ELECTRICITY PRICE REVIEW

HIKOHIKO TE UIRA

FINAL REPORT

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New Zealand Government

ELECTRICITY PRICE REVIEW
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Foreword

In April 2018, when we began this review, no member on the advisory panel had any inkling of how challenging and yet satisfying the following 13 months would prove to be. Every member assisting with this review feels privileged to have had the opportunity to examine the sector and, most importantly, develop recommended improvements to address the problems identified.

Early on, we decided to get out into the community and talk to all those with an interest in the sector, especially those often unseen and unheard stakeholders – residential consumers. All our discussions, interviews, meetings and workshops provided fruitful insights. There was also, of course, a wealth of written submissions and other material to evaluate.

We thank all those who took the time and effort to participate in whatever form, especially those who attended our workshops. An especially memorable highlight was our visit to Te Kuiti to meet King Country and Ruapehu stakeholders serviced by distributor The Lines Company. Among them were residents experiencing first-hand the effects of energy hardship. Their plight – and possibly unique set of problems – acted as powerful motivation to come up with practical ways to tackle this most pressing problem. One attendee summed up what all residents wanted – “to turn on the power without worrying themselves sick over the cost. Energy equity is as important as the right to healthcare and education”, she added.

Panel members are indebted to the review’s secretariat from the Ministry of Business, Innovation and Employment (Project lead Melissa Idiens, Gareth Wilson, James Forsberg, and Monica Quinn) and to Concept Consulting (David Hunt, Victoria Coad, Simon Coates and David Weaver). We were especially fortunate in our choice of consultants. We also thank Peter Riordan from THINKWRITE for his enormous contribution in helping write our first report, options paper and this final report. We considered it crucial, given the sector’s complexity, that all readers, not just industry insiders, could understand our reports.

We hope the recommendations of this final report will translate into a fairer and more consumer-focused market, fairer and more affordable prices, and a sector more prepared for the changes ahead. We hope, too, this review has, if only in a small way, helped facilitate greater collaboration and co-operation between industry participants, regulators and consumers. Teamwork is, after all, a key ingredient in running the complex network that supplies New Zealanders with power day in and day out. Never more is this ingredient needed as we stand on the threshold of unprecedented change, much of it driven by technology but also the need to move quickly to a low-carbon economy.

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At a glance

Short-term recommendations (within 3 months)

- A1 Establish an interim consumer advocacy council (and permanent council within 18 months)
- A2 Ensure regulators listen to consumers
- B1 Establish an interim cross-sector energy hardship group (and permanent group within 12 months)
- B7 Prohibit prompt payment discounts but allow reasonable late payment fees
- C5 Prohibit saves and win-backs
- E1 Issue a government policy statement on transmission pricing
- E2 Issue a government policy statement on distribution pricing

Medium-term recommendations (within 12 months)

- B2 Define energy hardship
- B3 Establish a network of community-level support services to help consumers in energy hardship
- B4 Set up a fund to help households in energy hardship become more energy efficient
- B6 Set mandatory minimum standards to protect vulnerable and medically dependent consumers
- B8 Encourage bulk deals for social housing and ⁄or Work and Income clients
- C1 Merge the Electricity Authority and Consumer NZ price comparison websites
- C2 Improve consumer awareness of Powerswitch and Utilities Disputes
- C3 Develop a streamlined way to process customer requests for consumption data
- C4 Make distributors offer retailers standard default terms for network access
- D1 Improve availability of wholesale market information
- D2 Introduce mandatory market-making obligations unless the sector develops an effective incentive-based scheme
- D4 Monitor contract prices and new-generation costs more closely
- E3 Ensure distributors have access to smart meter data on reasonable terms
- G1 Encourage more energy sector innovation
- G2 Examine the security and resilience of electricity supply
- G3 Explore new institutional arrangements for energy policy and regulation

Longer-term recommendations (within 18 months)

- B5 Offer extra financial support for households in energy hardship
- C6 Establish a pilot scheme to help non-switching consumers find better deals
- D3 Make generator-retailers release information about the profitability of their retailing activities
- E4 Give the Commerce Commission more powers to regulate distributors
- F1 Give the Electricity Authority more powers to regulate network access
- F2 Give the Electricity Authority an explicit consumer protection function
- F3 Update the Electricity Authority's compliance framework and strengthen its information-gathering powers
- F4 Phase out low fixed charge tariff regulations
- G4 Improve building energy efficiency

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Overview

Consumers are the heart of the electricity sector. They are the reason it exists. In this review, consumer interests and concerns have received greater weight than probably any review before. What consumers want is certainly reasonable: power that is reliable, affordable, fairly priced and – increasingly – environmentally sustainable. We found electricity to be reliable, affordable for many, not as fairly priced as it could be, and sustainable by world standards.[1]

To take reliability and environmental sustainability first, the sector is performing very well, scoring (along with security of supply) among the top eight of 125 countries.[2] Four-fifths of the sector's power comes from renewable sources.

On affordability, residential prices have risen 48 per cent since 2000 – faster than those in most other OECD countries.[3] On fairness, residential prices have risen more quickly and steeply than industrial and commercial prices.[4] Residential consumers in some places also appear to be paying more than they should compared to business consumers, mainly because of different distribution charges. However, to put this in perspective, residential prices on average ranked 10th lowest among 35 OECD countries in 2017, although residential consumption was the sixth highest.[5] This underscores the fact many homes are not energy efficient. Reducing power bills will therefore be as much about improving housing quality and how electricity is used as lowering prices.

Energy hardship emerged as one of the most pressing problems we uncovered. More than 100,000 households are in this situation. Worryingly, children live in many of these homes. The problem is especially acute in the King Country area serviced by The Lines Company (where we attended a workshop), although other examples are easy to find. Energy hardship will not go away on its own. As one consumer advocate put it, change will begin in earnest when decision-makers see and feel the poverty for themselves. There is no magic bullet, which is why the measures we recommend span so many fronts, from defining and gathering data on energy hardship to providing various types of support and establishing a co-ordinating body, to setting up an energy efficiency fund.

We identified other consumer-related problems. One is that households and small businesses lack sufficient say in the direction of the sector. They are largely unseen and unheard. They also cannot get immediate access to their consumption data. Many plead for more understandable bills that will help them compare plans and switch to retailers offering better deals. We have practical responses here, too, such as a single, beefed-up price comparison website and a pilot scheme to help non-switchers get cheaper electricity.

[1] Please note, unless otherwise stated, all footnotes in this final report reference submissions to our options paper from 18 February 2019.
[2] World Energy Council's, *World Energy Trilemma Index 2018*, pp4-16.
[3] Adjusted for inflation.
[4] Residential prices have risen by an average of 2.2 per cent a year (levelling off after 2015), compared with 1.6 per cent for industrial prices and 0.1 per cent for commercial prices (adjusted for inflation). Three factors have caused this unequal rise in residential prices: 1) distribution charges shifted from businesses to households on some networks; 2) generation and retailing charges (mostly the latter) went up a lot for households; and 3) GST, which only residential consumers ultimately pay, rose from 12.5 per cent to 15 per cent.
[5] Ministry of Business, Innovation and Employment's *OECD data for 2017*.

Another problem is consumers are sharing unequally in the benefits of increased retail competition. Those who shop around get good deals, while those who stay put miss out. The average gap between the cheapest retailer's price and the incumbent retailer's price has risen about 50 per cent since 2002.[6] A further problem for consumers is so-called prompt payment discounts. These can be as high as 26 per cent of the bill and are really late payment penalties. Unsurprisingly, they hit low-income consumers hardest. We recommend these discounts go.

Improvements are needed in other parts of the sector too. The wholesale contract market has faltered – and at exactly the moment when needed most. This makes it essential to introduce mandatory market-making within 12 months. Electrification of the economy will require a new transmission pricing methodology, yet for all the years of debate, a new one still looks a long way off. Outdated pricing structures are also standing in the way of greater efficiency among distributors. We recommend the Government issues a government policy statement to the Electricity Authority to guide its transmission and distribution pricing changes. Other obstacles include the difficulty in accessing metering data and the need for distributors to offer retailers standard terms for network access. The regulatory regime, although generally in good shape, needs improvements, especially since the sector faces technology changes unlike any it has experienced before. One gap is protection of household and small business consumers.

Looking ahead, a low-emissions economy will mean more demand for electricity, more grid-connected wind, hydro and geothermal power, widespread use of electric vehicles, and the emergence of a two-way flow of electricity as consumers install solar panels and sophisticated battery technology. Managed well, these changes, and the country's responses to climate change, should not necessarily lead to big price increases. But avoiding steep increases will require more co-ordinated planning and action among government agencies – not just energy regulators – than has been seen to date.

Our 32 recommendations are practical and designed to work as a package to address the sector's problems and challenges without undermining its well-performing elements. Some can be implemented immediately, others in the near term, and some in the longer term. Cumulatively, we consider these recommendations will result in a market that is fairer, more consumer-focused, more able to provide affordable power to all consumers, more competitive and more prepared for future challenges.

To confirm that our recommendations, if adopted, have had their intended effect, we propose a high-level review in three years. If our recommendations do not result in the intended improvements, more far-reaching measures may be needed, such as options we did not favour.[7]

Looking more broadly at the sector, greater collaboration will be needed if it is to respond effectively to the profound changes ahead. Each group, whether consumers, industry participants, regulators, officials or policy-makers, must play its part. Consumers need a bigger say in this, which is why we propose a council to advocate on their behalf. Competition is an essential ingredient in the sector's efficient functioning, but competition has its limits: retailers

[6] Adjusted for inflation.
[7] See our options paper for these options, which included retail price caps, splitting vertically integrated companies and requiring small distributors to amalgamate.

and distributors must work together in the interests of consumers rather than blame one another for problems. Both must recognise, too, they have social, as well as financial, responsibilities.

The sector's regulators, the Electricity Authority and Commerce Commission, need to get out and talk to participants, especially consumers, who lament the lack of meaningful engagement with either. We concur with those who say regulation should focus more on good outcomes and less on process. And regulators and officials generally need to co-ordinate more in response to government policy changes, especially those aimed at lowering carbon emissions. More than ever, we need fresh thinking and wider horizons. One report provides such an example.[8] Discussing how to regulate new forms of energy and technology, the authors say it must start "with the plug and not the power station". We agree.

Our findings and recommendations are set out in the next section. The findings must be read with care because, as summary points, they are necessarily stripped of the details that give them context. The recommendations are "headlines" only and should be read in conjunction with the relevant sections of the report. Note that some recommendations respond to more than one finding.

[8] Laura Sandys, Dr Jeff Hardy and Professor Richard Green, *Reshaping regulation: powering from the future*, October 2017.

Findings and recommendations

Section A: Strengthening the consumer voice

Our findings:

- Smaller consumers struggle to make their voice heard and influence the sector
- The obstacles are the sector's complexity, consumers' lack of resources, and cultural differences and language barriers
- Consumers feel regulators don't listen to them

Our recommendations:

- Establish a consumer advocacy council
- Ensure regulators listen to consumers

Section B: Reducing energy hardship

Our findings:

- More than 100,000 households cannot afford to heat their homes adequately
- The result is unhealthy and unacceptable living conditions that disproportionately affect children
- The lack of an accepted definition of energy hardship and regularly collected statistics hinders solutions
- Community support services are often too stretched to give adequate attention to energy hardship
- Those in energy hardship lack the means to make their homes more energy efficient, often the most cost-effective way to cut their power bills
- Those in energy hardship typically struggle to find and switch to plans best suited to their consumption and circumstances
- Prompt-payment discounts are confusing and disproportionately hurt those in energy hardship
- The causes of energy hardship extend beyond the electricity sector
- The solutions require joint action by the Government, regulators and the industry

Our recommendations:

- Establish a cross-sector energy hardship group
- Define energy hardship
- Establish a network of community-level support services to help consumers in energy hardship
- Set up a fund to help households in energy hardship become more energy efficient
- Offer extra financial support for households in energy hardship
- Set mandatory minimum standards to protect vulnerable and medically dependent consumers
- Prohibit prompt payment discounts but allow reasonable late payment fees
- Encourage bulk deals for social housing and/or Work and Income clients

Section C: Increasing retail competition

Our findings:

- The five biggest generator-retailers continue to dominate the retail market, with a 90 per cent market share
- The many independent retailers that have entered the sector face barriers to expanding their market share
- A two-tier market is developing between those who switch and enjoy the benefits of competition and those who don't and pay higher prices
- Many consumers are not on the best plan for them, and they also find it hard to compare prices and plans, choose the best one, and make the switch
- A fifth of consumers switch retailer each year, but many have never switched
- Retail competition has grown, mainly in new products, plans and services, but also in better prices for those who shop around
- Consumers who don't or can't easily shop around are paying more than they need to

Our recommendations:

- Merge the Electricity Authority and Consumer NZ price comparison websites
- Improve consumer awareness of Powerswitch and Utilities Disputes
- Develop a streamlined way to process customer requests for consumption data
- Make distributors offer retailers standard terms for network access
- Prohibit saves and win-backs
- Establish a pilot scheme to help non-switching consumers find better deals

Section D: Reinforcing wholesale market competition

Our findings:

- Wholesale prices appear reasonable compared to the cost of building new power stations
- There are gaps in the information needed by the wholesale market to work effectively
- The wholesale contract market isn't working effectively, limiting the ability of independent generators and retailers to manage price risk and undermining confidence in the market

Our recommendations:

- Improve availability of wholesale market information
- Introduce mandatory market-making obligations unless the sector develops an effective incentive-based scheme
- Make generator-retailers release information about the profitability of their retailing activities
- Monitor contract prices and new-generation costs more closely

Section E: Improving transmission and distribution

Our findings:

- Grid operator Transpower and distributors are not making excessive profits
- Delays in agreeing on a fair, efficient and lasting transmission pricing methodology risk undermining market confidence and timely investment
- Distribution pricing does not accurately reflect the cost of distributing electricity at different times of the day and year
- Distribution pricing prevents consumers from benefitting fully from emerging technologies and is slowing the shift to a low-carbon economy
- Distributors cannot access smart metering data on reasonable terms
- Some distributors appear not to be fairly allocating distribution costs between households and businesses
- The Commerce Commission lacks sufficient powers to improve distributors' performance and efficiency

Our recommendations:

- Issue a government policy statement on transmission pricing
- Issue a government policy statement on distribution pricing
- Ensure access to smart meter data on reasonable terms
- Give the Commerce Commission more powers to regulate distributors

Section F: Improving the regulatory system

Our findings:

- The regulatory framework generally works well, with no major gaps or overlaps between regulators to justify significantly changing their roles
- There is a regulatory gap in the protection of household and small business consumers
- Low fixed charge tariffs help only some households in need and push others into greater energy hardship
- Regulators have ambiguous powers regarding control of access to distributors' networks
- The Electricity Authority's information-gathering powers are limited in some areas, hampering its ability to conduct reviews or studies sought by the Minister of Energy and Resources

Our recommendations:

- Give the Electricity Authority more powers to regulate network access
- Give the Electricity Authority an explicit consumer protection function
- Update the Electricity Authority's compliance framework and strengthen its information-gathering powers
- Phase out low fixed charge tariff regulations

Section G: Preparing for a low-carbon future

Our findings:

- New Zealand is well placed for the future, with a high proportion of renewable power and declining carbon emissions from generators
- Electrification of the economy will require significant investment in extra generation
- More energy efficiency, especially in housing, heating and power use by industry, will be vital in switching to a low-carbon economy
- Clear, co-ordinated planning and implementation by the Government, regulators and the industry will be crucial to a clean future

Our recommendations:

- Encourage more energy sector innovation
- Examine the security and resilience of the electricity supply
- Explore new institutional arrangements for energy policy and regulation
- Improve building energy efficiency

Process

Introduction

Our review covered similar ground to the ministerial review in 2009, but we also looked at previously unexplored issues such as the need for electricity prices to be fair and affordable, not just efficient or competitive. This need for fair and affordable prices was a considerable influence on our thinking about how to remedy problems in the sector. Another striking difference of this review was the focus on consumers and their points of view, and whether they have sufficient say about the direction of the sector.

The sector's challenge of meeting demand has not changed since 2009, but new developments have arisen since then, notably technology advances and innovative business models. We therefore focused on the need for the electricity sector to function well during the transition away from carbon-based fuels. If the industry makes full use of the opportunities presented by emerging technologies, there is real potential to limit price rises during the electrification of the economy. The regulatory framework must support the full exploitation of those opportunities too – hence our examination of that framework.

Scope

Our terms of reference required us to consider the entire electricity supply chain, which necessarily included its monopoly elements (transmission and distribution) and its competitive elements (generation and retailing).[9] We also looked at consumer interests, prices, energy hardship, affordability more generally, as well as technology and the regulatory framework.

We were careful not to overstep our terms of reference. We liaised with the Interim Climate Change Committee, which has considered initiatives such as encouraging more use of electric vehicles and solar power, and reforming resource management regulations to ensure enough generation capacity is built to cope with moving the economy away from fossil fuels.[10] We were conscious, too, that suggested changes to the regulation of natural monopoly networks might have a bearing on the gas sector and international airports.[11] Finally, and as required by our terms of reference, we strived to ensure our findings and recommendations were suitably broad at a policy level, although not without meaningful detail.

Process

Our review, spanning more than 13 months, consisted of three stages:

- In the first stage (April to August 2018), we examined the state of the electricity sector. This culminated in a 85-page report containing our preliminary findings. We then sought oral and written comment from the industry and the public, and received more than 100 written submissions.

[9] 2018-19 Electricity Price Review terms of reference, April 2018.
[10] The Interim Climate Change Committee delivered its report on renewable electricity to Government on 30 April 2019. It had not yet been publicly released at the time this report was submitted to the Minister of Energy and Resources.
[11] Which are also regulated under Part 4 of the Commerce Act 1986, as are natural monopoly networks.

- In the second stage (November 2018 to February 2019), we considered feedback from submitters and stakeholders as part of the development of a 37-page options paper setting out possible ways to address problems discussed in the first report. As with the first stage, we sought written and oral feedback, and received more than 140 submissions.
- In the third stage (March to May 2019), we considered feedback on the options paper, held extensive discussions with submitters and stakeholders and produced this final report.

At each stage, we sought feedback from as many stakeholders as practicably possible, ranging from individual consumers to industry participants. We also sought the views of industry organisations, consumer advocacy and budgeting advice agencies and policy makers. We held discussions with the sector's regulators, the Electricity Authority and Commerce Commission, as well as with the Energy Efficiency and Conservation Authority and, as already noted, the Interim Climate Change Committee. Discussions with the Productivity Commission (over its inquiry into transitioning to a low-emissions economy) also produced useful insights. Everywhere, assistance was fully and freely given. Appendix 1 includes the stakeholders and submitters involved in the review.

In seeking feedback, we were interested in views on what was working well, as well as what was not, looming challenges and the suitability of the regulatory environment. We specifically sought consumers' views on the sector, and particularly on the subject of energy hardship. Questions that Consumer NZ helpfully agreed to add to one of its surveys in 2018 gave us further information on consumer views and experiences. For international perspectives, we talked with experts in Australia and the United Kingdom who had taken part in recent electricity reviews. Examination of recent relevant reports and surveys in New Zealand supplemented these discussions.

To establish a solid base of data on the industry, we requested billing data from the nine biggest retailers and received more than 50 million individual bills, subject to privacy and confidentiality provisions. We were pleased that all major retailers – which together supply more than 95 per cent of residential and business consumers with electricity – provided their data. Analysis of this data helped shed light on variations in power bills between socio-economic groups; how prompt payment discounts affect different groups; the extent to which consumers can make savings by switching to cheaper plans; how prices for buying electricity on a pre-pay basis compare with those of standard plans; and how low-fixed charge tariff regulations affect different consumer groups.

We held three workshops before submissions on the options paper closed. At our encouragement, the distributor The Lines Company convened a fourth, which produced a wealth of insights into the difficulties faced by households in energy hardship. The workshops covered the broad topics of consumer interests, the industry, and regulation and preparing for a low-carbon future. We invited a wide range of submitters and stakeholders to the workshops so we could get a variety of perspectives. Panel members found the workshops very useful in identifying which of the options we explored in stage two should be developed further to provide the best solutions to the problems identified in our first report.

Assessment

We designed our recommendations to work as an interconnected package. Our focus was on solving problems in a pragmatic way, and to that end we have considered each against the following measures:

- *Effectiveness:* How effective is each in achieving electricity prices that are efficient, fair and affordable, while also helping ensure security of supply and environmental sustainability?
- *Ease of implementation:* How practical is each to implement, given the complexity of the electricity sector?
- *Cost:* What is the likely cost of implementing each recommendation and what is the best way to allocate that cost?
- *Implementation time:* How quickly can each recommendation be put into effect? And if not reasonably quickly, is there an interim solution pending legislative or regulatory changes?
- *Stakeholder backing:* How much do stakeholders support each recommendation, knowing that consumer and industry-led initiatives are often more likely to succeed than imposed solutions?

