MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
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Weekly fuel monitoring

Methodology document – 16 September 2026

This document sets out the methodology used to produce MBIE's weekly fuel monitoring data.

Purpose

The Ministry of Business, Innovation and Employment (MBIE) monitors importer margins to assess how movements in key factors, including international oil prices, affect the retail pump prices faced by New Zealand consumers. This work supports MBIE's broader role in providing evidence and analysis on the energy sector, including monitoring prices across all energy types.

Background

MBIE and its predecessor, the Ministry of Economic Development, have maintained and published the weekly fuel margins series since at least 2006. Since the series was established, MBIE has periodically reviewed and updated the methodology for calculating prices and margins to reflect changes in data sources and developments in New Zealand's retail fuel market.

MBIE's weekly fuel margins series covers the period from 2004 to the present. A combination of data sources is used to produce the series across this period. This document describes the historical and current data sources and methods.

Methodology

The **retail importer margin** is the gross margin available to fuel retailers to cover domestic transportation, distribution and retailing costs in New Zealand, as well as profit. Monitoring this margin helps promote transparency in retail petrol and diesel pricing. The retail importer margin for a given fuel is calculated as:

Importer margin = Adjusted Retail Price – Taxes and Levies – Importer cost

It is important to note that the importer margin:

- is expressed in units of cents per litre of fuel sold
- covers both fixed costs (that is, components which cost the same regardless of the amount of fuel sold) and variable costs (that is, components whose cost increases as the amount of fuel sold increases)
- is not adjusted for inflation.

The methodology used to calculate each component is described below.

Retail price

The adjusted retail price is calculated by first deriving a national average **board price** (that is, the price advertised at fuel stations) and then applying an adjustment factor to align it with Stats NZ's Consumer Price Index (CPI) fuel price series.

Before 1 January 2022, the board price was calculated using daily national average prices sourced from Envisory and provided to MBIE weekly. From 1 January 2022, the board price has been calculated using data sourced from Datamine and provided to MBIE weekly. This transition date was selected because the prices derived from the two data sources differed only minimally at that point.

BOARD PRICE: DATAMINE

Datamine provides daily board price data—that is, advertised prices—by fuel station and fuel type across New Zealand. For each fuel type and day, the regional price is calculated as the median of all reported prices within the relevant region. The national price is then calculated as the mean of the regional prices, weighted by regional population, as follows:

$$\text{Natl. price} = \frac{(\text{Auckland price} \times \text{Auckland population}) + (\text{Northland price} \times \text{Northland Population}) + \cdots}{\text{Total population}}$$

Regional population estimates are drawn from Stats NZ's estimated resident populations for regional council areas as at 30 June. Although Stats NZ regularly updates and revises these estimates, the weightings are extracted at a specified point in time and are not subsequently revised. This approach maintains stability in the historical series.

BOARD PRICE: ENVISORY

Envisory historically provided MBIE with average board price data, sourced from a sample of sites, for regular petrol, premium 95 RON petrol, and diesel.

These data were used on the assumption that retail prices were consistent across the country. However, the introduction of the Auckland Regional Fuel Tax (ARFT) on 1 July 2018 created a price differential between Auckland and the rest of New Zealand. To account for this difference, a multiplicative factor was applied to prices from 1 July 2018 to 31 December 2021, the final date on which Envisory data were used as the source of fuel prices. The factor was calculated quarterly as follows:

$$F_{\text{ARFT}} = 1 - P + RP$$

Where:

- *P* is the proportion of the population in the Auckland region in each quarter. This is calculated from Stats NZ regional population estimates, which are produced as at 30 June each year and assumed to apply to the subsequent year, starting from the quarter ending in June. *P* for intervening quarters is calculated by linear interpolation.
- *R* is the ratio of the Auckland region's retail fuel price to the national fuel price, sourced quarterly from Stats NZ's regional Consumer Price Index (CPI) fuel prices.

