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Electricity Market Measures submissions
Ministry of Business, Innovation and Employment
PO Box 1473
Wellington 6140
New Zealand

By email: electricitymarkets@mbie.govt.nz

Submission on: Measures for Transition to an Expanded and Highly Renewable Electricity System

### Introduction

- 1. Thank you for the opportunity to make a submission on *Measures for Transition to an Expanded and Highly Renewable Electricity System*. This submission is from the Consumer Advocacy Council, the independent advocate for residential and small business electricity consumers in Aotearoa New Zealand.
- 2. If you have any questions regarding our submission, please contact:
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#### **General comments**

- 3. The Consumer Advocacy Council welcomes the focus of this consultation paper on measures to support the transition to a renewable electricity system. In particular, we welcome discussion of current regulatory settings, and whether they are fit for purpose to support the transition and deliver the outcomes consumers expect.
- 4. We note many of the issues canvassed in the paper have been the subject of previous consultations by the Electricity Authority and the Market Development Advisory Group. We therefore ask the ministry to consider our submission on this paper together with the following:
- submission on: <u>Promoting competition in the wholesale electricity market in the transition towards 100% renewable electricity</u>
- NZIER report to the Consumer Advocacy Council: <u>Assessing the New Zealand wholesale</u> electricity market: Issues affecting the benefits for small electricity consumers
- submission on: Price discovery in a renewables-based electricity system
- submission on: <u>Targeted reform of distribution pricing Issues paper</u>.

We have included extracts from the above documents at relevant points within this submission.

# Submission on Measures for Transition to an **Expanded and Highly Renewable Electricity System**

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# **Release of information**

Please let us know if you would like any part of your submission to be kept confidential.
I would like to be contacted before the release or use of my submission in the summary of submissions that will be published by MBIE after the consultation.
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# Responses to questions

## Part 1: Growing Renewable Generation

Are any extra measures needed to support new renewable generation during the transition?

1. Please keep in mind existing investment incentives through the energy-only market and the ETS, and also available risk management products. Any new measures should add to (and not undermine or distort) investment that could occur without the measures.

The Council considers additional measures are likely to be needed to support new renewable generation during the transition.

In our December 2022 <u>submission to the Electricity Authority</u> (EA) on promoting competition in the wholesale electricity market, we commented on the problems associated with relying on the energy-only market and the ETS to ensure renewables replace thermal generation. We refer the ministry to this submission.

In relation to the ETS, we noted that while it is intended to incentivise investment in renewables, these incentives are lessened for existing generators as they benefit when spot prices on the wholesale market are set by thermal generation. Higher spot prices for thermal power lead to "windfall gains" for renewable generators as they are also paid the spot price.

Estimates cited by the EA suggest renewable generators could earn an additional \$1.6 billion over the period from 2023 to 2027 due to increasing carbon prices. While these earnings could be invested in new renewable generation, there are ongoing questions about the level of returns being made versus the level of renewable investment occurring.

The major question for consumers is whether they are paying inflated prices as a result of current arrangements. Delays in moving to a renewable electricity system also inevitably mean there will be delays in the price and environmental benefits consumers should be able to expect from the transition.

If you think extra measures are needed to support renewable generation, which ones should the government prioritise developing and where and when should they be used? What are the issues and risks that should be considered in relation to such measures?

Our December 2022 submission to the Electricity Authority suggested consideration be given to structures used in overseas jurisdictions to support renewable generation. These measures

to structures used in overseas jurisdictions to support renewable generation. These measures could potentially include long-term procurement options, such as those identified by the International Renewable Energy Agency.

Prioritisation of measures needs to be informed by robust analysis, which recognises the potential contribution demand flexibility can make to the electricity system. Analysis must also consider other developments, such as the likely contribution microgrids will play in delivering an electricity system that meets consumer needs.

- If you don't think further measures are needed now to support new renewable generation, are there any situations which might change your mind? When and why might this be?
- Do you think measures could be needed to support new firming/dispatchable capacity (resources reliably available when called on to generate)? If yes, which kind of measures? What needs do you think those measures could meet and why?

The Council believes support for new battery storage should be considered to help manage supply risks due to intermittent generation and dry years.

We note the comments in the paper regarding the potential development of a capacity market. Research commissioned by the Council from NZIER pointed out that:

... the effectiveness of such a mechanism would depend on how accurately the regulator factors in different types of capacities [to] meet both peaking and dry year needs when forecasting the associated capacity requirement.