Appendix 2 lists each recommendation, the lead agency, the method of implementation and when it can be put into effect. Implementation timeframes begin from the point the Government decides to accept a recommendation.

Structure

The report has seven main sections, in addition to the following Observations section. They are:

- A: Strengthening the consumer voice
- B: Reducing energy hardship
- C: Increasing retail competition
- D: Reinforcing wholesale market competition
- E: Improving transmission and distribution
- F: Improving the regulatory system
- G: Preparing for a low-carbon future.

Each section has brief introductory context, our recommendations, their rationale, any differences (and why) from the options paper versions, relevant feedback, how they may best be implemented, and timing.

Observations

Working alongside such a range of people over the past 13 months, whether in one-on-one interviews, small groups, formal meetings or larger workshops, has been a genuine privilege. In that time, we have learned a great deal about the workings of the sector, but we have also observed four broader themes in action that warrant comment.

Co-operation

The first is retailers and distributors could do considerably more to work co-operatively in their customers' interests. At times of crisis, such as a power outage, or when their interests closely align, the industry is more than capable of joint action. At other times, however, one group blames the other for its problems. The result is that it takes an inordinate amount of time to clear away relatively straightforward roadblocks to progress. Accessing smart meter data on reasonable, standard terms is a good example. Making it simple and easy for consumers to get hold of their usage data is another. The debates and discussions go on, and still the consumer waits. Granted, industry participants are often competing with one another for business, and this is healthy and right, but there a range of matters where they can sensibly co-operate for the sake of the consumer (without raising potential competition law issues). A lack of collaboration risks eroding trust and confidence in the sector, and the latest evidence suggests this is already happening.

We are pleased to notice increasing co-operation between the two industry associations, the Electricity Retailers' Association of New Zealand (which represents mostly large retailers) and the Electricity Networks Association (which represents distributors), as evidenced by their recent joint initiatives and submission on our options paper. However, more needs to be done. We urge the two associations to take a lead on this. On a related point, we encourage the retailers' association and small retailers to work together to ensure a combined view on matters – especially those in customers' interests – where appropriate. Any reference in this report to the need to work with the association, or to take into account its views, should be read as including representatives of small retailers.

One practical improvement would be to devise processes that enable disputes between retailers and distributors to be resolved more quickly and cost-effectively than their current track record. With changes afoot on so many fronts in the sector, it would be a real missed opportunity if these two groups could not work together more collaboratively. Their customers should expect no less.

Social responsibility

Institutions and big businesses worldwide are grappling with a loss of consumer trust, as one study or survey after another confirms, including the well-known Acumen Edelman Trust Barometer.[12] A recent Consumer NZ survey found only two-thirds of respondents believed they could trust their retailer,[13] yet the public increasingly expects companies to exhibit social as

[12] Its 2019 results showed the world was "seeing the largest ever trust gap between the informed public (65 per cent) and mass population (49 per cent)" [and] New Zealand is in line with these global results, with an 11-point gap".
[13] Consumer NZ, *Energy providers survey 2018*. Sixty-eight per cent of respondents said they could trust their retailer, while 26 per cent were neutral and 18 per cent disagreed.

well as financial responsibilities.[14] In this context, we note the recent announcement by Genesis that it intends selling up to $18.4 million of customer debt.[15] Plainly, companies must manage their customer debt, but characterising the sale of customer debt as a "great opportunity to make significant profit" is a concern, especially when much of the debt will be collected from households in energy hardship. We question whether this comment displays the social responsibility that society expects today of corporations and institutions. It would be a worrying trend indeed if customer debt was viewed simply as an opportunity to make money, rather than an opportunity to pause and reflect on its causes.

We encourage all industry participants to work hard to fulfil their social, as well as financial, responsibilities. Failing to do so can jeopardise consumer trust which is an invaluable asset that is so hard to win and yet so easy to lose.

Engagement

The third observation concerns the sector's regulators. A frequent complaint we heard from consumers was that neither the Commerce Commission nor the Electricity Authority – but particularly the latter – listened to, or took account of, their views. Consumers need to see regulators making a concerted effort to understand their points of view. Nothing beats meeting people in person. It was disappointing, therefore, that neither regulator attended the stakeholder meeting in Te Kuiti convened by The Lines Company at our request. Both would have benefited from hearing residents' stories, as well as understanding their expectations of regulators – the chief of which is that they focus on consumers' long-term interests. Consumers and consumer advocates particularly single out the Electricity Authority for largely favouring short-term economic efficiency over long-term consumer benefits. One of our recommendations (A2) is that both regulators review and publish their engagement processes.

Consumers are not alone in lamenting the lack of meaningful engagement. Small retailers and distributors are also unhappy on this score. Larger retailers are less concerned, and major users less so again, but this should not be read in too positive a light because small retailers regard the Electricity Authority as tending to favour the views of these two groups in its decision-making. Perhaps it is only a matter of perception, but perceptions are reality for those who hold them. No doubt some of the Authority's decisions have coloured their unfavourable view, particularly in the slow and costly transmission pricing controversy. But even allowing for that, the strength and extent of these views lead us to urge the Electricity Authority to step up its engagement efforts because it is vital all participants feel their views have been heard and taken into account. We shared these observations with the Authority's board and senior management, who, pleasingly, said steps were already under way to improve stakeholder engagement, although they appreciated more remained to be done.

Sector participants were more positive about the Commerce Commission's engagement, although some, especially distributors, expressed concern at the Commission's slowness in resetting regulations when it became necessary. A commonly cited example was reform of price-quality regulations, which they said was in urgent need of an overhaul to make it more consumer-focused, like overseas models (see recommendation E4), and also the lack of

[14] First report, pg15.
[15] Genesis, *Request for Quotes: GE-CT19-049 Debt Purchase,* 6 May 2019; and NZ Herald article, "*Genesis seeks buyer for $18 million of customer debt*", 7 May 2019.

sufficient guidance on aspects of Part 4 of the Commerce Act 1986. We encourage the Commission to respond more promptly so regulatory settings keep abreast of the fast-paced change upon us. The Commerce Commission has advised us it is aware of this point, and also the need for improved consumer engagement.

Co-ordination

Technology advances promise to dramatically affect the sector. The changes will vary from stakeholder to stakeholder. Some will find them beneficial, others disruptive. Their course may be predictable or uncertain. A complicating factor will be the push towards a low-carbon economy. In the face of all this, many stakeholders emphasised the need for more co-ordination in the sector, including by industry participants, regulators and community agencies. They also urged the Government to encourage officials and regulators to be more aware of, and responsive to, government policy and regulatory changes aimed at smoothing the transition to a low-emissions economy.

Our options paper suggested forums such as the Council of Energy Regulators were a good way to achieve this, and we still hold that view.[16] However, many of the challenges this group is grappling with have links well beyond the electricity sector. Solutions will require more "joined-up" thinking, clearer communication and more co-ordinated action among a range of agencies, not just energy regulators – a point many stakeholders emphasised to us. The work of the Interim Climate Change Committee and Productivity Commission (over the latter's inquiry into a low-emissions economy) will obviously shape a good deal of this "joined-up" thinking and action.

[16] The Council was established in 2017 to promote communication and coordination between government agencies that regulate or advise on matters relevant to the industry and consumers – the Electricity Authority, Gas Industry Company, Commerce Commission and Ministry of Business, Innovation and Employment. Its work has dealt with greenhouse gas emissions, energy efficiency, energy hardship, health and safety, disaster resilience and resource management.

Section A: Strengthening the consumer voice

Introduction

Consumers, particularly households and small businesses, struggle to make their voices heard and exert influence over decisions affecting them in the electricity sector. They struggle because:

- the complexity of the sector makes it difficult for them to understand and express their views about things affecting their electricity supply and power bills
- they lack the considerable time and resources needed to get involved in decision-making processes, the outcomes of which are largely made on their behalf by industry participants, regulators and the Government[17]
- cultural differences and language barriers stand in the way.

Reflecting the extensive engagement we undertook with consumers and community organisations, our first report featured personal stories illustrating the difficulties some households faced in trying to heat their homes and pay their power bills.[18] They included grandparents quietly struggling with an unexpectedly large power bill; a solo mum unable to get reconnected; a working family feeling the squeeze as other bills piled up; and a young professional couple confused by retail plans and energy efficiency options.

These stories also highlighted the practical difficulties preventing such consumers from having an effective voice in the electricity sector. Such a voice would be able to press for power that was reliable, affordable and fairly priced, and increasingly, environmentally sustainable. Strengthening the voice of small consumers will not, on its own, solve all the problems we have identified, but it will highlight the problems small consumers face so the Government and the industry are in a better position to address them.

Industry participants and regulators are already working directly with consumers and consumer advocacy groups. These efforts are commendable, but much remains to be done to ensure consumers' voices are heard around industry board tables, in regulatory forums and among government agencies. As a result, we make two recommendations.

Recommendations

A1: Establish a consumer advocacy council

The Government should set up a council to advocate on behalf of residential and small business electricity consumers. This council would operate independently of industry participants, regulators and the Government.[19]

[17] First report, Figure 3: Influencing key decisions in the sector, pg16.
[18] First report, pg14.
[19] In this context, independent means demonstrably free of conflicts and having no commercial interest in the outcome of the council's work.

The council should:

- establish its own work programme within a charter set by the Minister of Energy and Resources
- work with the Electricity Authority, Commerce Commission, Utilities Disputes, other government agencies and industry participants on any matters affecting electricity consumers
- work with other consumer groups, particularly those advocating on behalf of medium to large businesses, major users and vulnerable consumers
- commission specialist research and analysis to support its activities (such as making formal submissions on behalf of consumers, hosting or participating in workshops, and regularly meeting regulators, other agencies and industry participants)
- complement, rather than replace, consumer representation on existing advisory groups and consumer panels.

The council should have up to seven members (including the chair) who should:

- be appointed by the Minister of Energy and Resources
- come from a wide range of consumer backgrounds, reflecting the cultural, ethnic and geographical diversity of New Zealand
- collectively have knowledge of the range of electricity consumer issues affecting households and small businesses
- understand the needs of those in energy hardship (although a cross-sector group (see recommendation B1) would take the lead in this area)
- have credentials in consumer advocacy or related skills, along with some industry expertise so the council can understand technical matters affecting consumers
- be appropriately paid for their role as council members.

A small executive should support the council.

We suggest the council's priority tasks could include:

- advising the Electricity Authority on possible improvements to the merged price comparison website (C1)
- working with the industry, Utilities Disputes and the Electricity Authority to agree on what information should go on power bills and websites to help consumers switch retailer or resolve billing disputes (C2)
- providing analysis and advice on co-ordinating the phasing out of low fixed charge tariff regulations with reforms to distribution tariffs and the transition to a low-carbon future (E2 and F4)
- considering electricity industry reports and research on how the distribution costs for shared network assets are allocated between residential and business customers (E2).

We consider such a council is fundamental to strengthening the consumer voice and consumers' trust in the sector. This is especially important with the advent of new technologies, innovative business models and the transition to a low-carbon future, which will have a significant impact on the sector, making it vital consumers have more say in the shape of that change.[20]

The council should advocate on behalf of residential and small business consumers, who are largely unseen and unheard in the electricity sector. Big industrial users already have their own well-funded advocacy body, the Major Electricity Users' Group. Mid-size consumers have organisations such as BusinessNZ, particularly its specialist division BusinessNZ Energy Council (although we note this also includes electricity regulators, retailers and network companies, which may mean the consumer voice is diluted).[21] The consumer advocacy council should liaise with these and other consumer groups about particular issues affecting all consumers big and small.

Submitters were almost unanimous in their support for such a council, citing Energy Consumer Australia as a good example of what could be achieved. Many stressed the need for the council to be independent of the Government, the industry and regulators. Many felt regulators gave inadequate weight to the perspective of small consumers and said the Electricity Authority and Commerce Commission were not consumer-friendly. They also said the council must receive the necessary resources to be effective in its work of targeted research, active engagement with consumers, meaningful contributions to regulatory and policy discussions, and forceful advocacy on behalf of consumers. As one stakeholder said: "It must have a very loud bark."

We consider the Government should give the council a statutory basis to ensure greater status and durability. This should be done by amending the Electricity Industry Act 2010 to establish the council in statute[22] and to provide for funding from industry participants.[23] Some submitters said industry-funded initiatives such as this had the potential to push up prices to consumers. However, suitable controls will minimise this possibility. We would trust, too, that industry participants would recognise their social responsibility to help support the many, many consumers who contribute to their revenues. We suggest funding of between $1.5 million and $2.5 million a year may be sufficient.[24] This is a tiny fraction of annual electricity sales – more than $6.5 billion in 2018 – but will benefit consumers, the industry and regulators.[25]

We consider the council's establishment a matter of high priority. We therefore recommend setting up an interim council, funded jointly by industry and the Government, while the

[20] This will respond to the International Energy Agency's recommendation that the Government strengthen consumer participation and representation. See International Energy Agency Publication, *Energy Policies of IEA Countries: New Zealand 2017 Review*, France 2017, pg107.
[21] See BusinessNZ Energy Council membership webpage https://www.bec.org.nz/members/our-members
[22] It may be necessary to define small business consumers as part of establishing the council's remit. Section 113 of the Electricity Act 2010 provides guidance: a small business is a non-domestic consumer that consumes less than 40MWh per year. We suggest this definition be reviewed to provide more flexibility, particularly to accommodate changing electricity needs with the advent of increasing distributed generation and electrification of the economy.
[23] In the longer term, the Government could also consider extending the council's mandate to other utilities, such as gas and telecommunications, if it proved successful and if a stronger consumer voice were needed in those sectors. In that case, industry participants in those sectors could help fund its operation.
[24] By comparison, Energy Consumers Australia received income (mainly from industry levies) of $6.8 million in 2017 and $9.6 million in 2018. See *Energy Consumers Australia annual financial statements for the period 1 July 2017 to 30 June 2018*.
[25] Ministry of Business, Innovation and Employment's *Electricity sales data for year ending March 2018*. Figure excludes GST, and does not account for the impact of electricity hedge contracts on participants' electricity expenditure.

necessary legislation is enacted. The interim council could play a leading role in advising the Minister of Energy and Resources on the form, membership, charter, initial work programme and funding needs of the statutory council. Pleasingly, the industry is willing to help fund an interim council so it can be quickly established. We suggest funding of about $1 million may be sufficient for its first year.

We recommend the Minister appoints a chair-designate for the interim council and approves forming a group (made up of representatives from Consumer NZ and the Ministry of Business, Innovation and Employment's energy team) to work with the industry and consumers to establish the interim council, secure initial funding, and develop the interim council's charter and initial work programme. This interim council should have an independent chair because, unlike the statutory council, it will not have the protections that come from being enshrined in legislation, and because the Government and the industry will directly fund it. This interim council should be set up within three months.

A2: Ensure regulators listen to consumers

The Government should encourage the Electricity Authority and Commerce Commission to review, document and publish their consultation and stakeholder engagement processes. Both regulators should ensure they understand and take into account consumers' views and needs when making policy decisions or when making or amending market rules that could affect electricity prices. This should include seeking input from representatives of all types of potentially affected consumers. The Government should set out clear expectations to both regulators for this review and for reporting back on what steps they have taken.

This recommendation will help ensure regulators fully understand consumers' interests when making decisions or market rules that will affect them. It will also respond to the commonly expressed view of consumers that neither regulator (but particularly the Electricity Authority) listens to their views or pays sufficient attention to their needs. As discussed earlier (see Observations), whether this view is true or not is beside the point, for it simply highlights the need for the regulators to strengthen their engagement with consumers.

Our options paper proposed giving regulators an explicit statutory responsibility to consult electricity consumers. However, we consider the combination of the advocacy council and this non-statutory approach will protect consumers' interests – a position supported by many submitters. We accept the point made in submissions by several consumer advocates that it is not enough merely to listen to consumers' views – showing how those views are weighed in reaching decisions is the vital second part of the process. We are confident properly documented consultation and stakeholder engagement processes will ensure this happens.

Section B: Reducing energy hardship

Introduction

More than 100,000 households are spending more than 10 per cent of their income on power.[26] By many definitions, that puts them in energy hardship. The signs of hardship are not difficult to find: cold, unhealthy homes, poorer health for occupants, scrimping on other essentials, and a greater likelihood of disconnection for non-payment of power bills. Worryingly, children are over-represented in households experiencing energy hardship.

The causes include low household income, high energy needs, low awareness of tariff and payment options, inferior housing, and poor-quality heating and insulation. The solutions, like the causes, are to be found both within and beyond the electricity sector. Many of those in energy hardship receive some form of help, but it is neither enough nor sufficiently integrated.

Our eight energy hardship recommendations will, among other things, produce a clearer picture of the size of the problem, ensure greater co-ordination of initiatives, expand existing community-based assistance, increase financial help to those in energy hardship, boost energy efficiency in the homes of those in hardship, end a so-called prompt payment discount that hurts low-income households, and give those in social housing or on welfare assistance better electricity deals.

Some recommendations will result in immediate benefits and should be prioritised. Others need more analysis to get a clearer picture of their costs, benefits and how best to align them with other government measures to tackle poverty. What must be stressed is there is no magic bullet to solve energy hardship.

Many of our recommendations are best developed together, which is why we propose a cross-sector group to co-ordinate energy hardship measures. It may even be time to establish a poverty commission to bring together all the strands of work on energy, financial and housing hardship. Such a step would be a matter of government policy and is beyond the scope of this review.

Recommendations

B1: Establish a cross-sector energy hardship group

The Government should form a cross-sector group to ensure, as much as possible, that energy hardship initiatives, whether commissioned or overseen by the group or by other agencies, are well-considered, carefully co-ordinated and properly implemented.

The group should bring together decision-makers from key government agencies, community organisations, consumer advocates, industry participants and regulators to develop and co-ordinate cohesive, cost-effective energy hardship initiatives. This could range from providing advice on high-level policy and strategy, through to the detailed design and implementation of initiatives. The United Kingdom's Committee on Fuel Poverty and other organisations in

[26] Statistics New Zealand, *Investigating different measures of energy hardship in New Zealand*, 1 September 2017.

Europe provide possible models.[27]

The Government should decide the group's membership and form. Members are likely to include: the Ministry of Business, Innovation and Employment; the Ministry of Health; the Ministry of Social Development; the Ministry of Housing and Urban Development; and community groups such as FinCap, the Community Energy Network and the Salvation Army. Electricity regulators and sector representatives, such as the Electricity Networks Assocation and Electricity Retailers' Association of New Zealand, could provide industry expertise.

We think it is important to keep the group small. Clearly it will liaise with other agencies and the consumer advocacy council, and can co-opt other experts when needed. With so many children affected by energy hardship, Oranga Tamariki and the Child Poverty Unit (which sits within the Department of the Prime Minister and Cabinet) will be able to offer valuable expertise. A strong chair and a small full-time secretariat would help the group, as one stakeholder at a workshop in Te Kuiti put it, "get traction".

The Government should provide operational funding to cover executive support and payment for those members not otherwise remunerated for their involvement in the group.[28] Consumer advocates and community support organisations are already stretched, so money should not be a barrier to their participation, especially since it is so important this group's membership includes organisations working at the problem's coal face.

We also recommend Government fund most initiatives (particularly if improved health is a principal outcome), but we suggest it leave the group to decide the funding of initiatives case-by-case. Some initiatives might suit contributions from the industry, such as our recommendation to improve household energy efficiency (B4).

We consider it vital to establish such a group because the causes of energy hardship extend beyond the electricity sector, making it a problem the Government, regulators and the industry must tackle together in a co-ordinated way. That co-ordination does not currently exist.

Many submitters supported a cross-sector group, noting the benefits of focus, co-ordination and combined expertise. The Sustainability Trust applauded this broader approach to energy hardship, rather than the "piecemeal and unlinked interventions such as EECA's Warmer Kiwi Homes, [the Ministry of Health's] Healthy Homes Initiative, the Winter Energy Payment and many other national and local initiatives".[29]

Several submittters emphasised the need to avoid duplicating existing groups' work. We agree. The group should undertake a high-level stocktake of initiatives to find out what is working well and whether there are gaps or overlaps. The stocktake must be concise, targeted and completed within three months. This is a high-priority task that needs to be completed to proceed with other recommendations, such as providing help through a nationwide community network (B3). A number of submissions supported a stocktake.

[27] The United Kingdom's Committee on Fuel Poverty is a government-appointed non-departmental public body whose role is to "advise on the effectiveness of policies aimed at reducing fuel poverty, and encourage greater co-ordination across the organisations working to reduce fuel poverty". See https://www.gov.uk/government/organisations/committee-on-fuel-poverty
[28] We expect those members of the group drawn from government and the industry would be remunerated by their own organisations, consistent with government and industry commitment to addressing energy hardship.
[29] The Sustainability Trust, pg1.

