SUBMISSION

Accelerating renewable energy and energy efficiency

Fletcher Building Submission to the Ministry for Business, Innovation and Employment

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About Fletcher Building

Fletcher Building is one of New Zealand's largest listed companies with revenues of over $8 billion. We are a significant employer, manufacturer, home builder and partner on major construction and infrastructure projects in New Zealand.

Our roots go back to 1909, when James Fletcher built his first house with Albert Morris in Dunedin. From those humble beginnings we today employ over 10,000 people across almost every region of New Zealand and make a significant contribution to both the national economy, and many regional economies.

The value we add to the New Zealand economy has been calculated at $1.3 billion and our contribution to GDP is $1.5 billion[1].

Fletcher Building is dual listed on the NZX and ASX and operates through six divisions – Building Products, Distribution, Concrete, Construction and Residential and Land Development and Australia.

Introduction

Fletcher Building agrees with the Government's goal of reducing greenhouse gas emissions and transitioning to clean energy sources. We support the transition to renewable energy in order to reduce impact on climate change and bring economic benefits to the New Zealand economy.

Consultation

Fletcher Building's responses to the specific questions in the discussion paper are set out in this submission.

We would welcome the opportunity to discuss our submission further.

[1] NZIER, Building New Zealand, Fletcher Building's economic contribution, June 2018

Feedback on questions in discussion documents

Part A: Encouraging energy efficiency and the uptake of renewable fuels in industry

Section 1: Addressing Information Failures

Barriers & Issues	Option
• Lack of accurate information on the emissions performance of products and/firms. • Information gaps regarding costs, issues, reliability and processes for electrification of industrial sites • Entities have poor information regarding their energy use and emissions.	1.1 Require large energy users to publish Corporate Energy Transition Plans (including reporting emissions) and conduct energy audits. 1.2 Develop an electrification information package for businesses looking to electrify process heat and offer co-funded low-emissions heating feasibility studies for EECA's Large Energy User partners. 1.3 Provide benchmarking information for food processing industries.

Questions

Q1.1) Do you support the proposal in whole or in part to require large energy users to report their emissions and energy use annually publish Corporate Energy Transition Plans and conduct energy audits every four years? Why?

We support this proposal in part.

We see benefit in annual energy use and emissions reporting. We already voluntarily undertake this activity as part of annual shareholder reporting and disclosure to organisations such as DJSI and CDP.

We consider greater disclosure consistent with our approach to increased transparency through the development and application of Environmental Product Declarations (EPD) and Life Cycle Analysis (LCA) throughout our business.

Our business is already in the process of developing emission reduction roadmaps to 2030, in order to help us meet our Science-Based Target of a 30% reduction in Scope 1 and 2 emissions by 2030 from a FY18 base year. These are based around efficiency improvements and energy transitions from fossil fuel to low-emissions alternatives where possible. In our view, the decarbonisation roadmap approach is primarily useful as a tool to enable future capital investment planning.

We see energy efficiency reports as a means to provide greater information to stakeholders generally on progress in energy efficiency. However, disclosure obligations must be

presented in the most comparable way possible, to avoid product and service misinformation reaching the market. It is therefore important that a standardised framework be applied to all participants for this purpose.

We would be concerned about the use of energy reports as a direct regulatory tool (e.g. mandated energy use reductions from baselines in the energy efficiency report), as we consider other mechanisms such as the NZ Emissions Trading Scheme (NZ-ETS) to be more appropriate for this purpose.

Q1.2) Which parts (set out in Table 3) do you support or not? What public reporting requirements (listed in Table 3) should be disclosed? (Attached in Appendix)

We see benefit in reporting corporate-level annual energy use and emissions. We already voluntarily undertake these activities as part of our annual reporting and disclosure to organisations such as DJSI and CDP.

While we agree with the principle of transparency, we do not support the publication of business-specific energy transition roadmaps. This is because future investment and technological step changes can potentially lead to loss of competitive and commercial advantage.

Q1.3) In your view, should the covered businesses include transport energy and emissions in their requirements?

For the purposes of transparency and to provide a more complete picture of energy use in different sectors, it would be beneficial to include emissions from transport energy in reporting.