The NZIER report also noted that a capacity market would need to be carefully designed to avoid over-procurement of new generation, which would likely lead to more costs being passed on to consumers.

Are any measures needed to support storage (such as battery energy storage systems or BESS) during the transition? If yes, what types of measures do you think should be considered and why?

Support for battery energy storage systems should be considered as storage systems will play a key role in a renewable electricity system. Sufficient storage to offset thermal base load will need to be available to assist in management of dry years and intermittent generation.

If you answered yes to question 4 or 5 above, should the support be limited to renewable generation and renewable storage technologies only or made available across a range of other technologies?

Keep in mind that fossil fuels are generally the cheapest option for firming, though this may change over time as renewable options (particularly batteries) become more efficient and affordable

6.

The Council's view is that support should be limited to renewable generation and renewable storage technologies. Technologies that will help achieve emissions reductions, including storage for renewables, should be prioritised.

- 7. If you answered yes to question 6 above, what are the issues and risks with this approach? How could these risks and issues be addressed?
  - Over-investment, which would likely result in higher prices for consumers, is a risk. However, this risk can be mitigated by ensuring decision making is underpinned by robust analysis and effective consumer participation.
- Are any measure(s) needed to support existing or new fossil gas fired peaking generation, so as to help keep consumer prices affordable and support new renewable investment?

  The Council's view is that any measures should prioritise renewables. As noted above (question 2), decision making must also take into account the contribution that demand flexibility can make to the electricity system and to reducing costs to consumers.
- If you answered yes to question 8 above, what measures should be considered and why? What are the possible risks and issues with these measures?
- If you answered yes to question 8 above, what rules would be needed so that fossil gas generation remains in the electricity market only as long as needed for the transition, as part of phase down of fossil gas?

- Are there any issues or potential issues relating to gas supply availability during electricity system transition that you would like to comment on?
- Do you agree that specific measures could be needed to support the managed phasedown of existing fossil fuel plants, for security of supply during the transition?

  The Council supports the introduction of notice periods, as outlined in paragraphs 115 and 116 of the consultation paper. Support for battery storage should also be considered to manage the phasedown of existing fossil fuel plants.
- If you answered yes to question 12 above, what measures do you think could be appropriate and why? What conditions do think you should be placed on plant operation?

For example, do you have any views on whether there should be a minimum notice period for reductions in plant capacity, and/or for placing older fossil fuel plant in a strategic reserve? As noted above, the Council supports the introduction of a minimum notice period. We suggest a minimum of three years, as in Australia, would be appropriate.

If you answered yes to question 12 above, what are the issues and risks with these measures and how do you think these could be addressed?

Notice periods are a relatively simple measure and are unlikely to present significant issues or risks.

In relation to battery storage, under- or over-investment is a risk. However, as noted, these risks can be mitigated by ensuring decision making is underpinned by robust analysis and effective consumer participation.

- What types of commercial arrangements for demand response are you aware of that are working well to support industrial demand response?
- What new measures could be developed to encourage large industrial users, distributors and/or retailers to support large-scale flexibility?
- Do you have any views on additional mechanisms that could be developed to provide more information and certainty to industry participants?

The Council agrees that demand response measures for large users have the potential to deliver significant benefits. As the paper notes, large industrial users consume about one third of New Zealand's electricity demand. There is therefore considerable scope for these users to provide demand response flexibility back to the market.

Demand flexibility also needs to be supported at the small business and household level. Demand flexibility will be essential to support intermittent renewable generation dispatch and to reduce costs to consumers, including the costs of network and grid infrastructure. We discuss these issues in more detail below.

## **Part 2: Competitive Markets**

Do you agree that the key competition issue in the electricity market is the prospect of increased market concentration in flexible generation, as the role of fossil fuel generation reduces over time?

The Council considers that the prospect of increased market concentration in flexible generation is an issue, but it is only one of the issues in the electricity market that needs to be addressed. We refer the ministry to our <u>December 2022 submission</u> to the EA and accompanying report from NZIER.

- Aside from increased market concentration of flexible generation, what other competition issues should be considered and why?

