

# New Zealand Energy Efficiency and 'Conservation Strategy Refresh

NZ Wind Energy Association Submission

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Submissions  
Energy Markets Policy  
Ministry of Business Innovation and Employment  
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## Introduction

The New Zealand Wind Energy Association (NZWEA) appreciates the Ministry of Business Innovation and Employment (MBIE) consultation and welcomes the opportunity to comment on New Zealand's Energy Efficiency and Conservation Strategy (NZEECS) Refresh 2017 - 2022.

## Executive Summary

In principle, NZWEA supports the current NZEECS strategy and the direction outlined in the targeted consultation document. There are a number of areas however where we consider the strategy can be enhanced. In summary these primarily relate to:

- The need to increase the level of focus given to promoting the use of renewable energy.
- Ensuring the alignment of Government Departments and Crown Entities in promoting energy efficiency, energy conservation and use of renewable sources of energy.
- Setting measurable objectives and targets and regularly reporting progress towards their achievement.

## Response to Questions

NZWEA's comments in relation to the specific questions asked are as follows:

Q1	Do you have any comments on the background, changing energy context or opportunities presented in this document? Are there any other factors that the government should have in mind when preparing the new NZEECS?
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- The background section refers to the Government's commitment to energy efficiency, energy conservation and use of renewable resources. The section then notes that EECA programmes have been established to encourage these activities. In reviewing EECA's activities, as outlined in the latest published annual report, NZWEA considers insufficient focus has been given to promoting the use of renewable resources.

- The changing energy context section notes NZ has a long history and competitive advantage in the development and use of renewable energy. This is clearly so in the electricity sector but less so across other sectors such as transport and manufacturing. In the transport area, for example, NZ lags a number of other developed economies in the commitment to and deployment of electric vehicles.
- The broad categories identified of energy productivity, technology and innovation and emission are appropriate to defining the changing energy context. The strategy refresh should consider trends and enablers in each of these areas
- NZWEA supports the introduction of economy wide targets but considers the figure 1 diagram would be enhanced by including the NZES goal and linking proposed targets to the four priority areas. Please refer to our response to question 4 for further comments in relation to energy sector targets.
- There should be a strong linkage in the NZEECS to the Goal, four priority areas and Areas of focus as set out in the NZES. At present the two documents are not well connected.
- NZWEA also supports the key opportunities identified of transport, business heat and electricity.
- NZWEA is concerned that the current regulatory and governance framework for the energy sector is complex and not proving agile in responding to accelerating innovation in areas such as use of transmission and distribution networks and ensuring policy setting are appropriate for the new options available to consumers.
- The role and impact of relevant Government Departments and Crown Entities in supporting innovations which lead to improved energy efficiency, energy conservation and use of renewable sources of energy should also be reviewed and aligned. For example, the NZWEA considers the current Electricity Authority (EA) consultation document on transmission pricing and distributed generation regulations will have a material impact in hindering the purpose of the strategy as outlined in the Energy Efficiency and Conservation Act particularly in the areas of conservation and use of renewable energy sources. The change in pricing methodology will discourage demand side management initiatives and investment in distributed renewable energy generation projects. NZWEA's submission on the EA's Transmission Pricing Methodology and Distributed Generation Pricing Principles consultation papers outlines in more detail our areas of concern.

Q2	Do you agree with the proposed NZEECS goal outlined in Section 5.2 of this document: For New Zealand to be more energy efficient, productive and a low emissions economy? (agree/disagree and explain)
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- NZWEA supports the goal but considers the title of the strategy should be changed from NZEECS to reflect the goal. In particular, the use of renewable energy should be included.

Q3	Do you have any comments on the proposed objectives of the strategy outlined in Section 5.2 of this document?
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- We support the move to develop the strategy on specific segments and therefore consider having objectives for each segment appropriate.
- We note that as written these tend to be desired outcomes rather than measurable objectives. In the strategy, if the objective definition is retained, specific target(s) for each area should be set.

- The consumer objective currently only relates to energy efficiency. The objective should be widened to include having a preference for renewable energy. Improved health and wellbeing should be another desired outcome.

