

GENERATING SCARCITY:
How the gentailers

How the gentailers hike electricity prices and halt decarbonisation







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EXECUTIVE SUMMARY

The report shows that:

- From 2014 until 2021, the four big generator-retailer firms (the gentailers) have distributed \$8.7 billion in dividends off only \$5.35 billion earned in profits. Collectively, the gentailers have delivered \$3.7 billion in excess dividends to shareholders over this period, averaging \$459 million a year.
- The NZ Government is a major beneficiary of this, collecting \$1.35 billion in excess dividends as part of the \$3.75 billion collected from its 51 percent shareholding over this period. This is an average of \$150 million per year.
- Systemic underinvestment in generating capacity has enabled excess dividend distribution, leaving New Zealand's generating capacity practically flatover the last decade.
- Underinvestment in renewable generation enables high-cost high-emission fossil fuel electricity to set the prices for cheaper renewable electricity, dragging prices up across the market and bolstering profits.
- Excess dividend distribution's impact is offset by a process of asset revaluations, itself the result of rising electricity prices. Asset revaluations now account for 56 percent of the value of fixed assets held by the three mixed ownership gentailers (\$10.9 billion out of \$19.6 billion).

This report argues that as the largest shareholder of three gentailers, the New Zealand Government should:

- Submit a minimum profit reinvestment target at the next shareholder meetings to rapidly develop new renewable generation;
- Require that future dividends received from its shareholding be used to buy back gentailer shares, to be held by a special purpose vehicle with the objective of maintaining stable and secure energy supply;
- That fossil fuel generation facilities be ringfenced for strictly non-commercial use to ensure national electricity security;
- That the Govt invests at least the equivalent of its \$1.35 billion excess dividend since partial-privatisation in community and household electricity schemes; and
- That a windfall tax be levied against the gentailers for the remainder of the excess dividend.

GENERATING SCARCITY: HOW THE GENTAILERS HIKE ELECTRICITY PRICES AND HALT DECARBONISATION

INTRODUCTION



Photo by: squirrel photos

In October 2022 a report commissioned by Aotearoa's major power generators set out a bold vision for the future: a transition to 98 percent renewable electricity by 2030. This would reduce New Zealand emissions by 8.7 Mt $\rm CO_2e$ per year (a faster scenario than the one outlined by the Climate Change Commission)¹.

While reaching that goal would cost \$42 billion in the 2020s alone - including \$10.2 billion to develop 4.8GW of new renewable generating capacity - it would save \$1.9 billion in total system costs and reduce average annual household bills by \$70².

The report doesn't, however, mention that at the same time as generating our electricity, the four large generator-retailers ("gentailers") that primarily funded it – Contact, Genesis, Mercury and Meridian – appear to have also spent the last decade generating scarcity, prioritising dividends over struggling households and the planet.

Since the partial privatisation of Genesis, Mercury and Meridian, the gentailers (including Contact Energy) have distributed \$8.7 billion in dividends to shareholders, \$3.7 billion more than they earned in profits³ over this period. This has starved the network of the investment needed to fund new generating assets while keeping existing gas and coal-generating facilities on life support.

¹ The report was commissioned by Contact Energy, Genesis Energy, Mercury, Meridian Energy, Vector, Unison Networks, Powerco, Wellington Electricity, and Orion.

² Boston Consulting Group. (2022). The Future is Electric: A Decarbonisation Roadmap for New Zealand's Electricity Sector. Available: https://web-assets.bcg.com/25/b3/fe0d22e04a6aaaa8e2aec92257ea/the-future-is-electric-full-report-2022.pdf.

³ Throughout this report, unless otherwise notified the word "profits" will be used to refer to "net profit after tax".

The New Zealand electricity network

Aotearoa is known for its relatively high proportion of renewable electricity generation⁴, much of which rests on the legacy of hydropower schemes built between 1945 and 1970 by the State Hydro Electric Department. However, during the last decade generating capacity has remained roughly the same at around 10,000MW.⁵

Until 1987, the generation and transmission of electricity in Aotearoa were managed by a state monopoly, the New Zealand Energy Department (NZED). Corporatisation created the Electricity Corporation (ECNZ), which was then split into separate generation and grid companies (Transpower) in 1994. In 1996 a group of assets were carved off ECNZ to form the corporatised "Contact Energy" in 1996, which was privatised in 1999. In 1999 ECNZ was split into three new stateowned enterprises: Genesis Energy, Mighty River Power (later Mercury) and Meridian.

After the election of the National government in 2008, legislation was passed in 2012 enabling the partial privatisation of the three state-owned enterprises. By 2014 and despite being comprehensively rejected in the citizens initiated referendum that accompanied the 2014 election, 49 percent of shares in these companies were sold to private investors. The sale netted the Crown \$4.7 billion, below the \$5 - 7 billion range that had been outlined by then-Finance Minister Bill English.

Today the sector is dominated by the four gentailers, who together generate 88 percent of the available electricity in the New Zealand market⁶ and retail 84 percent of it⁷. Even though much of the gentailers' generating capacity was paid for decades ago (much of it with taxpayer funding), residential electricity prices have climbed precipitously.

Over the last 30 years, residential electricity prices have increased by 79 percent, while commercial rates have dropped by 24 percent⁸. In the last fourteen years alone, household energy prices

⁴ Aotearoa is ranked ninth in the world for equity, security and sustainability, according to the World Energy Council Trilemma Index 2021. Available: https://www.worldenergy.org/transition-toolkit/world-energy-trilemma-index.