Q1.4) For manufacturers: what will be the impact on your business to comply with requirements? Provide cost specific estimates.

We expect that there will be costs associated with

- Administration of data gathering, processing and reporting.
- Energy audits and any required ISO 50001 certification, and there may be additional personnel requirements within the business to accommodate energy management duties.
- Capital investment in additional (sub)monitoring of manufacturing processes.

We note that there are currently no professionals accredited to perform ISO 50001 certification in New Zealand and appropriately trained personnel would need to be brought in from other countries, incurring extra expense.

These costs are likely to run into the hundreds of thousands of dollars across our business. We would therefore support measures that provide relief and incentives to businesses that adopt ISO 50001 certification.

Q1.5) In your view, what would be an appropriate threshold to define 'large energy users' ?

An energy measure such as a threshold quantity (TJ) of energy consumed per annum would be appropriate. However, we recognise that a company's energy spend is likely to be a more pragmatic proxy.

Q1.6) Is there any potential for unnecessary duplication under these proposals and the TCFD disclosures proposed in the MBIE-MfE discussion document on Climate-related Financial Disclosures?

We support use of the TCFD process.

Q1.7) Do you support the proposal to develop an electrification information package? Do you support customised low-emission heating feasibility studies? Would this be of use to your business?

It is our view that a number of major industries in New Zealand require bespoke energy transition solutions. This is because there may only be a single operation in the country with unique processes and requirements. Examples of these include the manufacture of:

- Cement
- Plasterboard
- Glasswool Insulation

These businesses already have a high level of understanding of energy demands within their operations. We therefore see value in continuing with the EECA approach to supporting businesses with customised solutions for these cases. The large emitters within Fletcher Building fall into the category of requiring bespoke solutions.

Because businesses have a deep understanding of their own assets and operations, we see greater need for governmental support for delivered capital solutions (post-capex) than for feasibility studies or energy audits (pre-capex) for large emitters.

We would want any information packages to be developed in consultation with business to ensure that feasible technologies are suggested as solutions.

We think government can play an important role in de-risking adoption of new low carbon technologies. We see the government's role as supporting adoption of new technologies, particularly those that are proven overseas and can be adapted for use within NZ industries.

Q1.8) In your view, which of the components should be scaled and/or prioritised? Are there any components other than those identified that could be included in an information package?

We have no specific comments on this question, other than what has been discussed in our response to Q1.7 above.

Q1.9) Do you support benchmarking in the food processing sector?

We have no specific comments on this question.

Q1.10) Would benchmarking be suited to, and useful for, other industries, such as wood processing?

We do see benefit in benchmarking industries internationally and supporting development of EPDs. We note that the use of EPDs provides comparable benchmark data across a particular product type.

We reiterate the need to support adoption of overseas technology and for the government to assist where appropriate to de-risk this process for NZ industries.

Q1.11) Do you believe government should have a role in facilitating this or should it entirely be led by industry?

Industry should lead any benchmarking exercise. This is important because of the unique nature of many of our businesses and products.

It is important to note that products must be compared with other, technically similar products with the same end specifications - for example, an EPD for 45 MPa concrete cannot be compared with an EPD for 65 MPa concrete. This industry-specific technical knowledge is important to include in any benchmarking exercises that may be undertaken.

Section 2: Developing markets for bioenergy and direct geothermal use

Barriers & Issues	Option
• Under-developed supply chains for bioenergy and the availability of bioenergy and geothermal resources regionally.	2.1 Development of a users' guide on the application of the National Environmental Standards for Air Quality to wood energy.

Questions

Q2.1) Do you agree that councils have regional air quality rules that are barriers to wood energy? If so, can you point us to examples of those rules in particular councils' plans?

We have no specific comments on this question.

Q2.2) Do you agree that a NESAQ users' guide on the development and operation of the wood energy facilities will help to reduce regulatory barriers to the use of wood energy for process heat?

We have no specific comments on this question.

Q2.3) What do you consider a NESAQ users' guide should cover? Please provide an explanation if possible.

We have no specific comments on this question.

Q2.4) Please describe any other options that you consider would be more effective at reducing regulatory barriers to the use of wood energy for process heat.

We have no specific comments on this question.

