



OPERATION GOOD OIL

Post Refinery Report

Prepared by the Operation Good Oil Committee

For the People of New Zealand

16-04-2024

From:

The Committee Members

And

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Operation Good Oil is an information and awareness campaign which is made up of a dedicated team of concerned individuals who seek to bring the truth of New Zealand's current looming energy crises into the light of day.

Neither Operation Good Oil nor any of its contributing members have been recompensed in any way shape or form in the production of this report, it has been produced solely through volunteering of time and resources.

This report does not constitute financial or legal advice nor is it intended to substitute sound financial and or legal advice.

“Nothing is hidden that will not be made known”

Jesus of Nazareth

Executive Summary

It is our conclusion that the switch from a refining model to an import only model for the supply of the New Zealand refined fuels market was a grave error precipitated by a board that failed to present a balanced and rational case for shutdown of the refinery.

Instead they presented to the shareholders a business case that has proven to be based on unfounded poor future profitability and an overwhelming fear of missing out on the transition to carbon zero.

Not only has it deprived shareholders of both the capital value of a world class low emissions refinery putting out high quality refined fuels, bitumen and other by-products, it has caused a massive increase in the CO₂ and CO_{2e} emissions of New Zealand's transport fuels, bitumen and other products the refinery once produced.

The company formerly known as Refining New Zealand Ltd now named Channel infrastructure has been reduced from producing over 70% of the nation's transport fuels to tankage and delivery of 40% of imported refined oil.

It is our opinion that the business case that was presented for closure was overstated and that claimed losses were created by impairments of refinery assets that were deemed no longer useful simply because "fossil fuel is bad". There were no real world losses as the 2020 and 2021 reports declared that the refinery operated on a "cash neutral basis from the fee floor" as per the customer processing agreements and returned to profitability in Q3 2021.

We also determined that had the refinery returned to full production in 2022, it would have been earning maximum profits in 2022, 2023, 2024 and be projected to do so for some years. The company instead was deprived of these profits, and shareholders have been left without the dividends that would have more than made up for the lean years of 2019 through 2021.

We now believe that the company is being run in a haphazard financial manner paying out appeasement dividends without the underpinning cash flow.

The costs of the planned small scale production of 'sustainable fuels' have not yet been established and all indications are that such ventures require massive amounts of investment that currently exceed oil refining in order to reach market share. There is no guarantee for future sustainable production of these fuels.

As a consequence of the shutdown of the Oil Refinery, we believe that the shareholders along with the nation are now exposed to global and geopolitical security risks that are worsening by the day. Removing the means of production of refined transport fuels from our shores has removed the ability to pivot in a low stock or high price environment causing the company to essentially be nothing more than an expensive transport fuels tolling and storage facility that could well be entirely bypassed in the near future using other ports and fuel transport options.

This indeed has already been demonstrated by the large loss of market share.

To the people of New Zealand:

1.0 Shipping situation update

Since the closure of the refinery Operation Good Oil has been monitoring shipping tanker movements through a number of different channels, we have managed to keep a fairly loose but good handle on the data and can make the following estimations about the progress in the import fuel supply lines.

Using data obtained from the AIS systemⁱ, we were able to track the details and movements of every chemical tanker that has entered New Zealand waters.

Through the ongoing efforts of members we were able to deduce through repetition which tankers were most likely delivering fuels and compile a list of all the fuel tanker arrivals into port.

We took a 9 month sample from April 2022 to December 2022 with the help of a research team and we then created a detailed database for analysis.

By applying averages and known capacities/consumption figures from MBIE and industry sources we were able to table and graph a range of probabilities to assess the current performance of the import model.

4	Nave Aquila	Panama	30052	49991	LR1 Small	59,989,200	59,389,308	Refined products or crude oil
5						0	0	
6	Maersk Seafarer	Denmark	30948	45999	LR1 Small	55,198,800	54,646,812	
7	Stolt Yuri	Singapore	7488	12365	GP	14,838,000	14,689,620	
8	Blue Grass Mariner	Marshall Is	29649	50275	LR1 Small	60,330,000	59,726,700	
9	Navigare Pars	Denmark	29840	51034	LR1 Small	61,240,800	60,628,392	
10	Yasa Hawk	Marshall Is	29593	49990	LR1 Small	59,988,000	59,388,120	
11	Atlantic infinity	Marshall Is	29256	50090	LR1 Small	60,108,000	59,506,920	
12	Theresa Orion	Honk Kong	7745	12999	GP	15,598,800	15,442,812	
13	Esteem Endeavour	Panama	29651	49999	LR1 Small	59,998,800	59,398,812	
14	Andreas Seafarer	Marshall Is	29777	49990	LR1 Small	59,988,000	59,388,120	

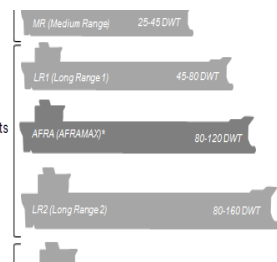


Table 1.0

1.1 CONCLUSIONS ON SHIPPING

The overall supply volume of the shipments exceeded the national gross consumption in the period observed when compared to MBIE figuresⁱⁱ.

We were unable to differentiate the specific fuels in each shipment but the overall number of vessels x capacity x frequency was enough to build an outline.

The amount of shipments that entered in the first 9 months (165) that were tracked nearly exceeded the entire projected annual amounts pre refinery closure, during the observation period several shipments were either reported to be faulty or rumoured to be of unusable quality.

1.2 POLLUTION INCREASED AND 600,000 tons of CO₂ EMISSIONS ADDED

NOTE: this section is by no means an exhaustive analysis of the shipping emissions created by the supply chain, it has been prepared with the goal of demonstrating that pollution and carbon creation has increased. It is intended to give people more than a “trust me bro” or “some guy on the internet told me” source when discussing or making decisions based on the following subject matter.

We welcome further investigation into this issue and feel more than quietly confident that honest detailed results will yield even worse figures.

It is our conclusion that the switch to an import model has greatly increased the carbon emissions created by the supply chain and has introduced a significant amount of a new and far more concerning environmental pollution hazard, Nitrous oxide (N₂O).

Nitrous oxide is an environmental poison which is created by heavy shipping exhaust and is also classified as a greenhouse gas that is measured in ‘CO₂E’

1kg of N₂O = 278kg of CO₂*iii

Because N₂O is defined as being 278 x greater than CO₂ as a GWG (global warming gas) and is a toxic gas that has been artificially introduced into the ecosystem, this swapping of emissions and pollution by New Zealand oil consumption is deeply concerning from an environmental stand point.

We have literally done nothing to reduce emissions but instead increased the level of environmental poison the country’s oil usage creates.

Table 3 – Emissions Data

RELEASES OUTSIDE CONSENT

10 ↑

2020: 5 2019: 1 2018: 5 2017: 4

DIRECT CO₂ EMISSIONS (SCOPE 1)

857,042 ↑ tCO₂

2020: 848,621 2019: 1,080,041 2018: 972,018 2017: 1,045,995

FLARE

0.06 ↓
Amount of flare as mass % of feedstock

2020: 0.17 2019: 0.02 2018: 0.05 2017: 0.02

DIRECT CO₂ EMISSIONS INTENSITY

244.0 ↑ kgCO₂/t of product

2020: 218.4 2019: 206.1 2018: 195.9 2017: 199.4

INDIRECT CO₂ EMISSIONS (SCOPE 2)

141,940 ↑ tCO₂

2020: 134,927 2019: 177,132 2018: 162,753 2017: 175,788

SULPHUR DIOXIDE EMISSIONS

3,341 ↓ Tonnes

2020: 3,345 2019: 4,329 2018: 3,404 2017: 3,695

Channel infrastructure sustainability report 2021^{iv}

Prior to the closure of the refinery the CO₂ emissions for 2021 of both direct and indirect causes totalled up to 998,982 tons.

It is noteworthy that the calculations include scope 2 covering shipping of oil from source.

1.3 WEIGHTS AND VOLUMES

Using the database we created we were able to conservatively estimate the CO₂ and CO₂E emissions created by the Fuel delivery tankers.

We tracked 124 individual ships which separately entered New Zealand waters 165 times combined.

These calculations do not include inshore legs of their journeys and do not include their onward journeys out of New Zealand waters, they are meant to empirically demonstrate that the closure of the refinery has been an environmental disaster and is now a blight on the country in terms of New Zealand's clean green image and also to show that we

have made a grave environmental error closing the refinery before viable replacement technology exists.