⁵ Ministry of Business, Innovation & Employment. Table 7: Operational Electricity Generation by Plant Typles (MW). Electricity Graph and Data Tables'. Available: https://www.mbie.govt.nz/assets/Data-Files/Energy/nz-energy-quarterly-and-energy-in-nz/electricity.xlsx.

⁶ Electricity Authority. 2022. Wholesale market snapshot. New Zealand's wholesale electricity market in Q3 2022. Available: https://public.tableau.com/app/profile/electricity.authority/viz/Wholesalemarketsnapshot/Wholesalemarketsnapshot.

⁷ Electricity Authority. 2022. Market Share Snapshot. Available: HERE

⁸ Ministry of Business, Innovation & Employment. 2019. Electricity Price Review. Available: https://www.mbie.govt.nz/ assets/electricity-price-review-final-report.pdf.

have risen 42 percent⁹. This is 20 percent higher than general inflation across the same period of 35 percent. Recent survey results show that many households are now cutting back on their electricity usage, with electricity prices ranking just below housing, petrol and food prices in terms of household budget pressures. Only one in four thought their power company was providing good value for money"¹⁰.

This stands in stark contrast to the rhetoric deployed in support of electricity sector reforms like corporatisation and privatisation. In a triumphant 1998 media release entitled "ELECTRICITY REFORMS WILL BE REMEMBERED", Energy Minister Max Bradford said the reforms "will be remembered by generations of New Zealanders because of the better deal they'll bring for consumers"

By the time of the 49 percent sell-down of the three state-owned gentailers, the pretence of cheaper residential power prices had largely been dispensed of, with the main emphasis being the financial proceeds from the sales.

[&]quot;Max Bradford. 1998. Electricity Reforms Will Be Remembered. Available: https://www.beehive.govt.nz/ release/electricity-reforms-will-be-remembered



Photo by: Belinda Sowerby

⁹ Statistics New Zealand. 2022. Household living-costs price indexes: September 2022 quarter. Available: https://www.stats.govt.nz/information-releases/household-living-costs-price-indexes-september-2022-quarter/.

¹⁰ Consumer Advocacy Council "Kiwis cutting back on electricity usage" 9 November 2022. Available at: https://www.cac.org.nz/news/kiwis-cutting-back-on-electricity-usage/

Concerns about profit and market power abuse

Even before their partial-privatisation, concerns had been raised about windfall profits by the gentailers. A 2009 Commerce Commission investigation called in quantitative evidence by Professor Frank Wolak that suggested that over a six and half year period the four main generators – Contact, Genesis, Meridian and Mighty River Power (later Mercury) – had exercised their market power to earn "market rents" conservatively priced at \$4.3 billion, roughly 18 percent of total revenue. While details of Wolak's work are now disputed, the Commission clearly demonstrated its position:



Photo by: W. Bulach

"The exercise of market power to earn market power rents is not by itself a contravention of the Commerce Act, but is a lawful, rational exploitation of the ability and incentive available to the generators." 12

A 2011 profitability analysis, undertaken by Ernst and Young on behalf of the Treasury, estimated that the "economic profit" (the companies' returns over and above their cost of capital) of the three then-state-owned enterprises – Meridian, Genesis and Mighty River (now Mercury) had totalled \$3.8 billion over a ten-year period. Invested capital had risen from \$4 billion in 2002 to nearly \$12 billion, but more than half of this - \$6.2 billion - was made up of asset revaluations.

More recently, regulators have raised red flags over abuses of market power. In June 2020 the Electricity Authority found that Meridian spilling water from their hydro dams in December 2019 had amounted to manipulation of the power market, costing consumers \$80 million¹³. And in October 2021 the Electricity Authority suggested that each household was paying an extra \$200 per year in power to subsidise the cheap electricity provided to the Tiwai Point aluminium smelter (totalling half a billion dollars per year)¹⁴.

¹³ Andrew McRae. 2020. Meridian spilled water to hike electricity prices - Authority ruling. Radio New Zealand. June 30 2020. Available: https://www.rnz.co.nz/news/business/420160/meridian-spilled-water-to-hike-electricity-prices-authority-ruling.

¹⁴ Jonathan Milne. 2021. Tiwai Point deal costs households \$200/yr more in power – regulator. Newsroom. October 28 2021. Available: https://www.newsroom.co.nz/tiwai-point-deal-costs-households-200-yr-more-in-power-regulator.

¹² Commerce Commission. 2009. Investigation Report: Commerce Act 1986 S 27, S 30 and S 36 Electricity Investigation. Available: https://comcom.govt.nz/__data/assets/pdf_file/0025/219094/Electricity-investigation-Investigation-report-21-May-2009.PDF.

Electricity Authority's May 2019 Electricity
These findings seem at odds with the Electricity
Authority's May 2019 Electricity Price Review,
which "found no evidence of generator-retailers
making excessive profits, although data limitations
mean we cannot be definitive in this assessment."
Business journalist Bernard Hickey slammed the
report, saying "the EPR was mostly a whitewash"
and noted that former gentailer executives had
contracted much of the analytical work that
supported its conclusions. In a Cabinet Paper
responding to that review, Minister of Energy Dr
Megan Woods continued to express concern
"about whether integrated generator retailers are
making excessive profits..."

In a paper published in February 2021, Dr. Stephen Poletti of Auckland University used a computer agent-based model to simulate the NZ electricity market and its prices over the period 2010 to 2016. Using this model, Poletti estimated that 37 percent of the \$15.2 billion in simulated market revenue over this period - \$5.6 billion – could be defined as "market power rents", revenue above that which would be found in a competitive market.

