shipments to the mainports (Lae, Madang, Rabaul and Kimbe), whereas for the outerports (Alotau, Oro Bay, Wewak, Kavieng and Manus) the actual cost of shipping fuel to that port from one of the mainports is recovered for each location. For Port Moresby, a cross-harbour rate applies for shipping fuel products from the refinery to the fuel terminal at Idubada. Road freight rates are the rates applying to transportation of fuel products from either the mainports or outerports to service stations both within the locality and to inland parts of the country.

Both shipping and road freight rates are reviewed by the ICCC on a quarterly basis.

### *Wholesale and retail margins*

The current maximum wholesale and retail margins applying to petroleum products are set at 24 toea per litre and 15.5 toea per litre respectively. These margins are set by the ICCC and over the current price path period (ending in August 2009) are adjusted each year using a formula linked to the movement in the Consumer Price Index (CPI) less a productivity improvement factor.

### *Excise duties*

The Government has set excise duties of 61 toea per litre and 6 toea per litre to apply to petrol and diesel respectively. There is no excise duty on kerosene.

### *Goods and Services Tax (GST)*

Just like most goods and services sold in PNG, there is a 10% GST applying to sales of all fuel products.

## Question 2

### What governs fuel pricing arrangements in PNG?

Prices of locally refined petroleum products are governed under the Project Agreement signed between the State and InterOil Limited in 1997. Under this Agreement petroleum products sold from the Napa Napa refinery are to be sold at import parity prices (IPP) for 30 years from the commencement of production. What this essentially means is that petroleum products refined at the Napa Napa refinery will be sold at prices that would have applied if there was no refinery and petroleum products were fully imported from overseas. Thus, petroleum products refined at Napa Napa are sold at the equivalent of fuel prices sold in the international

market or what is known as import parity prices. Under the Project Agreement, the ex-refinery price is set to equate the posted pricing of fuel imported from Singapore which is the reference point for fuel sold in the Asia-Pacific Region.

PNG like most other countries is susceptible to international fuel price movements, which are influenced by global market conditions and other events. As with other internationally traded goods, the price for petroleum products is set by international markets.

## Question 3

### Why are PNG fuel prices based on international benchmarks?

Petrol, diesel and kerosene are internationally traded commodities. If prices in PNG were lower than international prices, the domestic refinery would not have an incentive to supply the local market but rather would export these

products overseas, which could lead to shortages in PNG. PNG currently produces all of its petrol, diesel and kerosene requirements domestically, and domestic suppliers purchase these products from the refinery at international prices.

## Question 4

### What international benchmarks are used to set PNG fuel prices?

Under the Project Agreement, the price of refined petroleum products from the InterOil refinery at Napa Napa follows movements in international refined petroleum products prices rather than international crude oil prices. It is the price of refined product that is directly relevant to the refinery and it is upon this basis that InterOil agreed to build and operate the refinery.

Although movements in international refined fuel prices are generally in line with movements in world crude oil prices, demand and supply factors - such as increased demand for petrol in particular countries and refinery shutdowns - may cause these prices to diverge.

Singapore refined fuel products are used as the PNG benchmark because Singapore is the closest major fuel refining and marketing centre to PNG and has been the main source of imported fuel into PNG prior to the establishment of the Napa Napa refinery. Singapore is also the biggest refiner in the Asia-Pacific region and prices ex Singapore are

used as the standard benchmark by other countries in the region.

While price benchmarks for crude oil such as the West Texas Intermediate crude oil or Brent crude oil are often quoted in the media, the relevant benchmark for PNG is the Tapis crude oil rate. West Texas Intermediate crude oil is the general benchmark for crude oil prices in the United States and Brent crude is the European benchmark. Tapis crude oil comes from Malaysia and is the relevant benchmark for the Asian region.

The difference in price between Tapis crude oil and Singapore refined petroleum products (i.e. Mogas 92 Unleaded, 0.05 Gsl and Jet A-1) is known as the refiner margin. This margin is included in the price paid for petroleum products ex the Napa Napa refinery.

## Question 5

What makes fuel susceptible to price volatility?

Fuel is a major internationally traded commodity. It is subject to changes in supply and demand conditions. For example, the northern winter period usually produces a considerable increase in demand for fuel to meet heating requirements. International political tensions or natural disasters can cause fuel shortages and force up the price for fuel products.

## Question 6

Why do fuel prices change every month in PNG?

The current pricing arrangements applying to fuel products in PNG is governed under the Project Agreement between the State and InterOil Limited. The pricing arrangement under the Agreement requires that prices be adjusted on a monthly basis based on movements in the international benchmark over the previous month. At the end of each month, InterOil Limited sends to the ICCC, data and information on fuel price changes to take effect the next month. Upon confirmation of the data and information, the ICCC is required to approve the price changes which take effect from the 8<sup>th</sup> of each

month. Hence the monthly fuel price changes. In some other countries, fuel price changes can occur more frequently and without any prior notification process. The monthly price change is the average of daily fuel price movements on the international fuel market over the previous month. Hence, consumers do not bear the full effects of any highly irregular daily fuel price movements occurring in a month. By this arrangement, PNG has achieved a balanced approach to price adjustments for this important commodity.