99	EAGLE BAY	Singapore (SG)	9374272	47100	29266	1	29266	52966	47,669,400
100	SCARLET IBIS	Panama (PA)	9273832	46719	30411	1	30411	57746	51,971,400
101	OAK EXPRESS	Hong Kong SAR of China (H)	9405916	46697	28952	1	28952	54445	49,000,500
102	WORLD NAVIGATOR	Singapore (SG)	9422225	46639	29151	1	29151	54449	49,004,100
103	TAMIAT NAVIGATOR	Panama (PA)	9422237	46625	29151	1	29151	54449	49,004,100
104	ST GERTRUD	Panama (PA)	9400837	46622	28231	2	56462	54449	98,008,200
104	BRITISH CADET	United Kingdom (GB)	9724714	45999	30948	2	61896	53837	96,906,600
105	BRITISH CHIEF	United Kingdom (GB)	9724726	45999	30948	2	61896	53838	96,906,400
197	BRITISH ENGINEER	United Kingdom (GB)	9724702	45999	30948	1	30948	53838	48,454,200
108	BRITISH SAILOR	United Kingdom (GB)	9724673	45999	30948	4	123792	53838	193,816,800
109	SEA FRACTUS	Marshall Islands (MH)	9724609	45999	30948	1	30948	53838	48,454,200
110	GRAND ACEI	South Korea (KR)	9346067	45990	30027	1	30027	54678	49,210,200
111	CSC PEACE	Hong Kong SAR of China (H)	9344148	45886	29593	1	29593	50930	45,837,000
112	CSC AUSPICIOUS	Hong Kong SAR of China (H)	9406374	45851	29593	1	29593	50930	45,837,000
113	CHANG HANG FENG CAI	China (CN)	9379789	45844	29578	1	29578	51044	45,939,600
114	CSC PROGRESS	Hong Kong SAR of China (H)	9344136	45791	29593	1	29593	50930	45,837,000
115	CHANG HANG FEI YUE	China (CN)	9401659	45781	29578	1	29578	50659	45,593,100
116	CHANG HANG HONG TU	China (CN)	9379777	45765	29578	1	29578	57511	51,759,900
117	CHANG HANG XING YUN	Singapore (SG)	9352250	45717	29588	1	29588	51044	45,939,600
118	EASTERN QUINCE	Liberia (LR)	9379040	41397	27987	1	27987	45379	40,841,100
119	PUFFIN PACIFIC	Singapore (SG)	9876402	39996	29376	2	58752	52871	95,167,800
120	GOLDEN UNITY	Panama (PA)	9572575	23451	13517	1	13517	24725	22,252,500
121	STREAM BALTIC	Marshall Islands (MH)	9838668	19999	12075	2	24150	22269	40,084,200
122	STREAM PACIFIC	Marshall Islands (MH)	9838670	19999	12075	2	24150	22277	40,098,600
123	STREAM ATLANTIC	Marshall Islands (MH)	9829722	19998	12075	1	12075	22270	20,043,000
124	GOLDEN YOSA	Panama (PA)	9407081	19537	11645	1	11645	22094	19,884,600
Total						165	4,877,205		8,170,340,703

* TH liters based on 80% of DWT as average specific gravity of refined fuel oils
 ** Volume reduction: The overall volume is reduced by 10% to account for heel tank
 Calculated at 1.2 - average percentage difference
 From Marine track

Using the 9 months data we calculated the average monthly shipments as 18.33/month and then multiplied by 12 to generate our annual figure of:

220 shipments per annum.

Using the loose but generally accepted percentage of 70% fuels produced by the refinery we were then able to arrive at:

154 shipments replacing the refinery output in 2022/23

By multiplying the DWT of each ship by its number of entries into New Zealand waters we were then able to arrive at a total weight of movement for calculation over the 9 months and averaged it out for annual projection: **48,996,636 kg average per shipmen**

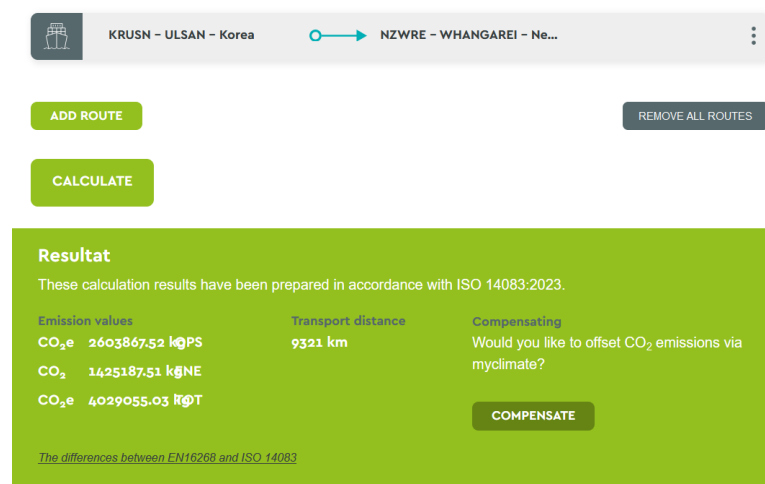
The estimated **annual replacement weight** of movement we arrived at is:

48,996,636 (kgs/ship) x 154 (ships) = **7,545,481,944 kilograms**

7.5 million tons

1.4 Distance

The vast majority of the shipments originated in Singapore and South Korea with a minority from China and Australia.



Resultat
These calculation results have been prepared in accordance with ISO 14083:2023.

Emission values	Transport distance	Compensating
CO ₂ e 2603867.52 kgPS	9321 km	Would you like to offset CO ₂ emissions via myclimate?
CO ₂ 1425187.51 kgNE		
CO ₂ e 4029055.03 kgT		

[The differences between EN16268 and ISO 14083](#)

COMPENSATE

Using carboncare.org which calculates shipping to EN16268 and ISO 14083 and entering the shortest route (Singapore) we arrived at the following figures:

384,715,943.92 kilograms of CO₂E

210,466,925.90 kilograms of CO₂

A total of: **595,182.87 tons added** to the supply chain

1.5 Section Summary

Disclaimer: the preceding information was prepared by volunteers and there is no claim whatsoever that it was an exhaustive investigation into shipping pollution nor that it was 100% correct, in that some best educated guesses were applied, it does however represent many hours of combined work and research by a number of volunteers, we believe that it tips the scales of probability to be able to make the claim that co2 and co2e gasses have markedly increased.

Given that;

- We now no longer have legislative or mechanical control on how our fuels are refined other than international standards and toothless regulations imposed on importers by parliament.
- We did not look at return journey emissions of ships caused to make the mammoth 10,000 kilometre journey down to New Zealand
- We did not look at shipping of the other products that the refinery used to supply such as Sulphur for fertilizer, Carbon Dioxide for food and medical, the 190,000 tons + of bitumen^v and the various other.

It would be quite reasonable assume that the refinery closure has nearly doubled the global carbon emissions of the transport fuels being used in New Zealand. The fact that this was not accounted for in the impacts assessment^{vi} is a clear obfuscation in order to bolster the case for the shutdown

Marsden Point oil refinery operated as one of the most efficient and environmentally sustainable in the world. New Zealand has swapped its environmental responsibility to control the means of production with an archaic, haphazard, pollution intensive model of refined oil supply.

2.0 CREATIVE ACCOUNTING SHIFTY DEALS AND WOOLY HAT PULLS FOR SHAREHOLDERS

It is Operation Good Oil's findings that the financial position and future projections for the profitability of the Marsden Point Refinery were inaccurate prior to the shutdown.

As a result we believe that long term shareholders have been deprived of significant profits and are left holding stocks in a glorified petrol station which appears to be currently run in a manner where future profits are leveraged to pay out obscene dividends using borrowed money.

Why high dividends in the absence of sufficient cash flows are being doled out is a matter of speculation, but one thing is clear, the current fiscal management of the company does not reflect the reality of the grandiose claims of future fuels projects which are not an economic reality with existing technology and without investments to the magnitude of billions.



simplywallstreet.com: Channel Infrastructure dividends to earnings

We wonder if tax write offs of highly valuable operational plant and scrap sales will be underpinning this marketing scheme, as opposed to future growth and expansion into economically viable production of actually usable and therefore saleable fuels.

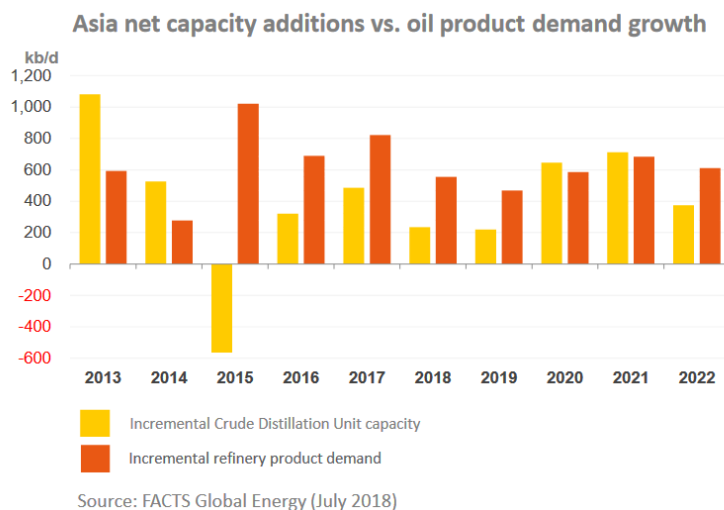
The fact that the business plan for what was previously New Zealand's main redundancy for fuel emergencies now relies on producing "future fuels" with technology that does not yet exist at scale, to service a market which is only a theory on a climate scientists whiteboard, is beyond terrifying to those who ponder such things, given the global security state of affairs.

2.1 UNDUE PESSIMISM IN THE FACE OF EVIDENT REALITIES

In November of 2018 Refining New Zealand floated an offer of subordinate notes.^{vii} On page 15 of this document the company states that in June of 2018 they had just completed a one in 15 year shut down and invested 107 million dollars in a "major re-life" of the plant and added significant upgrades.