Using actual prices the outcome was even higher, \$6 billion or 39 percent of total revenue.18 And, finally, in 2021 the Major Energy Users Group (MEUG) released an economic profit analysis of Meridian Energy, suggesting that from 2002 to 2020 they earned excess economic profits of \$3.5 billion and that 56 percent of those excess economic profits - \$1.9 billion - were in the years 2016 to 2020. MEUG Chairman John Harbord suggests that "Meridian has outperformed the level of profit-making seen in the Commerce Commission's retail fuel market and ongoing supermarket studies."19 A similar study published by the MEUG in October 2022 suggested that over the last eleven years, Contact Energy has generated economic profits of \$1.16 billion.²⁰

pdf?download=1

¹⁵ Ministry of Business, Innovation & Employment. 2019. Electricity Price Review. p. 41. Available: https://www.mbie.govt.nz/assets/electricity-price-review-final-report.pdf.

¹⁶ Bernard Hickey. 2021. NZ Inc calls out gentailer's \$3.5b 'super-profit'. The Kākā by Bernard Hickey. August 26 2021. Available: https://thekaka.substack.com/p/nz-inc-calls-out-gentailers-35b-super#details.

¹⁷ Hon Dr Megan Woods. 2019. Cabinet Paper, Electricity Price Review: Government Response to Final Report.

¹⁸ Stephen Poletti. 2021. Market Power in the New Zealand electricity wholesale market. Energy Economics, 94.

¹⁹ Major Electricity Users' Group. 2021. Accelerating super profits raise stakes for a comprehensive review of wholesale electricity market. Available: http://www.meug.co.nz/system/files_force/MEUG%20MEL%20EPA%20Findings_Media%20 Release 12PM%2024%20AUGUST%202021.pdf?download=1

²⁰ Major Electricity Users' Group. 2022. Update of Economic Profit of Contact Energy Ltd based on the year-ended 30 June 2022 financial results. Available: http://www.meug.co.nz/system/files_force/MEUG%20 EVA%20update%20for%20CEN%2011-Oct-22.

Photo by: Andrew Cooper

How this analysis differs

While we do not disagree with these analyses, this report takes a different approach. Rather than estimating market power rents or excess profits, we show how the gentailers have distributed billions in dividends to shareholders, far greater than their profits. Paying out excess dividends deprives the electricity network of the capital required to invest in new renewable energy capacity.

This in turn has undermined the potential to ringfence and minimise the use of costly highemitting fossil units that set wholesale electricity prices. This investment would also have brought down consumer electricity prices. If excess dividends had been reinvested, household electricity prices might not have been as significant a contributor as it has been to household budgets. Given the essential nature of electricity use, that is also likely to have meant that it took a bigger bite out of low-income household budgets, further constraining already difficult choices.

As the majority shareholder of three of the gentailers, it's the Government that needs to play the most active role in ensuring that our electricity network maximises wellbeing benefits for all people in Aotearoa. This should mean that profits are reinvested into developing more renewable energy capacity. It means bringing down residential electricity prices, ending our electricity network's reliance on fossil fuel-powered electricity, and enabling communities to develop their own local power schemes.

Photo by: Thomas Coker

EXCESSIVE DIVIDEND DISTRIBUTION

Gentailers deliver mega profits while cost of living spikes

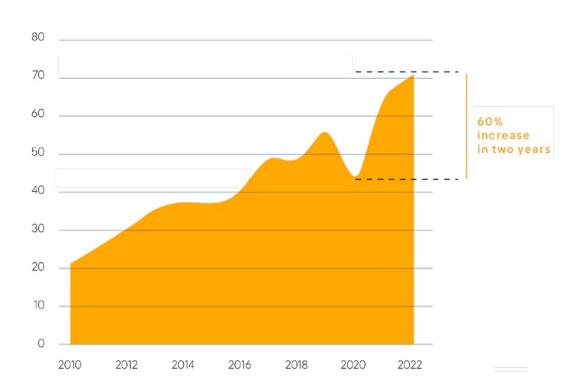
Our post-COVID cost-of-living crisis is hammering Kiwi households, with many struggling to make ends meet. There is growing demand for emergency housing. Demand for foodbanks has spiked, while consumer spending across the economy is stagnating.

This sits uncomfortably alongside data from Treasury accounts suggesting that corporate profits have increased by 60 percent in the last two years²¹. Reports of profiteering, particularly in seemingly non-competitive markets like supermarkets, fuel and banking have been met with widespread disdain and criticism with working people living paycheck to paycheck.

New Zealand's electricity sector has stood out in this respect. The 2022 financial year saw gentailer profits almost double, from \$788 million in 2021 to \$1,537 million in 2022, beating 2019's record by a remarkable 60 percent in two years. Chief amongst these increases was Genesis, whose profit jumped a startling 600 percent, from \$32 million to \$222 million, while Mercury experienced a 233 percent increase, from \$141 million to \$469 million. The future looks even brighter, with full hydro lakes lifting future earnings expectations²².

²¹ The Treasury. 2022. Tax Outturn Data - June 2022. Available: https://www.treasury.govt.nz/publications/tax-outturn-data/tax-outturn-data-june-2022.

²² Nona Pelletier. 2022. Full hydro lakes boost power firms' profits and renewable projects. Radio New Zealand. October 25 2022. Available: https://www.rnz.co.nz/news/business/477298/full-hydro-lakes-boost-power-firms-profits-and-renewable-projects.



Some analysts labelled the characterisation as unfair, noting that EBITDAF²³ growth was a less dramatic 10 percent. They pointed to major asset sales, notably the sale of Meridian's Australian business (resulting in a \$214 million gain) and the sale of Mercury's shareholding in Tilt Renewables (resulting in a \$367 million gain). Absent these items, the cumulative net profits after tax of the four gentailers would have risen a much more modest 21 percent.