Many stressed the need for good resourcing, but differed on funding (solely from the Government or with an industry contribution) and initiatives the group might undertake. Some were concerned electricity prices might rise if funding came from an industry levy.

Establishing this crucial body will take time, so we suggest the Minister of Energy and Resources sets up an interim energy hardship working group, led by an independent chair and funded by the Government and the industry. It could, as Trustpower proposed, draw its members from existing working groups looking at energy harship.[30] As with the permanent cross-sector group, members from outside government or industry organisations should be paid for their time. An interim body, aside from advising and assisting the Government on the set-up of the permanent group, could make a start on priority activities, including:

- conducting the stocktake and advising the Ministry of Business, Innovation and Employment of the results
- helping the Ministry develop regulations for mandatory minimum standards to protect vulnerable and medically dependent consumers (B6)
- liaising with the consumer advocacy council when the council's work relates to energy hardship or vulnerable consumers generally
- giving government agencies advice, if requested, on implementing our other energy hardship recommendations.

This interim working group should be set up within three months. It will need a small full-time secretariat to work on these priority activities until the permanent group is estalished.

B2: Define energy hardship

The Ministry of Business, Innovation and Employment should develop a clear and generally accepted definition of energy hardship, and determine what statistics should be gathered to monitor changes in energy hardship levels. In doing so, it should:

- work with Statistics NZ and other agencies
- draw on relevant reports and research
- consult New Zealand and overseas experts on energy hardship
- liaise with the cross-sector energy hardship group.

The definition should:

- align with the thresholds Statistics NZ uses to measure child poverty, particularly the material hardship measure
- align with, and feed into, the Government's wellbeing budget framework
- include a set of indicators (such as income, housing quality and age of occupants) that contribute to energy hardship and that are recorded and monitored, along with other important statistics such as disconnections for non-payment and self-disconnections by those on pre-payment meters.

[30] Trustpower, pg4.

New Zealand has no accepted definition of energy hardship. Without one, and regular monitoring, it is difficult to establish the scale of the problem or the success or otherwise of various policies targeting the problem. It would also be difficult to implement some of our other recommendations (such as more financial help and community-level support for those in energy hardship) without a definition.

Submitters were almost unanimous in supporting this measure, although we know from discussions with stakeholders that they differed on how broadly to define energy hardship. Some argued for a narrow definition to ensure help went to those in greatest need, while others pushed for a wider definition because electricity was an essential service no household should go without. Some said the definition should be graduated to avoid a single cut-off point between those deemed in hardship and those not.[31]

It should be possible to develop a definition quickly, preferably within six months. Several submissions pointed to a PwC report as a basis for a definition.[32] Others offered help with data and/or research.[33] We know Statistics NZ and New Zealand researchers have also published reports on defining and measuring energy hardship. International research is extensive.

B3: Establish a network of community-level support services to help consumers in energy hardship

The Government should progressively link and expand existing support services to establish a nationwide network of organisations offering credible, independent, electricity-specific advice and support services to those in energy hardship. This network would reach areas of New Zealand not currently serviced by any support services and would also reach people unaware help is available. It should be well funded and have governance arrangements that ensure services reach those who need them in a cost-effective manner. Its services should include:

- *Switching and plans*: Trained and trusted advisors would assess the circumstances of those in hardship (such as electricity needs, metering and payment arrangements), identify the best retailer and plan for them, and help them make the switch. This would be the most tangible way to help the many consumers in energy hardship who don't know how to choose the best deal and switch.[34]
- *Energy use*: Trained energy coaches would give households specialist advice on how to make their home warmer and more energy efficient. This could include behavioural changes to improve energy efficiency that are easier to understand and adopt if explained in person. Other help could include assistance getting better insulation, curtains and heaters, as well as electricity use monitors and thermostats.
- *Enhanced skills*: Community groups and advisors would have access to specialist training programmes and educational material to deepen their knowledge of energy hardship and how to deal with it in their communities. This could include information on smart energy use, maintaining healthy homes and where to get more help.

[31] For example, Ian McChesney, pg3.
[32] PwC's *Definition of energy vulnerability in New Zealand*, attached to Electricity Retailers' Association of New Zealand submission to our First report, pg2.
[33] For example, the Electricity Authority, pg4; He Kainga Oranga, pg3; and Ian McChesney, pg2.
[34] This could be extended to a "social broking" service that targeted particular communities in energy hardship for group switching deals tailored to their needs. It could also be widened to make the trained switching advisors available to help any consumers with technology, language or cultural difficulties (not just those in energy hardship).

Building on existing community organisations to create a centrally co-ordinated, better resourced and nationwide network would:

- be a timely, cost-effective way to provide help
- be preferable to making individual retailers run their own hardship programmes
- give community advisors the technical expertise to help with power bills (a matter usually relegated behind food, housing and clothing because of stretched resources)
- reach more people struggling with their power bills but not asking for help
- reach people in hardship who are unaware help is available
- make the most of the trusted relationships those in hardship may have with people in their own community, such as their marae, school, ethnic association or church group
- be consistent with the Whānau Ora approach of a "navigator" providing wrap-around services tailored to each household's needs
- reach people in areas not covered by existing support services
- lower energy costs and improve living standards for households in energy hardship.

Consumers could contact organisations in this network:

- directly (contact details would be widely available, including through an improved Powerswitch website)
- through their retailer
- by referral from agencies such as budget advisors, social agencies and health providers.

Support for this measure was widespread, although views differed on its funding. In our view, operational funding should come mainly from the Government because of the improvements in health and reduced child poverty, although there may be merit in the electricity industry also contributing because some of the causes of energy hardship originate in the sector.

Operational funding would not cover the cost of buying materials that households might need to act on the advice they receive (such as energy efficient lights and heating). Rather, it would be for providing contracted services. A separate recommendation (B4) deals with establishing a fund for eligible households to draw on in such circumstances.

Operational funding for a nationwide network may well be significant, but to put matters in perspective, the Crown received $1.6 billion in company tax, dividends and GST from the electricity sector in the 12 months to June 2017.[35] To redirect a modest portion of that yearly revenue would go a long way towards helping fund the network. And if the network is successful in reducing energy hardship, the commitment entailed in another recommendation (increasing financial support to those in hardship) will be lower.

We envisage the Government would contract for the delivery of services, with regular monitoring and reporting to ensure services were cost-effective, reached the desired audience and delivered the expected benefits. The Salvation Army said a contracting model could work,

[35] First report, pg9.

but described government contracting processes as “extremely onerous, stuck in silos, and not funded well, given [its clients’] high needs”.[36] One possible delivery model is FinCap, the budgeting and financial advice service supported by the Ministry of Social Development. Another is the Ministry of Health’s Healthy Home Initiatives, which fund some district health boards to help eligible families make their homes warmer and drier. We leave it to the Government to decide on how best to do this, drawing on the expertise of the cross-sector group.

We foresee the network expanding over six to 18 months, building on existing initiatives and using pilot programmes to test new arrangements. The results of the cross-sector group’s stocktake will help determine the best way to build a nationwide network, including by expanding those initiatives it finds are working well.

Lastly, we commend the industry for its recently launched EnergyMate pilot programme, which helps struggling families make sure they are on the right plan and also offers advice on how to make their homes warmer and more energy efficient. Supported by electricity retailers, distributors, the Government and community organisations, it is a good example of the type of service needed throughout the country.

B4: Set up a fund to help households in energy hardship become more energy efficient

The Government should establish a fund within six months so eligible households can buy items recommended by community-level advisors to improve the energy efficiency of their homes. LED lighting, hot water cylinder wraps, insulation and efficient heating are obvious examples, but any technology that cuts electricity costs in the home would qualify. The fund could also support energy efficiency pilot programmes benefitting hard-to-reach households in energy hardship.

Improving energy efficiency is often the most cost-effective way to lower consumption and cut power bills. Almost all households have room to improve their energy efficiency, but the barriers to doing so are particularly high for households in energy hardship because they lack the funds to invest now to save money in the future. An example is LED bulbs, which cost more to buy than an incandescent bulb but last longer, use 85 per cent less electricity and can save householders about $75 over the life of the bulb.[37] Also, many of these households live in private rental accommodation, and property owners will sometimes not agree to, or pay for, such improvements.

Setting up a fund attracted broad support from submitters. Consumer advocate Molly Melhuish said improving a household’s energy efficiency was simply beyond the reach of households in energy hardship, making it vital to have such a fund.[38] Ecobulb drew attention to several Australian state government programmes that focused on improving the energy efficiency of residential lighting.[39] The Salvation Army suggested extra help for more vulnerable whānau in navigating the funding application process. It also suggested that those households receiving

[36] Salvation Army, pg3.
[37] Energy Efficiency and Conservation Authority’s media release, *“Big benefits from reducing peak energy use”,* March 2018; and Concept Consulting Group Ltd, *What is the case for electricity efficiency initiatives?*, November 2017.
[38] Molly Melhuish, pg2.
[39] Ecobulb, pg2.

but not needing the Winter Energy Payment could donate the money to help those in energy hardship.[40]

The fund could be part of, or an adjunct to, the Warmer Kiwi Homes fund, which pays for retrospective fitting of insulation for eligible householders and is administered by the Energy Efficiency and Conservation Authority. We leave this to the Government to decide, drawing on the expertise of the cross-sector group and the Authority. We suggest energy trusts, charities and businesses are invited to contribute to the fund. In doing so, they could pass on surpluses or demonstrate corporate social responsibility. Earnings for the four largest generator-retailers ranged from $360 million to $666 million in 2018.[41] Donating even a fraction of that total could make a profound difference to the lives of many households.

B5: Offer extra financial support for households in energy hardship

The Government should give eligible households extra help with their power bills, supplementing any existing assistance, such as through Working for Families, the Community Services Card, the Winter Energy Payment and emergency assistance grants. This is a longer-term initiative.

The extent of this extra help will depend on:

- who is defined to be in energy hardship
- how many households that turns out to involve
- how effective other measures to tackle energy hardship, and poverty generally, prove to be.

Extra support could be a general income supplement or a direct rebate based on consumers' bills (modelled on the rates rebate scheme for residential ratepayers).[42] At present, more than 1 million people are entitled to the Winter Energy Payment, which cost the Government about $470 million in 2018-19.[43]

In our view, low income is one of the main causes of energy hardship, making it vital those in genuine need receive more financial help, or better targeted help. The Winter Energy Payment helps many households, but a lot of recipients still struggle to pay their power bills, especially low-income households with very high energy needs. In addition, many households in energy hardship don't receive the payment. The decision on how much help to provide and in what form is, however, ultimately one for the Government to make.

A wide spectrum of submitters supported extra financial assistance, ranging from consumers and consumer advocates to retailers and distributors. Among them was Grey Power, which said it should be made easy for those in need to access support because "many superannuitants will not ask for assistance but will suffer in silence".[44] There was also strong

[40] Salvation Army, pg4.
[41] Meridian, Contact, Mercury, and Genesis's annual reports for 2017-18 financial year (EBITDAF results: before interest, tax, depreciation and amortisation and before making any adjustments for fair value movements, realisations and impairments).
[42] A government-funded, local council-administered subsidy for low-income homeowners to cover the cost of their rates bills.
[43] Treasury and Ministry of Social Development Report, *Families Package: Winter Energy Payment – Detailed Design*, 10 November 2017, pp2-9.
[44] Grey Power, pg2.

backing for the Government to provide such support because it was, in essence, a form of income assistance and should not be subsidised by other electricity consumers.

Many submitters argued strongly for tying the level of support to households' energy needs. The Sustainability Trust said the Winter Energy Payment should be redirected from all recipients to those actually in need.[45] Mercury said it had analysed just such a step and found that redirecting the Winter Energy Payment to the estimated 100,000 households in hardship "would completely fund the annual electricity bills for those consumers as well as enabling the purchase of more energy efficient appliances for those households".[46] Consumer advocates in The Lines Company's area said it was important to base extra funding on income.

Some submitters wanted assistance credited directly to consumers' account with their retailer.[47] This has merit if it avoids disconnection and debt repayment costs. We expect this can be implemented relatively easily, given some retailers have expressed a willingness to work with government agencies to develop a universal payment process.

Providing extra assistance needs to be co-ordinated with:

- the recommendations from the report by the Welfare Expert Advisory Group[48]
- reforms to electricity distribution prices and the phasing out of low fixed charge tariff regulations, two more of our recommendations (E2 and F4)
- the Government's response to the impact of climate change policy settings.[49]

This co-ordination will help alleviate any possible price rises for those in energy hardship. We also suggest the Government seeks advice from the cross-sector group to implement any decision to give extra financial support to households in energy hardship.

B6: Set mandatory minimum standards to protect vulnerable and medically dependent consumers

The Government should set mandatory minimum standards that distributors, retailers and others must meet when providing electricity or electricity-related services to vulnerable and medically dependent consumers.[50] The Electricity Authority should monitor and enforce the standards, which should include:

- defining who are vulnerable or medically dependent consumers
- how service providers establish whether existing or intending customers are vulnerable or medically dependent[51]
- the advice such customers receive
- payment and metering options (including cash, "smooth pay" options and pre-pay)[52]

[45] The Sustainability Trust, pg3.
[46] Mercury, pg4.
[47] For example, Mercury, pg5; and Energyclubnz, pg1-2.
[48] Report of the Welfare Expert Advisory Group report, *Whakamana Tangata - Restoring dignity to social security in New Zealand*, 28 February 2019.
[49] The Interim Climate Change Committee delivered its report on renewable electricity to Government on 30 April 2019. It had not yet been publicly released at the time this report was submitted to the Minister of Energy and Resources.
[50] As provided for under Electricity Industry Act 2010, sec.113 (2)(d).
[51] Establishing a centralised registry of medically dependent customers would help with this.
[52] Many vulnerable consumers do not have a bank account or need to pay in cash. Smooth pay options level out power bills

- pre-pay service standards
- how to deal with such consumers when they fall behind with payments
- controls and procedures for disconnecting and reconnecting their power
- the involvement of advocates and agencies, such as budget advisors and Work and Income
- monitoring and enforcement arrangements.

We consider the current voluntary arrangements do not provide vulnerable and medically dependent consumers with sufficient protection and should be replaced by a formal, consistent and enforceable set of standards. Formal protection will become even more important as innovation in business models and technology leads to the emergence of new providers that may not give high priority to voluntary standards.

Consumer advocates, retailers and distributors supported a compulsory regime. The Electricity Authority, like the Major Electricity Users' Group, thought it should be a last resort. The Authority said more monitoring would be sufficient, but, as already stated, we consider this group of consumers needs the protection of formal rules. A good starting point for developing new standards would be the Electricity Authority's guidelines and retailers' benchmarks for managing customers in arrears.[53] There would also be merit in looking at relevant aspects of voluntary consumer protection arrangements and conventions here and in Australia, including, as some submitters suggested, Australia's new Payment Difficulty Framework.[54]

Stakeholders frequently mentioned the importance of sound disconnection procedures and arrangements to avoid disconnection, including at a recent workshop in The Lines Company area. We are concerned children and the elderly are often among those affected when power is disconnected, and that earlier discussions with retailers may have avoided the disconnections.

We recommend the Government reviews and strengthens the existing voluntary guidelines and benchmarks, including the disconnection provisions, as part of developing mandatory minimum standards. We also urge the industry to prioritise an education campaign about consumers' rights and how those struggling to pay their power bills can avoid disconnection. We have been told many households simply do not know what to do or are too embarrased to contact anyone (including their retailer) about their financial situation.

Several submitters said care was needed in defining a vulnerable consumer. They also pointed to the difficulties retailers would face in identifying them. These are valid points. We support the definition the industry has adopted in its voluntary guidelines.[55] By this definition, consumers are vulnerable if disconnection is a clear threat to their health or wellbeing, or if

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across winter and summer, which can be critical when budgeting for power bills.

[53] See the Electricity Authority's, *Guideline on arrangements to assist medically dependent consumers*, 19 August 2016; and *Guidelines on arrangements to assist vulnerable consumers*, 19 August 2016. Also see, the Electricity Retailers' Association of New Zealand's webpage "*Better outcomes for those struggling to pay their electricity bills"*, https://www.eranz.org.nz/news-and-insights/better-outcomes-for-those-struggling-to-pay-their-electricity-bills/

[54] There are also the Electricity Authority's *Voluntary good contracting principles and minimum terms and conditions for domestic contracts*, 28 September 2018; and unwritten industry conventions that, in effect, provide a backstop retailer for medically dependent customers.

[55] See the Electricity Authority's *Guideline on arrangements to assist vulnerable consumers Version 2.1,* 1 November 2010, page B.

they have genuine difficulty paying their power bills because of financial hardship. Such a definition would ensure minimum standards apply more broadly, not just to those meeting the definition of energy hardship.

Given there are already voluntary arrangements to provide a basis for new standards, and there is strong industry support for the change, it should be possible to develop and implement the standards within 12 months. In carrying out this work, the Ministry of Business, Innovation and Employment should draw on the expertise of the cross-sector group to ensure co-ordination with other energy hardship initiatives.

B7: Prohibit prompt payment discounts but allow reasonable late payment fees

The Government should pass regulations to prevent retailers (and any applicable distributor)[56] from offering prompt payment discounts, but allow them to charge late payment fees that reflect the actual cost of recovering outstanding debts.[57]

We consider prompt payment discounts should be prohibited because they:

- disproportionately hurt low-income consumers
- are confusing when customers try to compare retailers' prices
- are often unrelated to the true cost of recovering an overdue bill – supposedly the reason for offering the discount
- are the single biggest factor distinguishing what consumers in the most deprived and least deprived areas pay.[58]

We also consider retailers should be allowed to charge reasonable late payment fees because they face legitimate costs in collecting overdue debts.

Consumers and consumer advocates strongly favoured a ban on prompt payment discounts for the reasons just cited. Discounts can be as high as 26 per cent of a power bill. The Electricity Networks Association expressed similar sentiments, as did many indvidual distributors.

Retailers and generator-retailers were divided. Independent and smaller retailers supported a ban. So did two of the larger generator-retailers, Meridian and Trustpower.[59] Two others, Genesis and Contact, opposed a ban, along with the BusinessNZ Energy Council. (Contact subsequently told us in late April of its intention to move to prompt payment discounts that reflected the true cost of collecting late payments.) They said prompt payment discounts offered consumers choice, were not misleading, and acted as a carrot to pay on time, which was preferable to the stick of a late payment fee. A ban would undermine competition, be hard to enforce, reduce innovation, increase credit management costs and harm those in energy hardship. Generator-retailers Mercury and Nova sat in the middle, arguing for keeping the discounts but capping them at the actual saving of receiving payment on time.

[56] The Lines Company, which is currently the only electricity distributor to bill customers directly, also offers prompt payment discounts. The Lines Company has advised, however, it is intending to shortly remove its prompt payment discounts.
[57] As provided for under Electricity Industry Act 2010, sec.113 (2)(d).
[58] This finding, from our analysis of billing data, is adjusted for other differences, such as usage levels. See our Initial Analysis of Retail Billing Data, 15 October 2018, pp9-13.
[59] Meridian and Trustpower do not, however, support capping other conditional discounts.

Consumer NZ said prompt payment discounts did not give consumers choice. Rather, they were an example of confusing pricing that worked against consumers' interests.[60] Flick held the same view: "If firms want to differentiate on price, they should do it in their headline price, which will be less confusing." We agree.

The Electricity Authority proposed a staged approach to a ban, starting with a requirement for retailers to be clearer about all their discounts and fees. We disagree. Our analysis shows they are disproportionately hurting low-income customers right now, and a staged approach will merely prolong the hurt.

Meridian stopped prompt payment discounts in late 2018, estimating at the time that the move would save customers $5 million a year.[61] Six months on, it observed no discernible difference in late payments, levels of customer debt or disconnections.[62] We found customers would save $45 million a year if other retailers followed Meridian's example.

Competitors, customers and regulators will be watching retailers closely for any signs of unexplained across-the-board price increases or increases in other conditional discounts (such as for paperless bills, bundled bills and direct debiting) to circumvent a ban on prompt payment discounts. However, we expect normal competitive pressures – which some of our other recommendations will only increase – should minimise this possibility.

Our options paper proposed capping other conditional discounts at reasonable savings-related levels, but we decided against such a step because we accept the view put by some submitters that this would be too prescriptive, could lessen innovation, limit retailers' ability to tailor plans to consumers' needs and add cost and complexity.[63] However, we expect the regulations to be drafted in such a way that they minimise retailers' ability to get around the ban. The Fair Trading Act 1986 also contains provisions to prevent misleading or deceptive practices. Finally, prescriptive constraints on conditional discounts could be introduced in regulations after the three-year review if retailers are found to be frustrating the ban and further confusing consumers with their discounting practices.