Q2.5) In your opinion, what technical rules relating to wood energy would be better addressed through the NESAQ than through the proposed users' guide (option 2.1)?

We support measures that would make it easier for businesses to use wood energy in place of fossil fuels.

Regulation would need to be coherent and synergistic. In our view, use of biomass needs to be supported in a way that does not result in adverse effects on areas with air quality concerns. We would also support easier access to resource consents for businesses wanting to transition from fossil fuels to bioenergy.

Q2.6) In your view, could the Industry Transformation Plans stimulate sufficient supply and demand for bioenergy to achieve desired outcomes? What other options are worth considering?

As outlined in our answer to Q1.2, we do not support publication of business-specific emissions reduction roadmaps. However, there may be benefit to anonymised, multi-sector aggregate data being made available for the purposes of biomass supply and demand planning.

Q2.7) Is Government best placed to provide market facilitation in bioenergy markets?

We think government should play a role in facilitating a long-term supply of wood-based fuel at a stable price to provide confidence for businesses that wish to undertake fuel-switching.

Q2.8) If so, how could Government best facilitate bioenergy markets? Please be as specific as possible, giving examples.

We see benefit in the government encouraging recovery of wood waste - particularly for end of life construction and demolition and wooden pallet waste. This could be done through the Waste Minimisation Fund.

Q2.9) In your view, how can government best support direct use of geothermal heat? What other options are worth considering?

We agree with government supporting access to geothermal resources for industry. In our view, geothermal energy is a source of significant potential innovation. Support could come in the form of facilitating resource consenting energy transitioning projects and use of geothermal mineral resources.

Section 3: Innovating and building capability

Barriers & Issues	Option
• Firms tend to be risk averse to technologies that change or could delay their production process, and process engineers may not be familiar with new technologies	3.1 Expand EECA's grants for technology diffusion and capability-building. 3.2 Collaborate with EIHI industry to foster knowledge sharing, develop sectoral low-carbon roadmaps and build capability for the future using a Just Transitions approach

Questions

Q3.1) Do you agree that de-risking and diffusing commercially viable low-emission technology should be a focus of government support on process heat? Is EECA grant funding to support technology diffusion the best vehicle for this?

As outlined in our answer to Q1.7, we agree that de-risking is key to the successful adoption of low-emission technology. We support continued EECA grant funding where appropriate to enable this process. However, we perceive that the main barrier to overcome is moving from feasibility studies to installed solutions. We therefore support greater emphasis on funding at the post-capex stage, to accelerate the implementation of a proven solution.

The government could also support greater overseas research by New Zealand businesses. As New Zealand is predominantly a technology taker from other parts of the world, often research involves travel to other countries which is currently not able to be funded through existing mechanisms. These costs can run into the tens of thousands of dollars and should be able to be reimbursed via extension of R&D tax credit.

Q3.2) For manufacturers and energy service experts: would peer learning and on-site technology demonstration visits lead to reducing perceived technology risks? Is there a role for the Government in facilitating this?

We support a focus on technology diffusion through similar industries. Industries with individual and specific technology requirements would typically benefit less from a more general approach to industry learning.

We support wider use of R&D tax credits to promote innovation. We would also support an approach similar to the UK model where in-house R&D is supported through tax credits of other innovation.

In addition, we would support a similar approach to technology adoption in order to address the gap between innovative solutions at a pilot stage and bringing these solutions into industry at scale.

Q3.3) For EIHI stakeholders: What are your views on our proposal to collaborate to develop low carbon roadmaps? Would they assist in identifying feasible technological pathways for decarbonisation?

In our view it is important to encourage business to take a long-term view of changes. As outlined in our response to Q1.3, it is important to protect intellectual property and commercially sensitive information, including business' strategic aims.

We see value in the development of low-cost abatement options and asset management/replacement plans, as supported by work done by EECA.

Q3.4) What are the most important issues that would benefit from a partnership and co-design approach?

Information sharing to facilitate more informed decisions by government would be helpful (addressing the information asymmetry).

We see government support with international abatement options as important.

Q3.5) What, in your view, is the scale of resourcing required to make this initiative successful?

We have no specific comments on this question.