Earnings before interest, tax, depreciation, amortisation and the change in fair value and other significant items, a measure used consistently by all the four gentailers.

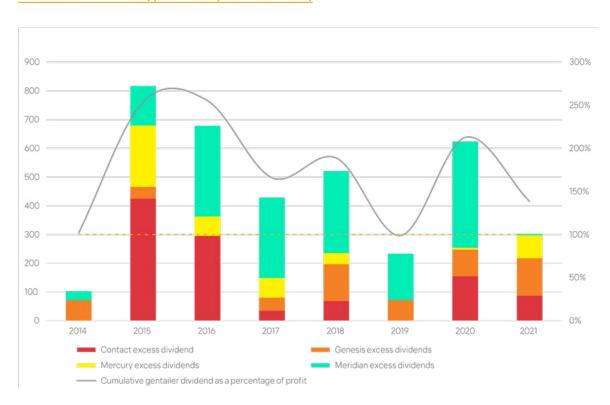
Gentailer dividend substantially higher

A closer look at the gentailers' financial reports suggests that 2022 stands out for another reason: it is one of the few years since partial privatisation that the profits of the gentailers have been *higher* than their dividends.

From 2014 to 2021 the combined profits of the gentailers reached \$5.35 billion, however, they paid out \$8.7 billion in dividends to shareholders. During each year of this period, excess dividends paid out by the gentailers come to between \$100 million and almost \$800 million per year, totalling \$3.7 billion over the entire period (69 percent higher than combined profits). On average, \$459 million a year was paid out in excess dividends to shareholders. In dollar terms, this amount is more than the scale of excess profit alleged in the Commerce Commission's Market Study on supermarkets (\$430 million). Only in years in which asset sales significantly boost net profit after tax have the gentailers' collective dividends fallen below the level of profit earned.

The below graph shows the scale of cumulative excess dividend distribution, as a percentage on the right-hand side. Everything above the dotted line is considered excess. In 2015 and 2016 dividends were more than 200 percent of profits, while in 2017, 2018 and 2020 they were more than 150 percent of profits. 2019 was one of the rare post-privatisation years in which net profits were

EXCESS DIVIDENDS (\$ MILLION, 2014 TO 2021)



²⁴ Commerce Commission "Market Study into the retail grocery sector" 8 March 2022, p 55. Available at: https://comcom.govt.nz/__data/assets/pdf_file/0024/278403/Market-Study-into-the-retail-grocery-sector-Final-report-8-March-2022.pdf

Gentailer	Cumulative difference between dividends and profit (2014 – 2021)	Cumulative dividends as a % of NPAT
Contact	\$1,066 million	177%
Genesis	\$582 million	191%
Mercury	\$476 million	119%
Meridian	\$1,587 million	179%
TOTAL	\$3,710 million	169%

higher than dividends, although not by much, collectively dividends accounted for 99 percent of dividends. As with 2022, this is largely the result of asset sales, with Mercury selling Metrix for \$270 million.

The occasional excess dividend payment is not uncommon. Boards may sometimes pay no dividend for a few years while they pay down debt or develop new assets, rewarding shareholders with a windfall later. However, the consistent delivery of hundreds of millions of dollars in excess dividends a year over an eight-year period is highly unusual and could be evidence of competition issues in the electricity sector. The practice is widespread, with all gentailers paying more in dividends than they earned in profit over the 2014 to 2021

There are of course instances in which profits have been higher than dividends for specific gentailers. But they are the exception, occurring only five times out of thirtytwo sets of financial reports.

Indeed, the payment of excess dividends seems to persist regardless of profits. In 2016 Contact made a loss, but still paid out \$189 million to shareholders, having already distributed \$558 million to shareholders the previous year (420 percent of that year's profit). Genesis delivered relatively low net profits after tax in 2018 (\$19.8) million) and 2021 (\$31.7 million), however they still paid out dividends of \$147.7 million - 746 percent of net profit after tax - and \$162.3 million (512 percent).



The Government share

Having retained a 51 percent shareholding in Genesis, Mercury and Meridian, Treasury has received a significant proportion of the excess dividends generated. Since partial privatisation, the three mixed-ownership gentailers have collectively generated \$7.35 billion, \$3.75 billion of which has gone into Government coffers. By way of contrast, the sale of 49 percent of the shares in those firms collectively provided only \$4.7 billion. We estimate that 36 percent of excess dividends - \$1.35 billion - were paid to the Government over this period, averaging \$150 million per year.

Some may argue that given some of the excess dividends flow back to the Government that there is no harm done. There are a number of reasons why this is unacceptable. Firstly while Government is the largest single gentailer shareholder, the majority of excess dividends - 64 percent - flow to private shareholders. Secondly, the money that Government receives from excess dividends comes at the cost of higher electricity prices for residential consumers, serving as a particularly regressive tax on low-income communities. Of course, it is better that Government captures these funds rather than private shareholders, however greater cost savings would be achieved by reinvesting funds into new renewable capacity.