Retailers should be allowed time to make the necessary arrangements before regulations come into effect. Drafting and passing the regulations should take three months. Allowing a further three months – before the regulations take effect – to conclude transition arrangements should be sufficient.

B8: Encourage bulk deals for social housing and/or Work and Income clients

The Government should encourage social housing agencies, such as Housing New Zealand, community housing providers and local councils, along with Work and Income, to negotiate better electricity deals for their clients. The arrangements could include:

- establishing a preferred supplier deal with a retailer
- tendering for the bulk supply of electricity

[60] Consumer NZ, pg3.
[61] Letter from Meridian Chief Executive to Electricity Price Review Chair, "*Update on Meridian's decision to replace Prompt Payment Discounts",* 14 December 2018.
[62] Meridian, pg5.
[63] Contact, pg3; Meridian, pg5; and the Electricity Retailers' Association of New Zealand. pg9.

- paying for some electricity as part of the rental agreement so tenants can heat their homes to a healthy standard without fear of steep bills (and creating an incentive for the social housing provider, as landlord, to ensure homes are energy efficient)
- taking on some or all of the credit risk for clients who can't pay their bills and risk disconnection, being careful to avoid shifting costs and risks to agencies and tax payers
- contracting a retailer to act as a retailer of last resort so Work and Income clients in energy hardship and/or with a poor credit history are guaranteed a supply of electricity.

Agencies themselves should negotiate the structure of bulk deals, but we would encourage them to seek advice from the cross-sector group and co-ordinate their efforts with the group.

We support bulk deals because they:

- have great potential to help those in energy hardship (provided they produce genuine efficiencies and allow individual households to opt out)
- may be more cost-effective for the Government than contributing to payment of power bills through the welfare system and meeting the higher health costs of those in energy hardship
- give social housing tenants and beneficiaries – many of whom are either in energy hardship, on income assistance, in debt or have little to do with the electricity market – the group bargaining power to strike better electricity deals.

Bulk deals won't benefit the many thousands of people in private rental housing who struggle to pay power bills. However, some of our other recommendations will help private renters, particularly expanding the community support services network.

Housing New Zealand has already been exploring bulk supply options for its clients, and the Electricity Retailers' Association of New Zealand is looking at bulk deals for social housing. Initiatives of this kind offer significant scope to help those in energy hardship, and the Government should encourage agencies and retailers to see such deals through to fruition.

Submitters' support for bulk deals ranged from cautious to very strong. Most accepted such deals had the potential to save consumers money. Some stressed the importance of householders having the ability to opt out of any deal if it didn't suit their circumstances. The Sustainability Trust said a focus on electricity alone might not produce many savings. The real promise, it said, lay in improving energy efficiency.[64] Some submitters said the benefits would be even greater if the Government underwrote some or all of the credit risk because the health costs from damp, underheated homes would be lower, as would welfare assistance.[65]

Bulk deals would also boost retail competition, said some submitters, provided their scale and the approach to tendering did not distort the market and permitted smaller retailers to make competitive offers.[66] Others said the government-run tendering process disadvantaged or excluded smaller retailers. The Electricity Authority said agencies would need easy access to clients' electricity usage data to develop bulk tenders and analyse offers. Recommendation C3

[64] The Sustainability Trust, pg3.
[65] For example, Ecotricity, pg5; Electricity Networks Association, pg11; Flick, pg9; and Powerco, pg2.
[66] For example, Contact, pg4; Electricity Authority, pg5; Ecotricity, pg5; Flick, pg9; Pioneer Energy, pg4; and Utilities Disputes, pg2-3.

will help here. Some retailers, especially independent retailers, said they would be able to make more competitive bulk offers once improvements had been made to the retail and wholesale markets (C1, C3, D1 and D2).

This medium-term initiative can be implemented alongside more immediate measures.

Section C: Increasing retail competition

Introduction

Retail competition has grown in recent times. A lot of it has been in new products, plans and services, although there have also been better prices for those who shop around. And that is the nub of the problem, because a lot of consumers aren't switching retailer or plan to get better deals and are missing out on the benefits of competition. Indeed, many haven't changed retailer since records began. (We estimate the figure at somewhere between 23 per cent and 42 per cent of all consumers since 2002.)[67] Were all consumers to move to the cheapest plan available to them, they would save on average about $240 each a year.[68]

Since 2002, the difference in price between the cheapest retailer and the so-called incumbent retailer in each area has risen about 50 per cent.[69] Switchers hunt out keenly priced deals, while others stay put – usually with the incumbent. Lower-income households are especially likely to be among the non-moving customers who unwittingly pay too much in what has become an increasingly two-tier market.

A compounding factor is win-backs – counter-offers to entice back customers who intend moving retailer or have already done so. This practice is good for the individual consumer concerned, but not for competition generally if it eventually undermines choice. Win-backs are arguably one of the bigger barriers independent retailers face in expanding their market share, and we recommend they are banned. Many new retailers have entered the market (28 since 2005), but the five biggest generator-retailers continue to dominate, their 90 per cent market share hardly changed from a decade ago.

Many consumers find it confusing to compare prices and plans, choose the best one for them, and make the switch. Several of our recommendations respond to this problem by making price comparisons easier and faster. Informed choice is also important, hence our recommendation about requests to retailers for consumption data. We also propose measures to raise awareness of the savings within consumers' reach right now. All these initiatives together should act as a real spur to greater competition.

We did not favour the option of price caps because it is hard to make them work. We also consider a better route is to strengthen competition, which increases pressure on retailers to minimise costs and promptly share savings (including from lower distribution charges) with consumers. That said, the three-year review may consider price caps if our recommendations prove unsuccessful.

[67] First report, pg36; and Electricity Authority Market Development Advisory Group, *Customer acquisition, saves and win-backs – issues paper*, May 2018, pg29.
[68] Our Initial Analysis of Retail Billing Data, *Table 1: Estimated average savings ($/year) available to consumers from switching*, pg15. Excludes spot-price plans.
[69] First report, pg38. Adjusted for inflation. The unadjusted increase is higher than 50 per cent.

Recommendations

C1: Merge the Electricity Authority and Consumer NZ price comparison websites

The Electricity Authority and Consumer NZ should merge their price comparison websites, respectively Whatsmynumber and Powerswitch, to create a new and improved website that makes it easier for electricity consumers to shop around. Ideally, the new website should be able to:

- present information in more effective ways
- offer consumers easy access to their long-term usage data so they can compare prices more accurately, share it with other retailers and choose the best plan for their needs
- estimate the effect on consumers' bills of installing solar panels, storage batteries or using electric vehicle charging
- compare non-price aspects of retailers' plans, such as how much of the electricity supply is renewable and whether customers can smooth out payments between high-use and low-use months of the year
- notify consumers of new offers or opportunities to save money
- have a link to the government-run language line for consumers for whom English is a second language
- have an after-hours helpline and chatbot facility
- have more ability to analyse how visitors use the website
- make available data on all current and previous pricing plans, so as to help researchers and anyone seeking to develop consumer-switching tools.

A single website with more functions and features will improve consumers' ability to hunt out the best deals, and more effectively use the money the Electricity Authority currently spends running its website and partly funding the the Powerswitch website. Consumer NZ said it supported a merger because consumers would be better served by a single, independent website.[70]

The two organisations should therefore work together to develop the new website within six months, after which Consumer NZ would be contracted by the Electricity Authority to maintain, promote and further develop it. Enhancements could be added progressively, rather than attempting to launch a fully redeveloped website in one step. The Electricity Authority should consult the consumer advocacy council and industry stakeholders about these enhancements. The contract should provide stable and sufficient funding to ensure Powerswitch has no need to rely on retailers' commissions, which could undermine consumers' trust in the website. The contract should provide for periodic retendering to ensure efficiency.

Submitters generally supported a merger.[71] Some emphasised the importance of ensuring consumers could trust the information on the website.[72] One referred to a recent Australian

[70] Consumer NZ, pg3.
[71] For example, David Riley, pg1; Electricity Authority, pg5-6; Electricity Networks Association, pg12; Electricity Retailers' Association of New Zealand, pp9-10; Grey Power, pg2; Ian McChesney, pg4; Jake Lilley, pg3; and Line Trust South Canterbury, pg2.

Energy Market Commission review that found customers were more likely to trust information from the government than commission-based sites. A few submitters suggested the contract should be put out to open tender, but this would, in our view, unduly delay the new website's launch.[73] And besides, we favour, as already noted, periodic retendering of the contract. Another factor in our decision was Powerswitch's successful track record.

The Electricity Authority, in consultation with the consumer advocacy council, should also consider three other steps that could make it easier for customers to get the best deal possible. These options all look attractive at first sight, but require closer study to decide whether to proceed. They are:

Billing information: Many consumers find their bills confusing and want them simplified. As one resident at a workshop put it: "Consumers want a bill that is understandable to all – it's as simple as that!"[74] We strongly support this goal, but we recognise the devil is in the detail. For this reason, we propose the Electricity Authority should look at what can be done to make bills clearer, drawing particularly on advice from the consumer advocacy council.

Direct billing by distributors: The Electricity Authority should consider whether to ban distributors from directly billing their residential and small business consumers. The Lines Company is currently the only distributor that directly bills. Feedback from consumers about direct billing was overwhelmingly negative. Consumers in The Lines Company area told us it was hard enough budgeting for one power bill, let alone two. They also risked losing two prompt payment discounts if they paid late and risked disconnection by either the retailer or distributor. We think it increases costs and complexity for residential and small business consumers. We think it better for distributors to bill retailers, which then package those charges into their retail tariffs. This provides consumers with more scope to find the pricing plan covering both network and energy costs that best meets their need. The Lines Company is currently reviewing its practice of a separate bill, and we trust it will listen to the voices of its consumers. Other distributors could also bill directly, so the matter warrants attention.

Annual plan reviews: The current low fixed charge tariff regulations require retailers to review their customers' consumption each year and advise them whether their current plan best suits their needs or whether another is more suitable. One of our recommendations is to phase out these regulations. We recommend the Electricity Authority consider whether to retain the yearly review provision (coupled with more rigorous enforcement) as a prompt to customers to look more carefully at their plans.

Finally, one matter we raised at workshops was whether the Electricity Authority should require retailers to disclose a 'headline price' for their monthly or annual packages particularly on their websites. Packages would vary according to number and type of consumers in a household (such as singles, couples, four-person families) and perhaps home heating sources, insulation level and so on. This could stimulate competition by allowing easier comparison of retailers' prices. The details of such packages would be crucial. Australian authorities are looking at the concept. We consider efforts are better directed at beefing up Powerswitch so customers can

[72] Electricity Retailers' Association of New Zealand, pg9-10; and Vector, pg10.
[73] Glimp, pp1-3; and Trustpower, pg6.
[74] Comment from consumer at workshop hosted by The Lines Company in Te Kuiti on 29 April 2019.

more readily compare prices. Depending on what happens in Australia, the idea of headline prices could be reconsidered.[75]

C2: Improve consumer awareness of Powerswitch and Utilities Disputes

The Electricity Authority should amend the Electricity Industry Participation Code to require retailers to provide clear and prominent information on their websites and all customer communications about Powerswitch and the disputes resolution service Utilities Disputes.[76] Retailers and distributors should also fund a Utilities Disputes marketing campaign to lift awareness of the scheme's free service. This should be completed within nine months.

We consider boosting awareness of Powerswitch will encourage more people to seek out better deals – especially the many consumers who have never switched retailer – and that this will encourage competition more generally. Boosting awareness of Utilities Disputes is necessary because current awareness among consumers is as low as one per cent.[77]

Submitters strongly backed the inclusion of clear, prominent information about Powerswitch and Utilities Disputes on all bills, customer communications and websites.[78] Some said it was important not to impose undue costs, such as use of colour printing.[79] Others said emails and phone calls were overtaking posted bills as the main means of communication between retailers and their customers, making it essential the requirement extended to all forms of communication.

The Electricity Authority should consult Utilities Disputes, the consumer advocacy council and stakeholders about what information retailers would be required to provide and in what form. In turn, Utilities Disputes should consult the Authority on the awareness-raising campaign, funding for which could come from the industry levy paid by retailers and distributors.

C3: Develop a streamlined way to process customer requests for consumption data

The Electricity Authority should give retailers six months to agree on a quick, simple procedure for processing consumers' requests for their consumption data, whether for their own use or for sharing with other retailers, and failing that, it should amend the Electricity Industry Participation Code to impose such a procedure. Requests by a customer's authorised agent should be treated in the same way, and there should be a simple process for nominating such agents.[80] Requests should result in the release of all usage data a retailer holds on a customer (or customers if a bulk request).

Quick, easy access to long-term consumption data is vital if consumers are to make informed choices, rather than guesstimates, about which plan suits their needs. It is also vital if authorised agents (such as Powerswitch and other price comparision tools, as well as

[75] For example, see Energy Consumers Australia's *Submission to AER Issues Paper: Customer price information*, 31 November 2017.
[76] This should also include distributors that bill end-users directly. All distributors and retailers must join and follow the rules of Utilities Disputes, which operates the approved energy complaints scheme under the Electricity Industry Act 2010.
[77] Options paper, pg14.
[78] For example, Electricity Authority, pg6; Energy Network Association, pg12; Grey Power, pg2; Ian McChesney, pg4; and Utilities Disputes, pg3.
[79] For example, Contact, pg4; and Nova, pg3.
[80] These are individuals or organisations trusted by a consumer to receive a copy of his or her usage data. It could, for example, be Powerswitch, a competing retailer or a solar panel provider.

competitors) are to be able to provide more accurate estimates of how much consumers can save by switching.

Retailers are already required to give consumers or their agents usage data within five working days for no fee.[81] Some retailers provide instant access, but not all do so. In any case, five days is too long. Consumers expect real-time responses via smart devices. In addition, fast, easy access to data will become increasingly important as smart tariff pricing (which reflects the cost of producing electricity at different times of the day) becomes more common. It will also be vital in helping consumers decide whether to invest in solar panels, batteries and other technology. Another problem is that retailers decide individually what criteria and processes to apply in deciding whether an agent is properly authorised. This complicates, or even hinders, agents' access. The Electricity Authority said different interpretations of, and idiosyncratic approaches to, the Privacy Act 1993 significantly slow the exchange of data.[82] Our view, like that of the Electricity Authority, is retailers should not hide behind the Act as a way to frustrate a consumer's wishes.

Stakeholders generally agreed on the need for streamlining data access.[83] As one consumer put it: "Smart meters only work one way at the moment – in favour of the corporate, not the consumer."[84] The Electricity Authority is developing standard terms for the transfer of data between retailers and consumers' agents, and we strongly support this work, since it may be necessary if retailers cannot agree among themselves on terms acceptable to the Authority. Standard terms offer similar benefits to those of a central data repository, as suggested by some submitters, but should be cheaper and faster to develop.[85]

C4: Make distributors offer retailers standard default terms for network access

The Electricity Authority should require distributors to offer retailers standard default terms for use of their network, and these terms should apply automatically unless a distributor and retailer agree otherwise.

We regard this measure as necessary because the current lack of standard terms raises retailers' costs and impedes competition, particularly outside the main centres.

Consumers and retailers generally supported default terms,[86] while many distributors opposed them on the grounds retailers had readily signed up to individual agreements.[87] This argument overlooks the costs facing new or expanding retailers and the substantial advantage in negotiating power enjoyed by distributors. Requiring distributors to offer standard default terms will be beneficial, a point of view shared by the Court of Appeal.[88]

The Electricity Authority is drafting default terms and expects to issue a consultation paper in mid-2019. We would expect finalised default terms to be ready for use within nine months.

[81] A fee may be charged if four or more requests were made in the previous 12 months.
[82] Electricity Authority, pg6.
[83] For example, Energy Network Association, pg12; Grey Power, pg2; and independent retailers, pg6.
[84] Comment from consumer at workshop hosted by The Lines Company in Te Kuiti on 29 April 2019.
[85] For example, independent retailers, pg6; and Northpower and Top Energy, pg6.
[86] For example, Grey Power, pg2; independent retailers, pg4; Major Electricity Users' Group, pg5; and Utilities Disputes, pg6.
[87] For example, Counties Power, pg2; Northpower and Top Energy, pg6; Vector, pg11; and Waipa Networks, pg2.
[88] Court of Appeal, *Vector Ltd vs Electricity Authority* [2018] NZCA 543, paragraph 43.

Note: The jurisdictional boundary of the Electricity Authority and Commerce Commission, as set out in section 32(2)(b) of the Electricity Industry Act 2010, affects the scope of regulated default terms. We recommend amending the Act to clarify the boundary (F1). Any amendment will take time, and should not hold up the Electricity Authority's work on default terms.

C5: Prohibit saves and win-backs

The Electricity Authority should amend the Electricity Industry Participation Code to prevent retailers from acting on notice that a customer intends switching or has switched to a competitor in order to win back that business. This means the ban should include both saves (enticing a customer to cancel a switch before it happens) and win-backs (enticing back a customer after a switch happens). For simplicity, we refer to both as win-backs.

Such a ban would be much like the one in the telecommunications sector. It would, however, go one step further and also prevent a retailer from acting on any private information it held on former customers for marketing purposes. This would prevent retailers from sidestepping the ban by obtaining customers' prior agreement to retain private information after they are no longer a customer and using it for marketing purposes. We identified this as a loophole in the telecommunications rules. The ban, in combination with the Privacy Act 1993, would mean retailers could no longer make win-back offers based on switching notifications.[89]

Retailers would still be able to:

- initiate offers aimed at individual existing customers, or groups of existing customers, to seek their continued loyalty
- respond to requests for counter-offers initiated by customers
- contact switching customers to remind them of contractual obligations, such as notice periods or exit fees (as long as retailers did not take the opportunity during the call to initiate a counter-offer)
- make offers to former customers as part of broader marketing campaigns (provided such offers aren't based on switch notifications or private information held on former customers).

This ban will help counter the development of a two-tier market in which consumers who actively shop around receive discounts and those who don't pay higher prices. The difference in prices paid by these two groups has been increasing, as has win-back activity.[90] In addition, vulnerable consumers are over-represented among non-switchers.[91] In our view, all of this is inherently unfair. One group is, in effect, subsidising the other. The unpublicised nature of the discounting that has fuelled the rise of a two-tier market is also unfair. As one senior industry executive observed, non-switching consumers are not going to suddenly "wake up" and seek out discounts since win-back offers are never publicised. The growing two-tier market also does nothing to build trust and confidence in the sector.

[89] Retailers cannot use private information (such as contact details) for reasons other than its original purpose, and retailers must dispose of private information about former customers: Privacy Act 1993, Part 2: Information privacy principles 9 - 10.
[90] First report, Figure 16; and the Electricity Authority's Market Information auto-generated "*Residential Savings trend*" available from https://www.emi.ea.govt.nz/Retail/Reports/COBZIA?RegionType=ISLAND_1&_si=v|3; and the Electricity Authority's Market Development Advisory Group's *Save's and win-backs updated draft recommendations paper*, 26 February 2019, Figure 12: Monthly save and win-back rates and trends grouped by network areas.
[91] First report, pg38.

We accept that win-backs may help as well as hinder competition, but we consider the overall impact to be negative.[92] We place significant weight on the fact submissions from consumers and new retailers overwhelmingly supported a ban. We also know a ban is no leap in the dark because the telecommunications sector has applied a similar ban for years.[93]

Independent retailers and most consumer groups supported a ban on fairness grounds.[94] Many said current arrangements contributed to a two-tier market and imposed a "loyalty tax" on non-switching customers. Electric Kiwi cited a statement by the chief executive of Meridian's Australian retail arm that "most Australian retailers operate a loyalty tax – the most loyal customers get the worst deal".[95] Some submitters said regulators in Australia and the United Kingdom had recently criticised practices in other industries that created loyalty taxes.[96] Grey Power said a ban was "in the interests of fairness to loyal customers".[97]

Pulse said win-backs penalised retailers that strived to stimulate competition. In its case, it had lost more than 30,000 new customers within 10 days of acquiring them because of win-backs.[98] Flick said current rules favoured long-established retailers and were one of the main reasons such retailers' combined market share had barely budged in 10 years.[99] Energyclubnz said "win-backs are … increasing new entrants' costs which will ultimately limit competition".[100] Among the established retailers, Contact was alone in saying "there may be value in prohibiting win-backs".[101]

The other big retailers and the BusinessNZ Energy Council (with a dissenting view from one member) opposed a ban. Mercury and Trustpower said the Electricity Authority's Market Development Advisory Group had reviewed the matter extensively and found no evidence win-backs were harming competition.[102] However, that review did not weigh wider fairness considerations. Nor were its findings categorical. It said "there is no strong evidence of regulatory problems or market failures" but added that "evidence that there are problems arising from the use of saves and win-backs, or not, are relatively thin such that no robust conclusions can be drawn one way or the other".[103] By contrast, we found convincing evidence win-backs restrict retail competition by raising costs for rivals of the vertically integrated companies.