This would give us the reasonable expectation that the refinery plant was good to go out until 2033 and had been modernized to service the market for at least the next 5-10 years.

On page 17 of the subordinate notes offer it is stated that according to FACTS, by 2022 demand in Asia for refined products would outstrip capacity.

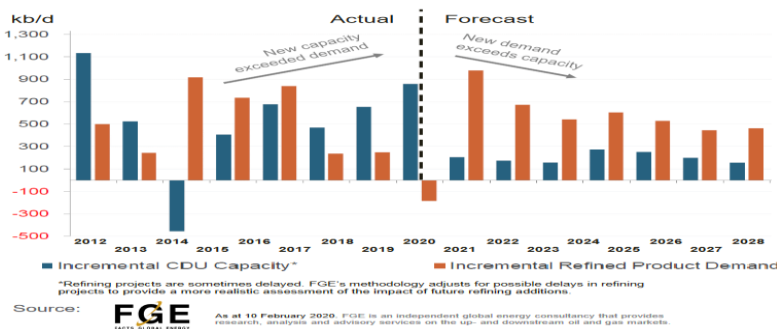


Page 17 RNZ Investor presentation 2018

Nostradamus in the stats department

Again in the RNZ 2019 Annual Results presentation for investors^{viii} dated Feb 27 2020, a mere month after the first lockdown was enforced on the Chinese people, we see a chart produced in line with the company forecast that 2020 is going to be a negative year with a return to positive refining margins in 2021. It is acknowledged in all the metrics in the report that CDU throughput capacity in Asia is going to be severely outpaced by demand post 2020. High refining margins are forecasted. The chart appears to take into account the

Covid-19 Govt responses along with the bottom of the dip in the cycle and is spookily accurate in terms of demand vs capacity although a little optimistic in usage reductions.



Pg12 Refining New Zealand 2019-Investors-presentation

It is clear that pandemic aside, 2021 was known, forecasted and predicted to be a pivotal year for refining and the turnaround in refining fortunes.

Nobody needs reminding of the events of 2020 and 2021 in which it was alleged that a new and deadly virus was on the loose that would kill vast amounts of people if drastic measure were not taken, but none the less the short of it is:

On the 25th of March 2020 the incumbent New Zealand government in conjunction with the New Zealand Police decided to make it essentially illegal in New Zealand to use motorcars, boats and other oil powered vehicles without severely restricted reasons.

This lasted for 1 month across the entire country and then went on in various sporadic stages in various areas until June 8 2021 when all but border restrictions affecting aviation fuel were lifted

Again on August 11th the government decided to lock down the refinery's largest market for its customers, Auckland with various forms of travel restrictions until October 8th.

These unprecedented actions by the government caused a predictable but massive drop in domestic demand for refined fuel, coupled with the international flight restrictions which caused a catastrophic drop in Aviation fuel demand, the resulting action by the refinery was a logical drop in throughput^{ix} during the course of the government actions, this along with some bizarrely timed accounting moves resulted in the company posting a net loss for 2020 of 198 million dollars^x.

We at Operation Good Oil feel it is important to note that these drops in demand were not due to usual market forces or global supply and demand metrics, but were temporary local phenomena that should have been easily recognized as such.

2.1 WHAT A TIME TO DO A REVIEW

Bizarrely the company chose to do a strategic review in the middle of an unprecedented global disruption which affected all industries across the economy and in particular caused a

significant but temporary drop in transport fuel consumption, the refinery's main market.

Interestingly the "Strategic Review" seemed to include a revaluation of plant and assets right before taking a case to the shareholders, it would seem that the revaluation resulted in the company marking down the resale value of a large amount of capital asset and claiming an impairment loss of 233 million dollars which had a negative effect on the profitability of the business and the annual return (more on this further down).

EARNINGS BEFORE DEPRECIATION, IMPAIRMENT, FINANCE COSTS AND INCOME TAX	50,423	118,235
Depreciation and disposal costs	11	87,218
Impairment of assets		223,697
TOTAL DEPRECIATION, DISPOSALS AND IMPAIRMENT	310,915	99,931
NET (LOSS)/PROFIT BEFORE FINANCE COSTS AND INCOME TAX	(260,492)	18,304
FINANCE COSTS		
Finance income	(176)	(44)
Finance cost	11,096	13,489
NET FINANCE COSTS	10,920	13,445
NET (LOSS)/PROFIT BEFORE INCOME TAX	(271,412)	4,859
Income tax	6	(73,133)
NET (LOSS)/PROFIT AFTER INCOME TAX	(198,279)	4,165
ATTRIBUTABLE TO:		
Owners of the Parent	(198,279)	4,165

Refining New Zealand Financial Statements 2020^{xi}

The justification in the notes for such a large impairment causing losses was based on some key factors, some of the factors given assumed an average throughput at the refinery's retarded rate of 93,000 bpd and reliance on the fuel demand forecasts which were produced using assumptions of compliance to legislation and emergence/uptake of electric vehicle and green transport technologies. Basically a best case and ideal scenario outcome for the unicorn fart industry.

Key assumptions

The key assumptions used in the impairment testing include:

– NZ transport fuel demand

Refining NZ uses demand forecasts formulated by an independent expert, which reflects a faster transition away from fossil fuels, driven by New Zealand's commitment to zero net greenhouse gas emissions by 2050, than previously anticipated. According to the latest demand outlook, petrol and diesel demand will start declining from circa 2025 and 2030, respectively, reaching the Company's refinery production levels by circa 2035 and 2040, respectively. This outlook is considered to be largely in line with the Climate Change Commission 'Draft Advice for Consultation' issued on 31 January 2021.

Jet fuel demand forecasts have a wide range due to the uncertainty around COVID-19 recovery and viable alternative sources of energy for air travel, however independent expert forecasts used by the Company have demand forecast to recover to pre-COVID-19 levels by 2025 and grow until circa 2040. Given the long-term uncertainty with respect to alternative fuels, including biofuel demand which could replace some of the decline in crude oil derived fuel production, potential contribution of biofuel demand to revenue has not been considered for impairment assessment purposes at this time.

– Refining and pipeline volume

The base assumption is that the refinery will operate until 2035, followed by a conversion to an import terminal, noting that the outlook for transport fuels demand remains highly uncertain. The Processing Agreements are long-term "evergreen" contracts which, subject to any termination right arising at law, continue unless renegotiated or terminated by mutual consent or by a customer on one year's notice. As at the date of these financial statements, no customer has given notice of termination and therefore the assumed date for conversion to an import terminal in 2035, is aligned to the timeframe by which the refinery's production is forecast to exceed domestic petrol demand.

The refinery and pipeline throughputs were assumed at an average of circa 34 million barrels and circa 18.5 million barrels per annum, respectively, in the 15-year period to 2035. Near-term volumes have been adjusted for the impacts of COVID-19 driven demand reduction; longer-term, Refining NZ used demand forecasts developed by independent industry experts.

Shareholders should rightly be more than a bit miffed that the profitability case presented at the AGM and the basis on which the board issued dire warnings and recommendations was more than a little sketchy.


We believe that the strategic review relied far too heavily on projections of a reduction in crude oil based transport fuel demand.


Needless to say the board made a decision to present a business case to the shareholders that the most viable future for the company was to close the refinery down and convert the site to an import terminal and indicated it had plans to utilize the existing infrastructure for R&D of future carbon neutral fuels, specifically SAF ('allegedly' Sustainable Aviation Fuel) and Hydrogen.

Currently signatory states to the Paris accord have been mandating SAF percentages in aviation fuel incrementally toward the reduction targets with a view to having all aviation fuel comprised of 50% SAF by 2050.

The legislation is bad in that it was not written by industry experts nor did it take into account the markets resistance to bad legislation which is economically unviable; SAF manufacturers and users around the world are stating that the targets are unachievable.

 Travel Radar
<https://travelradar.aero> > the-eus-2030-biofuel-targets-u...
The EU's 2030 Biofuel Targets Unachievable And ...
19 Sept 2023 — The EU has now issued the ReFuelEu legislation, which will see a mandated amount of Sustainable Aviation Fuel, or **SAF**, used in every flight ...

 Biofuels International
<https://biofuels-news.com> > news > government-should-...
'Government should set achievable SAF targets or risk ...
6 Jul 2023 — ... **target** for **SAF** above 0.5% as a proportion of jet fuel in 2025 would be **unachievable**, even according to the Department ...

 CAPA - Centre for Aviation
<https://centreforaviation.com> > News
Qatar Airways CEO: 2030 emissions targets unachievable ...
7 Jun 2023 — Qatar Airways CEO: 2030 emissions **targets unachievable** due to lack of raw materials for **SAF**. 7-Jun-2023 12:05 AM. Qatar Airways CEO: 2030 ...

 FlightGlobal
<https://www.flightglobal.com> > 156444.article
What factors risk derailing aviation's net-zero sustainability ...
14 Mar 2024 — Low availability and high costs of renewable energy are among major impediments to **SAF** production, as are competing uses for clean power, from ...