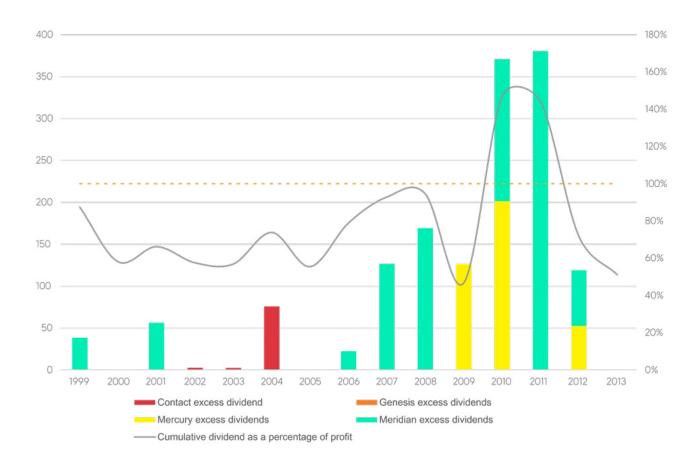


A longer time series view shows how excessive dividend distribution ramps up, post-privatisation. From 1999 to 2013 the gentailers earned \$7.94 billion in cumulative net profit after tax, distributing and the cumulative dividends distributed total \$6.2 billion, a relatively high rate of distribution at around 80 percent. Individual firms did make excess distribution payments from year-to-year, however, these distributions averaged only \$97 million per year. Excess dividend distribution increases fivefold after privatisation, to \$459 million per year.

Relative to profits, Meridian and Mercury account for the largest proportion of excess dividends distributed over this period, respectively 34 percent and 28 percent higher than their profits (much of this over 2009 - 2011). Contact's cumulative dividends roughly match their profits, while Genesis does not pay excess dividends over the period. Meridian is the only gentailer for which cumulative dividends are greater than cumulative profits over the entire period, paying out \$3.5 billion in dividends off \$3 billion in profit.

The below graph shows the same data on a firm-by-firm basis. Individually, only one of the gentailers – Meridian – paid out more in dividends than they earned in profits, with dividends \$578 million than dividends over the period. Relatively lower dividend payments by other gentailers works to minimise this impact in the above (collective) data.

EXCESS DIVIDENDS (\$ MILLION, 1999 TO 2013)





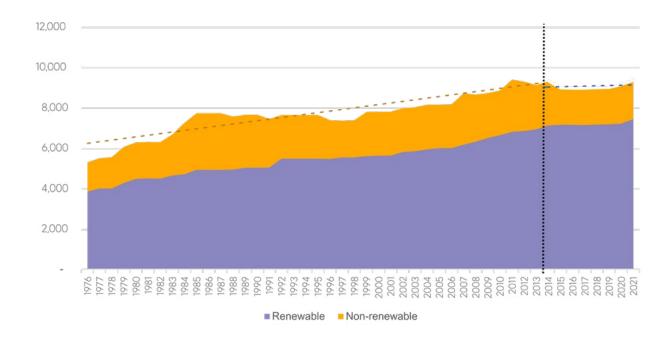
WHAT IS THE IMPACT OF EXCESSIVE DIVIDEND DISTRIBUTION?



Photo by: Lou Lei

Firm profits can be reinvested, held by the company, or distributed to shareholders as dividends. Most firms need to balance these objectives to ensure that they remain competitive and aren't undercut by other market participants, while at the same time compensating investors for taking a risk on them. The market in which the gentailers operate, however, means company management don't have to undertake this decision-making process, instead delivering windfall dividends for their shareholders year after year. While there is nothing illegal about this, it underscores serious existing questions about who benefits from the current electricity market.

The gentailers' practice of excessive dividend distribution is a key factor in explaining why electricity generating capacity in Aotearoa has hardly moved in more than a decade, and the relatively small remaining proportion of fossil generation has been kept on life support.



This is not for lack of potential. According to the New Zealand Wind Energy Association, there is almost 2000MW of wind farms that have been consented but not yet constructed²⁵. This alone is more than the current operational capacity provided by gas and coal combined. Energy economist Geoff Bertram argued that the best windfarm sites in the country have been "preemptively occupied" by the gentailers.²⁶

Constraining development on these sites pushes up the price of electricity, as well as the cost of adding new capacity.

Risk of blackouts growing

Historically, Department of Energy (now MBIE) planners (from the Committee to Review Power Requirements) had been extremely risk averse, maintaining a substantial margin of excess generating capacity to avoid blackouts. For many decades, supply outpaced demand, making it easier to set residential power prices as low as possible. Neoliberal deindustrialisation through the 1980 and 90s meant that while the population expanded, industrial demand for electricity grew more slowly.

By the winter of 2021 it had become clear that the network was straining to deliver. On 9 August, a cold front caused temperatures to plummet and electricity demand soared. Gale force winds had contributed to a build-up of weeds in the Tokaanu hydro intake, taking more than 100MW offline²⁷. At the same time, Transpower asked lines companies to cut more power than was required by a generation shortfall²⁸.

Stuff. August 10 2021. Available: https://www.stuff.co.nz/

²⁵ New Zealand Wind Energy Association. Consented Wind Farms in NZ. Available: https://www.windenergy.org.nz/consented-wind-farms.

²⁶ Geoff Bertram. 2013. Weak Regulation, Rising Margins and Asset Revaluations: New Zealand's Failing Experiment in Electricity Reform. Evolution of Global Electricity Markets: New Paradigms, New Challenges, New Approaches. Available: https://www.researchgate.net/ publication/287755960.

 ²⁷ Smart Power. 2021. The Wholesale Electricity Market.
 Market Update August 2021. Available: https://www.smartpower.co.nz/2021/09/04/market-update-august-2021/28
 Tom Pullar-Strecker. 2021. Power cuts: Genesis boss says firm feels 'victimised' as Transpower admits error.