  See our response to question 18 above.
- What extra measures should or could be used to know whether the wholesale electricity market reflects workable competition, and if necessary, to identify solutions? See our response to question 18 above.
- Should structural changes be looked at now to address competition issues, in case they are needed with urgency if conduct measures prove inadequate?

  The Council considers structural changes should be looked at as part of a broader review of the wholesale market to assess whether it remains fit for purpose.

We note the commentary in the consultation paper that a "definitive conclusion" about retail competition is "difficult" and that the EA's comparative assessments of retailer gross margins and internal transfer prices "may not provide definitive assurance that retail market competition is workable or effective".

For consumers, this means there is also no definitive assurance the market is working for their long-term benefits. There are therefore grounds for consumers to question whether they are paying higher electricity prices than they should because the system that is intended to operate in their interests is failing to do so.

We acknowledge some changes have been made to try to address identified problems. However, these changes have not resulted in a situation where consumers can have confidence the electricity system is delivering the outcomes expected. Our recommendation is that a broader review of the current market structure should be undertaken.

Is there a case for either vertical separation measures (generation from retail) or horizontal market separation measures (amending the geographic footprint of any gentailer) and, if so, what is this?

See our response to question 21 regarding the need for a broader review.

- Are measures needed to improve liquidity in contract markets and/or to limit generator market power being used in retail markets? If yes, what measures do you have in mind, and what would be the costs and benefits?
  - See our response to question 21 regarding the need for a broader review.
- Should an access pricing regime be looked at more closely to improve retail competition (beyond the flexibility access code proposed by the Market Development Advisory Group or MDAG)?

An access pricing regime – for example, similar to the regulated access pricing regime that applies to some wholesale telecommunications services – could be considered in a broader review of the wholesale market.

- What extra measures around electricity market competition, if any, do you think the government should explore or develop?

  See our response to question 18 above.
- Do you think a single buyer model for the wholesale electricity market should be looked at further? If so, why? If not, why not?

The Council considers that alternative models for the electricity market, including a single-buyer model, should be explored.

A single-buyer model has previously been suggested as an option in New Zealand to improve outcomes for consumers. In its <u>report</u> to the Council, NZIER noted that a single-buyer model:

... could promote more competition across the generators and reduce the volatility of ... wholesale prices, as well as [help] alleviate supply shortages and [provide] incentives for private investment in new generation capacity.

NZIER's report noted the single-buyer model would require the government to take on more risk. However, these risks can be mitigated by ensuring robust decision-making processes are in place.

#### Part 3: Networks for the Future

- Do you consider that the balance of risks between investing too late and too early in electricity transmission may have changed, compared to historically? If so, why?

  The urgent need to decarbonise the economy means the risks are likely to be higher than they previously were. If transmission planning and investment decisions fail to support the transition to renewable generation, consumers will ultimately be left to bear the costs of those decisions.
- Are there any additional actions needed to ensure enough focus and investment on maintaining a resilient national grid?

It will be crucial to ensure consumers are represented in decision-making processes about investment in and maintenance of a resilient national grid.

As the consultation paper notes, insufficient capacity may lead to rationing and outages, as well as potentially higher wholesale prices. Over-investment will also lead to higher costs for consumers. Adequate consumer representation in decision making is therefore essential to minimise these risks.

We note the "New Reg" project in Australia, an initiative set up by the Australian Energy Regulator, Energy Networks Australia and Energy Consumers Australia to ensure that:

... customers' preferences drive energy network businesses' proposals and regulatory outcomes.

The New Reg project included the development of a model for a different approach to revenue resets. Similar models for transmission and distribution pricing are likely to be of benefit in New Zealand to ensure consumer interests are integral to decision making.

Do you agree we have identified the biggest issues with existing regulation of electricity distribution networks?

In addition to the issues listed in the paper, lack of good quality information about network capacity is a further problem. We note the comments in the Commerce Commission's recent consultation on information disclosure that most distributors:

... are either still developing the capability to collect [low voltage] network data ... and/or face difficulties obtaining and using smart meter data to report meaningful constraint information.

Reliable data on existing network capacity is essential to ensure informed decision making both by networks themselves and by the regulator. Data shortfalls therefore need to be addressed.

In regard to the issue of pricing signals and efficient use of networks (the fourth issue listed in the consultation paper), equity impacts need to be central to consideration of pricing signals. As we discuss in further detail below, many consumers are unlikely to have the ability to load shift in response to price signals and will therefore be penalised by higher peak tariffs.