 Ministry of Business, Innovation & Employment
<https://www.mbie.govt.nz> > dmsdocument > 183... PDF
Sustainable Biofuels Mandate: final policy design
15 Dec 2021 — The **SAF** Consortium also argues that a **SAF** ... **unachievable**. 2 — mandate ... Zealand's 2050 net-zero carbon **target** (or the mandate **targets** for future.

 Energy Live News
<https://www.energylivenews.com> > ...
Qatar Airways boss says net zero 'unachievable' by 2050
24 May 2023 — Qatar Airways boss says net zero '**unachievable**' by 2050. He says there is not enough **SAF** production to hit the **goal**. Share on LinkedIn.

Google search: SAF targets unachievable

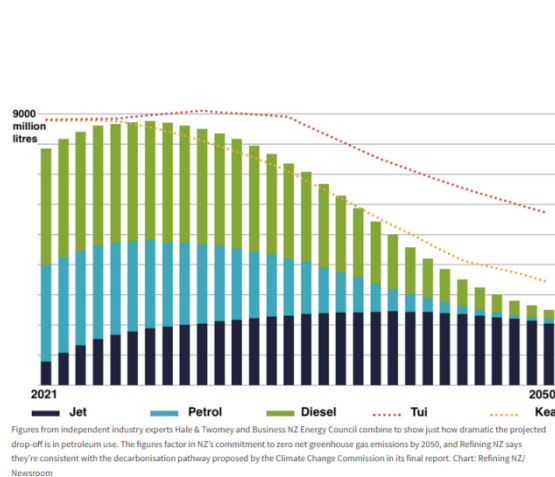
The scale of technology did not exist in 2021 and it does not exist now to bring the product to market at targets without investments that will essentially collapse the entire industry. The market will resist and even kick back at such a prospect, and it is in fact beginning to do so.

It is noteworthy that much of the projections and metrics for future usage in channel and MBIE reports were provided by Hale and Toomey.

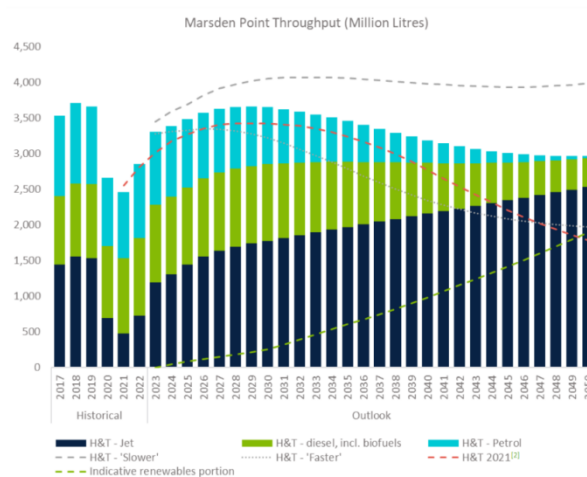
In July of 2021 National attacked the government over two conflicting reports on the same issue of fuel resilience without a refinery, both created by Hale and Twomey. They appear to arrive at opposite conclusions, the “pro” shut down report interestingly cost the government 10x as much to procure as the one ‘opposing’ or cautioning against, the refinery shut down.

“National's energy and resources spokesperson Barbara Kuriger said: *"I just can't believe how the two reports have ended up so differently."*^{xii}

Peak oil



Newshub article^{xiii}



investor's presentation^{xiv}

Hale and Twomey have projected oil peaking somewhere around 2025 and plateauing for a few years, their projections are based on two assumptions that have a massive range of variables which are subject to market forces and global security conditions.

1: EV production, delivery and uptake.

2: The markets ability to deliver according to legislative requirements.

In our opinion this is a very foolish way to do business and an even more foolish methodology to rely upon when removing the means of production in favour of an ideal outcome with unknown factors.

Basically they have taken a gamble based on the odds.

2.2 SLOW IT DOWN AND YOU WILL SHUT IT DOWN

In a publication by refining New Zealand titled “response by refining NZ to the New Zealand Commerce commissions retail fuel market study draft report” dated September 2019, the

author prophetically makes the following statements:

- 1.6 Our overall concern is that any actions arising from the Commission's market study do not have the unintended effect of refinery under-utilisation. Refinery under-utilisation would increase the potential prospect of:
- (a) refinery closure; and
 - (b) a shift to 100% imported product, as has been the case with some major Australian locations (e.g. Sydney). Refinery closure would have a damaging impact, both locally and nationally, on economic prosperity and security of transport fuels supply.

Response by refining NZ to the New Zealand Commerce commissions retail fuel market study draft report

SUB POINT A

In late 2020 RNZ decided that it would remove the production of bitumen from the refinery and reduce the throughput to 90,000 bpd beginning early 2021^{xv}.

The official reasoning was the saving of 20 million dollars in labour and production costs.

We find this move bizarre as the market is worth 100 million per annum and during the course of the government imposed lockdowns while there were fewer cars on the road, roading was considered an essential service, so bitumen and roading would logically be viewed as bread and butter income.

Slowing down the refinery makes business sense in a severely deflated time of demand, but removing a profitable guaranteed income makes no sense at all unless the customer base has indicated that it will no longer buy the product.

Many have tried through the OIA request process to find evidence of political collusion influencing this inexplicable business decision but have mostly been unsuccessful.

One thing is for sure, the business process appears to have a very tangible flavour of a foregone conclusion.

2.3 OH NO WE'RE MAKING MONEY

Disclaimer: This section of the report contains information that is of a complex taxation nature, and we make no claims whatsoever as to legalities, practices or procedures and in no way shape nor form do we make any allegations against any individuals whatsoever. This information is supplied for the purposes of raising legitimate questions that we believe need to be answered and for making historic observations about what has transpired.

Despite the retardation of the refinery output in early to mid-2021 and the removal of the lucrative bitumen contract along with the magic act of disappearing impaired capital in 2020, the refining margins returned in Q3 2021 and the refinery started to make profit.

Enter yet more suppression power from the wonderful world of accounting, the company

posted the annual financial statements of December 2021^{xvi} and claimed a total net loss of 552 million dollars and some change after the accounting magic.

NET LOSS BEFORE INCOME TAX		(765,060)	(271,412)
Income tax credit	6	(212,431)	(73,133)
NET LOSS AFTER INCOME TAX		(552,629)	(198,279)
ATTRIBUTABLE TO:			
Owners of the Parent		(552,629)	(198,279)

Refining New Zealand annual return December 2021

It seems legit on the surface and is exactly what was predicted by the proponents of transfer to an import model, times were dire, demand was down, production was dismal they went on to take the predicted hammering that import only was going to save them from.

All they had to do now was get rid of that massive liability the refinery and they would get back into the green again, this is where we make a tyres screeching or a record scratching noise and say “hold the phone”.

It would seem that in December 2021 a full 3 months before the refinery stopped operating (in the green) they got rid of it, yes that’s right they disposed of it for tax purposes at a staggering loss of 587 million and change.

NET LOSS AFTER INCOME TAX		(552,629)	(198,279)
OTHER COMPREHENSIVE INCOME			
Items that will not be reclassified to the Income Statement			
Defined benefit plan actuarial gain/(loss)	20(c)	20,225	(4,130)
Revaluation of property, plant and equipment	11	587,182	-
Deferred tax	6(b)	(170,074)	1,156
Total items that will not be reclassified to the Income Statement		437,333	(2,974)

Refining New Zealand annual statement December 2021

Once again the instrument they chose to use was impairment, presumably that’s why they continued operating until April 2022 in order to justify the usage of impairment to claim such a huge loss.

We do find the reasoning for such large losses given in the notes to be questionable, so we are asking some questions and will report back when we get some answers.

Note 11 sub note (a) in the report gives the following justification for the massive half billion dollar write off:

“The residual value of refining assets was assessed at \$34 million, based on an independent assessment of the scrap value of refining plant (post demolition) and the fair value of refining units that could be sold or used in the production of renewable fuels.”

Does this mean they wrote off anything useable in the production of standard fuels still very much in use around the world for the foreseeable future, as merely scrap metal destined for the smelter?

We also find their justification of financial forecasts tied to bad legislation more political than a working sense of responsibility to shareholders and the company.

Over the space of 2 years during an unprecedented time of low demand the company managed to write down 825 million dollars of well-maintained equipment to a poultry \$35 million dollars and present that to the shareholders and to the nation as a massive loss due to circumstances outside of their control! Tui add anyone?

2.4 IS THAT EVEN LEGAL BOSS?

We are not tax experts and the people we have approached about it do seem to think that this is all a little odd but it still doesn't change the fact that there would have actually been a modest profit hidden in there somewhere had the write off not been done while the plant was still in use and a better job was done to source buyers and sell equipment at a responsible price. At the very least a break even considering the 35 million dollar difference between the write off and the total net loss (a repetitive figure as it turns out).

Killing the goose that lays the golden eggs

Could this bizarre move to make the refinery look as if it was a total lemon be an attempt to save egg on the face that would result from having to face the shareholders at the next AGM whilst holding a green balance sheet?