Photo by: Marek Piwnicki

Keeping fossil fuel on life support

Grid emergencies are a green light for fossil fuel generators. While coal generation had diminished to just 404 GWh in 2016 – around one percent of total generation that year- by 2021 its usage had increased more than fivefold. In 2020 New Zealand imported more than a million tonnes of low-grade high-emissions sub-bituminous coal from Indonesia.²⁹

Opposition parties – the same parties who implemented the electricity sector reforms of the 1980s and 2010s – have argued that the sharp increase in coal use is a product of the Labour Government's 2018 ban on new offshore oil and gas permits. This makes little sense given how it takes years to develop gas reserves.

While Winter 2022 was not as cold as the previous year, the year was still littered with numerous 'grid emergency' events, indicating a risk of further power outages. An October polar blast, which coincided with a fault on the HVDC cable that connects the North and South Islands, again threatened the North Island with blackouts.

Spot prices rose from \$170/MWh at the start of the month to \$1600/MWh on 9 August, as 20,000 homes in the Central North Island were plunged into darkness.

²⁹ Jordan Bond. 2021. NZ imported more than a million tonnes of 'dirty' coal last year. Radio New Zealand. July 14 2021. Available: https://www.rnz.co.nz/news/national/446845/nz-imported-more-than-a-million-tonnes-of-dirty-coal-last-year#:~:text=ln%20the%20same%20year%20that,the%20first%20time%20since%202006.

³⁰ NZ Herald. 2022. Christopher Luxon: National would scrap oil and gas ban, tax policy could change. New Zealand Herald. March 16 2022. Available: https://www.nzherald.co.nz/nz/politics/christopher-luxon-national-would-scrap-oil-and-gas-ban-tax-policy-could-change/NEMOMS3NUJMO73AUFJ42SIOBMA/.

However today gas is responsible for an even higher proportion of electricity production than coal. It still retains a reputation as a "bridging fuel" - not perfect, but a valuable part of the transition toolkit.

It is worth noting that for the gentailers, keeping coal and gas as part of our energy mix is a crucial part of the business strategy for keeping profits high. Spot prices on our wholesale energy market are determined by the last form of generation to bid into the market. Lower cost renewable generation like hydro, wind and geothermal bids in first, and more expensive generation like coal, gas, and diesel only bid in when demand is high enough to bring up the price. Since every kilowatt hour generated receives the wholesale price, when Huntly is burning coal, generators make a sizable profit on the low-cost kWhs they generated from hydro and wind.

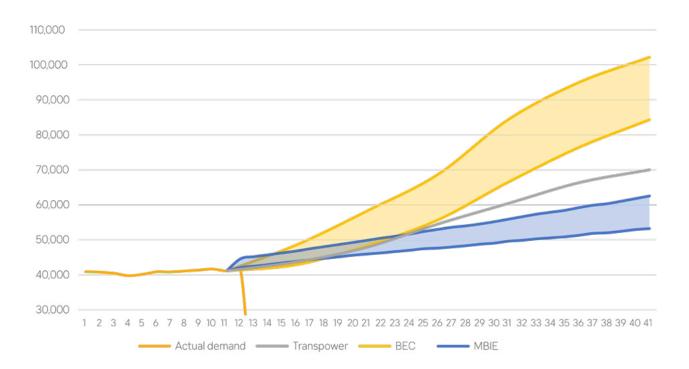
Sustaining share prices requires ongoing excess dividends payments to shareholders, which stifles possibleinvestment to expand renewable generation. This is a crucial part of ensuring that expensive fossil inputs set the price for cheap renewable energy. This keeps profits high and

shareholders – including the Government – happy. It's households, small businesses and the planet that pay the price.

This is particularly concerning, given projections of electricity demand over the coming decades. Electrification of consumer heating and transport, as well as in the commercial and industrial spaces, means Aotearoa will need a significant increase in electricity generation. We're already starting to see increased demand with the introduction of incentives to purchase electric cars, Councils replacing diesel buses with electric, and investments in the electrification of industrial process heat. In addition, climate change is already creating additional demand for cooling (in hotter summers) and heating (particularly in more regular extreme weather events).

The below graph presents both actual consumption to 2021, followed by a number of potential demand scenarios, from Transpower, the Ministry of Business, Innovation and Employment, and the Business Energy Council.

There is significant variability between these projected scenarios, regardless the timescales





all suggest a step change in the scale at which generating capacity be added to the network. Excess dividend distribution has constrained the pace at which investment in new renewable generation took place over the past decade, driving power prices upwards. Seeing this situation persist over the next decade would substantially hinder our ability to meet our 2030 Paris Agreement targets.

Photo by: Joshua Fuller

HOW IS THIS POSSIBLE?



Photo by: Liam Edwards

Distributing more in shareholder dividends than a firm generates in net profit after tax should diminish firm value, or require hefty borrowing. While gentailer debt levels have increased over the period firm value has been sustained by an ongoing process of asset revaluation. This process of asset revaluation is itself driven by ongoing increases in electricity prices, which, as we discussed in the previous section, is a byproduct of excessive dividend distribution.

The below graph shows the extent of asset revaluations that have taken place since the formation of these companies in 1996 and 1999. In the year 2000, the combined value of the fixed assets (also known as 'property, plant and equipment') of the four gentailers – most importantly their generating assets – came to around \$7 billion. By 2022 the combined value of these fixed assets had more than tripled, to \$23.7 billion. However, 46 percent of this total value – \$11 billion – was made up from asset revaluations.

GENTAILER FIXED ASSET REVALUATIONS (\$ BILLION)



While all of the gentailers have undertaken the revaluation process, Contact halted it in 2010, reverting to historic book value, in response to concerns by offshore shareholders. Meridian, Mercury and Genesis (all of which are majority state-owned) have nonetheless continued apace, as the below table suggests.