Mercury and Trustpower said the Australian Consumer and Competition Commission had not banned win-backs after its recent review, citing the potential for unintended effects.[104]

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[92] The positive effect arises because a losing retailer can make a competitive retention offer in response to a switch request. The negative effect occurs because allowing win-backs raises costs for retailers seeking to compete and expand.
[93] The Commerce Commission's, *Terms For Local And Mobile Number Portability In New Zealand*, 2016; and TCF Code for Transfer of Telecommunications Services, 26 February 2013; and New Zealand Telecommunications Forum Non-Regulated Customer Transfer Code for Fibre Services, 31 March 2016.
[94] Consumer NZ, pg4; Ecotricity, pg6-7; Electric Kiwi and Haast Energy Trading, pp1-7; Energy Trusts of New Zealand, pg4; FinCap, pg3; Flick, pp12-14; Grey Power, pg2; Pulse, pg3; The Salvation Army, pg5; Sustainability Trust, pg3; Utilities Disputes, pg6; and Vector, pg12-13.
[95] Electric Kiwi and Haast Energy Trading, pg7.
[96] See the Australian Competition and Consumer Commission's media statement 142/18: "*Empowering consumers against companies",* 31 July 2018. And the United Kingdom Competition and Markets Authority's press release, *"CMA tackles loyalty penalty charges"*, 19 December 2018.
[97] Grey Power, pg2.
[98] Pulse, pg2-3.
[99] Flick, pp12-14.
[100] Energyclubnz pg3.
[101] Contact, pg4.
[102] BusinessNZ Energy Council, pg10; Genesis, pg2; Mercury, pg8-9; Meridian, pg6; and Trustpower, pg8-9.
[103] The Electricity Authority's Market Development Advisory Group, *Save's and win-backs recommendations paper*, 11 March 2019, 4.1.1 and 4.1.4.
[104] Mercury, pg8; Trustpower, pg9.

Nonetheless, the regulator said "there are questions as to whether [win-back] activity is in the best interests of consumers as a whole".[105] It also said a range of market features were creating a loyalty tax, and it recommended price caps "to limit the loyalty tax that is levied on disengaged customers".[106] We prefer to address the causes of this competition problem directly by banning win-backs, rather than interfere with retail prices.

Mercury and Meridian said switching rates were higher in electricity than telecommunications, and suggested this undermined the case for banning win-backs. These comparisons are not valid because of differences in the way switching statistics are compiled in the two sectors. More importantly, we are unaware of any evidence to suggest retail competition in the telecommunications sector is weaker than in electricity.

Trustpower said a ban could have unintended side-effects. It said win-back calls gave a retailer an opportunity to check that a consumer fully understood the terms and conditions of the new plan and how it differed from the current one, and that the benefits of switching had not been misrepresented. It also said the original retailer needed to be able to contact consumers during the switching process to notify them of any potential exit fees or changes to services that would remain with the original retailer. Our ban, as already indicated, will not preclude such calls, provided retailers do not use them to make counter-offers.

Some submitters said a ban might lead to more misleading and/or aggessive door-to-door sales tactics.[107] A ban would not alter consumers' rights under the Fair Trading Act 1986, including the protection of the five-day cooling-off period, and we encourage the Commerce Commission to closely watch retailers' sales practices and strictly enforce any breaches.

Some submitters also suggested a subsequent review to establish whether a ban was working as intended.[108] We agree. This would be especially valuable in assessing its longer-term effects on competition. Such an evaluation could form part of the proposed wider review in three years, but we consider a review that specifically looks at this question in detail is preferable. The ban should therefore remain in place for at least three years before the Electricity Authority reviews it to decide whether it should be modified or ended.

We consider the necessary change to the Electricity Industry Participation Code could be put into effect within three months, given we have already undertaken extensive stakeholder engagement on win-backs and only limited consultation should be needed.[109] Just as we were completing this report, the Electricity Authority advised us it intended proposing a code change to ban win-backs – and promptly. We welcome this move.

[105] Australian Competition and Consumer Commission, *Retail Electricity Pricing Inquiry - Final Report*, June 2018, p143.
[106] Ibid, pg249.
[107] Consumer NZ, pg6; Northpower Electric Power Trust, pg2.
[108] Unison, p1; and Vocus, pg6.
[109] We received submissions from a very broad cross-section of groups and individuals in two rounds of engagement – a point noted by submitters such as Vocus, pg5.

C6: Establish a pilot scheme to help non-switching consumers find better deals

The Electricity Authority should begin a pilot scheme to help consumers who find it hardest to shop around, especially those who are vulnerable. The Electricity Authority should negotiate a bulk deal for such consumers, enabling them to be on better plans than otherwise possible. Tenders should focus on a limited number of distribution network areas to reduce complexity and help maximise competition among potential suppliers.

Such a scheme would:

- identify suitable distribution areas
- identify consumers in those areas who had not switched retailer for many years and were paying above average prices (drawing on retailer data and other sources of information, such as Statistics NZ)
- contact these consumers individually about their provisional interest in joining such a scheme
- tender for the supply of electricity to consumers in the selected areas
- re-contact interested individuals to explain the details of the plan and, if they wished to proceed, arrange to switch them to the new plan
- collect data to evaluate whether to extend the scheme to other areas.

Individuals who expressed provisional interest would not be committed to switching – nor could they be expected to, given the details of the alternative plan could not be finalised until after the tender closed. Only at that point could they evaluate the potential savings and decide whether to switch or stay put. Individuals who expressed no interest on the first occasion would not be approached again.

We consider this initiative necessary because our other measures to help consumers get the best deal are necessarily broad and may be insufficient to influence some of the 400,000 to 750,000 households which have never switched retailers since 2002 (when records began), especially those disadvantaged in some way.[110] These individuals also stand to gain from a plan based on their collective bargaining power.

The United Kingdom began trialling such a scheme in early 2018. It involved 50,000 consumers, all of whom had not switched retailer for at least three years. In all, 22.4 per cent took up a bulk deal offer, and have enjoyed average annual savings of almost £300. Further trials are planned.

A range of submitters, including consumer organisations, independent retailers, distributors and Transpower, supported such an initiative.[111] The larger retailers generally opposed the idea, saying there were better ways to help such consumers. They also questioned the extent of the problem and/or pointed to implementation risks. Meridian, Northpower and Top Energy

[110] First report, pg36.
[111] For example, Consumer NZ, pg4; Counties Power, pg2; Energy Trusts, pg5; FinCap, pg3; Grey Power, pg2; independent retailers, pg7; Orion, pg5; Salvation Army, pg5; and Transpower, pg3.

expressed concerns that some consumers might be forced to switch against their will.[112] Our proposed design leaves the decision firmly with individual consumers.

Some submitters said few consumers were genuinely disinterested, so a scheme was unnecessary.[113] Granted, we cannot be certain about the number of such consumers, but survey data indicates about 285,000 residential consumers are unsure or don't think they can switch.[114] This excludes consumers who know they can switch but are put off by perceived costs or barriers.

The Electricity Retailers' Association of New Zealand said non-switchers might be staying put because they valued factors other than price. Some no doubt do put more weight on, say, the convenience of a bundled offer or environmental sustainability. Our goal, however, is not to remove all price differences in the market, but to ensure consumers who want a good deal can find one – and easily.

Some submitters said a scheme should not distract attention from broader efforts to help consumers shop around, such as improving Powerswitch and facilitating bulk deals.[115] This is true, which is why we suggest the Electricity Authority should establish the pilot scheme within 18 months. A pilot scheme should not need a lot of resources, and the Authority could contract an independent party to undertake most of its design and operational aspects.

Competition in Tauranga area

Some submitters, we noted in our options paper, said Tauranga Energy Consumer Trust's distribution of benefits solely to Trustpower customers undermined retail competition in the western Bay of Plenty.[116] We said that if these arrangements were reducing competition, this might be a matter the Commerce Commission should investigate.

The Commission, after making enquires, has told us it considers the trust's practice of restricting rebate payments to Trustpower customers "potentially distort[s] retail competition", but it does not consider these payments result in a substantial lessening of competition (which is the legal standard).[117] It said Trustpower's share of the Tauranga and western Bay of Plenty market was declining (although still about 65 per cent, as at February 2019) and its customers were switching to other retailers. It did not consider prices were "abnormally high" or "resulting in negative outcomes for consumers" and would not take the matter further. We do note that Trustpower's prices average about $575 a year more than the cheapest alternative in the Tauranga area.[118]

We do not necessarily share the Commission's view that this matter warrants no further investigation, but as New Zealand's expert competition authority, its view must prevail.

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[112] Meridian, pg6; Northpower and Top Energy, pg6-7.
[113] Contact, pg5-6; Electricity Retailers' Association of New Zealand, pp11-13; Mercury, pgt9-10; and Nova, pg6.
[114] For switching awareness survey results, see Electricity Authority, *Advertising tracker – telephone Omnibus Results*, August 2017, pp15-27.
[115] Commerce Commission, pg2-3; Electricity Authority, pg7; Genesis, p9; and Mercury, pg9-10.
[116] See our options paper, pg17. The Tauranga region has the highest concentration ratio on the Herfindahl-Hirschman Index (HHI). It is a measure commonly used to assess market competitiveness.
[117] Commerce Act 1986, Section 27.
[118] This is based on a comparison of published prices on Powerswitch (electricity price comparison website) for Trustpower's non-term tariff offer, and the cheapest alternative retailer (including its joining gift) for the Tauranga area, as at May 2019. Estimate is a weighted average of a notional "low-fixed charge" consumer and a "standard" consumer. The comparison excludes the annual rebate paid by Tauranga Energy Consumer Trust, which is only available to Trustpower customers.

Section D: Reinforcing wholesale market competition

Introduction

The wholesale spot and contract markets provide strong investment incentives that result in a reliable supply of electricity and low and falling emissions. Our primary concern is with the wholesale contract market. For the past decade, the four largest generator-retailers have underpinned its development by voluntarily agreeing to act as “market-makers”. In recent years, this voluntary system has faltered at exactly those times it is most needed – when the spot market is under stress. The spread between wholesale contract buy and sell prices has become uncomfortably wide – exceeding 50 per cent at times. Spreads of this magnitude are inconsistent with a well-functioning contract market and undermine confidence in it as a way to manage electricity price risk.

We recommend four measures to strengthen competition and improve confidence in the wholesale market. Our recommendations do not remove the onus on market participants to actively manage their individual risk exposure. The Electricity Authority should consider further efforts to make this point clear.

We do not favour the option of forcibly separating the generating and retailing activities of vertically integrated businesses. We consider the benefits of vertical integration outweigh the costs, even after the costs of promoting competition in a vertically integrated industry are included.[119] Forced separation would also be disruptive, undermine investor confidence and stall or delay the huge amount of generation investment needed to move to a low-carbon economy. However, the benefits of allowing vertical integration should be shared more widely – hence our recommendation for mandatory market-making.[120]

We found no evidence of generator-retailers making excessive profits, although data limitations mean we cannot be definitive in this assessment.

Recommendations

D1: Improve availability of wholesale market information

The Electricity Authority should review the wholesale electricity market information disclosure rules and close any gaps.[121] Simultaneously, the Gas Industry Company should finish developing gas disclosure arrangements. The two are related because gas supply shortages affect electricity generation. If needed, the Government should amend the law to strengthen the powers of these bodies to regulate information disclosure.

[119] See our first report, pg43; and options paper, pg21.
[120] Unsurprisingly, vertically integrated companies did not support forced separation. However, some non-vertically integrated participants shared this view, including Energyclubnz, the Major Electricity Users’ Group, Orion and Powerco.
[121] Electricity Industry Participation Code, clause 13.2A(2).

The review of disclosure rules should include:

- *Scope of current exemptions:* The provision allowing participants to withold information supplied to them on a confidential basis deserves particular attention. It is a critical weakness because it potentially neutralises the disclosure regime for most gas supply information held by generators.[122] One solution raised in submissions is to require thermal generators to reflect any gas supply constraint as a reduction in their generation availability for the relevant period.[123]
- *Format of information:* A lot of information is already available, but it is difficult to piece together and interpret. We support considering a centralised repository to make it easier for participants to find and interpret market information.[124]
- *Gas spot market volumes and prices:* This information was publicly available until 2018 but is now available only to subscribers. Given the wide interest in this information, a way should be found to reinstate public access.

Relevant regulatory bodies should enforce disclosure rules more vigorously.

We consider these steps will create a stronger disclosure regime, boosting confidence and informed participation in the wholesale electricity and gas markets. Participants will have more reliable, timely information about key factors influencing prices, such as thermal fuel supply and planned generator outages. This, in turn, will help ensure electricity prices reflect what electricity is worth to well-informed buyers, and lessen price volatility by minimising uncertainty.

Stakeholders generally supported reviewing electricity and gas market disclosure rules, although they differed on the extent of current problems.[125] We consider disclosure arrangements for both electricity and gas should be strengthened in light of limited information about gas supply shortages in 2018. Improved disclosure arrangements will also support other recommendations, notably the next recommendation on market-making arrangements, a point noted in submissions.[126]

The Electricity Authority should complete its review within nine months. The Gas Industry Company should complete its work as soon as practical.

D2: Introduce mandatory market-making obligation unless the sector develops an effective incentive-based scheme

The Electricity Authority should impose a mandatory market-making obligation on vertically integrated companies within 12 months unless the industry can develop an incentive-based scheme by then that is effective, funded largely by those companies and acceptable to the Authority.[127]

The mandatory market-making obligation should include definitions of the parties on which the obligation applies, the maximum permissible spreads between prices quoted for buying and

[122] Most large gas supply agreements contain confidentiality provisions, as noted by the Electricity Authority. See the Electricity Authority's, *15 September 2018 - Undesirable Trading Situation decision paper,* 28 February 2019, para 9.36, pg36.
[123] Mercury, pg10.
[124] Genesis, pg10.
[125] For example, Nova Energy, pg4; Electric Kiwi and Haast Energy Trading, pg3.
[126] For example, Meridian and Powershop, pg11; and Vector, pg18.
[127] See our options paper, pg18, for an explanation of market-making.

selling contracts, the contract volume obligations and the conditions that would trigger a relaxation or suspension of the obligation (see safety valve mechanisms below).

In the meantime, the Authority should closely monitor voluntary market-making activity and if necessary make an urgent change to the Electricity Industry Participation Code imposing an interim mandatory market-making obligation.

The current wholesale contract market is not working effectively. It relies heavily on the four biggest generator-retailers voluntarily quoting buy and sell prices with spreads of no more than 5 per cent for certain contracts. When it works this way, it adds depth to the contracts market and ensures clear price signals. But spreads in recent times have been as wide as 50 per cent, apparently in response to uncertainty caused by low rainfall and/or gas shortages. We do not expect market-makers to assume undue risks, but they have been withdrawing from their obligation without publicly stating either the decision or the reasons for it. Once one leaves, the rest typically follow, rendering market-making fragile and unpredictable.

We think it vital to correct this fragility to protect the competitive process (rather than competitors per se). An efficient contract market is particularly important for stand-alone retailers and generators, which are a key source of innovation and competitive pressure. Without an efficient contract market, innovators wanting to generate or retail electricity have to enter both of these markets at once.

We consider it reasonable to allow the industry time to develop an incentive-based scheme, but a mandatory scheme provides the assurance that a much-needed solution will be ready within 12 months regardless.[128] Many of the design questions are common to both schemes, so a twin-track approach should not result in significant wasted effort. An incentive-based scheme could attract more market-makers than an obligatory scheme, and this may reduce costs. However, we doubt whether it could be implemented in time, given the degree of co-operation required and the fact work on such a scheme has already been going on for two years. We also suspect some submitters' preference for the incentive-based approach rests on the assumption the cost will fall on others. Our view is that costs should be borne primarily by vertically integrated companies, which, after all, are the beneficiaries of such integration, via a levy in an incentive-based scheme or directly in a mandatory scheme.[129]

The majority of stakeholders acknowledged there were problems with the existing arrangement and supported change.[130] Independent retailers in particular regarded this as a critical area for improvement. Some favoured our mandatory approach, others preferred an incentive-based scheme.[131]

[128] Market-makers would be selected via a tender and paid fees to provide services.
[129] Vertically integrated companies subject to a mandatory scheme would individually bear their own market-making costs. Under an incentive-based scheme, market makers would receive payments from the Electricity Authority for the provision of market-making services. The Authority would recover the cost of these payments via a levy, which would largely be on vertically integrated companies.
[130] These included Consumer NZ, pg4; Electricity Networks Association, pg14; Grey Power, pg2; independent retailers, pg8; Mercury, pg10; Pioneer Energy, pg8; Transpower, pg3; and Vector, pg17.
[131] The former included Consumer NZ, Energyclubnz, Ecotricity, Flick, and Pulse, while the latter included Contact, Genesis, Grey Power, Meridian and Nova.

Submitters favouring an incentive-based approach cited:

- it's possible lower costs (because those best able to act as market-makers would come forward)
- its faster implementation time compared to a mandatory scheme (six months, according to some)
- its scope for a tender process to provide information to help design safety valve mechanisms (to partly relax the obligations on market-makers during periods of high price uncertainty, and to protect them from undue risk).

Most submitters, whether favouring mandatory, incentive-based or voluntary schemes, recognised the necessity of safety valve mechanisms.

A few stakeholders considered the existing arrangements satisfactory, saying contracts should be bought well in advance, not when a crisis loomed.[132] We consider this view an oversimplification. Most parties do contract ahead. Some, such as retailers with a growing customer base, cannot know their full requirements in advance and should not be precluded by market arrangements from adjusting their near-term positions. Furthermore, the widening of spreads has at times affected both near-term and longer-term contracts. Even those seeking to contract well in advance can find it extremely hard to manage their risks.

The United Kingdom is currently deciding whether to end its mandatory market-making scheme, a point emphaised by some submitters. But this move was prompted by changes in the structure of the market, as some market-makers sold generation assets to lower their carbon exposure and/or focus on retail services.[133] These divestments reduced the number of remaining market-makers, casting doubt on the sustainability of the arrangement. However, the divestments also increased the natural liquidity in the contract market, reducing the need for the mandatory market-maker scheme.

The Electricity Authority's prime goal should be to develop a scheme that is well-structured and will therefore pass the test of time. We expect this work to take 12 months, given the time needed to design safety valve mechanisms that strike the right balance between costs and benefits. This is a critical matter (as it will be for any incentive-based scheme). Analysis and stakeholder feedback should help determine the design. The mechanism could include an option to allow those in the scheme to subcontract their obligation, as happens in the United Kingdom.

In the meantime, the Electricity Authority should continue its close monitoring of voluntary market-making activities. We also support its intention to introduce interim mandatory market-making via an urgent code change, if required, to safeguard the viability of the futures market. Such an amendment would need to go through a full review process within nine months or automatically expire.

[132] For example, Trustpower pg11-12 and the attached *Lantau report*, pg4.
[133] See Financial Times article "*Centrica sells last big UK power stations*", 22 June 2017; and Iberdrola media release, "*Iberdrola sells convention generation assets in the United Kingdom, becoming first 100% renewable energy company in that country*", 16 October 2018.

D3: Make generator-retailers release information about the profitability of their retailing activities

The Electricity Authority should require vertically integrated companies to report separately on the financial performance of their retailing and generation/wholesale operations using a common (regulated) set of reporting rules. This is a longer-term initiative, to be completed within 12 to 18 months.

Generator-retailers are considered by some to be making excessive profits and favouring their retail arms to undermine competition, but we lack the information to properly test this belief. At a minimum, expanded reporting will fill the information gap that fosters suspicion and undermines market confidence. If there is a real competition problem that requires correcting, separate reporting should help uncover it.

A range of submitters – from consumer organisations and independent retailers to some of the generator-retailers themselves – favoured the extra scrutiny.[134] Some opposed it on the grounds of effectiveness or implementation costs.[135] The Major Electricity Users' Group suggested a regulatory economic model for this purpose.

We accept there will be extra costs for some vertically integrated companies, but we consider – like many stakeholders – that these can be kept low through careful design of regulations, including the use of existing arrangements and applying a minimum size threshold before reporting is required.

How internal transfer prices are treated will, as many submitters noted, be crucial. We support the suggestion of independent retailers and Vector that the design of disclosure arrangements draw on experience from the distribution sector regime overseen by the Commerce Commission, and the segmental reporting rules issued by Ofgem in the United Kingdom.[136]

Some submitters proposed an additional step of operational separation, that is, requiring vertically integrated businesses' generation and retailing arms to interact at arm's-length through the contract market.[137] We do not support this because we think other elements of our reform package will be sufficient to mitigate the competition-weakening effects of vertical integration.