Are there pressing issues related to the electricity distribution system where you think new measures should be looked at, aside from those highlighted in this document? How would you prioritise resolving these issues to best enable the energy transition?

The Council considers a further pressing issue is the need for increased scrutiny of distribution companies' expenditure, particularly in view of forecast increases in spending to support renewable generation. We note the Commerce Commission's July 2022 report on trends in company performance, which made the following comments regarding expenditure:

- First, the Commission stated it collected "a lot of information from local lines companies
  about the age and condition of their assets through [information disclosure]. However, the
  detailed nature of the asset category data, compared to the less-detailed expenditure
  data, makes it challenging to understand the relationships between expenditure and cost
  drivers, and therefore efficiency. We consider this is a potential subject of future work".
- Second, the Commission stated companies were spending more on non-network operating expenditure. It reported operating expenditure for "business support" and "system operations and network support" respectively comprised about 34% and 24% of total operating expenditure from 2013-2021. Given the significance of these costs, the Commission stated it considered that "gaining a greater understanding of their drivers and scope for efficiency should be an area of future work".

Questions about distribution companies' revenue and expenditure, and the cost implications for consumers where spending is not justified, have been raised for some time. For consumers to have confidence that regulatory settings are providing appropriate checks on lines companies, these questions need to be addressed.

Are the issues raised by electricity distributors in terms of how they are regulated real barriers to efficient network investment?

31.

Please give reasons for your answer. Is there enough scope to address these issues with the current ways distributors are regulated? If not, what steps would you suggest to address these issues?

The Council notes the work already underway to address these issues. Our views on broader regulatory settings are discussed below.

- Are there other regulatory or practical barriers to efficient network investment by electricity distributors that should be thought about for the future?
- What are your views on the connection costs electricity distributors charge for accessing their networks? Are connection costs unnecessarily high and not reflective of underlying costs, or not? If they are, why do you think this is occurring?

The Council is aware of complaints about high costs and time delays associated with approvals for and completion of network connections.

We note the comment (paragraph 236) in the consultation paper regarding the Commerce Commission's review of information disclosure requirements, which is intended to allow it to monitor the performance of distribution businesses in providing new connections.

The Council strongly supports increased scrutiny of companies' performance. Monitoring, coupled with requirements for companies to disclose better information about costs and capacity constraints, will improve transparency for both the regulator and consumers.

- If you think there are issues with the cost of connecting to distribution networks, how can government deliver solutions to these issues?
  - In addition to work underway to improve monitoring and price transparency, we recommend customers be given the right to take complaints about connection costs to an independent dispute resolution scheme, such as Utilities Disputes.

This would enable customers to directly challenge high connection costs and provide an added check on distribution companies' performance in this area.

- Would applying the pricing principles in Part 6 of the Code to new load connections help with any connection challenges faced by public EV chargers and process heat customers? Are there other approaches that could be better?
  - The Council would support investigation of this option.
- Are there any challenges with connecting distributed generation (rather than load customers) to distribution networks?
  - The Council is aware there are also complaints about high costs and time delays associated with the connection of distributed generation to networks. These factors will likely create barriers to consumers who are planning to invest in new technologies to reduce carbon emissions.
- Are there different cost allocation models addressing first mover disadvantage (when connecting to distribution networks) which the Electricity Authority should explore, potentially in conjunction with the Commerce Commission?
  - In our <u>August 2023 submission</u> to the Electricity Authority on distribution pricing, the Council noted concerns about the "first mover disadvantage" where a customer who requires a new

connection, or an increase in connection capacity, may face significant costs as they are required to pay for capacity beyond what is needed.

Our submission recommended regulating connection pricing to help ensure a customer does not pay for unneeded capacity and that additional capacity is purchased by customers who will use it. The Netherlands' model, outlined in box 7 of the consultation paper, could be explored further for potential use in New Zealand.

Should the Electricity Authority look at more prescriptive regulation of electricity distributors' pricing? What key things would need to be looked at and included in more prescriptive pricing regulation?

We consider a more prescriptive approach should be explored.

There may be situations where the use of a "renewable energy zone" is appropriate, for example, where small distributors lack sufficient resources and require support from central government to make necessary investments.

