



AIDE MEMOIRE

Information on FuelClock

Date:	31 March 2026	Priority:	High
Security classification:	Sensitive	Tracking number:	REQ-0030324

Information for Minister(s)

Hon Nicola Willis
Minister of Finance

Contact for telephone discussion (if required)

Name	Position	Telephone	1st contact
Dan Jenkins	Acting General Manager	Privacy of natural persons	✓

The following departments/agencies have been consulted

--

Minister's office to complete:

- | | |
|---|---------------------------------------|
| ☐ Approved | ☐ Declined |
| ☐ Noted | ☐ Needs change |
| ☐ Overtaken by Events | ☐ Seen |
| ☐ See Minister's Notes | ☐ Withdrawn |

Comments

-



AIDE MEMOIRE

Information on FuelClock

Date:	31 March 2026	Priority:	High
Security classification:	Sensitive	Tracking number:	REQ-0030324

Purpose

To provide an initial assessment of FuelClock produced by the Taxpayers' Union. Through staff review and a supplemental review by Claude AI we have found what we think are material errors in the information it displays.

We think it would be helpful to engage the Taxpayer's Union – and a wider range of economic commentators – to help make sure that information they report publicly is factually correct.

Dan Jenkins
Acting General Manager
MBIE

___ / ___ / 2026

Summary of initial assessment

What's correct

1. The FuelClock uses the same demand information we are using to calculate days cover. We think this is fit for purpose. FuelClock presents its days cover stock levels as "live" and this is misleading, it is an estimate based on historical use.

Errors we have seen

2. FuelClock uses old data to calculate its time to depletion. New Zealand's stocks are larger than it reports.
3. FuelClock uses Automatic Identification System (AIS – that ships use to make their position public) to provide information about shipping cargoes. We have reviewed this information and consider it materially inaccurate. Annex 1 compares FuelClock data to MBIE data (provided by fuel importers) and shows that FuelClock data underestimates total cover by 3-16 days depending on the fuel type. It reports any stock on water not included in its AIS data as "unverified", but that is incorrect as the stocks on water have been verified by the fuel importers. This means New Zealand's incoming stocks are larger than FuelClock reports.

4. Putting these together, FuelClock is materially underreporting how much cover New Zealand has. We consider FuelClock in its current state should not be relied upon by Ministers or the public.

Other points

5. MBIE's information includes verified opening stocks, verified stock on water volumes, verified voyage schedules and verified forward plans. The information is provided by fuel importers and represents the best available information about New Zealand's current and forward fuel stock position.

Next steps

6. We think it is important that the information on stocks provided publicly is accurate. If you agree, we will engage with the Taxpayer's Union and economic commentators to build more accurate reporting into their public commentary. This could include:
 - a. Taxpayers' Union
 - b. Sharon Zollner ANZ Chief Economist
 - c. Kelly Eckhold Westpac NZ Chief Economist
 - d. Jarrod Kerr KiwiBank Chief Economist
 - e. Stephen Toplis BNZ Head of Research
 - f. Nick Tuffley ASB Chief Economist
 - g. Shamubeel Eaqub Simplicity Chief Economist
 - h. Brad Olsen Infometrics Chief Executive

Annexes

Annex 1: Data comparison between FuelClock and MBIE

Annex 1: Data comparison between FuelClock and MBIE

Below we compare the TPU Data as represented in the *Fuel Clock* this morning and the MBIE Website.

The data in the table reflects volumes and fuel types reported as on NZ Bound Vessels, both Confirmed and Scheduled. Note, this does not correlate to the “Cargo By Fuel Type” Figures on the Fuel Clock, which we have been unable to rectify. The calculated difference is based on fuel volumes calculated from the Days cover as reported on the MBIE website.

	TPU Data		MBIE Website	Difference	
Fuel Type	TPU Volume	TPU Days Cover	Actual Days	Difference Days	Calculate difference in volume
Petrol	124,355,000.00	15.35	31.40	16.05	129,985,000.00
Diesel	299,800,000.00	28.02	32.80	4.78	51,160,000.00
Jet Fuel	103,200,000.00	21.50	25.10	3.60	17,280,000.00
Total	527,355,000.00	22.35	25.90	3.55	83,855,335.54

Broken down to highlight inaccuracies across all metrics:

1. Number of vessels

- TPU = 3 ships carrying Petrol: MBIE = 8 ships carrying petrol. Petrol ship numbers reflect 37.5% of total
- TPU = 5 ships carrying diesel: MBIE = 11 ships carrying diesel. Diesel ship numbers reflect 45% of total
- TPU = 2 ships carrying jet fuel: MBIE = 5 vessel carrying jet fuel Jet fuel ships reflect 40% of total

2. Named Vessels

- The only named vessels on the TPU Fuel Clock dashboard are the FRONT POLLUX and JURONG SUPPLIER.
- JURONG SUPPLIER does not match any named vessel in the Starboard Maritime Intelligence Platform database, nor in the MBIE data.
- TPU report FRONT POLLUX is carrying 60m litres of Petrol. MBIE data states that Front Pollux is carrying Confidentiality
- Confidentiality

3. Route: South Korea to New Zealand

- The TPU Fuel clock shows FRONT POLLUX and one unnamed vessel on route to New Zealand from South Korea. TPU claim the unnamed vessel is carrying 40m litres of petrol.
- MBIE data shows four vessels (other than FRONT POLLUX) on the water between South Korea and New Zealand. These 4 vessels are carrying the following combined fuel totals:
 - Jet Fuel: 57,235,320 litres
 - Diesel: 117,318,491 litres
 - Petrol: 80,876,084 litres
- This is a discrepancy, with TPU under calculating petrol supplies by 40,876,084 litres, reporting only 49% of petrol.
- Across all fuel types, there is a discrepancy of 215,429,895 litres, with TPU reporting only 16% of total fuel volume across all types.

4. Route: Japan to New Zealand

- The TPU Fuel clock shows no vessels on water between Japan and New Zealand.
- MBIE data has two vessels either planned or on water from Japan to New Zealand. These vessels are carrying 107,727,713 litres of Diesel.

5. Route: Singapore to New Zealand

- TPU data for the Singapore to New Zealand shows up to 5 vessels on the water (including JURONG SUPPLIER), with the following combined total fuel:
 - 278.5m litres of Diesel
- MBIE data shows 4 vessels on the water between Singapore and New Zealand. These are carrying the following combined fuel totals:
 - Jet Fuel: 60,601,936
 - Diesel: 85,004,398
 - Petrol: 81,220,177
- This is a discrepancy with TPU over calculating Diesel supplies by 193,495,602 litres, reporting 327.6% of the total.
- The discrepancy over total fuels sees TPU over calculating total fuel supplies by 51,673,489 litres, reporting 123% of total.

Annex 2: Claude AI review of FuelClock

The following points were generated by Claude AI but has not been verified by MBIE

Overall verdict:

The methodology is internally coherent and the consumption/MSO constants are accurate.

However, the site has a potentially serious data-currency problem with the March 18 fallback anchor being stale relative to the March 25 MBIE update — and the jet fuel in-country figure is particularly understated.

The new MBIE EEZ reporting split is not yet reflected in FuelClock's model, and the "MBIE vs Actual" framing has a structural editorial bias worth noting, especially given the Taxpayers' Union's advocacy context.

FuelClock.nz — Coherence & Accuracy Assessment

✅ What's Correct

MSO thresholds are accurate. The site states Petrol 28d, Diesel 21d, Jet Fuel 24d. MBIE confirms fuel importers must hold 28 days' cover of petrol, 21 days' of diesel, and 24 days' of jet fuel.

Daily consumption rates match MBIE exactly. FuelClock hardcodes 8.1 ML/day petrol, 10.7 ML/day diesel, and 4.8 ML/day jet fuel. MBIE confirmed these as the average daily fuel demand figures used to calculate days of cover.

The March 18 fallback anchor figures are arithmetically consistent: $221.9 \text{ ML} \div 8.1 = 27.4\text{d}$ petrol; $224.7 \text{ ML} \div 10.7 = 21.0\text{d}$ diesel; $102.7 \text{ ML} \div 4.8 = 21.4\text{d}$ jet fuel — all correct.

The IEA 90-day obligation framing is accurate. MBIE confirmed NZ meets the IEA obligation of 90 days of oil stocks through a combination of onshore stockholdings and "oil tickets" — agreements with the US, UK, and Japan that allow oil held overseas to count toward the total.