More accurate disclosure of transfer prices will enable a much clearer assessment of the extent of any competition problems, triggering further action if justified. Our suggested three-year review should use the disclosed information as part of considering operational separation if the package of measures in this report does not adequately strengthen wholesale competition.

[134] For example, BusinessNZ Energy Council, pg5; Consumer NZ, pg4; Flick, pg17; Genesis, pg10; Grey Power, pg2; independent retailers, pg9-10; and Mercury, pg11.
[135] For example, Electricity Authority, pg9; Nova, pg5; and Major Electricity Users' Group, pg7.
[136] See independent retailers, pg10; and Vector, pg20.
[137] For example, Flick pg17; and Vector, pg19-20.

D4: Monitor contract prices and new-generation costs more closely

The Electricity Authority should expand its monitoring of the wholesale market to include periodic comparisons of wholesale contract prices with new-generation costs. The first comparison should be completed within 12 months.

As with the previous recommendation, this is intended to clear up a perception held by some of excessive profits – in this case by generator-retailers inflating wholesale contract prices. Again, periodic comparisons will fill the information gap that fosters suspicion and undermines market confidence, and may also uncover a genuine competition problem.

There was solid support from submitters for this recommendation, including from consumer organisations, independent retailers, generator-retailers and the Electricity Authority.[138]

Some submitters cautioned against misleading "snapshot" assessments that risked undermining investment incentives.[139] Instead, they said, comparisons should be made over the longer term. We consider careful implementation can minimise this possibility. The Major Electricity Users' Group preferred the Ministry of Business, Innovation and Employment undertook this work rather than the Electricity Authority, but we consider the Authority is better placed because it already monitors the wholesale market and has the analytical resources at hand.

Vector supported monitoring but said it should extend to spot prices using a methodology similar to that adopted by economist Stephen Poletti from the University of Auckland in 2018. Vector said this methodology had been mischaracterised as ignoring the need to recover fixed costs. We accept the methodology could be augmented with analysis of fixed-cost recovery but note that this has not been attempted.

Vector also proposed the Commerce Commission conduct a full-scale investigation into market power in the wholesale market. We do not support such a move because submitters presented no material new information to justify such a step, and also an investigation of that scale would divert resources from considering the recommendations in this report, and delay the realisation of benefits for consumers. Furthermore, the increased monitoring we recommend should help detect competition problems.

[138] For example, BusinessNZ Energy Council, pg5; Contact, pg7; Flick, pg17; Genesis, pg10; Grey Power, pg2; independent retailers, pg10; and Mercury, pg11.
[139] For example, Transpower, pg3; and Trustpower, pg13.

Section E: Improving transmission and distribution

Introduction

The electricity network's transmission and distribution infrastructure is a sprawling enterprise that reaches virtually every place big or small where people are found. It is also a monopoly-operated undertaking, absorbing a large amount of capital that can take a long time to recoup. How should the cost of this investment be recovered, and from whom? On the surface, it's a simple enough question, but the answer – at least for the transmission grid – has eluded the industry for more than seven years.

Our review found the delays in agreeing on a fair, efficient and lasting transmission pricing methodology risk undermining market confidence and timely investment. A government policy statement setting out the Government's position on the allocation of grid investment costs could help end the stalemate. This question of who should pay is no idle matter because electrification of the economy will push up demand and require substantial investment in transmission infrastructure in coming decades.

Distribution infrastructure will also need to accommodate this increased demand – but with an added twist: some of the power flows will be two-way: extra supply from customers' solar panels on the one hand, but extra demand from their rechargeable vehicles on the other.

Right now, distribution pricing is not structured to encourage individual consumers to make decisions about investing in these emerging technologies in the best interests of all consumers. Nor is it structured to accurately reflect the cost of distributing electricity at different times of the day and year. This is slowing the shift to a low-carbon economy.

We also found evidence some distributors' pricing unfairly allocated distribution costs between households and businesses. Another problem is the industry's inability to agree on reasonable terms for access to metering data. Retailers and metering companies hold the data that distributors would find so useful in improving their efficiency, including fixing outages more quickly.

Transmission and distribution, as monopoly activities, are subject to regulation to ensure control of cost and quality. Here, too, there is room for improvement, although it is largely at the margins of the regulatory framework: extra powers for the Commerce Commission to regulate distributors in particular situations.

Our recommendations respond to these various deficiencies and challenges.

Changes we favour that have not made it into formal recommendations are the need for trust-owned distributors to be more upfront with beneficiaries about their decisions, and also to update their trust deeds regarding the benefits of new technology. Even more importantly, we encourage more contracting and joint ventures between distributors, as well as greater

collaboration more generally between them. We discussed these in our options paper and hope these matters will be acted on voluntarily.

Recommendations

E1: Issue a government policy statement on transmission pricing

The Government should issue a government policy statement to the Electricity Authority that should shape its preparation of new guidelines for setting transmission prices.

We consider a statement is necessary for three reasons:

Firstly, the question of whether and how much transmission pricing changes should affect users or regions is best settled with clear guidance from elected governments. We made this view plain in our first report and options paper. A government policy statement is an effective way for the Government to express its policy objectives and whether it is generators, or households and business consumers in poorer regions such as Northland and King Country, that should benefit from lower transmission charges.[140]

Secondly, the vast majority of submitters – from consumer advocates, regulators, distributors and retailers – strongly favoured a statement.[141] The Energy Efficiency Conservation Authority, like many submitters, said "considerations of fairness and equity are better directed through policy means such as a government policy statement".[142] Transpower said these matters were "policy and political, not regulatory. They go to the redistribution of wealth between regions in New Zealand, and between groups of New Zealanders. It is not fair to ask a regulator to make them, let alone expect a regulator to achieve industry buy-in and consensus".[143]

Thirdly, a government policy statement could help break the gridlock that has developed over a new transmission pricing methodology. The review, which has gone on for more than seven years, threatens investor confidence and diverts the Electricity Authority's resources from other pressing matters.

The statement should contain the policies the Electricity Authority should have regard to as it prepares new guidelines. We suggest these include that transmission pricing changes should:

- allocate the costs of future grid investments on a beneficiaries-pays basis
- reallocate the cost of past grid investments from generators to consumers, or between transmission customers, only if the Electricity Authority can estimate with a high degree of confidence that such a reallocation will result in substantial, long-term benefits to consumers
- have a phasing-in period where necessary to avoid price shocks.

We have said we would not be arbiters in the debate on pricing methodology, and we still hold

[140] Refining New Zealand said Northland consumers were least able to afford an increase and would face the biggest increase in transmission charges simply to retain an existing level of service. It said Northland's unemployment was 5.6 per cent (1.3 percentage points above the national average) and therefore included consumers least able to afford an increase, p6. See also The Lines Company, which said a statement would be an effective way for the Government to ensure low-income consumers in the King Country are considered, pg10.
[141] For example, Consumer NZ, pg4; Grey Power, pg3; the TPM Group (comprising 11 organisations opposed to the Electricity Authority's approach), pg2; Aurora, pg4-5; and Transpower, pg3-4, to name a few.
[142] Energy Efficiency and Conservation Authority, pg5.
[143] Transpower, pg4. See also Mercury, pg11.

this position. However, after a 13-month review involving extensive engagement with stakeholders, many of whom expressed a view on the topic, it may be helpful to the Government to set out what we consider a government policy statement should contain. We do so for three reasons.

Firstly, most submitters backed the approach summarised in the three policies we propose.[144] A good many opposed retrospective reallocation of costs, although some, including Meridian, strongly supported such an approach. All, however, were clear in wanting a pricing method that was simple, practicable and understandable.

Secondly, the Electricity Authority, despite opposing a government policy statement, said that, if there were to be one, it should give clear guidance on "policy aspects that may also have potentially controversial distributional consequences, such as the recovery of the cost of historical assets".[145] This suggests to us that proposing a statement is inseparable from proposing what it should contain.

Thirdly, our expert panel members come from a broad range of backgrounds, including economics, policy development, consumer affairs, the electricity industry and the law. We also have the advantage of dispassionate independence and offer a view we think is practicable as well as fair, emphasising again this is a view only. Plainly, it is for the Government to decide whether to issue a statement and, if so, whether to adopt the policies suggested above or draft others.

The first policy on the treatment of future investments is sensible because it is efficient that those who benefit from grid investment should pay for it.[146] Opposition to this approach has been minimal and confined to implementation-related questions.

The second policy on the treatment of past investments is sensible because it minimises unjustified cost reallocations, or "wealth transfers", that are inherently unfair to companies that made investment decisions based on the existing methodology.[147] The Electricity Authority previously proposed reallocating some of the costs of three big investments Transpower has made since 2000 that would move hundreds of millions of dollars of charges from one set of grid users to another for an uncertain and much smaller benefit.[148] A government policy statement could rather guide the Authority to focus on the efficiency of future grid investment – a more important matter than tussling over cost allocations for past grid investments.

The third policy is sensible for the self-evident reason that those affected by the shifting of costs should have time to adjust to any price increases.

Submitters were generally either firmly for or against differentiating between past and future investments. Vector, for example, agreed with our approach of distinguishing between the two, suggesting past costs be recovered through a "postage stamp" charge.[149] Electric Kiwi and

[144] For example, Transmission Pricing Methodology (TPM) Group, pg2; and Consumer NZ, pg4.
[145] Electricity Authority, pg10.
[146] Efficiency is important because transmission users will generally want to overbuild parts of the grid that benefit them if they can avoid the full cost and get other users (who don't benefit) to pay some of those costs. This will lead to inefficient over-investment and higher average costs for everyone.
[147] For our analysis of its most recent pricing methodology proposal, see our first report, Appendix A, pp82-85.
[148] Electricity Authority, *Transmission pricing methodology: issues and proposal: second issues paper*, 17 May 2016.
[149] A postage stamp charge is, in this context, one that doesn't vary by location (just as the cost of posting a letter anywhere in New Zealand is the same no matter where it is posted from). Vector, pg24-25, also noted that no other country had

Haast Energy Trading said previous proposals would have disproportionately reallocated past investment costs from South Island generators to consumers compared to the assessed benefits.[150]

Meridian, although against a government policy statement, said any such statement should not support pricing that distinguished between past and future investments. Unison and New Zealand Aluminium Smelters said existing cost allocations unfairly required them to pay for recent transmission investments in the upper North Island from which they derived no benefit.[151] Introducing beneficiaries-pay pricing would exacerbate matters because both companies would also face the full costs of any future transmission investment in their own regions. However, the same argument applies for all grid users, and in addition we think any such disadvantage to these two submitters does not justify large reallocation of past costs.

Some submitters said a government policy statement, whatever it might contain, risked "politicising a matter best left to the regulator" and would result in more delays.[152] To the first point, we agree with those that said substantial reallocations of costs were precisely about politics and policy. Notably, the Gas Industry Company told us it found the government policy statement issued to it in 2008 proved very helpful guidance in approving a new gas transmission access code for the gas industry. It said it was "very useful to have a clear steer" as to government policy. As for delay, we, like Transpower, consider a government policy statement may act as a circuit breaker in a review process that began in January 2012 and still has some way to run – quite apart from the fact several other potentially lengthy steps remain before the Electricity Authority's view becomes reality.[153]

The Transmission Pricing Methodology Group, among others, favoured amending the Electricity Industry Act 2010 to require the Electricity Authority to give effect to, rather than have regard to, a government policy statement on transmission pricing. We were undecided about this variation in our options paper, but now believe it could undermine the Electricity Authority's independence as a regulator and could also set a precedent for other regulations. Moreover, we are confident the Authority will recognise – as a court would, too, if litigation arose – that a government policy statement must be given due regard and cannot simply be ignored.

The Electricity Authority has indicated it intends releasing a revised transmission pricing proposal in mid-2019, making it important a government policy statement is issued soon, and preferably before the Authority releases that proposal. Some submitters suggested a need for public consultation before issuing a statement. We think that is unnecessary given the arguments are now well rehearsed after seven years of consultation on a new pricing methodology.

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adopted such a retrospective approach to transmission pricing.

[150] Electric Kiwi and Haast Energy Trading, pg4.

[151] Unison, pg2; and New Zealand Aluminium Smelter, pg2.

[152] For example, Major Electricity Users' Group, pg8; and Electricity Networks Association, pg16.

[153] Transpower must follow the guidelines to develop a methodology, then go back to the Electricity Authority for approval. If approval is withheld, Transpower can revise the methodology. If withheld again, the Authority must itself develop a methodology, which, once finalised, Transpower implements from 1 April of the following year.

E2: Issue a government policy statement on distribution pricing

The Government should issue a government policy statement to the Electricity Authority to guide it through its reforms to distribution pricing. The statement should contain policies the Authority should have regard to during this work. We suggest these include that distribution pricing changes should:

- reflect more accurately the cost of providing distribution services
- allocate costs between household and business consumers in a way that is fair and efficient
- have a phasing-in period where necessary to avoid price shocks
- co-ordinate pricing changes as much as possible with government and industry measures to alleviate energy hardship.

A statement will help the Electricity Authority as it develops distribution pricing principles to guide distributors through changes to their pricing structures. Distributors are already altering the way they set their prices. Many are considering, trialling or have already implemented new structures based on when power is used, not simply how much is used. If permitted, they may also raise their fixed charges to reflect more fully their network costs. Distributors should also take note of these policies as they re-evaluate their pricing because they promote general fairness, efficiency and certainty, and will also foster an orderly transition from current to new pricing structures.

Substantial changes to distribution pricing will be needed in coming years to exploit emerging technology, lower carbon emissions and get prices more in line with true costs. These changes, as desirable as they are, will hurt some consumers in the short term. Households already in energy hardship may face higher prices. A government policy statement will give the Electricity Authority guidance on the Government's priorities for distribution pricing.

The first policy on bringing distribution charges more into line with costs is sensible because it is efficient that those who benefit from distribution investment should pay for it.

The second policy on allocating business-residential costs fairly and efficiently is self-evident.

The third policy on a phase-in period is sensible because severe price shocks could undermine implementation of distribution pricing reform.

The fourth policy on co-ordinating with hardship alleviation measures is sensible because it will avoid doing anything to exacerbate an already serious problem.

Our options paper sought views on whether to issue distribution pricing principles, enforceable through regulation, to ensure a fair allocation of distribution costs between households and businesses.[154] Our first report found that the allocation of costs between businesses and consumers could probably be fairer on some networks. We now consider a government policy statement is a better way to encourage a fairer business-residential allocation.

We consider a government policy statement containing these four principal policies will move

[154] First report, pg60.

the industry in the right direction. If successfully implemented, it should not be necessary, as our options paper noted, to require distributors to publish an approved tariff structure statement and ensure annual price changes are consistent with it, as occurs in Australia.[155] If the Electricity Authority's work, guided by a government policy statement, is not successful, the three year review could re-examine this option.

Many submitters supported issuing a government policy statement, and offered suggestions about its contents. The Electricity Networks Association said a statement could also contain policies requiring active engagement with, and support for, consumers; and pricing that allowed consumers to make informed choices about consumption and use of technology.[156] We are not certain a statement need cover these matters, but this is a matter for the Government. Orion said a statement could make explicit that limiting steep price rises was crucial to the success of distribution pricing reform. The Distribution Group said a statement should recognise that differences between distributors – such as their network costs, consumer profiles, load characteristics and access to smart metering capability – might influence how they structured their prices. Vector said a statement should avoid a one-size-fits-all approach. Northpower said it was crucial a statement focused on the long-term interests of consumers.

We consider it important the Government issues a government policy statement soon, given the Electricity Authority is currently developing its distribution pricing principles to guide distributors.

E3: Ensure distributors have access to smart meter data on reasonable terms

The Electricity Authority should require retailers and metering companies to give distributors or their agents metering data on reasonable terms if the parties concerned cannot agree on terms within three months.

We consider this measure necessary because the current impasse over what constitutes reasonable terms of access is impeding progress and innovation in the distribution sector. In particular, access to metering data on reasonable terms will enable distributors to:

- expand their networks more efficiently by analysing consumption patterns to improve their investment plans
- find and fix faults and outages more quickly
- plan maintenance more easily.

Companies looking to develop innovative products and services to help distributors will also be able to do so more easily using metering data.

The industry agrees that distributors should have reasonable access to smart meter data to improve service quality and lower service costs. Several distributors, retailers and metering companies said they expected discussions to culminate in agreements soon, and that this would open the door to others to do the same. Commendable though those efforts are, the

[155] See the Australian Energy Market Commission, Rule Determination – National Electricity Amendment (Distribution Network Pricing Arrangements) Rule 2014 No.9, 27 November 2014.
[156] Electricity Networks Association, pg33. The Transmission Pricing Methodology (TPM) Group made similar suggestions, pg2.

matter is too important to rely on good intentions alone. Also, competition law may hamper the industry's efforts to reach agreement because the Commerce Commission has said the Commerce Act 1986 may require it to authorise any such agreements.[157] It would be disappointing if Commerce Act considerations were to impede what is plainly a good outcome for consumers. We encourage the Commission to have urgent constructive discussions with the industry to overcome this obstacle so distributors or their agents can get the metering data they need. However, regulations may have to be the circuit breaker.

The Electricity Authority is already drafting a protocol on accessing metering data, which could form part of our recommended default agreement between distributors and retailers (C4).

E4: Give the Commerce Commission more powers to regulate distributors

The Government should amend the Commerce Act 1986 to increase the range of powers available to the Commerce Commission to regulate distributors. In particular, the Commerce Commission should be able to:

- recommend that the Government remove a distributor's exemption from price-quality regulations if a Commission investigation finds this would be better for consumers.[158] A distributor would then be subject to price-quality regulations (or perhaps only quality regulations if, for example, the Commission believed the poor state of the distributor's assets was affecting customer service)
- recommend that the Government declare a distributor exempt from price-quality regulations if a Commission investigation finds such regulation no longer warranted (such as if a community-owned distributor misses out on the exemption simply because some trustees are appointed by a local council rather than elected by consumers)
- recommend that the Government move a distributor from default or customised price-quality regulations to individual price-quality regulations if a Commission investigation finds this would be better for consumers
- compare distributors' relative performance when setting price-quality regulations (known in the industry as benchmarking)

The first measure on removing a distributor's exemption status is sensible because it ensures the regulatory regime is in a position to respond to such a situation.[159]

The second measure on declaring a distributor exempt from price-quality regulations is sensible because it could lower regulatory compliance costs for some distributors (and in turn consumers). Also, the rise of competition from households and businesses generating their own electricity (using, for example, solar panels) could eventually lead the Commerce Commission to conclude that price-quality regulations are no longer necessary for some distributors. We did not propose this power in our options paper, but we do so now because of the potential benefits some submitters brought to our attention.[160]

The third measure on moving a distributor to individual price-quality regulations is sensible

[157] Commerce Commission, pg3.
[158] The country's 12 community-owned distributors are exempt from the default price-quality regulations that apply to the other 17 distributors.
[159] Unison favoured this power, pg4.
[160] For example, Unison, pg5.

because it allows more effective and tailored regulations in certain circumstances than the one we proposed in our options paper (giving the Commission the power to move a distributor from default to customised price-quality regulations). On the other hand, such regulations typically have higher administration and compliance costs than default price-quality regulations, so the Commission must be satisfied the benefits to consumers outweigh the costs.[161]

The fourth measure on benchmarking is sensible because it gives back to the Commerce Commission an orthodox regulatory tool that was removed in 2008 over concerns about its use as the primary method of regulation.

Note: all four recommendations require legislative changes and should be implemented as part of recommendation F1.

Some submitters on the third measure said they preferred the Commission developed its existing information disclosure powers before being given new ones. In particular, one referred to its power to require distributors to attain international standards certification for asset management.[162] Several submitters said the original proposal would have lessened the incentive for distributors to consider applying for customised price-quality regulations. Powerco preferred an "individualised regulation carrot" to a "customised regulation stick", saying the former, if applied to the seven biggest distributors, would result in more "rigour and transparency" for about 70 per cent of the distribution sectors' customers and revenue".[163]

Most distributors on the fourth measure strongly opposed restoring the Commission's benchmarking power. Unison, for example, said the factors behind variations in distributors' performance were numerous and significant, and that "no benchmarking model has ever been developed [that] accommodates these [variables]".[164] However, comparative benchmarking is commonly used overseas, and the Commission has said it would apply it cautiously, as one input, if granted the power.[165]

Our options paper also proposed deterring big distributors from breaching price-quality regulations by raising maximum penalties to align them with those in Part 2 of the Commerce Act 1986 (relating to restrictive trade practices). Most distributors strongly opposed this option. On reflection we agree, for three reasons:

Firstly, a breach of quality standards is very different to a breach of the Act's prohibitions on anti-competitive conduct, such as price-fixing.

Secondly, distributors are right to say it is premature to increase penalties before the Commission has published guidelines on how it interprets and enforces quality regulations. Distributors are entitled to the benefit of clear guidance on the Commission's approach before penalties increase.