ADJUSTMENT FACTOR AND ADJUSTED RETAIL PRICE

The data described above represent the board price—that is, the price advertised by fuel retailers. However, the amount paid by consumers may differ because of several factors, including:

- participation in loyalty programmes and the use of vouchers
- regional variation that is not accounted for by our aggregation methods.

To account for these factors, we adjust our data using Stats NZ's quarterly CPI fuel price. Stats NZ calculates the national average price for different fuel types using its own data collections.

This is a measure of the price paid for fuel, not just the advertised price. Stats NZ's methodology for calculating its fuel price measure is included in its wider CPI methodology documentation, available here.

The retail price is aligned with Stats NZ's CPI fuel price through the following process:

- Calculate the quarterly average fuel price from all daily national average fuel prices within the quarter.
- Subtract Stats NZ's CPI fuel price for the quarter from the quarterly average.

The resulting value is the **adjustment factor**, which is applied to all prices for the quarter. The board price, after application of this factor, is the **adjusted retail price**.

This adjustment ensures that our data align with Stats NZ's CPI fuel price data, which are used to construct our quarterly average fuel price statistics. These statistics can be accessed here: https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-statistics-and-modelling/energy-statistics/energy-prices.

ESTIMATING THE ADJUSTMENT FACTOR WHEN CPI DATA ARE UNAVAILABLE

Stats NZ releases its CPI fuel price data for a quarter around two weeks after the quarter ends. For example, data for the quarter ending 31 March are released in mid-April. CPI fuel price data therefore always lag our weekly fuel price data. For example, our April data need to be adjusted using fuel price data for the quarter ending 30 June, but those data are not released until July. We must therefore estimate the adjustment factor until CPI data for the period are available.

We estimate the adjustment factor for this period by carrying forward the most recently calculated factor. For example, if the adjustment factor for regular petrol for the quarter ended December 2024 is −5.2 cents per litre (c/L), and Stats NZ's CPI fuel price data for the quarter ended March 2025 are not yet available, we assume that the adjustment factor for the quarter ended March 2025 is also −5.2 c/L.

Data calculated using an estimated adjustment factor are designated **provisional**. The data are designated **final** once CPI data for the relevant quarter have been released and the adjustments recalculated.

Importer cost

The **importer cost** for a fuel is calculated using data supplied by Argus Media and supplemented by data provided by Envisory. It is calculated as follows:

Importer cost = Cost to purchase fuel + Cost to ship fuel + Wharfage

COST TO PURCHASE FUEL

The purchase cost is calculated by applying a series of adjustments to a base price provided weekly by Argus Media. All prices are based on Singapore product spot prices.

- Regular and premium petrol prices are based on quoted spot prices for Gasoline 95 RON unleaded.
- Diesel prices are based on quoted spot prices for Gasoil 50 ppm (high pour).

2026 fuel market adjustment

The 2026 conflict in the Middle East increased physical fuel purchase costs beyond the increases reflected in refined product prices. These additional costs represented a risk premium charged by traders in anticipation of near-term price increases.

Following consultation with fuel importers, the Commerce Commission determined that the additional cost could be estimated as a proportion of the fuel differential—the difference between the physical delivery price and the benchmark price. Its analysis indicated that the risk premium averaged approximately 70 per cent of the fuel differential.

Accordingly, MBIE has applied an adjustment to the base fuel purchase cost from 27 February 2026. Consistent with the Commerce Commission's methodology, the adjustment is set at 70 per cent of the fuel differential.

These prices are modified using quarterly price adjustments provided by Envisory:

- A fuel-specific *quality premium* is applied to the spot prices for regular petrol, premium petrol, and diesel to reflect the requirements of New Zealand's fuel specification for regular petrol.
- A further adjustment is applied to the spot price for Gasoline 95 RON unleaded to reflect the product price of regular petrol. This is done by applying an *octane adjustment*, a factor that reflects the difference in octane rating between the reference fuel and regular petrol.