Once again we are sure that Channel Infrastructure has some of the best accountants and lawyers on the books but we feel more than a little aggrieved at the treatment of plant and equipment that was gifted to them by the people of New Zealand for the nations fuel security, so in the spirit of the historical record we will just leave this here:

"Notwithstanding any other enactment or rule of law, The New Zealand Refining Company Limited is denied a deduction under the [Income Tax Act 2007](#) for an amount of depreciation loss for the expansion assets." Petroleum Sector Reform Act 1988 section 3 (3)

We will also just leave this here as well:

Marsden Point construction costs

<u>Initial cost</u>	<u>Inflation adjusted</u>
1962 initial construction 10,000,000 pounds	\$290,793,610.13
1973 expansion \$160 million	\$2,515,151,245.09
1981 hydrocracker and pipeline \$1.86 billion combined	\$9,973,547,409.05
Total in today's money	\$12,779,492,264.27

(Estimated hydrocracker cost at \$320 million in **1979 \$2,319,126,937.52**)

Costings taken from: <https://en-academic.com/dic.nsf/enwiki/7110572>

Inflation calculator used: <https://www.inflationtool.com/new-zealand-dollar/>

2.5 PROPHECY COMPLETE

SUB POINT B

- (b) a shift to 100% imported product, as has been the case with some major Australian locations (e.g. Sydney). Refinery closure would have a damaging impact, both locally and nationally, on economic prosperity and security of transport fuels supply.

This section does not need much explanation; the authors sub point b highlights the damaging effect of the refinery's closure on the nation's prosperity and security.

New Zealand annually uses somewhere between 8 – 9 billion litres of refined oil product, with the means of production removed from the economy the value added from oil refining is now exported directly off shore in the form of your money.

Stats New Zealand reported in 2022^{xvii} that:

"Diesel imports rose \$589 million in June 2022 to reach \$658 million, while petrol imports rose \$312 million to reach \$335 million. These increases in values were mainly quantity driven, however unit prices are also at a high level."

and credited the currency export from transport fuels as "fuelling a record deficit"

The 2023 report^{xviii} didn't fare any better and credited refined fuel products for an annual increase in imported goods vs exported products quoting institutional sectors senior manager Paul Pascoeas saying:

"Fuel, including diesel, petrol, and jet fuel, was the main contributor to the increase in goods imports, driven by increases in both the price and volume of fuel,"

We believe that these truths are self-evident and don't need much more time spent on them but they are important to highlight as more nails in the coffin of sensibility that lead to the refinery's closure.

3.0 INCREDIBLE CLAIMS BY THE PROPHETS OF DOOMED PROFITS

A special meeting was called on the 6th of August 2021 to vote on the shutdown. Concerns were raised by minor shareholders about the dangers and folly of shutting down refining. Political interference and loss of profits were raised.

In response Chair Simon Allen rejected accusations the decision was political.

"The refinery's revenues had been declining and would continue to do so, he warned, unless they agreed to transition to an import terminal^{xix}. "

We find this statement incredulous in light of all the positive projections for future refining margins and upward CDU throughput curve in all the company's aforementioned metrics (excluding those revisionary metrics previously mentioned in 2020).

Sadly Simon Allen and the boards assertions were not only against all previous forecasts and promises to investors, **they were completely wrong!**

In the NZX announcement of the special meeting the board released the following:

"An Independent Appraisal Report has been prepared by Grant Samuel. In Grant Samuel's opinion maintaining the simplified refinery would be a sub-optimal outcome for Refining NZ and its shareholders. Grant Samuel believes the transition to an import terminal on the basis of the non-binding in-principle terms which have been agreed is fair to the non-customer shareholders of Refining NZ. The basis for the Independent Appraiser's opinion, and the assumptions on which it is based, are set out in the Independent Appraisal Report included in the Explanatory Booklet, which accompanies the Notice of Meeting."

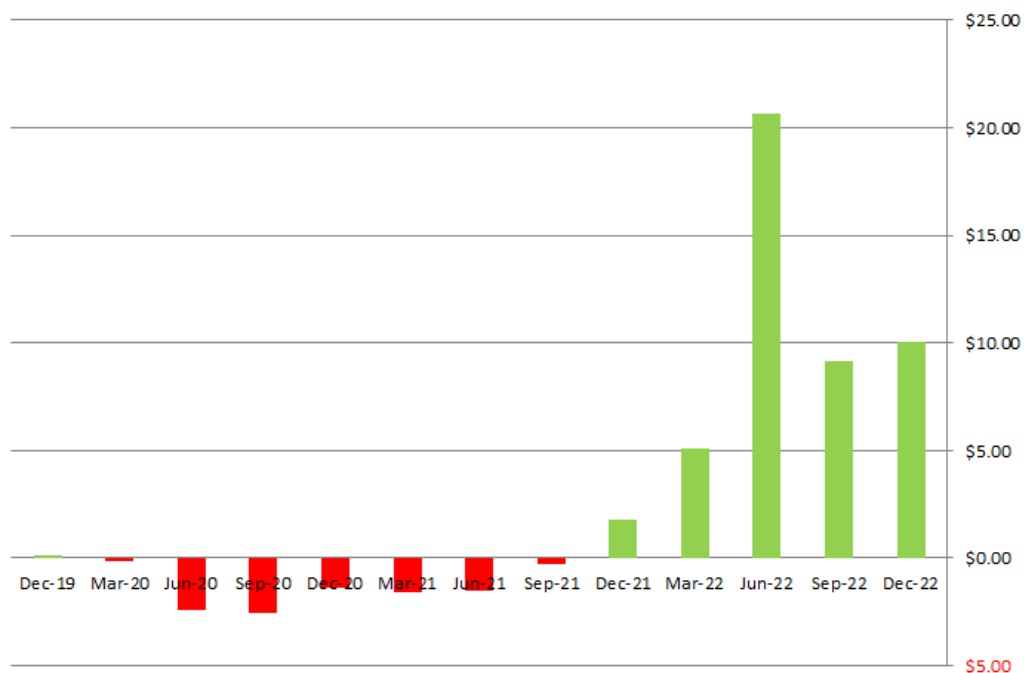
Although technically correct in that a simplified refinery would be sub optimal, we believe this to be disingenuous wool pull over on the shareholders given that a fully functioning refinery would have been optimal and also extremely profitable moving forward.

It is interesting to note Grant Samuel has been criticized as of late for "fundamental errors" in its reporting, by people with the actual clout to make their criticism stick^{xx}.

Refining margins returned in Q3 2021 and record profits are being made by refineries around the world until this day.

This bad advice has cost the shareholders and the company 100's of millions of dollars in profits.

Singapore Refining Margins USD



Bar graph of data from:

https://ycharts.com/indicators/singapore_medium_sour_hydrocracking_refining_margin

4.0 SECURITY

Whilst Meagan Woods' MBIE cabinet paper "Fuel supply resilience without a domestic oil refinery"^{xxi} addresses the different scenarios of fuel disruption and foolishly implies that moving to an import only model is **NOT** a "single point of failure" (this kind of backward logic is hard to digest) whilst advocating the removal of our secondary redundancy of supply, it does not address the financial or economic destruction that will be caused by a fuel disruption.

Operation Good Oil and a number of others including the refinery operators themselves warned loudly against this folly and the decision to close was clearly and evidently not based around traditional logic and sound reason which is what caused the refinery to be constructed in the first place.

At the time of writing this report the price of crude oil has been increasing daily due to proxy conflicts between Russia and Nato and conflicts in the middle east, specifically between Israel and Iran.

Russian refineries have been attacked as their enemies seek to deprive their military of energy, Iran has also engaged in a direct attack on Israel.

Russia is the world's second largest oil producing nation but it is also the world's 5th largest user of oil so any diminishment in its ability to refine oil will put a squeeze on refined oil products not to mention the oil shock that caused the New Zealand Government to reduce

fuel tax and dump our strategic oil holdings onto the market when NATO and OPEC put sanctions on Russian oil.

Russian oil supply or the lack of it clearly has an ability to negatively affect price and supply.

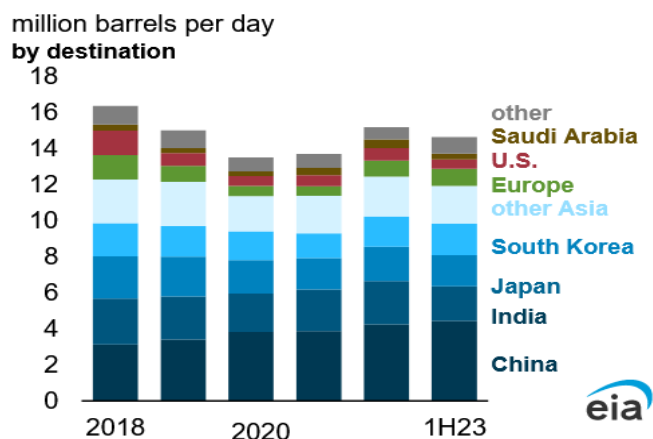
4.1 THE WORLDS MOST IMPORTANT CHOKE POINT

Iran owns part of the shipping channel in the strait of Hormuz^{xxii}, which is made up of two lanes each only two miles wide, effectively a perfect target for a marine ambush or blockade.