Section 4: Phasing out fossil fuels in process heat

Barriers and Issues	Option
• Risk of locking in new long-lived emissions-intensive heat plant. • Reluctance to replace legacy fossil fuel facilities before the end of their technical lives (both power plants and industrial facilities	4.1 Introduce a ban on new coal-fired boilers for low and medium temperature requirements. 4.2 Require existing coal-fired process heat equipment supplying end-use temperature requirements below 100°C to be phased out by 2030.

Questions

Q4.1) Do you agree with the proposal to ban new coal-fired boilers for low and medium temperature requirements?

No specific comment, as we do not use coal for low temperature process heat.

Q4.2) Do you agree with the proposal to require existing coal-fired process heat equipment for end use temperature requirements below 100 degrees Celsius to be phased out by 2030? Is this ambitious or is it not doing enough?

No specific comment, as we do not use coal for low temperature process heat.

Q4.3) For manufacturers: referring to each specific proposal, what would be the likely impacts or compliance costs on your business?

We have no specific comments on this question.

Q4.4) Could the Corporate Energy Transition Plans (Option 1.1) help to design a more informed phase out of fossil fuels in process heat? Would a timetabled phase out of fossil fuels in process heat be necessary alongside the Corporate Energy Transition Plans?

We have no specific comments on this question.

Q4.5) In your view, could national direction under the RMA be an effective tool to support clean and low GHG-emitting methods of industrial production? If so, how?

We support mechanisms in the RMA to encourage best technology solutions

We believe that the ETS and NES are sufficient solutions to achieve energy efficiency and lower emissions, and we do not support specific numerical emissions limits for industrial activities

In particular, Fletcher Building supports:

- Development of national direction to encourage the use of renewable energy, carbon capture and storage, and uptake of low emissions technologies;
- Favourable consideration being given within the resource consenting process for low emissions activities and technologies in much the same way that there are credits / offsets for ecological protection; and
- for emissions-intensive activities for which emissions pricing is unlikely to be effective, we support an approach of reviewing technology options to promote best available technology for emissions reduction.

We concur with the options identified for further consideration and with the options noted as not preferred in the summary assessment of options against criteria.

Section 5: Boosting investment in energy efficiency and renewable energy technologies

Barriers & Issues	Option
• Competition for capital leading to prioritisation of core business spending and an underinvestment in energy	5.1 No new options proposed at this time.

efficiency and renewable energy technologies in the industrial sector.	

Questions

Q5.1) Do you agree that complementary measures to the NZ-ETS should be considered to accelerate the uptake of cost-effective clean energy projects?

We agree with this approach. While the ETS should remain the primary tool for driving down emissions, additional measures will help.

Q5.2) If so, do you favour regulation, financial incentives or both? Why?

We favour financial incentives rather than regulation.

We do not support mandated investment in clean technology based on payback period – legislation can be too blunt an instrument to use for this purpose. Rather, we support measures that incentivise and facilitate investment.

Q5.3) In your view what is a bigger barrier to investment in clean energy technologies, internal competition for capital or access to capital?

Internal competition for capital is a more significant barrier to investment in clean energy technologies.

Q5.4) If you favour financial support, what sort of incentives could be considered? What are the benefits, costs and the risks of these incentives?

In our view, the government should consider incentivising:

- R&D through tax credits.
- uptake of technology to de-risk adoption.
- uptake of overseas technologies.
- research trips to identify new technologies.
- optimisation of clean technology once adopted, and for upscaling new technologies in order to avoid locking companies out if they were not early adopters.

Q5.5) What measures other than those identified above could be effective at accelerating investment in clean energy technologies?

We have no specific comments on this question.

Section 6: Cost recovery mechanisms

Barriers & Issues	Option

• In order to mobilise private-sector investment and scale up efforts to achieve the Government's process heat outcomes, additional funds will be required to resource implementation of some of the policy proposals	6.1 Introduce a levy on consumers of coal to fund process heat activities.

Questions

Q6.1) What is your view on whether cost recovery mechanisms should be adopted to fund policy proposals in Part A of this document?

We have no specific comments on this question.

Q6.2) What are the advantages and disadvantages of introducing a levy on consumers of coal to fund process heat activities?

We have no specific comments on this question.