Gentailer	Fixed asset value	Asset revaluation reserve	Revaluation reserve as a % of fixed asset value
Genesis	\$3,738,700,000	\$1,756,300,000	50%
Mercury	\$8,080,000,000	\$4,153,000,000	51%
Meridian	\$7,830,000,000	\$5,079,000,000	65%
TOTAL*1	\$19,648,700,000	\$10,988,300,000	56%

This remarkable process itself is driven by high and rising electricity prices, themselves the product of the refusal to reinvest in and expand generating capacity. Economist Geoff Bertram has described this as a "circular process of revaluing assets, declaring higher capital charges to service the resulting book values, then raising prices to recover those charges before proceeding to the next "fair value" exercise". These capital gains are driven by manufactured market scarcity, and then distributed to shareholders as excess cash dividends

¹ This total excludes Contact Energy

CONCLUSION

Since the 1998 electricity sector reforms, household energy has been an ever-present inflationary fact of New Zealand life. The gentailers paid out most of their profits as dividends, with high prices lining the pockets of Treasury (and the investors that had bought shares in Contact Energy) and ensuring limited investment in new generating capacity. This has driven a process of illusory asset revaluations that had potential shareholders chomping at the bit for privatisation.

Since the 2013 reforms that sold 49 percent of Genesis, Mercury and Meridian the above process has been on steroids. In the eight years to 2021, gentailers distributed excess dividends 57 percent higher than the profits earned by these companies. Excess dividend distribution has starved the network of new renewable generation, keeping the high-cost high-emissions coal and gas industries on life support while pushing up prices for residential users and redoubling profits and shareholder dividends. Perversely, high prices have sustained the constant cycle of asset revaluation that has offset the impact of excess dividend distribution on the gentailers' accounts, preventing their book value from plummeting.

What we are seeing here is asset-stripping that delivers disproportionate benefits to a privileged few at the cost of residential consumers and global heating. It's doubly ironic that this is possible because of the investments made over decades by the taxpayer, yet it's the poorest New Zealanders who are paying the price in higher energy prices. Its beyond time to deliver change - its time for action.

A CALL TO POSITIVE ACTION



Photo by: 350 flickr

The Government remains the largest player in the electricity sector, through its 51 percent shares of Genesis, Mercury and Meridian. Together they account for 44% of shares of the gentailers, and are the recipient of 36 percent of the excess dividends paid out over the period 2014 to 2021. The authors of this report firmly believe that the New Zealand Government must play the primary role in establishing a fair electricity system that ensures a stable climate and affordable electricity prices, particularly for low-income households.

The CTU has called for a Just Transition to a low carbon economy in its recent Building a Better Future publication.³¹ The CTU believes that New Zealand needs a national strategy for an energy revolution and to achieve this, we will need to invest in green energy generation and ensure the dividends of new economic growth are equitably distributed. Central to this will be the creation of a new Ministry of Green Works, who will work to deliver that revolution - in much the same way much of our existing energy infrastructure was built by the previous Ministry of Works.

For over a decade 350 Aotearoa has been standing up to the fossil fuel industry to end all coal, oil, and gas projects in Aotearoa, and called for a just transition to renewable energy in the hands of the ordinary people. The Homegrown Energy³² campaign supports grassroots campaigners advocating for policy solutions that will support energy sovereignty and expand public participation in the renewable energy transition. There is growing international interest in the role of community-led energy initiatives as a crucial part of the energy transition, spreading financial gains more broadly, developing energy literacy, addressing project opposition and building broad-based community resilience.

³¹ New Zealand Council of Trade Unions. 2022. Building a Better Future: Creating an Economic Development Strategy Together for Aotearoa New Zealand. Available: https://www.buildingabetterfuture.org.nz/.

Specific recommendations include:

- Setting minimum profit reinvestment targets that continue until our Paris Target goals have been achieved, requiring reinvestment into new renewable generating capacity or into activities that provide greater energy security and affordability for New Zealanders and New Zealand businesses.
- That any dividends distributed to the Government from their gentailer shareholders be used to buy back shares of the gentailers. The ownership of any gentailer shares shall be placed in a SPV, whose objective would be "stable, sustainable, and affordable electricity". It would submit shareholder motions at AGMs to this end, and would require the companies to demonstrate publicly how this is being achieved.
- That the Government purchases the remaining fossil fuel generating facilities across the country, ringfencing them for strictly non-commercial use to ensure national energy security as the electricity undergoes its full decarbonisation process.
- That financing at least equivalent to the Government's share
 of excess dividends distributed over the 2014 to 2021 period

 \$1.12 billion be invested into household and communityowned and operated electricity generation schemes between
 now and 2030 to reduce reliance on the gentailers and support
 low-income households.
- That consideration be given to the levying of a windfall tax against these gentailers, set against the value that has been generated through the excessive use of thermal generation. The value of that windfall tax would be used to insulate homes across Aotearoa, and to reduce emissions from industrial heat processes

BIBLIOGRAPHY

350 Aotearoa. 2022. "Homegrown Energy" available at: https://350.org.nz/homegrown-energy/

Bertram, G. 2013. Weak Regulation, Rising Margins and Asset Revaluations: New Zealand's Failing Experiment in Electricity Reform. Evolution of Global Electricity Markets: New Paradigms, New Challenges, New Approaches. Available: https://www.researchgate.net/publication/287755960.