Do current arrangements support enough co-ordination between the Electricity Authority and the Commerce Commission when regulating electricity distributors? If not, what actions do you think should be taken to provide appropriate co-ordination?

The Council considers improvements are required in this area. The division of responsibilities between the Electricity Authority and the Commerce Commission seems overly complex, given New Zealand's small size and the importance of ensuring a coordinated approach to the regulation of electricity distributors.

The Council has not formed a specific view on the changes required. However, we support investigation of options that could improve current arrangements and the outcomes for consumers. Improved coordination would also be useful in consultation processes relating to the regulation of electricity distributors.

Will the existing statutory objectives of the Electricity Authority and Commerce Commission adequately support key objectives for the energy transition?

Given the urgency of responding to climate change, the Council considers the existing

Given the urgency of responding to climate change, the Council considers the existing statutory objectives of the Electricity Authority and Commerce Commission should be expanded to ensure they reflect key objectives for the energy transition.

Should the Electricity Authority and/or the Commerce Commission have explicit objectives relating to emissions reduction targets and plans set out in law? If so,

 should those objectives be required to have equal weight to their existing objectives set in law?

Why and how might those objectives affect the regulators' activities?

41.

We consider the Electricity Authority and the Commerce Commission should have explicit objectives relating to emissions reduction targets and plans. Including these in legislation would ensure climate change and emissions reduction targets are integrated into decision making, rather than potentially seen as separate and ancillary considerations.

As the consultation paper notes, a similar approach is already being taken in Australia with the introduction of a specific emissions reduction objective into the national energy objectives,

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which are contained in the National Electricity Law, the National Energy Retail Law and the National Gas Law.

Should the Electricity Authority and/or the Commerce Commission have other new objectives set out in law and, if so, which and why?

With the exception of the new consumer protection objective added to the Electricity Industry Act in 2022, the objectives of the Authority and the Commission have not been amended for some time and do not adequately reflect the consumer outcomes that electricity regulation should achieve.

In other jurisdictions, electricity regulators have moved beyond a single focus on efficiency. For example, the <u>UK Office of Gas and Electricity Markets</u> (Ofgem) has previously identified five "strategic consumer outcomes". These are:

- lower bills than would otherwise have been the case
- reduced environmental damage both now and in the future
- improved reliability and safety
- better quality of service, appropriate for an essential service, and
- benefits for society as a whole, including support for those struggling to pay their bill.

While New Zealand legislation includes references to the "long-term benefit of consumers", this term is not defined and has generally been interpreted with a narrow efficiency lens. As the Ofgem list above illustrates, consumer interests in electricity supply extend beyond efficiency considerations.

Is there a case for central government to direct the Commerce Commission, when dealing with Electricity Distributors and Transpower, to take account of climate change objectives by amending the Commerce Act and/or through a Government Policy Statement (GPS)?

The Council believes the urgency of responding to climate change provides strong grounds for central government to direct the Commission to take account of climate change objectives.

If you answered yes to question 43, please explain why and indicate:

• What measures should be used to provide direction to the Commerce Commission and what specific issues should be addressed?

How would investment in electricity networks be impacted by a direction requiring more explicit consideration of climate change objectives? Please provide evidence.

Providing direction via a government policy statement could provide an interim step prior to making changes to legislation. The Council considers a GPS would not replace the need for legislative amendments in order to provide clear legal direction that climate change objectives must be considered by the regulator.

For electricity networks and Transpower, legislative change would also establish that climate change considerations must be central to their planning and investment decisions.

Part 4: Responsive Demand and Smarter Systems

44.

Would government setting out the future structure of a common digital energy infrastructure (to allow trading of distributed flexibility) support co-ordinated action to increase use of distributed flexibility?

The Council supports measures to increase the use of distributed flexibility and we consider the government will need to play a proactive role in this area. We would therefore support government initiatives to set out the infrastructure requirements for increased use of distributed flexibility.

The consultation paper suggests this could be done by the government working with industry. However, consumers must also be involved in this process.

Household-level consumer energy resources (CER) will be part of distributed flexibility services and consumers must be involved in discussions about these services. Consumers will also be affected by decisions relating to investment in and operation of distribution services, and should therefore be represented in decision-making processes.

Should central government see how demonstrations and innovation to help inform how trade of flexibility evolves in the New Zealand context, before providing direction to support trade of distributed flexibility? If yes, how else could government support the sector to collaborate and invest in digitalisation now?