Part B: Accelerating renewable electricity generation and infrastructure

Section 7: Enabling development of renewable energy under the Resource Management Act 1991

Section	Options
• Enabling development of renewable electricity generation under the Resource Management Act 1991	7.1 Amend the NPSREG to provide stronger direction on the national importance of renewables 7.2 Scope National Environmental Standards or National Planning Standards specific to renewable energy 7.3 Other options including: • Pre-approval of new renewable developments: Planning approaches including relatively permissive consenting rules in defined areas • Pre-approval of new renewable developments: Crown acquiring consents for transfer to developers • Pre-approval of new renewable developments: new statutory allocation process • Amending NPSET and NESETA

Questions

Q7.1) Do you consider that the current NPSREG gives sufficient weight and direction to the importance of renewable energy?

We have no specific comments on this question.

Q7.2) What changes to the NPSREG would facilitate future development of renewable energy? In particular, what policies could be introduced or amended to provide sufficient direction to councils regarding the matters listed in points a-i mentioned on page 59 of the discussion document?

We have no specific comments on this question.

Q7.3) How should the NPSREG address the balancing of local environmental effects and the national benefits of renewable energy development in RMA decisions?

We have no specific comments on this question.

Q7.4) What are your views on the interaction and relative priority of the NPSREG with other existing or pending national direction instruments?

We have no specific comments on this question.

Q7.5) Do you have any suggestions for how changes to the NPSREG could help achieve the right balance between renewable energy development and environmental outcomes?

We have no specific comments on this question.

Q7.6) What objectives or policies could be included in the NPSREG regarding councils' role in locating and planning strategically for renewable energy resources?

We have no specific comments on this question.

Q7.7) Can you identify any particular consenting barriers to development of other types of renewable energy than REG, such as green hydrogen, bioenergy and waste-to-energy facilities? Can any specific policies be included in a national policy statement to address these barriers?

We have no specific comments on this question.

Q7.8) What specific policies could be included in the NPSREG for small-scale renewable energy projects?

We have no specific comments on this question.

Q7.9) The NPSREG currently does not provide any definition or threshold for "small and community-scale renewable electricity generation activities". Do you have any view on the definition or threshold for these activities?

We have no specific comments on this question.

Q7.10) What specific policies could be included to facilitate re-consenting consented but unbuilt wind farms, where consent variations are needed to allow the use of the latest technology?

We have no specific comments on this question.

Q7.11) Are there any downsides or risks to amending the NPSREG?

We have no specific comments on this question.

Q7.12) Do you think National Environmental Standards (NES) would be an effective and appropriate tool to accelerate the development of new renewables and streamline re-consenting? What are the pros and cons?

We have no specific comments on this question.

Q7.13) What do you see as the relative merits and priorities of changes to the NPSREG compared with work on NES?

We have no specific comments on this question.

Q7.14) What are the downsides and risks to developing NES?

We have no specific comments on this question.

Q7.15) What renewables activities (including both REG activities and other types of renewable energy) would best be suited to NES? For example:

- **What technical issues could best be dealt with under a standardised national approach?**
- **Would it be practical for NES to set different types of activity status for activities with certain effects, for consenting or re-consenting? For example, are there any aspects of renewable activities that would have low environmental effects and would be suitable for having the status of permitted or controlled activities under the RMA?**

We have no specific comments on this question.

Q7.16) Do you have any suggestions for what rules or standards could be included in NES or National Planning Standards to help achieve the right balance between renewable energy development and environmental outcomes?

We have no specific comments on this question.

Q7.17) Would National Planning Standards or any other RMA tools be more suitable for providing councils with national direction on renewables than the NPSREG or NES?

We have no specific comments on this question.

Q7.18) Are there opportunities for non-statutory spatial planning techniques to help identify suitable areas for renewables development (or no-go areas)?

We have no specific comments on this question.

Q7.19) Do you have any comments on potential options for pre-approval of renewable developments?

We have no specific comments on this question.

Q7.20) Are the current NPSET and NESETA fit-for-purpose to enable accelerated development of renewable energy? Why?

We have no specific comments on this question.

Q7.21) What changes (if any) would you suggest for the NPSET and NESETA to accelerate the development of renewable energy?

We have no specific comments on this question.