Bond, J. 2021. NZ imported more than a million tonnes of 'dirty' coal last year. Radio New Zealand. July 14 2021. Available: https://www.rnz.co.nz/news/national/446845/nz-imported-more-than-a-million-tonnes-of-dirty-coal-last-year#:~:text=ln%20the%20same%20year%20 that,the%20first%20time%20since%202006.

Boston Consulting Group. (2022). The Future is Electric: A Decarbonisation Roadmap for New Zealand's Electricity Sector. Available: https://web-assets.bcg.com/25/b3/fe0d22e04a6aaaa8e2aec92257ea/the-future-is-electric-full-report-2022.pdf.

Bradford, M. 1998. Electricity Reforms Will Be Remembered. Available: https://www.beehive.govt.nz/release/electricity-reforms-will-be-remembered.

Commerce Commission. 2009. Investigation Report: Commerce Act 1986 S 27, S 30 and S 36 Electricity Investigation. Available: https://comcom.govt.nz/__data/assets/pdf_file/0025/219094/Electricity-investigation-Investigation-report-21-May-2009.PDF.

Electricity Authority. 2022. Market Share Snapshot. Available: https://www.emi.ea.govt.nz/ Retail/Reports/R_S_C?DateTo=20220930&Regi

onType=NZ&RetailEntity=RPC&MarketSegmen t=All&Percent=Y&seriesFilter=CTCT,GENE,MRP L,MERI&_si=p|0,v|3.

Electricity Authority. 2022. Wholesale market snapshot. New Zealand's wholesale electricity market in Q3 2022. Available: https://public.tableau.com/app/profile/electricity.authority/viz/Wholesalemarketsnapshot/ Wholesalemarketsnapshot.

Hickey, B. 2021. NZ Inc calls out gentailer's \$3.5b 'super-profit'. The Kākā by Bernard Hickey. August 26 2021. Available: https://thekaka.substack.com/p/nz-inc-calls-out-gentailers-35b-super#details.

Hon. Dr. Woods, M. 2019. Cabinet Paper, Electricity Price Review: Government Response to Final Report.

McRae, A. 2020. Meridian spilled water to hike electricity prices - Authority ruling. Radio New Zealand. June 30 2020. Available: https://www.rnz.co.nz/news/business/420160/meridian-spilled-water-to-hike-electricity-prices-authority-ruling.

Major Electricity Users' Group. 2021. Accelerating super profits raise stakes for a comprehensive review of wholesale electricity market. Available: http://www.meug.co.nz/system/files_force/ MEUG%20MEL%20EPA%20Findings_Media%20 Release_12PM%2024%20AUGUST%202021.

pdf?download=1.

Major Electricity Users' Group. 2022. Update of Economic Profit of Contact Energy Ltd based on the year-ended 30 June 2022 financial results. Available:

http://www.meug.co.nz/system/files_force/ MEUG%20EVA%20update%20for%20CEN%20 11-Oct-22.pdf?download=1.

Milne, J. 2021. Tiwai Point deal costs households \$200/yr more in power – regulator. Newsroom. October 28 2021. Available: https://www.newsroom.co.nz/tiwai-point-deal-costs-households-200-yr-more-in-power-regulator.

Ministry of Business, Innovation & Employment. 2019. Electricity Price Review. Available: https://www.mbie.govt.nz/assets/electricity-price-review-final-report.pdf.

Ministry of Business, Innovation & Employment. Table 7: Operational Electricity Generation by Plant Typles (MW). Electricity Graph and Data Tables. Available: https://www.mbie.govt.nz/assets/Data-Files/Energy/nz-energy-quarterly-and-energy-in-nz/electricity.xlsx.

New Zealand Council of Trade Unions. 2022. Building a Better Future: Creating an Economic Development Strategy Together for Aotearoa New Zealand. Available: https://www.buildingabetterfuture.org.nz/.

New Zealand Wind Energy Association. Consented Wind Farms in NZ. Available: https://www.windenergy.org.nz/consented-wind-farms.

NZ Herald. 2022. Christopher Luxon: National would scrap oil and gas ban, tax policy could change. New Zealand Herald. March 16 2022. Available: https://www.nzherald.co.nz/nz/politics/christopher-luxon-national-would-scrap-oil-and-gas-ban-tax-policy-could-change/NEMOMS3NUJMO73AUFJ42SIOBMA/.

Pelletier, N. 2022. Full hydro lakes boost power firms' profits and renewable projects. Radio New Zealand. October 25 2022. Available: https://www.rnz.co.nz/news/business/477298/full-hydro-lakes-boost-power-firms-profits-and-renewable-projects.

Poletti, S. 2021. Market Power in the New Zealand electricity wholesale market. Energy Economics, 94.

Pullar-Strecker, T. 2021. Power cuts: Genesis boss says firm feels 'victimised' as Transpower admits error. Stuff. August 10 2021. Available: https://www.stuff.co.nz/business/126029919/power-cuts-genesis-boss-says-firm-feels-victimised-as-transpower-admits-error.

Smart Power. 2021. The Wholesale Electricity Market. Market Update August 2021. Available: https://www.smartpower.co.nz/2021/09/04/market-update-august-2021/.

Statistics New Zealand. 2022. Household living-costs price indexes: September 2022 quarter. Available: https://www.stats.govt.nz/information-releases/household-living-costs-price-indexes-september-2022-quarter/.

The Treasury. 2022. Tax Outturn Data - June 2022. Available: https://www.treasury.govt.nz/ publications/tax-outturn-data/tax-outturn-data-june-2022.

World Energy Council. 2021. World Energy Trilemma Index 2021. Available: https://www.worldenergy.org/transition-toolkit/world-energy-trilemma-index.