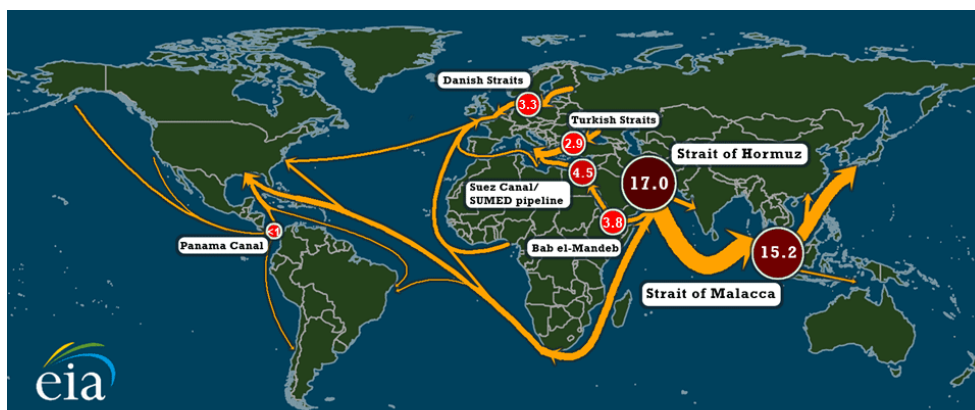
20% of the planet's oil supply pass through these channels daily, 76% of that supply goes to Asia where some of the world's largest economies rely heavily on deliveries, notably China which is resource poor and Japan with around 50% of its energy requirements and South Korea with around 70% come directly from the channel, the supply line has been well documented and identified as the world's most important energy corridor.

40% of the worlds natural gas supply is located in the Persian Gulf and the strait is the main corridor for shipping.

The US Energy Information Administration calls the strait "the world's most important oil transit chokepoint"^{xxiii}



Strait of Hormuz volume by destination



All estimates in million barrels per day. Includes crude oil and petroleum products. Based on 2013 data.

2013 graphic indicating volume paths

A disruption in the strait will have an immediate effect on prices in New Zealand, any extended disruption would likely lead to fuel delivery shortages and rationing.

New Zealand will not compete with any of the larger closer economy's if a disruption occurs, we wonder if the Minister Woods and her security advisors were actually paying attention when they assessed the security to supply concerns whilst deciding that New Zealand should rescind self-sufficiency and downgrade to rely on a single source of refined oil, shipping.

Iran has already stated that it believes it has the right and the ability to close the strait, at the time of writing this Iran had already intercepted and hijacked a cargo vessel that it claims was carrying Israeli product^{xxiv}.

Europe experienced a massive energy crisis due to unrealistic climate agenda legislation and the global insecurity issues^{xxv}, it has subsided for now but the outlook moving forward is still unclear as winter in Europe demands high usage of oil products and global security is an ongoing issue that appears to be worsening by the day.

It is our view and has always been our view that just thinking about supply in terms of quantity and logistical services by third parties as opposed to the means of production and ability to controllably secure supply, is beyond foolishness and it is our enduring view that the refinery formed apparatus which was vital for securing supply for the health and safety of all new Zealander's, no matter how big or small the threats are.

WE WILL JUST LEAVE THIS HERE:

Sabotage

(1)

Every one is liable to imprisonment for a term not exceeding 10 years who, with intent to prejudice the safety, security, or defence of New Zealand or the safety or security of the armed forces of any other country, lawfully present in New Zealand,—

(a) impairs the efficiency or impedes the working of any ship, vehicle, aircraft, arms, munitions, equipment, machinery, apparatus, or atomic or nuclear plant; or

(b) damages or destroys any property which it is necessary to keep intact for the safety or health of the public.

(2)

No person shall be convicted of an offence against this section by reason only of the fact that he or she takes part in any strike or lockout.

Crimes Act 1961

5.0 THE ELECTRIC VEHICLE MARKET

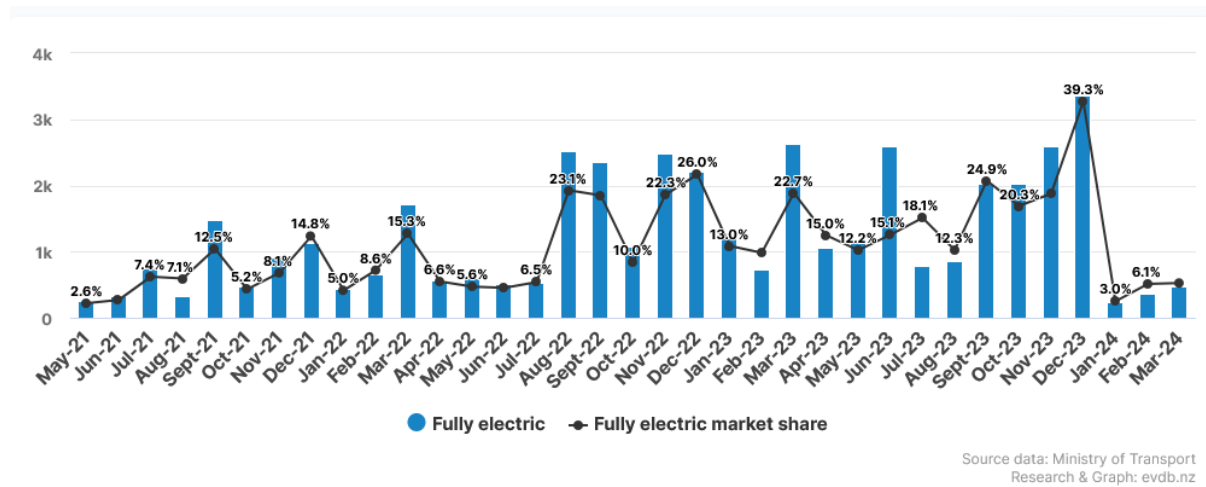
Unicorn farts and fairy dust are becoming about as likely as the New Zealand fleet (or world fleet for that matter) switching to electric vehicles within the timeframe to justify all the grandiose claims of both politicians and executives in the destruction of the refinery.

Electric vehicles asides from being heavier, more expensive to make and environmentally irresponsible to create, are now more expensive to run than ever (clean car discounts removed and RUCS' added, charging is no longer free at some places) and have very little infrastructure in terms of service, repair, charging or resale value.

They are great as a rich man's gimmick for around town if you don't mind throwing it away after a few years, but as a realistic alternative to oil, they have predictably failed and no amount of bad legislation is going to force people to voluntarily give up the convenience, price and environmentally responsible longevity of a well-honed petrol or diesel vehicle.

Manufactures around the world have since 2023 not been able to mark down ev's low enough and in some instances they are now sitting rusting in yards in their tens of thousands.

Major manufacturers have opted instead to act responsibly and save their companies, deciding to pay carbon emissions tax as opposed to making EV's that don't sell.^{xxvi}



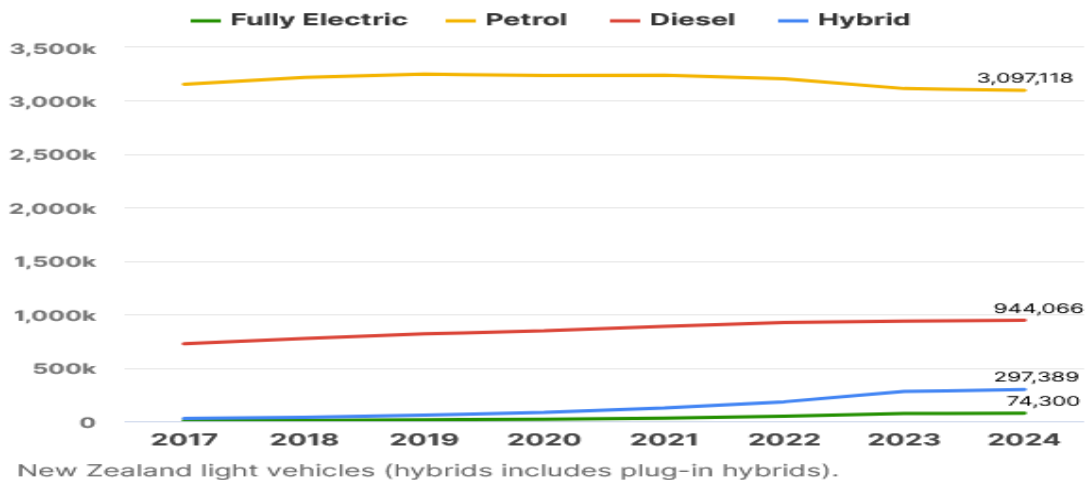
EV imports into New Zealand as of March 2024 <https://evdb.nz/ev-stats>

This was entirely predictable simply based on the science, we mentioned in our last report that the evidence was self-explanatory and we were not going to go into it, we've left a couple of links in the citations to look at but we still don't think this needs much explanation from us.

It was a stupid idea then and it is still a stupid idea now purely from a logical and scientific stand point to try and electrify entire national fleets in a couple of decades, given where we are on the technology curve.