Thirdly, and perhaps most importantly, we share many submitters' view that the Commission needs to develop more consumer-focused quality standards – and urgently. Existing quality

[161] Only Transpower is currently subject individual price-quality regulations.
[162] Unison, pg5.
[163] Powerco, pg4-5.
[164] Unison, pg6.
[165] See the Commerce Commission's submission on our first report, pg9.

standards are based on network-level average measures of how frequently and how long consumers are without power during a given period. Vector, in its submission, made the valid point that these measures rely on 15-year-old data and are increasingly out of touch with differences in urban and rural networks operated by the same distributor (and the uptake of electric vehicles in each) and evolving customer needs.[166] New Zealand is behind countries such as Australia and the United Kingdom in not having more up-to-date quality standards, including compensation payments that distributors initiate (rather than customers request) when outages exceed defined durations.

We urge the Commission to develop a new and more consumer-focused approach to quality standards. This is a more pressing priority right now than increasing penalties.

Finally, our recommendations to give the Commerce Commission more powers should not imply it lacks scope to make greater use of its existing powers. Indeed, as our options paper noted, the Commission could use the powers it already has to:

- apply a minimum practice or good practice standard to distributors' asset management plans
- develop the quality standards just mentioned
- assess and publish details of collaboration between distributors to encourage others to follow suit where there is evidence of benefits to consumers.

[166] Email to review from Simon Mackenzie (Vector CE), 27 March 2019.

Section F: Improving the regulatory system

Introduction

The electricity sector's regulatory system generally works well, with no gaps or overlaps of significance in regulators' powers. Some of our recommendations are concerned with tidying up administrative matters: the Electricity Authority's limited ability in certain circumstances to conduct reviews and studies, and its dated compliance framework.

One regulatory gap we identified was in the protection of household and small business consumers, hence our recommendation the Electricity Authority should have an explicit function to protect the interests of such consumers.

We have also recommended phasing out low fixed charge tariff regulations because they exacerbate inefficient pricing signals and are not well targeted. They help some consumers but disadvantage others.

The most significant change we recommend will clear up ambiguity about regulators' powers to control access to distributors' networks. To an outsider, this will seem an arcane matter of small importance, but it is not. It relates to regulation of an area of the sector where enormous technological changes are afoot – the generation and storage of electricity by consumers themselves. Our recommendation will help ensure a level playing field so competition can flourish on fair terms for all.

Recommendations

F1: Give the Electricity Authority more powers to regulate network access

The Government should amend the Electricity Industry Act 2010 to allow the Electricity Authority to regulate the involvement of Transpower and distributors in markets for consumer-generated power and related services.

The amendments should remove rules in Part 3 of the Act that define (narrowly in today's terms) what distributors and retailers are and can do, and delegate to the Electricity Authority the development of regulations to replace them.[167] The High Court should be able to hear appeals against any resulting regulatory decisions made by the Authority on their merit.[168]

The need for these legislative and regulatory changes arises from recent technological advances that were unforseeable when the Act was enacted and have begun to blur the boundary between distributors and retailers. These advances and their widespread introduction are still in their early stages, but they are likely to grow dramatically and have a significant impact on the electricity sector.

[167] Existing measures in Part 3 of the Electricity Industry Act 2010 include corporate separation, ownership separation, management separation and non-discrimination rules for distributors involved in generating and retailing electricity.
[168] Industry participants are able to appeal decisions of the Commerce Commission on input pricing methodology decisions on merit under the Commerce Act 1986.

This technology and related services include: the sale and control of solar panels, and associated storage batteries; the sale and control of stand-alone batteries that can recharge during cheaper off-peak times and discharge during peak times; connecting electric vehicle batteries to consumers' home supply; and the sale and operation of energy management systems that automatically control consumers' appliances to limit peak-time use. Collectively these are known as distributed energy services. Both distributors and retailers have begun offering such services. Transpower also offers a distributed energy service by paying consumers that agree to have their peak power use lowered or turned off if Transpower finds this necessary.

The Electricity Authority needs to be able to draft regulations that can respond to these new circumstances if distributors use their monopoly position to deter competitors from entering the market for such products and services or disadvantage those already in the market.[169] Their monopoly position could allow them, for example, to cross-subsidise these services from their distribution operations, such as by offering consumers discounted batteries or panels and recovering the discount through distribution charges. Or distributors could offer non-financial inducements to buy their batteries or panels, such as extra services they alone provided. This would be unfair to competitors and to the long-term interests of consumers.

Distributors, on the other hand, have genuine incentives to become involved in distributed energy services because such services can lower customers' peak consumption, which in turn delays or limits the need for expensive upgrades of their lines networks to cope with rising demand.[170] Therefore, we do not suggest distributors should be excluded from involvement in this area, merely that their involvement comes with the inherent risk they might exploit their monopoly position to the detriment of competitors. Clear, flexible regulations are the best way to manage this risk.[171]

Exactly how – and when – the Electricity Authority frames those regulations is a matter for it to decide. The rules in those regulations would need to be consistent with its objective of ensuring a competitive, efficient and reliable electricity sector. They should also be drafted in consultation with the Commerce Commission so they complement the Commission's price-quality regulations and so the Commission is clear about where the boundary lies between the monopoly elements of the sector it regulates and the contestable elements the Authority oversees. They would also need to be drafted in a way that minimises any investment uncertainty and avoids any constraints on innovations in business models.

Retailers supported clearer and more flexible regulation of distributors' involvement in distributed energy services.[172] The Electricity Retailers' Association of New Zealand said competition needed a level playing field to thrive, particularly when it involved the competitive and non-competitive parts of the sector.[173]

The Commerce Commission and Electricity Authority also supported the measure. The Commission said regulators had to be able to respond quickly and in a co-ordinated fashion if

[169] First report, pg77-79.
[170] Ibid.
[171] Ibid.
[172] For example, Mercury, pg14-15; Contact Energy, pg9; Genesis, pg13; Nova Energy, pg6-7; independent retailers, pg15; and Electricity Retailers' Association of New Zealand, pg16.
[173] Electricity Retailers' Association of New Zealand, pg16-17.

market developments threatened to harm consumers' interests.[174] The Authority said it was better to have such powers on hand in case the need arose than to wait for time-consuming legislative change after a problem emerged. It also said market regulators in Australia and the United Kingdom had such powers.[175]

Most distributors opposed the measure, saying the Commerce Commission's price-quality and information-disclosure regulations already limited their opportunities to cross-subsidise distributed energy services.[176] They also said their investment in batteries and demand management technology should be encouraged, not discouraged, because it had many planning, engineering and operational advantages that ultimately benefited consumers. Vector said it could not see how the "risk to competition currently outweighs the opportunity cost of disenabling the uptake of distributed generation technology, and the critical role of [distributors] in this".[177]

Powerco, however, said it understood the need to ensure arm's-length dealings between Transpower and distributors on the one hand and non-regulated entities on the other.[178] It said it hoped the Authority, in developing the rules, took a more collaborative, industry-focused approach, and the results were flexible enough to enable amendments that did not require legislative changes.[179] In contrast, Vector said, if there were a case to regulate, it should be done through primary legislation, as in the provisions in Part 3 of the Electricity Industry Act 2010. Vector said affording regulatory discretion to the Authority could discourage investment straightaway, even if the regulator was not currently proposing to exercise those powers.[180]

The fast pace of technology changes in the sector makes this a priority recommendation. Legislative amendments such as this might typically take 12 to 18 months to implement, but anything sooner could only be to the sector's advantage.

In our options paper, we said we did not favour making Electricity Authority decisions subject to appeal on merit. Appeals can be costly and may serve the best interests of those with the financial means to afford legal action. Also, regulatory accountability can be achieved in other ways, such as having clear statutory objectives and principles and giving government policy statements to guide the regulator when appropriate. Furthermore, Parliament's Regulations Review Committee provides an avenue for review of any matter regulated by the Electricity Authority. However, regulatory decisions about distributors' involvement in distributed energy services could have significant implications for commercial freedom and investments by distributors and others, and we therefore consider appeals on merit should be allowed, in the same way as appeals on merit are allowed against input pricing methodology decisions.[181]

Our options paper also considered, but we did not favour, transferring network access regulatory functions from the Electricity Authority to the Commerce Commission. Many

[174] Commerce Commission, pg5.
[175] Electricity Authority, pg12. Note: in relation to distributed energy services, Australian electricity regulators have rules requiring distributors to 'ring-fence' certain of these services from their regulated business activities: see the Australian Energy Regulator, *Ring-fencing Guideline - Fact Sheet*, 30 November 2016.
[176] For example, Energy Trusts New Zealand, pg10; and Unison, pg8.
[177] Vector, pg30.
[178] Powerco, pg5.
[179] Powerco, pg6.
[180] Vector, pg31.
[181] Trustpower provided useful comments from Jack Hodder QC on ways to address our concerns about costs, delays and uneven access to the appeal process, see Attachment 4 - *Merits Appeals against Electricity Decisions,* a memorandum from Jack Hodder QC, 8 March 2019, pp85-88.

submitters, especially Transpower and distributors, favoured this option, but we continue to think it would be complex to implement and result in new regulatory boundaries. It could, however, be considered as part of a broader review of future institutional arrangements (G3).

Finally, the Government should amend the Electricity Industry Act 2010 to enable the Electricity Authority to regulate access agreements between distributors and retailers, including quality standards relevant to such agreements.[182]

As discussed in recommendation C4, regulation of distribution access agreements could bring more standardisation and in turn more effective retail competition. The Electricity Authority is developing default access agreements, but this work was held up by legal action questioning its ability to regulate for this. The Court of Appeal recently confirmed the Electricity Authority could regulate such agreements, but could not include quality standards of the kind the Commerce Commission could regulate.[183] We think it makes sense for the Electricity Authority to regulate all parts of distribution access agreements, as it already does for transmisison access agreements.

Many distributors expressed concern that regulated default agreements could require distributors to bear more risks without being adequately compensated under the Commerce Commisison's regulatory regime.[184] That risk can be managed by requiring the Electricity Authority to consult the Commerce Commission before regulating access to distribution networks and requiring the Commssion to take account of such regulation.

F2: Give the Electricity Authority an explicit consumer protection function

The Government should amend the Electricity Industry Act 2010 so one of the Electricity Authority's functions is to protect the interests of household and small business consumers. This, in turn, would enable the Authority to add consumer protection provisions to the Electricity Industry Participation Code, particularly as they apply to vulnerable consumers and consumers in energy hardship.[185]

Making this function explicit will remove a regulatory gap in the protection of consumers' interests. The gap exists because of uncertainty about whether, in regulating in the long-term interests of consumers, the Electricity Authority would be acting inconsistently with its statutory objectives of promoting efficiency, competition and reliability of supply in the sector. Meridian, for example, said in its submission it thought consumer protection was inconsistent with these objectives. This only reinforces our view clarification is needed.

The Electricity Authority has voluntary good practice guidelines for retailers. How widely they are followed is not certain, but many retailers have benchmarked their practices against the guidelines.[186] One concern is the guidelines may lose some of their applicability in the face of new developments or new types of participants in the industry. Examples include providers of

[182] Regulation could also cover agreements with generators connected to a distribution network, and potentially with other businesses offering peer-to-peer trading of electricity, control of batteries and consumer appliances (demand management). Quality standards, in this context, are those referred to in Part 4 of the Commerce Act.
[183] *Vector Ltd v Electricity Authority* [2018] NZCA 543 and [2019] NZCA 49.
[184] For example, Unison, pg8.
[185] Consumers' interests centre around whether, for example, a retailer disconnects a household for non-payment before taking reasonable steps to avoid disconnection, and whether it ensures consumers have the information to make informed choices and are on the right plan.
[186] The guidelines include, among other matters, minimum terms and conditions for domestic contracts, communicating price increases, and helping medically dependent and vulnerable consumers. See also the discussion at B6.

standalone power systems, and "secondary" retailers or distributors which are also consumers' landlord or building owner. Should the Authority consider it necessary or desirable to enforce these guidelines, explicit powers will be at its disposal.

Most submitters backed a consumer protection function for the Electricity Authority, although some gave qualified support, saying the function should not duplicate what other agencies did and shouldn't deal with matters more appropriately addressed through welfare policies.[187] Some said sufficient protections were already available under the Consumer Guarantees Act 1993 and the Fair Trading Act 1986.[188] These Acts contain general consumer protections. We consider there is good reason to supplement them with sector-specific safeguards, much as the Residential Tenancies Act 1986 protects the rights of tenants, another type of consumer. Household power debt, for example, can easily spiral out of control when bills arrive well after the power is used. Also, disconnections initiated because of debts can compromise the safety of householders medically dependent on electrical equipment. More broadly, consumer protections are warranted for those who may have little bargaining power or find it hard to right wrongs.

Our options paper considered whether, in addition to a consumer protection function, the Electricity Authority (with the Commerce Commission) should also be given environmental and social policy objectives. At the time, we said there were better ways, such as government policy statements, to achieve these objectives. After considering submissions, we think the Government could issue a government policy statement on its carbon reduction objectives so both regulators have regard to these objectives when carrying out their functions.

Some submitters suggested requiring the Electricity Authority, in interpreting its statutory objective, to take account of wealth transfers between consumers and generators.[189] We think the Electricity Authority should consider wealth transfers when evaluating, for example, changes to transmission and distribution pricing. However, we do not favour changing the legislation to require this because it could inadvertently increase investment uncertainty at a time when investment in the industry is critical. Our suggested policies in E1 and E2 would provide sufficient guidance on the weight to be given to wealth transfers.

This recommendation may take 12 to 18 months to implement, given it requires legislative amendments.

F3: Update the Electricity Authority's compliance framework and strengthen its information-gathering powers

The Government should review the compliance framework in the Electricity Industry Act 2010 and related enforcement regulations to bring them up to date with best practice. The Government should also amend the Act to increase the Electricity Authority's information-gathering powers so it can undertake any review, study or inquiry requested by the Minister of Energy and Resources, regardless of whether the request relates to the Authority's statutory objectives.

[187] For example, Powerco, pg6.
[188] For example, Electricity Networks Association, pg27.
[189] For example, Vocus, pg4, says the Authority's interpretation differs from the Commerce Commission's interpretation under the Telecommunications Act 2001. The Authority says in virtually all circumstances only efficiency gains should be treated as benefits to consumers, and wealth transfers excluded (Electricity Authority's, *Interpretation of the Authority's statutory objective*, 14 February 2011).

A review of the Act's compliance framework is long overdue. The framework dates back more than 20 years and is based on contracts between industry participants that were incorporated into the regulatory framework when self-regulation ended in 2003. It has undergone only relatively minor changes since then.

Amending the Act to increase the Electricity Authority's information-gathering powers is necessary because of legal uncertainty about whether the Authority can act on requests by the Minister that are not related to its statutory objective, such as reviews of fairness or environmental matters relating to the electricity industry.

A review by the Authority in 2014 found enforcement regulations needed to be less prescriptive, and compliance activities and decisions more transparent. It also found investigators should not always have to try to settle disputes and it should be able to enforce settlement agreements. The Ministry of Business, Innovation and Employment should complete the review and recommend any changes necessary to make the regulations consistent with regulatory best practice. This will ensure the electricity regulatory system serves consumers well into the future.

In our options paper, we suggested a review should look at ways to separate rule-making functions from monitoring and enforcement functions (like the separation between Parliament, police and courts). Some submitters agreed this approach had possible benefits, but most – including the Electricity Authority – thought the administrative costs and loss of cohesion and communication would outweigh the benefits.[190] The case for separation may not be clear, but it warrants further evaluation as part of the review.

The Electricity Authority said it would prefer to move the administration of the Rulings Panel to an agency other than the Authority (such as the Ministry of Justice) in order to avoid potential conflicts of interest.[191] We agree. The Authority funds the Rulings Panel and must agree on its budget and performance objectives. If the Rulings Panel hears a case in which the Authority is a party, it may appear less than independent. The review should consider alternative administration arrangements for the Rulings Panel.

Some submitters supported more information-gathering powers for the Electricity Authority, but others said it was unnecessary or might encourage the Authority to go on fishing expeditions. Trustpower said there was a risk the Authority might step beyond its area of expertise. It pointed out the Inquires Act 2013 already gave the Minister powers to obtain information, order disclosures and summon individuals to give evidence.[192] Vector said such a power risked overlapping with the Commerce Commission's recently introduced market study powers.[193] Granted, the Minister has other ways to commission studies and investigations, but we think it is appropriate the Minister has the power to make full use of the Authority's electricity industry knowledge and expertise in this way when required.

[190] Electricity Authority, pg12-13.
[191] Ibid.
[192] Trustpower, pg22.
[193] Vector, pg37.

F4: Phase out low fixed charge tariff regulations

The Government should phase out low fixed charge tariff regulations by allowing the maximum fixed charge component of low-user plans (currently 30 cents) to rise gradually over five years, at which point the cap would be removed.[194] Retailers and distributors would no longer have to offer consumers the option of a low-user tariff, although they might choose to do so. The Government would make this change by amending regulations made under the Electricity Industry Act 2010.

A five-year phase-out, co-ordinated with help for households in energy hardship and the distribution pricing changes mentioned above, should moderate the impact of removing the cap on most low-use households. Some distributors suggested a shorter phasing-out period, but this, in our view, could result in unacceptable price increases for low-use households.

The regulations should be removed because they exacerbate already inefficient price signals to residential consumers and also unintentionally shift costs to households with low incomes and high electricity consumption.[195]

Many submitters – including retailers, distributors, regulators and some consumers – supported phasing out the regulations.[196] However, other submitters, including Grey Power, said removing the regulations could worsen energy hardship for some low-use households. They wanted any phase-out delayed until it was clear how these households could be helped. Some said the consumer advocacy council (A1) should have the opportunity to consider what help these households should get before the removal of the regulations.[197]

Some submitters pointed out the regulations encouraged energy conservation by rewarding households that installed solar panels, insulation and non-electric forms of heating.[198] One householder said in his submission his yearly consumption had fallen from 3,400 kWh to 1,850 kWh after fitting double-glazing and better insulation.[199] Although energy conservation measures can be desirable, they should not be stimulated by artificially shifting costs to households with higher usage because this can have the unintended consequence of poorly heated homes and poor health. Nor should these measures be artificially encouraged if they ultimately shift the cost of network-supplied electricity to households that cannot afford such energy-saving measures.[200]

The Electricity Networks Association said no measure would be more significant to its members, and arguably to the electricity sector in general, than removing the regulations.

[194] Variable components of prices should fall as fixed components rise, so that annual charges overall should not rise.
[195] First report, pg56.
[196] For example, Energy Management Association of New Zealand, pg10; Electricity Retailers' Association of New Zealand, pg15; Electricity Networks Association, pg19-20; BusinessNZ Energy Council, pg6.
[197] For example, Ian McChesney, pg6-7; Grey Power, pg3; and Consumer NZ, pg4.
[198] For example, SolarCity, pg3; and Molly Melhuish, pg5. Both said fixed charges take the power of choice out of consumers' hands.
[199] Martin Rother, pg2.
[200] First report, pg65-66.

Section G: Preparing for a low-carbon future

Introduction

The electricity sector faces testing times. The need to cut greenhouse gas emissions will impose a greater burden on it than most. In meeting this challenge, it will have to grapple with another – how to adopt a slew of technology advances that bear directly on its functioning.

Electric vehicles symbolise the dilemma. If widely adopted, they will make deep inroads into the country's fossil fuel use and emissions. But such a huge extra demand for electricity would strain existing infrastructure without various reforms and improvements. Either way, more generation capacity will be needed as part of the electrification of the economy. This will require substantial investment, predominantly in renewable energy, such as hydro, geothermal and wind, which, fortunately, already account for about 80 per cent of New Zealand's generation. The sector is in a good position to contribute to a low-carbon economy.

But increasing renewable energy from 80 per cent will not be easy, especially as renewable generation starts to approach 100 per cent. At this point, costs could increase significantly and the risk is it will make power unaffordable for some consumers and deter motorists from switching to electric vehicles. Electrifying vehicles and process heat (used mainly in industrial applications), along with more renewable generation, will cut emissions faster than an all-renewable electricity system.

Rooftop solar panels and other renewable technlogies will help with the transition – and one of our recommendations aims to smooth their path to wider adoption. But larger-scale generation will also be needed, and at a faster rate if New Zealand is to meet its carbon targets. These are also questions examined by the Interim Climate Change Committee.

We have looked at how to make better use of the electricity already produced. One way is to make buildings more energy efficient. Considerable gains are possible. We also see it as vital the Government reviews how its agencies are organised, so as to ensure clear, co-ordinated planning and implementation of all energy-related work programmes.

Technology changes could well have an impact on the electricity system's ability to provide power reliably. The greater role, for example, of intermittent sources of generation such as wind and solar power could make it necessary to amend aspects of the way the system is run. We therefore recommend a review of this area. On this point, it is pleasing to see the Government is investing in an energy centre in Taranaki that will receive $20 million over four years to co-ordinate and support such technology.