Q7.22) Can you suggest any other options (statutory or non-statutory) that would help accelerate the future development of renewable energy?

We have no specific comments on this question.

Section 8: Supporting renewable electricity generation investment

Section	Options
• Supporting renewable electricity generation investment	8.1 Introduce a Power Purchase Agreement (PPA) Platform

	8.2 Encourage greater demand-side participation and develop the demand response market 8.3 Deploy energy efficiency resources via retailer/distributer obligations 8.4 Develop offshore wind assets 8.5 Introduce renewable electricity certification and portfolio standards 8.6 Phase down thermal baseload and place in strategic reserve 8.7 Other options including: • Government-sponsored storage facility for firming hedge products • State-owned enterprise for renewables investments • Co-ordinated procurement of new generation (single market buyer) • Tax incentives for renewable electricity generation • Provision of subsidies via auction (one-off or in rounds i.e. biennially)

Questions

Q8.1) Do you agree there is a role for government to provide information, facilitate match-making and/or assume some financial risk for PPAs?

We have no specific comments on this question.

Q8.2) Would support for PPAs effectively encourage electrification and new renewable generation investment?

We have no specific comments on this question.

Q8.3) How could any potential mismatch between generation and demand profiles be managed by the Platform and/or counterparties?

We have no specific comments on this question.

Q8.4) What are your views and preferences in relation to different options A to D above?

We have no specific comments on this question.

Q8.5) For manufacturers: what delivered electricity price do you require to electrify some or all of your process heat requirements? And, is a long-term electricity contract an attractive proposition if it delivers more affordable electricity?

Price parity with natural gas per kWh of energy consumed (allowing for any efficiency changes) would incentivise electrification of process heat for low to medium process heat applications.

We note that there are sometimes efficiency gains with electrification of processes. However, price parity per kWh of energy consumed might not in itself be a significant enough incentive in all cases since there would also be initial capital costs to transition from gas to electricity. Therefore, the price of electricity price may need to be lower than the price of natural gas.

Q8.6) For investors / developers: what contract length and price do you require to make a return on an investment in new renewable electricity generation capacity? And, is a long-term electricity contract an attractive proposition if it delivers a predictable stream of revenues and a reasonable return on investment?

We have no specific comments on this question.

Q8.7) Do you consider the development of the demand response (DR) market to be a priority for the energy sector?

We have no specific comments on this question.

Q8.8) Do you think that DR could help to manage existing or potential electricity sector issues?

We support demand response in order to enhance stability of the energy grid.

Q8.9) What are they key features of demand response markets? For instance, which features would enable load reduction or asset use optimisation across the energy system, or the uptake of distributed energy resources?

We have no specific comments on this question.

Q8.10) What types of demand response services should be enabled as a priority? Which services make sense for New Zealand?

We have no specific comments on this question.

Q8.11) Would energy efficiency obligations effectively deliver increased investment in energy efficient technologies across the economy? Is there an alternative policy option that could deliver on this aim more effectively?

We support continued improvement to building standards to provide improved energy efficiency as a policy option.

Q8.12) If progressed, what types of energy efficiency measures and technologies should be considered in order to meet retailer/distributor obligations? Should these be targeted at certain consumer groups?

We have no specific comments on this question.

Q8.13) Do you support the proposal to require electricity retailers and/or distributors to meet energy efficiency targets? Which entities would most effectively achieve energy savings?

We have no specific comments on this question.

Q8.14) Could you or your organisation provide guidance on the likely compliance costs of this policy?

We have no specific comments on this question.

Q8.15) Do you consider the development of an offshore wind market to be a priority for the energy sector?

We have no specific comments on this question.

Q8.16) What do you perceive to be the major benefits and costs or risks to developing offshore wind assets in New Zealand?

We have no specific comments on this question.

Q8.17) This policy option involves a high level of intervention and risk. Would another policy option better achieve our goals to encourage renewable energy generation investment? Or, could this policy option be re-designed to better achieve our goals?

We have no specific comments on this question.

Q8.18) Should the Government introduce RPS requirements? If yes, at what level should a RPS quota be set to incentivise additional renewable electricity generation investment?

We have no specific comments on this question.