Petrol vehicles decline

Electrified + diesel vehicles increase



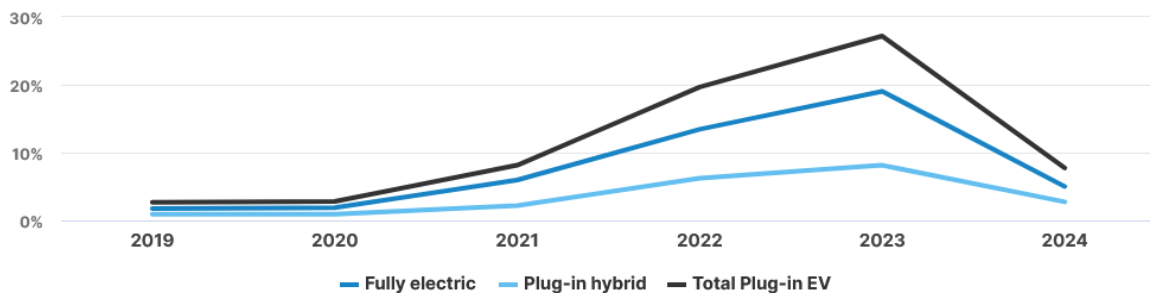
Source data: Ministry of Transport
Research & Graph: evdb.nz

<https://evdb.nz/ev-stats>

The transition has happened, it was a fizzer as predicted and now all the legislation is going to lead to is wealthy people buying throw away vehicles while the average man on the street has to keep an ever aging second hand vehicle running until the Govt. makes it illegal to use.

EV market share

Percentage of new car registrations



Source data: Ministry of Transport
Research & Graph: evdb.nz

<https://evdb.nz/ev-stats>

We now wonder that since it is all now being fully exposed, if something else may shortly be exposed, such as those who are enforcing these rules are and were actually fully aware of what they are doing

5.1 HYDROGEN FROM HERO TO ZERO

“H2, Hydrogen will never become a useful transport fuel because of basic physics. The volumetric energy density of compressed h2 is about 20% of that of petrol, and compressed liquid h2 about 30% with an added energy cost of the cooling and pressure to get liquid nitrogen being approx 25% of the energy being stored as h2 fuel. And that's not even considering the energy used to generate the hydrogen in the first place which is generally in excess of 100% the energy capacity of the created fuel.. It just doesn't make economic sense outside of very niche applications given that the net energy input from extracting crude oil to it being pumped into your vehicle is less than 20% in total not including all the other byproducts produced along the way.” Daniel Reurich Operation Good Oil – Future Fuels Report, yet to be released

6.0 ROUGE SHAREHOLDERS AND REBEL DIRECTORS NOMINATED

We would like to bring to the reader’s attention a move within the shareholders of Channel Infrastructure to conduct feasibility and cost study for a return to refining.

Two shareholders, Karl Barkley and Daniel Reurich have been nominated for directorships at this coming AGM on April 30 2024.

Mr Barkely has prepared and sent a proposal for resolution by the shareholders; it has been received by the board and added to the agenda for the meeting.

In a rather lengthy response, the board has recommended against the proposal because they believe it is no longer Channels responsibility and have fobbed off all responsibility and liability onto the government despite their rather murky behaviour and control over the plant which does actually exist despite their accountants saying it doesn’t.

We would highly recommend if you are a shareholder voting for the proposal and for the nominees if for nothing less than to throw a cat among the pigeons and to get some of our burning questions answered.

If you are not a shareholder, it is not too late. You can buy as little as \$5 worth of shares on Sharsies and get voting rights to have a say. The more people who start to get involved and buy shares to make noises the more a company culture can start to shift at the top.

It is not a foregone conclusion yet that we can’t refine our own oil, the people who have made these bad decisions on behalf of all of New Zealand, be they government or executives are biting their nails right now because they get up every morning and flip coins to decide what they do next. Sometimes it comes up tails, sometimes it comes up heads. The real question here is:

WHO IS THE HEAD AND WHO IS THE TAIL?

TABLE 1

	NAME	FLAG	IMO	DWT	TONNAGE	trips to da	DWT Total c	TH Liter	TH Liters	Volume reduction
1	SEADYDSEY	Hong Kong SAR of China (HK)	9740419	113176	64092	1	113176		123740	111,366,000
2	STI LILY	Singapore (SG)	9838242	109994	63338	1	109994		126421	113,778,900
3	HAFNIA BEIJING	Malta (MT)	9856634	74999	43693	1	74999		86085	77,476,500
4	LIAN GUI HU	Hong Kong SAR of China (HK)	9783409	72822	43687	1	72822	87386	87386	70,830,173
5	STI TOPAZ	Marshall Islands (MH)	9629938	51840	28708	1	51840		54116	48,704,400
6	SVEN	Liberia (LR)	9434228	51703	29636	1	51703		53033	47,729,700
7	DORIC PIONEER	Liberia (LR)	9637117	51565	29622	1	51565		54114	48,702,600
8	LADY MALOU	Greece (GR)	9590723	51441	29762	2	102882		54079	97,342,200
9	ELANDRA FJORD	Marshall Islands (MH)	9482550	51408	29694	2	102816		53033	95,459,400
10	STI SAN TELMO	Marshall Islands (MH)	9794410	51260	29804	2	102520		55539	99,970,200
11	NAVIGARE PARS	Denmark (DK)	9583665	51034	29840	3	153102		54000	145,800,000
12	FOREVER MELODY	Liberia (LR)	9676527	50885	30263	4	203540		53167	191,401,200
13	ELANDRA CORALLO	Liberia (LR)	9396751	50607	30150	1	50607		52144	46,929,600
14	NORD VALOROUS	Liberia (LR)	9827059	50550	29760	1	50550		53030	47,727,000
15	UNIQUE INFINITY	Hong Kong SAR of China (HK)	9540833	50378	29479	1	50378		55283	49,754,700
16	MIDNIGHT GLORY	Marshall Islands (MH)	9877808	50322	29649	3	150966		54309	146,634,300
17	MORNING GLORY	Marshall Islands (MH)	9877793	50322	29649	1	50322		54308	48,877,200
18	GRAND WINNER 1	Panama (PA)	9906685	50301	29707	1	50301		54325	48,892,500
19	GRAND WINNER 2	Panama (PA)	9906697	50301	29707	1	50301		54325	48,892,500
20	LARGO CALIFORNIA	Marshall Islands (MH)	9843780	50290	29994	2	100580		54112	97,401,600
21	RIDGEBURY KATHERINEZ	Marshall Islands (MH)	9439797	50215	29832	1	50215		54600	49,140,000
22	BLUE GRASS MARINER	Marshall Islands (MH)	9905411	50177	29649	1	50177		54325	48,892,500
23	HARRISON BAY	Marshall Islands (MH)	9697636	50163	29735	1	50163		52939	47,645,100
24	JENNINGS BAY	Marshall Islands (MH)	9717773	50150	29735	1	50150		53116	47,804,400
25	STI SOHO	Marshall Islands (MH)	9686754	50140	29735	1	50140		52840	47,556,000
26	STI DAMA	Marshall Islands (MH)	9686716	50137	29735	1	50137		53002	47,701,800
27	ST PETRI	Singapore (SG)	9788497	50105	29513	1	50105		55036	49,532,400
28	ATLANTIC HARMONY	Marshall Islands (MH)	9797747	50090	29256	1	50090		53078	47,770,200
29	ATLANTIC INFINITY	Marshall Islands (MH)	9797759	50090	29256	3	150270		53078	143,310,600
30	MANTA GALATASARAY	Marshall Islands (MH)	9425538	50083	28465	1	50083		55457	49,911,300
31	SUNSHINE EXPRESS	Panama (PA)	9433808	50077	28465	1	50077		55457	49,911,300
32	CHALLENGE POLLUX	Singapore (SG)	9793284	50068	29267	1	50068		54250	48,825,000
33	HIGH FIDELITY	Liberia (LR)	9689146	50000	29935	1	50000		53554	48,198,600
34	MAERSK TOKYO	Singapore (SG)	9718076	50000	29455	2	100000		53658	96,584,400
35	FOREVER GLORY	Hong Kong SAR of China (HK)	9796901	50000	29355	2	100000	120000	120000	194,529,600
36	LINDANGER	Norway (NO)	9725299	49999	30945	1	49999		53808	48,427,200
37	MARI BOYLE	Norway (NO)	9732979	49999	30945	1	49999		53808	48,427,200
38	BAYOU SUN	Panama (PA)	9911537	49999	30873	1	49999	59999	59999	48,631,427
39	NAVE SEXTANS	Panama (PA)	9697442	49999	30310	1	49999		54267	48,840,300
40	ELANDRA SEA	Marshall Islands (MH)	9635779	49999	29939	1	49999		53251	47,925,900
41	ORPHEUS	Marshall Islands (MH)	9865752	49999	29917	1	49999	59999	59999	48,631,427
42	PROTEUS	Marshall Islands (MH)	9864368	49999	29917	1	49999	59999	59999	48,631,427
43	SEAWAYS JEJU	Liberia (LR)	9700471	49999	29770	1	49999		54006	48,605,400
44	BW SWIFT	Singapore (SG)	9713844	49999	29751	1	49999		52920	47,628,000
45	OCEAN NISA	Marshall Islands (MH)	9553749	49999	29671	1	49999	59999	59999	48,631,427
46	ESTEEM ENDEAVOR	Panama (PA)	9882360	49999	29651	2	99998	119998	119998	194,525,709
47	RICH RAINBOW	Panama (PA)	9800659	49999	29513	3	149997		55036	148,597,200
48	MANOLATES	The Bahamas (BS)	9756274	49999	29465	1	49999		53936	48,542,400
49	NORD MINUTE	Denmark (DK)	9391440	49999	29266	1	49999		54164	48,747,600
50	FOREVER ASSURANCE	Hong Kong SAR of China (HK)	9880398	49999	29063	1	49999		52261	47,034,900
51	FOREVER BRILLIANCE	Hong Kong SAR of China (HK)	9880403	49999	29063	1	49999	59999	59999	48,631,427
52	FOREVER CORDIALITY	Hong Kong SAR of China (HK)	9903774	49999	29063	3	149997		52262	141,107,400
53	ORIENT INNOVATION	Singapore (SG)	9793387	49997	29766	2	99994		54257	97,662,600
54	HELLAS AVATAR	Malta (MT)	9722613	49997	29410	2	99994		53114	95,605,200
55	STI MEMPHIS	Marshall Islands (MH)	9681156	49995	29767	1	49995		54010	48,609,000
56	NORD OLYMPIA	Panama (PA)	9747132	49995	29513	1	49995		55283	49,754,700
57	MANCHAC SUN	Cayman Islands (KY)	9724013	49994	30565	1	49994		55325	49,792,500
58	TARANAKI SUN	Cayman Islands (KY)	9751406	49994	30561	1	49994		55330	49,797,000
59	CAIJUN SUN	Cayman Islands (KY)	9724025	49993	30565	1	49993		55332	49,798,800
60	NAVE AQUILA	Panama (PA)	9459072	49991	30052	2	99982		53820	96,876,000
61	HIGH CHALLENGE	Liberia (LR)	9740586	49990	29957	1	49990		54225	48,802,500
62	STI OSCEOLA	Marshall Islands (MH)	9707807	49990	29785	1	49990		54816	49,334,400
63	VUKOVAR	Malta (MT)	9707819	49990	29785	2	99980		54816	98,668,800
64	STI GALATA	Marshall Islands (MH)	9785689	49990	29738	1	49990		55539	49,985,100
65	STI LA BOCA	Marshall Islands (MH)	9785718	49990	29738	1	49990		55539	49,985,100
66	STI LARVOTTO	Marshall Islands (MH)	9645774	49990	29715	2	99980		55203	99,365,400
67	YASA HAWK	Marshall Islands (MH)	9619531	49990	29593	1	49990		54142	48,727,800
68	TORM SUCCESS	Denmark (DK)	9836048	49976	28877	1	49976		52534	47,280,600
69	ORIENT CHALLENGE	Singapore (SG)	9793375	49972	29766	1	49972		54257	48,831,300
70	FOREVER HARMONY	Singapore (SG)	9796925	49948	29684	1	49948		52822	47,539,800
71	FOREVER SPLENDOR	Hong Kong SAR of China (HK)	9796913	49945	29684	1	49945		51475	46,327,500
72	FOREVER PROSPERITY	Hong Kong SAR of China (HK)	9796937	49940	29684	1	49940		52822	47,539,800
73	ARDMORE SEAFOX	Marshall Islands (MH)	9708215	49924	29737	1	49924		52931	47,637,900
74	NORD JEWEL	Panama (PA)	9814167	49857	29567	2	99714		55031	99,055,800
75	BUILDDOG	Singapore (SG)	9858072	49856	29447	1	49856		55031	49,527,900
76	BEAGLE	Panama (PA)	9814181	49850	29447	2	99700		55031	99,055,800
77	TAKAROA SUN	Singapore (SG)	9850202	49849	29987	1	49849	59819	59819	48,485,530
78	MAERSK TACOMA	Denmark (DK)	9708617	49828	28445	2	99656		54085	97,353,000
79	ENERGY APOLLO	United Kingdom (GB)	9891438	49812	29597	2	99624		52961	95,329,800
80	MAGNOLIA EXPRESS	Marshall Islands (MH)	9901427	49796	29472	1	49796	59755	59755	48,433,980