Finally, it is time, as one stakeholder put it, to "think big and bold", about how government agencies are structured, and how energy policies, regulations and programmes are co-ordinated. Regulations and regulatory agencies themselves must be shaped in a way that, as one report put it, "embraces the changing nature of energy, technology and primarily

consumers".[201] The focus must be more on outcomes not process, on regulations that facilitate, not prescribe, and on how consumers consume, not on how businesses are organised. This is why we recommend a more far-reaching examination of our institutional arrangements for energy policy and regulation than that proposed in our options paper.

Recommendations

G1: Encourage more energy sector innovation

The Government should encourage more innovation in the energy sector, particularly new technologies and alternative business models that support a low-carbon future. This should happen in three ways:

Funding: The Government should ensure the objectives and allocation criteria of the Provincial Growth Fund, Green Investment Fund, Callaghan Innovation, Endeavour Fund and Innovation Partnership programmes give sufficient priority to innovation in the energy sector.[202] Energy projects that help poorer communities should receive more weight. The Government should also publicise these funds more widely.

Regulations: The Commerce Commission should implement default price-quality regulations in a way that encourages innovation among distributors.[203] An example is using demand-side management tools that encourage consumers to use less power, or use it at off-peak times, to alleviate network congestion.

Workstreams: The Electricity Authority should continue to prioritise workstreams that support innovation in the electricity sector. An example is the Innovation and Participation Advisory Group's work to make it easier for new technology and service providers to gain access to distribution areas.[204]

We consider these measures will provide impetus to innovation in the sector, which, as the Productivity Commission pointed out, needs significantly more resources devoted to low-emission innovation than the "modest and inadequate current allocation".[205] We expect the sector will need to be much more innovative and adaptable if New Zealand is to achieve its climate change objectives quickly and cost-effectively.

We favour making more use of existing funds over setting up a dedicated energy sector fund because the former have well-established funding mechanisms, and adding another risks unnecessary duplication. Collectively, these funds distribute hundreds of millions of dollars a year, so redirecting even a small portion of this will give the sector the boost it needs.

Many submitters said a new fund was unnecessary because funds already existed to foster

[201] Laura Sandys, Dr Jeff Hardy, Professor Richard Green, *Reshaping Regulation: Powering from the future*, October 2017.
[202] These are the main funds, but there are others that should form part of the review.
[203] For example, the Commerce Commission held a workshop in March 2019 that considered how, in redefining default price-quality regulations as required every five years, it could facilitate innovation and deal with uncertainty. See the Commerce Commission's *2020-2025 default price-quality path* webpage https://comcom.govt.nz/regulated-industries/electricity-lines/electricity-lines-price-quality-paths/electricity-lines-default-price-quality-path/2020-2025-default-price-quality-path?target=documents&root=122704
[204] The Electricity Authority's Innovation and Participation Advisory Group, *Final advice on creating equal access to electricity networks*, April 2019.
[205] The New Zealand Productivity Commission's *Low-emissions economy*, August 2018, pg148.

innovation, including in the electricity sector.[206] However, some said improvements were needed to give clearer guidance on use of the funds, more co-ordination between funds, and a higher profile of their work.[207] Some submitters said an industry levy should not be used to pay for any dedicated fund because it would push up electricity prices.[208]

Two submitters said competition, not contestable funding, should be the spur to innovation,[209] but others, including some independent retailers and distributors, supported a dedicated fund.[210] Some of these submitters said the objective of funding initiatives should be to reduce energy costs for consumers,[211] while two distributors said the fund should help smaller distributors to invest in innovation that might not otherwise happen.[212] One submitter said funds in Australia and the United Kingdom (the ARENA fund and Ofgem Network Innovation Fund respectively) awarded money for innovative projects, the results of which were shared among other participants.[213]

We would expect this recommendation to be implemented within 12 months.

G2: Examine the security and resilience of the electricity supply

The Electricity Authority should commission the Security and Reliability Council to examine the potential impact of technological advances and other changes on the long-term security and resilience of the country's electricity supply.

The Council should interpret resilience and reliability broadly, taking into account developments throughout the electricity supply chain. It should draw on relevant reports written here and overseas to avoid duplication of effort, and should take special note of policy settings relevant to the sector that arise from the Government's response to the Interim Climate Change Committee report.

The Council should complete its work within 12 months, having been given sufficient resources, including access to specialist advice and analysis, to carry out the task. The Authority should report back to the Minister on actions it is taking in response to the review and any recommendations for the Government and other agencies.

The review's considerations should include:

- the Council's own charter, terms of reference and work programme
- the potential impact of large increases in intermittent generation, particularly wind and solar panels, large increases in electric vehicle charging and industrial heat, and possible proliferation of battery installations throughout distribution networks

[206] For example, Consumer NZ, pg5; Contact, pg10; Electricity Retailers' Association of New Zealand, pg18; Energy Efficiency and Conservation Authority, pg5; Genesis, pg13; Mercury, pg16; Meridian, pg17; Nova, pg7; and Orion, pg10.
[207] For example, BusinessNZ Energy Council, pg10; Department of Public Health, pg12; and Energy Efficiency and Conservation Authority, pg5.
[208] For example, Electricity Retailers' Association of New Zealand, pg18.
[209] Electricity Retailers' Association of New Zealand, p18; and Trustpower, p23.
[210] For example, Community Energy Network, pg3; Counties Power, pg5; Energyclubnz, pg6; Flick, pg24; Grey Power, pg4; Northpower and Top Energy, pg12; Powerco, pg7; The Lines Company, pg14; and Wellington Electricity, pg7.
[211] For example, Flick, pg24; independent retailers, pg17; and Northpower and Top Energy, pg12.
[212] The Lines Company, pg14; and Wellington Electricity, pg7.
[213] Wellington Electricity, pg7-8.

- the risk monitoring policies and procedures of Transpower (as system operator responsible for managing the power system and operating the wholesale electricity market)
- the Electricity Authority's market development work programme and market performance monitoring functions
- other relevant matters, including matters overseen by agencies such as the Ministry of Business, Innovation and Employment, the Commerce Commission and the Gas Industry Company.

We consider a review necessary because it is highly likely developments such as "digital disruption", increasing electrification of transport and process heat, and the emergence of alternative fuel sources will eventually have a profound impact on the security and resilience of the electricity supply.[214] Less certain is how these developments will make themselves felt. Knowing this will enable the Government to take steps to ensure the continued security, reliability and resilience of the electricity system. The Council's members have the necessary experience and expertise to undertake such a review.

A range of submitters supported such a review. Some emphasised the importance of ensuring the Council had enough resources to carry out the review.[215] Others urged an evaluation of the review's terms of reference to ensure its role was clear. The Electricity Authority said the review should not duplicate the work of other reviews in recent years.[216] Contact said it should not overlap with the monitoring function the Council, the Electricity Authority and Transpower are required to perform in this area.[217] Several submitters highlighted the relevance of work by the Interim Climate Change Committee and the possible impact of future government policy decisions on climate targets.[218]

Nova and Orion said Treasury or the Ministry of Business, Innovation and Employment were better choices to conduct the review, which should encompass other infrastructure, such as the gas supply.[219] We think the Council can consider these wider questions through its engagement with other agencies.

G3: Explore new institutional arrangements for energy policy and regulation

The Government should consider alternative ways for government agencies to co-ordinate energy policies, regulations and programmes. Its purpose should be to better organise resources to face challenges spanning multiple areas of agency responsibility. This could be achieved in various ways, including the following (either separately or in combination):

- establishing a single electricity and gas regulator, incorporating the functions of the Electricity Authority, with comparable regulatory functions for the natural gas industry (as suggested in our options paper: F6)
- establishing a ministry of energy, bringing together parts of the Ministry for the Environment, Ministry of Civil Defence and Emergency Management, Ministry of Transport

[214] Digital disruption, in this context, refers to the extensive use of sensors, automation, artificial intelligence and analysis of consumer information that, dramatically alters the way electricity is produced, transported, stored, purchased and sold.
[215] For example, Electricity Authority, pg17; Electricity Networks Association, pg30; Transpower, pg7; and Trustpower, pg23.
[216] Electricity Authority, pg13.
[217] Contact, pg10.
[218] For example, Electricity Authority, pg17; Electricity Networks Association, pg30; and Powerco, pg7.
[219] Nova pg7; and Orion, pg11.

and Ministry of Business, Innovation and Employment

- creating less formal arrangements such as a public service executive board to facilitate cross-sector initiatives
- creating a council to co-ordinate energy sector initiatives

We consider a review of institutional arrangements is warranted because energy challenges increasingly cross traditional boundaries – and so must the solutions. Energy production affects climate change objectives, income affects energy hardship, and housing quality affects energy consumption. The institutional tools with which these problems are addressed must therefore be adapted to the new circumstances. As noted earlier (F1), any need to transfer functions between regulators could also be considered as part of this broader review.

This recommendation is considerably more far-reaching than that proposed in our options paper, which was to set up a single electricity-gas regulator. However, many submitters urged us to take a more expansive view of how government agencies could be organised in responding to energy-related challenges. Some suggested we take a cue from current proposals to introduce responsiveness and adaptability into the public service.[220] The range, strength and soundness of those views persuaded us to adopt this recommendation.

Vector suggested the creation of a ministry of energy, which it said could tackle how to transition to a low-carbon economy, how to deal with energy hardship, and how to ensure the electricity supply remained resilient.[221] Some submitters said greater co-ordination among government agencies should be extended as far as social welfare and enviornmental agencies.[222] For this reason, Vector did not support the Council of Energy Regulators acting as the co-ordinating body, although the Electricity Networks Association considered the Council was the logical choice.[223]

However, some submitters on our electricity-gas regulator option (F6) said there was no clear problem to justify even this step, which they said would distract the Government and regulators from more pressing matters.[224] Others suggested combining energy regulation with efforts to cut the sector's emissions.[225]

The Government should begin exploring alternative arrangements once the Climate Commission is established and has made progress preparing energy sector carbon budgets and emission reduction plans. This preliminary work by the Commission will set the broad parameters within which the Government's exploratory work can begin. In the meantime, energy sector regulators should continue to co-ordinate with each other and other relevant agencies on mutual areas of interest, such as emissions reduction, energy efficiency, building energy performance, income adequacy, public health and public housing. (See Observations regarding need for greater co-ordination.) A good first step would be for the Electricity Authority and Commerce Commission to have one common member on their governance boards – and

[220] State Services Commission's *State Sector Act Reform Consultation,* 4 September 2018. See http://www.ssc.govt.nz/consultation-state-sector-act-reform-opens
[221] Vector, pg41.
[222] For example, Orion, pg11; and Vector, pg41.
[223] Electricity Networks Association, pg31.
[224] For example, BusinessNZ Energy Council, pg7-8; Major Electricity Users' Group attachment TDB Advisory *Gas Sector Governance Interim Report,* 22 March 2019, pg6.
[225] Genesis, pg3; Independent Electricity Generators Association, pg11.

both agencies have indicated support for such a cross-appointment.

G4: Improve building energy efficiency

The Government should review and amend building performance regulations and programmes to improve the energy efficiency of new and existing buildings. In particular, it should:

- revising the building code to boost energy efficiency, ventilation and moisture control requirements of buildings
- revising the building code to facilitate the installation of solar panels, storage batteries, electric vehicle charging technology, building energy management systems, and related products and services
- extending programmes to improve the energy performance of existing homes, including the Warmer Kiwi Homes grants scheme and healthy home standards for rental accommodation.

This is sensible because of the considerable untapped potential to increase the energy efficiency of New Zealand's housing stock. The benefits will include lower energy demand, reduced greenhouse gas emissions, more affordable power, better health and wellbeing for occupants and improved security of supply.

Our recommendation is wider than the options paper proposal because it includes expanded energy efficiency programmes and stronger building quality regulations for owner-occupier as well as rental homes. We did this in response to stakeholder feedback. Under the Warmer Kiwi Homes scheme, for example, qualifying owner-occupiers (generally low-income households) receive grants to install insulation. Healthy home standards govern, among other things, heating, insulation and ventilation for rental properties. Extending these programmes, and the reach of these regulations, will help improve the energy efficiency of existing homes (both owner-occupied and rented), particularly for low-income households.

There was widespread support for this measure. Submitters noted the benefits of improved energy efficiency already outlined.[226] Energy hardship researcher Ian McChesney said clear objectives and more focus were needed after years of slow progress.[227] Transpower described this measure as without doubt a "low hanging fruit" option that would produce "predictable and achievable" gains.[228]

Some submitters cautioned against making changes that would overlap with other initiatives.[229] Several submitters questioned the need for the measure because of work already in progress in this area.[230] We consider our recommendation will strengthen, not overlap with, existing initiatives.

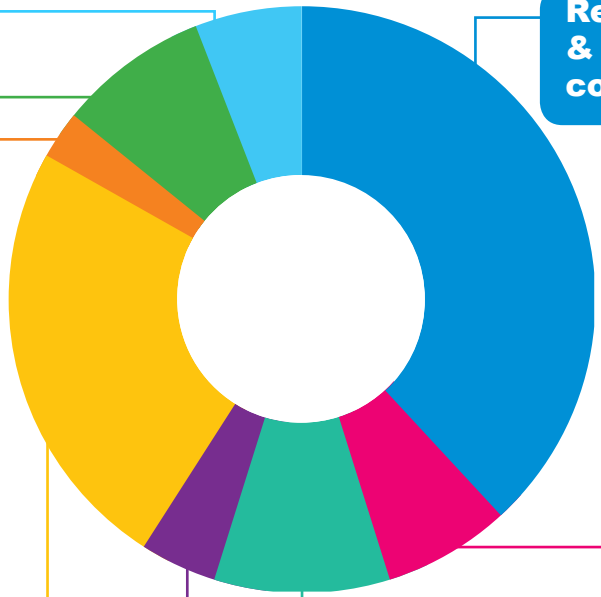
This is a high-priority measure because of the enormous potential benefits to households, businesses and the environment. We are aware some of these benefits come with extra costs, but are confident they will be valuable.

[226] For example, Community Energy Network, pg3; Department of Public Health, University of Otago, pg12; Flick, pg24; Transpower, pg8; and Trustpower, pg23.
[227] Ian McChesney, pg9.
[228] Transpower, pg8.
[229] For example, BusinessNZ Energy Council, pg11; and Electricity Networks Association, pg31.
[230] For example, Major Electricity Users' Group, pg11; and Orion, pg11.

Appendix 1: Stakeholders involved in the review

Associations

- BusinessNZ Energy Council
- Electricity Engineers' Association
- Electricity Networks Association
- Electricity Retailers' Association NZ
- Energy Management Association of NZ
- Federated Farmers
- Independent Electricity Generators Association
- Irrigation NZ
- Major Electricity Users' Group
- Major Gas Users' Group
- New Zealand Wind Energy Association
- Petroleum Exploration and Production Association of NZ
- Sustainable Energy Association NZ
- Telecommunications Users Associations of NZ



Residential & business consumers

[too many to list]

Consumer advocates

- Child Poverty Action Group
- Community Energy Network
- Consumer NZ
- Sustainability Options
- Sustainability Trust
- FinCap
- Grey Power New Zealand Federation Inc
- Greypower Ruapehu
- Hamilton Residents & Ratepayers Assn Inc
- Tairawhiti Residents Association
- Taumarunui Residents' & Ratepayers' Association Inc.
- The Salvation Army
- Turangi-Tongariro Residents and Ratepayers Association

Government, regulators & agencies

- Canterbury District Health Board
- Commerce Commission
- Electricity Authority
- Energy Efficiency and Conservation Authority
- Gas Industry Company
- Housing NZ
- Interim Climate Change Committee
- Ministry of Health
- Ministry of Social Development
- Regional Public Health
- Taranaki District Health Board
- Welfare Expert Advisory Group

Individuals, researchers & academics

- Bryan Leyland
- David Butcher and Associates
- He Kainga Oranga/The Housing and Health Research Programme
- Dr Andrew Crossland
- Electric Power Optimisation Centre
- Dr Geoff Bertram
- Gifford Consulting
- Greenpeace Aotearoa
- Ian McChesney
- Jake Lilley
- Molly Melhuish
- National Energy Research Institute
- Retirement Policy and Research Centre, University of Auckland
- Dr Stephen Poletti

Energy companies

- Aurora Energy
- Buller Electricity Limited
- Centralines
- Community Power
- Contact Energy
- Counties Power
- Distribution Group
- Ecotricity
- Electric Kiwi & Haast Energy Trading
- Energyclubnz
- First Gas
- Flick Electric
- Genesis Energy
- Karapiro Ltd
- Marlborough Lines
- Mercury
- Meridian Energy Limited
- Network Waitaki
- Ngati Tuwharetoa Electricity Limited
- Northern Energy Consumer Group
- Northpower
- Nova Energy
- Orion
- Our Energy
- Paua to the People
- Pioneer Energy
- Powerco
- Pulse Energy
- Revolve Energy
- The Lines Company
- Top Energy
- Transpower
- Trustpower
- Unison
- Vector Limited
- Ventus Energy
- Vocus
- Waipa Networks Limited
- WEL Networks
- Wellington Electricity Lines Ltd

Service providers and technology companies

- Accurassi
- Ampli
- ASX Limited
- Chargenet NZ
- Drive Electric
- Ecobulb Limited
- Glimp Limited
- Home Spot Limited
- NZX
- Saveawatt & One Big Switch New Zealand
- Simply Group
- Solarcity
- Sunshine Solar and Yes Power
- Utilities Disputes
- Windflow Technology

Consumer trusts

- Energy Trusts of New Zealand
- Entrust
- LineTrust South Canterbury
- Northpower Electric Power Trust
- Waitaki Power Trust
- Counties Power Consumer Trust

Appendix 2: Implementation matrix

Recommendations			Lead agency	How actioned	Estimated time to complete
A	1	Establish a consumer advisory council	MBIE	Statutory change	Short
	2	Ensure regulators listen to consumers	MBIE	Non regulatory	Short
B	1	Establish a cross-sector energy hardship group	Cross sector	Non regulatory	Short
	2	Define energy hardship	MBIE	Non regulatory	Medium
	3	Establish a network of community-level support services to help consumers in energy hardship	tbc	Non regulatory	Medium
	4	Set up a fund to help households in energy hardship become more energy efficient	tbc	Non regulatory	Medium
	5	Offer extra financial support for households in energy hardship	MSD	Non regulatory	Longer
	6	Set mandatory minimum standards to protect vulnerable and medically dependent consumers	MBIE	Regulation change	Medium
	7	Prohibit prompt payment discounts but allow reasonable late payment fees	MBIE	Regulation change	Short
	8	Encourage bulk deals for social housing and/or Work and Income clients	MSD / HUD	Non regulatory	Medium
C	1	Merge the Electricity Authority and Consumer NZ price comparison websites	EA	Non regulatory	Medium
	2	Improve consumer awareness of Powerswitch and Utilities Disputes	EA / CAC	Non regulatory	Medium
	3	Develop a streamlined way to process customer requests for consumption data	EA	Code change	Medium
	4	Make distributors offer retailers standard default terms for network access	EA	Code change	Medium
	5	Prohibit saves and win-backs	EA	Code change	Short
	6	Establish a pilot scheme to help non-switching consumers find better deals	EA	Code change	Longer
D	1	Improve availability of wholesale market information	EA	Code change	Medium
	2	Introduce mandatory market-making obligations unless the sector develops an effective incentive-based scheme	EA	Code change	Medium
	3	Make generator-retailers release information about the profitability of their retailing activities	EA	Code change	Longer
	4	Monitor contract prices and new-generation costs more closely	EA	Non regulatory	Medium
E	1	Issue a government policy statement on transmission pricing	MBIE	Non regulatory	Short
	2	Issue a government policy statement on distribution pricing	MBIE	Non regulatory	Short
	3	Ensure distributors have access to smart meter data on reasonable terms	EA	Code change	Medium
	4	Give the Commerce Commission more powers to regulate distributors	MBIE	Statutory change	Longer
F	1	Give the Electricity Authority more powers to regulate network access	MBIE	Statutory change	Longer
	2	Give the Electricity Authority an explicit customer protection function	MBIE	Statutory change	Longer
	3	Update the Electricity Authority's compliance framework and strengthen its information-gathering powers	MBIE	Regulatory & statutory change	Longer
	4	Phase out low fixed charge tariff regulations	MBIE	Regulation change	Longer
G	1	Encourage more energy sector innovation	MBIE	Non regulatory	Longer
	2	Examine the security and resilience of electricity supply	EA / SRC	Non regulatory	Medium
	3	Explore new institutional arrangements for energy policy and regulation	MBIE	Non regulatory	Medium
	4	Improve building energy efficiency	MBIE	Regulation change	Longer