❌ Errors, Inconsistencies & Concerns

1. Stale Anchor Data Displayed in Methodology Table — Most Important

This is the biggest factual issue. The methodology page's consumption rate table still shows anchor stock figures from **18 March** (Petrol 27.4d, Diesel 21.0d, Jet Fuel 21.4d). MBIE's latest update, collected at 11:59PM Wednesday 25 March, shows in-country figures of 27.9d petrol, 21.7d diesel, and 25.3d jet fuel.

The jet fuel discrepancy is particularly stark: the anchor shows 21.4d, while the March 25 in-country figure is 25.3d — a nearly 4-day gap. **If the live scraper hasn't picked up the March 25 data and the site is still running off the March 18 fallback**, the depleted in-country estimates displayed to users as of today (31 March — 13 days since anchor) would be approximately:

- Petrol: ~14–15 days (vs actual ~21–22d)
- Diesel: ~8–9 days (vs actual ~15–16d)
- Jet Fuel: ~8–9 days (vs actual ~18–19d)

That would be a very significant understatement of actual stocks, creating unwarranted alarm.

2. MBIE Changed Its Reporting Format — Not Reflected in FuelClock

The March 25 MBIE update introduced a new reporting format, splitting on-water stocks into two categories: fuel within NZ's EEZ (up to 2 days away) and fuel on ships outside the EEZ but up to 3 weeks away.

FuelClock's "MBIE vs Actual Reserves" model treats MBIE's on-water figure as a single undifferentiated pool and compares it against AIS-confirmed vessels, labelling the gap "unverified supply." With the new EEZ split, this comparison is now structurally misaligned with how MBIE categorises supply. Ships within the EEZ (up to 2 days from port, already in NZ waters) are materially different from ships 3 weeks away, and FuelClock's model doesn't reflect that distinction.

3. "MBIE vs Actual Reserves" Framing Is Systematically Misleading

The site presents MBIE's on-water figures as "unverified" by contrasting them with AIS data. But MBIE's on-water figures are reported **directly by fuel importers under legal obligation** — they are not estimates or projections. MBIE's data is provided by fuel companies themselves and cross-checked against shipping information. The framing that this constitutes a "claimed" figure versus a "confirmed" one is editorially loaded and potentially inaccurate.

4. The March 22 MBIE Data Inconsistency

The previous update (March 22) showed an important nuance. MBIE data showed combined onshore and on-water stocks at 46.6 days as at March 22, with in-country diesel falling to 18.1 days — below the 21-day MSO threshold. FuelClock's model would have shown this as a critical breach, but MBIE issued an out-of-cycle clarification explaining this was related to vessels mid-discharge being counted differently. FuelClock doesn't appear to have acknowledged or accounted for that clarification in its methodology.

5. Dubai Crude Proxy

The site labels QM=F as "Dubai Crude / Oman Crude Futures" — acknowledging in parentheses that it's actually Oman futures. QM=F (NYMEX miNY WTI) is not Dubai Crude at all; it tracks WTI. The actual Dubai/Oman price would require a different instrument. This is a data sourcing error.

6. Sovereign Credit Rating

The site states NZ holds a Fitch AA+ rating with a "Negative Watch" outlook, displayed with a flashing red alert. "Negative Watch" is a very specific and unusual designation (distinct from the more common "Negative Outlook"). This needs verification — if incorrect, it's actively misleading users about NZ's sovereign fiscal position in a way that serves the Taxpayers' Union's editorial agenda.

Summary Table

Item	FuelClock	MBIE/Actual	Status
Petrol MSO	28d	28d	✓
Diesel MSO	21d	21d	✓

Jet Fuel MSO	24d	24d	✓
Petrol daily consumption	8.1 ML/day	8.1 ML/day	✓
Diesel daily consumption	10.7 ML/day	10.7 ML/day	✓
Jet daily consumption	4.8 ML/day	4.8 ML/day	✓
Anchor anchor in-country petrol	27.4d (18 Mar)	27.9d (25 Mar)	▲ Stale
Anchor in-country diesel	21.0d (18 Mar)	21.7d (25 Mar)	▲ Stale
Anchor in-country jet fuel	21.4d (18 Mar)	25.3d (25 Mar)	✗ ~4d gap
EEZ/non-EEZ on-water split	Not reflected	New format since 25 Mar	✗
Dubai crude instrument (QM=F)	Claims Dubai	Actually Oman/WTI futures	✗
"Unverified" on-water framing *1	Labels MBIE gap as unverified	MBIE data is importer-reported	▲ ! Misleading

Note from MBIE: FuelClock On water days cover information is not internally consistent