Demonstration projects will provide useful information. However, the Council considers action can be taken now to facilitate use of distributed flexibility arrangements. This could include removing potential barriers to these arrangements in the Electricity Code and developing consumer safeguards, particularly relating to the control and security of smart devices.

- Aside from work already underway, are there other areas where government should support collaboration to help grow and develop flexibility markets and improve outcomes? If yes, what areas and actions are a priority?
- Could co-funding for procurement of non-network services help address barriers to uptake of non-network solutions (NNS) by electricity distributors?

Co-funding for procurement of non-network services may be appropriate in some circumstances to help address barriers to their uptake by electricity distributors. This may be justified in the case of small electricity distributors that lack sufficient resources for investment in non-network solutions.

However, we consider electricity distributors should be including non-network services in their planning as a matter of course, underpinned by robust information about their network capacity. Existing data gaps regarding network capacity will need to be addressed to inform decision making about investment in both network and non-network solutions.

Would measures to maximise existing distribution network use and provide system reliability (such as dynamic operating envelopes) help in New Zealand? If yes, what actions should be taken to support this?

The Council would support investigation of these measures.

What do you think of the approaches to smart device standards and cyber security outlined in this document? Are there other issues or options that should be looked at?

The Council considers that standards for smart devices and cyber security are essential in order to ensure consumers can have confidence in these devices and take advantage of the energy savings they may offer.

Recent survey research carried out by the Council found:

- Use of "smart" devices, such as programmable lights and smart plugs, is not yet
  widespread. Just 12% of consumers have these devices and use these regularly. Highincome households are more likely to do so and therefore are more likely to benefit from
  the energy savings available.
- Just under half (47%) were open to having smart appliances that could be controlled remotely to run at off-peak times when power was cheaper. However, most consumers wanted to be able to retain control of when these appliances operated, rather than have them fully automated.
- Most (71%) are interested in new technologies to help manage energy bills. However, fewer than half (43%) think of themselves "early adopters".

This survey research is due to be published shortly and the Council is happy to provide the results to the ministry.

- Do you think government should provide innovation funding for automated device registration? If not, what would best ensure smart devices are made visible? The Council would support investigation of this.
- Are extra measures needed to grow use of retail tariffs that reward flexibility, so as to support investment in CER and improved consumer choice and affordability?

The Council considers electricity bills should be required to contain a "best plan" message. This message, displayed on bills every three months, would inform customers whether they could save money by switching to another plan and, if so, how much they could save.

We have recently <u>developed a model electricity bill</u> that contains a "best plan" message. This work was informed by the Australian Energy Regulator's "Better bills" project, which involved extensive research with consumers. Our own survey research with Kiwi consumers found 87% considered a best plan notice would be useful on their power bills.

In <u>our October 2023 submission</u> to the Electricity Authority on options to amend the *Consumer care guidelines*, we recommended that requirements for a best plan notice be included in proposed consultation on changes to the Electricity Code.

In addition to better pricing information on bills, consumers need access to robust information on CER options to help them make purchasing decisions. At present, independent information can be hard to find. This gap needs to be addressed to support uptake of technology that can deliver energy efficiency gains.

We also stress that any changes to retail tariffs need to recognise consumers' capacity to load shift. Where households are not able to do this, tariffs changes should not penalise them. Our latest survey research found:

- only nine percent of consumers thought it would be very easy to change when they use large appliances (such as dishwashers and washing machines) to off-peak times when power can be cheaper
- one in five thought it would be difficult, mainly because it would not work for their household.

These findings highlight the need to ensure that tariff changes intended to reward flexibility do not discriminate against consumers who have no or little capacity to change when they use power.

Similarly, consumers who cannot afford to purchase off-grid power systems (e.g., solar photovoltaic systems and batteries) or discretionary load devices (such as smart appliances) will not benefit from tariffs designed to reward flexibility.

<u>Our submission</u> to the Electricity Authority on the reform of distribution pricing canvasses these issues in more detail.

- Should the government consider ways to create more investment certainty for local battery storage? If so, what technology should be looked at for this?

  The Council would support investigation of ways to create more investment certainty for local battery storage.
- Should further thought be given to making upfront money accessible to all household types, at all income levels, for household battery storage or other types of CER?