81	CREOLE SUN	Panama (PA)	9850214	49760	29987	1	49760		53360	48,024,000
82	ASPEN EXPRESS	Marshall Islands (MH)	9901415	49757	29472	1	49757	59708	59708	48,396,047
83	AYAME	Liberia (LR)	9911111	49757	29472	1	49757	59708	59708	48,396,047
84	SILVER CAITRIONA	Marshall Islands (MH)	9692313	49746	29460	1	49746		53793	48,413,700
85	SILVER GINNY	Marshall Islands (MH)	9682318	49746	29460	1	49746		53793	48,413,700
86	SILVER PHILIPPA	Marshall Islands (MH)	9692296	49746	29460	1	49746		53793	48,413,700
87	SILVER VENUS	Marshall Islands (MH)	9692375	49635	29327	1	49635		54247	48,822,300
88	NORD SWIFT	Denmark (DK)	9692155	49579	30108	1	49579		52433	47,189,700
89	ARDMORE ENDURANCE	Marshall Islands (MH)	9654567	49466	29993	1	49466		52770	47,493,000
90	LV LIZZY	Panama (PA)	9303417	49414	29606	1	49414		58495	52,645,500
91	MARI COUVA	Norway (NO)	9848584	49000	29000	1	49000	58800	58800	47,659,752
92	KOKAKO	Panama (PA)	9804124	48929	29000	1	48929		49022	44,119,800
93	AKANE	Panama (PA)	9547520	48005	28777	1	48005		54096	48,686,400
94	MAGELLAN ENDEAVOUR	Panama (PA)	9333280	47931	31090	1	47931		59683	53,714,700
95	STI MAXIMUS	Singapore (SG)	9854741	47499	29991	3	142497	56999	56999	138,599,422
96	STI MYSTERY	Singapore (SG)	9829461	47499	29991	1	47499	56999	56999	46,199,807
97	CABO NEGRO II	Panama (PA)	9317248	47236	30954	2	94472		58427	105,168,600
98	ATLANTIC EAGLE	Hong Kong SAR of China (HK)	9332183	47128	29266	1	47128		54164	48,747,600
99	EAGLE BAY	Singapore (SG)	9374272	47100	29266	1	47100		52966	47,669,400
100	SCARLET IBIS	Panama (PA)	9273832	46719	30411	1	46719		57746	51,971,400
101	OAK EXPRESS	Hong Kong SAR of China (HK)	9405916	46697	28952	1	46697		54445	49,000,500
102	WORLD NAVIGATOR	Singapore (SG)	9422225	46639	29151	1	46639		54449	49,004,100
103	TAMIA NAVIGATOR	Panama (PA)	9422237	46625	29151	1	46625		54449	49,004,100
104	ST GERTRUD	Panama (PA)	9400837	46622	28231	2	93244		54449	98,008,200
104	BRITISH CADET	United Kingdom (GB)	9724714	45999	30948	2	91998		53837	96,906,600
105	BRITISH CHIEF	United Kingdom (GB)	9724726	45999	30948	2	91998		53838	96,908,400
105	BRITISH ENGINEER	United Kingdom (GB)	9724702	45999	30948	1	45999		53838	48,454,200
108	BRITISH SAILOR	United Kingdom (GB)	9724673	45999	30948	4	183996		53838	193,816,800
109	SEA FRACTUS	Marshall Islands (MH)	9724609	45999	30948	1	45999		53838	48,454,200
110	GRAND ACE1	South Korea (KR)	9346067	45990	30027	1	45990		54678	49,210,200
111	CSC PEACE	Hong Kong SAR of China (HK)	9344148	45886	29593	1	45886		50930	45,837,000
112	CSC AUSPICIOUS	Hong Kong SAR of China (HK)	9406374	45851	29593	1	45851		50930	45,837,000
113	CHANG HANG FENG CAI	China (CN)	9379789	45844	29578	1	45844		51044	45,939,600
114	CSC PROGRESS	Hong Kong SAR of China (HK)	9344136	45791	29593	1	45791		50930	45,837,000
115	CHANG HANG FEI YUE	China (CN)	9401659	45781	29578	1	45781		50659	45,593,100
116	CHANG HANG HONG TU	China (CN)	9379777	45765	29578	1	45765		57511	51,759,900
117	CHANG HANG XING YUN	Singapore (SG)	9352250	45717	29588	1	45717		51044	45,939,600
118	EASTERN QUINCE	Liberia (LR)	9379040	41397	27987	1	41397		45379	40,841,100
119	PUFFIN PACIFIC	Singapore (SG)	9876402	39996	29376	2	79992		52871	95,167,800
120	GOLDEN UNITY	Panama (PA)	9572575	23451	13517	1	23451		24725	22,252,500
121	STREAM BALTIC	Marshall Islands (MH)	9838668	19999	12075	2	39998		22269	40,084,200
122	STREAM PACIFIC	Marshall Islands (MH)	9838670	19999	12075	2	39998		22277	40,098,600
123	STREAM ATLANTIC	Marshall Islands (MH)	9829722	19998	12075	1	19998		22270	20,043,000
124	GOLDEN YOSA	Panama (PA)	9407081	19537	11645	1	19537		22094	19,884,600
Total						165	8,084,445			8,170,340,703

* TH liters based on 80% of DWT as average specific gravity of refined fuel oils
** Volume reduction: The overall volume is reduced by 10% to account for heel tank
Calculated at 1.2 - average percentage difference
From Marine track

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