Q8.19) Should RPS requirements apply to all retailers and/or major electricity users? What would be an appropriate threshold for the inclusion of major electricity users (i.e. annual consumption above a certain GWh threshold)?

We have no specific comments on this question.

Q8.20) Would a government backed certification scheme support your corporate strategy and export credentials?

We have no specific comments on this question.

Q8.21) What types of renewable projects should be eligible for renewable electricity certificates?

We have no specific comments on this question.

Q8.22) If this policy option is progressed, should retailers and major electricity users be permitted to invest in energy efficient technology investments to meet their renewable portfolio standards? (See option 8.3 above on energy efficiency obligations).

We have no specific comments on this question.

Q8.23) Could you or your organisation provide guidance on the likely administrative and compliance costs of this policy?

We have no specific comments on this question.

Q8.24) This policy option involves a high level of intervention and risk. Do you think that another policy option could better achieve our goals to encourage renewable energy generation investment? Or, could this policy option be re-designed to better achieve our goals?

We have no specific comments on this question.

Q8.25) Do you support the managed phase down of baseload thermal electricity generation?

We have no specific comments on this question.

Q8.26) Would a strategic reserve mechanism adequately address supply security and reduce emissions affordably during a transition to higher levels of renewable electricity generation?

We have no specific comments on this question.

Q8.27) Under what market conditions should thermal baseload held in a strategic reserve be used? For example, would you support requiring thermal baseload assets to operate as peaking plants or during dry winters?

We have no specific comments on this question.

Q8.28) What is the best way to meet resource adequacy needs as we transition away from fossil fueled electricity generation and towards a system dominated by renewables?

We have no specific comments on this question.

Q8.29) Should a permanent capacity market which also includes peaking generation be considered?

We have no specific comments on this question.

Q8.30) Do you have any views regarding the above options to encourage renewable electricity generation investment that we considered, but are not proposing to investigate further?

We have no specific comments on this question.

Section 9: Facilitating local and community engagement in renewable energy and energy efficiency

Section	Options
Local and community energy engagement	9.1 Ensuring a clear and consistent government position on community energy issues, aligned across different policies and work programmes 9.2 Government supports development of a small number of community energy pilot projects, through options including financial support, 'handholding' and facilitating of projects, or assisting with regulatory approvals and access to land

Questions

9.1 Should New Zealand be encouraging greater development of community energy projects?

We have no specific comments on this question.

9.2 What types of community energy project are most relevant in the New Zealand context?

We have no specific comments on this question.

9.3 What are the key benefits and downsides/risks of a focus on community energy?

We have no specific comments on this question.

9.4 Have we accurately identified the barriers to community energy proposals? Are there other barriers to community energy not stated here?

We have no specific comments on this question.

9.5 Which barriers do you consider most significant?

We have no specific comments on this question.

9.6 Are the barriers noted above in relation to electricity market arrangements adequately covered by the scope of existing work across the Electricity Authority and electricity distributors?

We have no specific comments on this question.

9.7 What do you see as the pros and cons of a clear government position on community energy, and government support for pilot community energy projects?

We have no specific comments on this question.

9.8 Any there any other options you can suggest that would support further development of community energy initiatives?

We have no specific comments on this question.

Section 10: Connecting to the national grid

Section	Options
Connecting to the national grid	10.1 Encourage Transpower to include the economic benefits of climate change mitigation in applications for Commerce Commission

	approval of projects expected to cost over $20m 10.2 Put in place additional mechanisms for, or encourage, Transpower, first movers and subsequent customers to agree to alternative forms of cost sharing arrangements by contract 10.3 Shift some of the cost and risk allocation for new and upgraded connections from the first mover through mechanisms within the Commerce Commission's regulatory scope, with the Crown accepting some of the financial risk. Two identified ways to achieve this are: • 10.3.1 Optimise asset valuations under the Commerce Commission's regime in circumstances where demand is lower than originally anticipated because expected (subsequent) customers do not eventuate • 10.3.2 Provide for Transpower to build larger capacity connection asset or a configuration that allows for growth, but only recover full costs once asset is fully utilised, with the Crown covering risk of revenue shortfall. 10.4 Provide independent geospatial data on potential generation and electrification sites (e.g. wind speeds for sites, information on relative economics and feasibility of investment locations given available transmission capacity) 10.5 Extend the data and information provided in MBIE's EDGS and increase the frequency of publication, and potentially recover the cost through the existing levy on electricity industry participants. 10.6 Produce a user's guide on the current regulations and approval processes relating to getting an upgraded or new connection to the grid 10.7 Provide a "map" or database of potential renewable generation and demand sources, location and potential size (e.g. wind, geothermal, milk plant). 10.8 Introduce measures to enable coordination regarding the placement of wind