  The Council supports investigation of this to help ensure all households are able to access CER benefits. For many, investment in battery storage or other types of CER is unlikely to be a realistic option without financial support.
- Should government think about ways to reduce 'soft costs' (like the cost of regulations, sourcing products, and upskilling supplier staff) for installing local battery storage with solar and other forms of CER/DER storage? If so, what technology should be looked at?

  The Council would support investigation of ways to reduce 'soft costs' to facilitate equitable access to new technology.
- Is a regulatory review of critical data availability needed? If so, what issues should be looked at in the review?

The Council notes that access to data is an ongoing problem, which has not been resolved by actions taken to date. We therefore consider a wider review may be warranted.

## Part 5: Whole-of-system considerations

What measures do you consider the government should prioritise to support the transition?

The Council considers that measures should be prioritised to ensure the operation of the wholesale market supports affordability, resilience and sustainability goals. The wholesale market has a significant effect on price, as well as on investment decisions that determine how and when electricity is generated, and will therefore play a pivotal role in the transition.

Measures also need to be prioritised to support domestic and small business consumers in the transition to a renewable energy system. These measures should ensure consumers:

- can actively participate in the transition by, for example, making informed decisions about purchasing new technology
- can access electricity services at an affordable price and see the benefits of renewable generation in lower prices
- are supported financially where low-income presents a barrier to switching away from fossil fuel use.

Are there gaps in terms of information co-ordination or direction for decision-making as we transition towards an expanded and more highly renewable electricity system and meeting our emissions goals? Please provide examples of what you'd like to see in this area.

As the consultation paper notes, the electricity system "relies on a multitude of different parties" and there is "no active system architect, as such, to guide or coordinate the fragmented decisions of individual actors in a manner that best promotes system-level objectives".

The Council considers this is a gap that needs to be addressed, given the urgency of transitioning to a renewable electricity system. Better coordination and direction are needed to ensure New Zealand has an electricity system that is able to deliver on affordability, resilience and sustainability goals.

Are there significant advantages in adopting a REZ model, or a central planning model (like the NSW EnergyCo), to coordinate electricity transmission investment in New Zealand?

Would a REZ model for local electricity distribution be an effective means of addressing first mover disadvantage with connecting to electricity distribution networks?

The Councils considers a local REZ model may be appropriate in some areas, However, a central planning model would have the benefit of being able to coordinate electricity transmission investment across the country. As the consultation paper notes, this approach is already being adopted in other jurisdictions.

60. Should MBIE regularly publish opportunities for generation investment to enable informed market decision-making?

The Council is not opposed to this option. However, we are unsure whether it will make a significant difference.

How should the government balance the aims of sustainability, reliability and affordability as we transition to a renewable electricity system?

Decision making needs to ensure all three aims can be achieved.

59.

The Council's survey research shows affordability is a key concern for both domestic and small business consumers. In our <u>July 2023 survey</u>, making sure electricity is affordable was a top concern for 82% of domestic consumers and 87% of small business consumers.

The survey also found a high level of concern about the resilience of the electricity system to extreme weather events. For 78% of domestic consumers and 87% of small business consumers, system resilience was a key concern.

As 2023 has shown, extreme weather events can have significant effects on the electricity system. Climate change means we can expect these events to increase in frequency in the future, highlighting the need to ensure sustainability is central to decision making.

To what extent should wholesale, transmission, distribution or retail electricity pricing be influenced by objectives beyond the (affordability-related) efficiencies achieved by cost-reflective pricing, such as sustainability, or equity?

The consultation paper raises the question of whether "we may need to actively consider to what extent it may be appropriate to diverge from cost-reflective pricing to balance other parts of the energy trilemma".

The Council believes broader objectives, beyond efficiencies assumed by a cost-reflective pricing approach, must inform decision making.

As noted above, the urgency of responding to climate change requires an approach that recognises sustainability objectives. Pricing approaches must also recognise that electricity is an essential service and equity objectives must therefore be considered. This will require changes to existing pricing models.

Are the current objectives for the system's regulators set in law (generally focusing on economic efficiency) appropriate, or should these also include more focussed objectives of equity and/or affordability?

The Council supports expanding the objectives of the system's regulators to reflect the importance of affordability and equity objectives in decisions regarding electricity services. As noted above, sustainability objectives should also inform decision making.

**General Comments:**