## Question 7

### Why do fuel prices vary between different locations in PNG?

Retail fuel prices vary between locations in PNG for a limited number of reasons. Fuel prices in PNG are determined by a combination of factors including international prices for petroleum products, excise duties, transport and freight costs, wholesale and retail margins, and GST.

Since fuel prices are declared, they are subject to regulation. The wholesale and retail margins are controlled by the ICCC and these margins are the same no matter where a service station or fuel outlet is located in PNG. The main variation in terms of the price paid in different locations is

the freight costs from the Napa Napa refinery. Freight charges will reflect distance from the refinery and also the volume of fuel being transported. On a per litre basis, smaller volumes of fuel delivered to a particular location are likely to have a higher freight cost than larger volumes to that same location. Also, distance from the refinery adds to the freight costs. Consequently, the further away a location is from a mainport or outerport, the higher the price of fuel products.

## Question 8

What are the influencing factors behind the increases in fuel prices in 2004/05?

Over the period 2004 and 2005, world crude oil prices have risen to unprecedented levels, with prices in August 2005 reaching an all-time high of over US\$70.00 (K216.00) per barrel. By mid-November 2005, prices had fallen to US\$56.00 (K173.00) per barrel. The last time the world experienced oil price increases and levels of this magnitude was during the Middle East oil crisis of the early 1970s.

The increase in world crude oil prices can be attributed to a number of factors, including (but not limited to):

- Persistently strong global demand for petroleum products continuously outstripping supply. This demand has been pushed by strong growth in the world economy, but more so by the record growth in the Chinese, Indian and more recently the United States economies.
- Lack of refining capacity to cater for the massive global demand for petroleum products.

- Major disruptions to refineries and oil facilities throughout the world that have fuelled concerns about energy supply in light of soaring global demand.

The price of fuel is like many other internationally traded goods, it rises and falls with changes in demand and other factors affecting the market. From the high levels of world price in mid 2005, prices have declined by mid November 2005. Under the pricing arrangements in PNG, these price adjustments were reflected in the domestic fuel prices paid by consumers with prices rising or falling in line with movements in prices internationally.

## Question 9

### What is the ICCC's role in fuel pricing?

The ICCC is the independent pricing regulator in PNG. Under the arrangements announced following a public inquiry in 2004, the ICCC has the role of regulating fuel prices in PNG. This regulation occurs in a number of ways. For fuel products sold ex the Napa Napa refinery, the role of the ICCC is to monitor InterOil Limited's administration of the import parity pricing (IPP) arrangements under the Project Agreement with the State. Final import parity price changes as recorded by the Singapore refineries and other relevant data are sent to the ICCC by InterOil Limited at the end of each month. Upon confirmation of the data by the ICCC (the ICCC keeps the same pricing template and data sources as InterOil Limited and thus effectively and independently monitors daily the fuel price changes) the price changes are then passed through to the final pump price incorporating excise duties, wholesale & retail margins, freight charges and GST.

Under the terms of the Project Agreement, the ICCC cannot withhold approval for a pass-through of any increases/decreases in fuel prices from the refinery. However, if the ICCC finds that the wrong numbers have been used in the pricing formula, it can require that appropriate adjustments are made.

The ICCC also monitors movements in domestic shipping and road freight rates to ensure that these charges reflect appropriate costs.

The ICCC also determines the actual wholesale and retail margins to be applied to petroleum products. These margins are set by the ICCC and over the current price path period (ending in August 2009) are adjusted each year using a formula linked to the movement in the Consumer Price Index (CPI) less a productivity improvement factor.

As part of its enforcement and compliance roles, the ICCC conducts inspections at services stations throughout PNG to ensure that retailers comply with approved prices, thereby ensuring that consumers are not paying more than the approved prices. The approved prices announced by the ICCC each month are comprised of the ex refinery price, domestic transport costs, wholesale and retail margins, excise duties and GST.

In view of its other role to inform and educate consumers and the general public, a press statement is released to

inform consumers of the fuel price changes to take effect each month. Another important role of the press statements is that fuel distributors and retail outlets are notified to

apply the prices changes endorsed by the ICCC so that consumers are not disadvantaged.

Consumers are encouraged to report to the ICCC if they suspect that a retailer is charging more than the allowable prices for fuel products in a particular location.

For further information

Consumer Complaints Hotline	180 3333
Website	<a href="http://www.iccc.gov.pg">www.iccc.gov.pg</a>
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