	farms to ensure they are more likely to be better distributed around the country

Questions

Q10.1 Which option or combination of options proposed, if any, would be most likely to address the first mover disadvantage?

We have no specific comments on this question.

Q10.2 What do you see as the disadvantages or risks with these options to address the first mover disadvantage?

We have no specific comments on this question.

Q10.3 Would introducing a requirement, or new charge, for subsequent customers to contribute to costs already incurred by the first mover create any perverse incentives?

We have no specific comments on this question.

Q10.4 Are there any additional options that should be considered?

We have no specific comments on this question.

Q10.5 Do you think that there is a role for government to provide more independent public data? Why or why not?

We have no specific comments on this question.

Q10.6 Is there a role for Government to provide independent geospatial data (e.g. wind speeds for sites) to assist with information gaps?

We have no specific comments on this question.

Q10.7 Should MBIE's EDGS be updated more frequently? How often?

We have no specific comments on this question.

Q10.8 Should MBIE's EDGS be more granular, for example, providing information at a regional level?

We have no specific comments on this question.

Q10.9 Should the costs to the Crown of preparing EDGS be recovered from Transpower, and therefore all electricity consumers (rather than tax-payers)?

We have no specific comments on this question.

Q10.10 Would you find a users' guide helpful? What information would you like to see in such a guide? Who would be best placed to produce a guide?

We have no specific comments on this question.

Q10.11 Do you think that there is a role for government in improving information sharing between parties to enable more coordinated investment? Why or why not?

We have no specific comments on this question.

Q10.12 Is there value in the provision of a database (and/or map) of potential renewable generation and new demand, including location and potential size? If so, who would be best to develop and maintain this? And how should it be funded?

We have no specific comments on this question.

Q10.13 Should measures be introduced to enable coordination regarding the placement of new wind farms?

We have no specific comments on this question.

Q10.14 Are there other information sharing options that could help address investment coordination issues?

We have no specific comments on this question.

Section 11: Local network connections and trading arrangements

Section	Options
Local network connections and trading arrangement	No new options

Questions

Q11.1 Have you experienced, or are you aware of, significant barriers to connecting? Are there any that will not be addressed by current work programmes outlined above?

We have no specific comments on this question.

Q11.2 Should the section 10 option to produce a users' guide extend to the process for getting an upgraded or new distribution line?

We have no specific comments on this question.

Q11.3 Are there other section 10 information options that could be extended to include information about local networks and distributed generation?

We have no specific comments on this question.

Q11.4 Do the work programmes outlined above cover all issues to ensure the settings for connecting to and trading on the local network are fit for purpose into the future? Are there things that should be prioritised, or sped up?

We have no specific comments on this question.

Q11.5 What changes, if any, to the current arrangements would ensure distribution networks are fit for purpose into the future?

We have no specific comments on this question.

Appendix.

Table 3: Proposed requirements for Corporate Energy Transition Plans

Target group	Annual energy spend (purchased) of greater than $2 million per annum
Public reporting	Annual corporate-level energy use and emissions, split out by a range of sources including coal, gas, electricity and transport Energy efficiency actions taken that year Plans to reduce emissions to 2030
Government reporting	Businesses annually report to the Government a defined intensity metric (e.g. specific energy consumption/product emissions intensity), by plant/process. This information will be treated in confidence for statistical and policy purposes
Energy auditing	Mandatory energy auditing every four years with Boards required to review the findings
Compliance	Public information to be included in annual reports or in separate "corporate energy transition plan" on website Energy audits meet the government's guidelines or the company is ISO 50001 certified Boards required to review the energy audits findings and report compliance to a national scheme administrator

Source : Accelerating renewables uptake and encouraging changes in industrial energy use. Page 20.