COST TO SHIP FUEL

The cost of shipping fuel to New Zealand is calculated by multiplying the Worldscale flat shipping rate provided by Envisory by the Singapore–Asia-Pacific route rate provided by Argus Media. A freight adjustment supplied by Envisory is then applied to reflect the additional cost of shipping to New Zealand. Insurance and loss factors, also provided by Envisory, are applied as percentages of the total shipping cost. The resulting value is converted from USD/bbl to NZc/L using exchange-rate data sourced from the Reserve Bank of New Zealand.

WHARFAGE

A wharfage rate provided by Envisory is then added to determine the final importer cost.

Taxes and levies

The calculation includes the following taxes and levies:

- Direct taxes on fuel use:
  - ACC Levy
  - Petroleum and Engine Fuel Monitoring Levy
  - Local Authorities Petroleum Tax
  - National Land Transport Fund
  - Auckland Regional Fuel Tax (discontinued in July 2024)
- Costs associated with the New Zealand Emissions Trading Scheme (ETS)
- Goods and Services Tax (GST).

GST is calculated as a proportion of the adjusted retail price. ETS costs are provided weekly by Envisory. Other taxes are applied on a cents-per-litre basis.

The Auckland Regional Fuel Tax (ARFT) was a tax of 10 c/L before GST, applied to all petrol and diesel sales within the Auckland region. Its national impact was estimated by multiplying the tax by the proportion of New Zealand's population living in the Auckland region, calculated quarterly using the method outlined in the section on Envisory board prices above.

Further information on current duties, taxes and direct levies on motor fuels is available on the MBIE website: https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-generation-and-markets/liquid-fuel-market/duties-taxes-and-direct-levies-on-motor-fuels-in-new-zealand.

Annex: Supplementary information

Summary of data sources

The data sources mentioned in this document are summarised below. "Frequency" refers to the frequency of the data itself, which is not necessarily the frequency of provision to MBIE.

Section	Data	Source	Frequency
Importer cost	Fuel cost	Argus Media	Weekly
	Octane adjustment	Envisory	Quarterly
	Quality premium	Envisory	Quarterly
	Worldscale rate	Envisory	Quarterly
	Route rate	Argus Media	Weekly
	Freight adjustment	Envisory	Quarterly
	Insurance rate	Envisory	Quarterly
	Loss rate	Envisory	Quarterly
	Exchange rate	RBNZ	Weekly
	Conversion bbl/t	Envisory	Quarterly
	Wharfage	Envisory	Quarterly
	Product differential	Argus Media	Daily
Taxes and levies	ETS levy	Envisory	Daily
	Direct taxes	MBIE	Annually
Retail price	Retail fuel prices (to 31 December 2021)	Envisory	Daily
	Retail fuel prices (from 1 January 2022)	Datamine	Daily
	Regional population estimates	Stats NZ	Annually
	CPI fuel price	Stats NZ	Quarterly

Glossary of terms

Importer margin: The gross retail margin available to fuel retailers to cover domestic transportation, distribution and retailing costs in New Zealand, as well as profit margins. This is calculated as the adjusted retail price minus taxes, duties, levies, New Zealand Emissions Trading Scheme (ETS) costs, and importer cost. Note that this margin differs from the *wholesale margin* as estimated by the Commerce Commission, which focuses on wholesale (rather than retail) sales.

Importer cost: The cost to purchase a set quantity of fuel and import it to New Zealand. This cost covers the cost to purchase, the cost to ship, insurance, and wharfage.

Board price: The advertised price of a given fuel. It does not account for discounts received through vouchers, loyalty programmes or similar arrangements.

Adjustment factor: A factor applied to fuel prices to align them with Stats NZ's CPI fuel price. It reflects both the effect of discounts received through vouchers, loyalty programmes and similar arrangements, and methodological differences between MBIE's and Stats NZ's fuel price series. The adjustment factor may be positive or negative.

Adjusted retail price: The price of fuel adjusted to align with Stats NZ's CPI fuel price. This is equal to the **board price** of a fuel plus a specified **adjustment factor**.