Q4	How ambitious should the new NZEECS be? (low/med/high)
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- NZWEA considers the review of existing, and setting of wider, energy targets important. The targets should reflect a balanced scorecard approach including renewable generation, security of supply, efficiency, affordability and carbon emissions.
- While it is acknowledged that the current strategy refresh is being completed in advance of energy sector targets it is expected that the new targets will need to contain considerable stretch to improve New Zealand’s poor energy intensity performance and assist in ensuring an appropriate focus on reducing carbon emissions.
- There is widespread agreement that the carbon reduction opportunities are significant in the transport and manufacturing sectors notwithstanding this NZWEA considers that there should be an ongoing focus on increasing the level of renewable electricity generation. In recognition of the potential for demand growth the current strategic target of 90% of electricity derived from renewable sources should be retained.
- The refreshed strategy should be set at the medium to high level to hasten the transition of New Zealand to a more energy productive and lower carbon economy.

Q5	Do you agree with the three main target areas (business heat, transport and electricity) identified in this document?
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- The areas identified represent the highest potential to improve efficiency, increase renewable generation and reduce emissions.
- Addressing the heat and transport sectors is expected to result in increased electricity demand. Sufficient planning will be required to ensure this increased demand does not result in the percentage of electricity generated from renewable sources reducing.

Q6	Do you consider the proposed ‘three actors’ approach (individuals, business and government) outlined in this document is useful for developing strategies for the NZEECS? If not, what alternatives or improvements would you suggest?
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- NZWEA supports the customer segmentation approach proposed as this will enable more effective identification of opportunities and targeting of initiatives. This is highlighted in the transport sector where different initiative will be required to target residential and business drivers.
- Having Government as a separate sector is also supported as for a number of initiatives the Government can take a lead role in innovation and creating change. An example of this could be the procurement of electric vehicles for central and local government fleets.
- Local Government should also be given some specific thought as an “actor”, having significant opportunities to influence policy delivery by incorporating electricity, heat and transport planning strategies and targets.

Q7	What types of policies should the government consider to encourage greater energy efficiency and use of renewables?
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- When initially introduced the ETS was expected to increase the retail price of electricity through higher thermal generation costs. The low cost of carbon credits has meant there has been no discernible impact on either wholesale or retail electricity prices and, until recently, afforded no advantage to renewable generation.
- The recent change to the New Zealand Emissions Trading Scheme (NZETS) to remove two for one subsidy is supported after a long period where the scheme has been ineffective in pricing carbon emissions. NZWEA understand that NZETS review is progressing. The policy changes resulting from the review need to ensure carbon emission prices increase over time to a level that changes behaviour.
- The recent policy announcement on electric vehicles, while supported does not go far enough in accelerating the uptake of electric vehicles. For example, a number of European countries having made a commitment to banning the sale of petrol and diesel cars by 2030 which creates a very clear signal as to the future of electric vehicles.
- NZWEA has also been working with other low carbon associations and supports the suggestions for policies in the “yes we can!” report for inclusion in the NZEECS.

Q8	What role should the government play in delivering the strategy?
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- The Government has a key role to establish goals, set policy and ensure that energy markets continue to work effectively. In doing so there is a need to ensure alignment of objectives among departments and crown owned entities.
- There is currently a disconnect at a governance level between Crown entities and this is something the NZWEA considers should be rectified.
- For example, the EA has a single statutory objective to promote competition in, reliable supply by, and the efficient operation of the electricity industry for the long term benefit of consumers which does not allow consideration of pan-industry externality policies such as renewable energy targets or lower carbon emissions.
- The EA’s objective is therefore inconsistent with the focus identified in the NZEECS targeted consultation document which identifies emissions as a key aspect of our changing environment and EECA’s function to promote the use of renewable energy sources and a key priority of the NZ Energy strategy to reduce carbon emissions.
- As noted in response to question 1 the NZWEA considers the current EA consultation document on transmission pricing and distributed generation (DG) pricing principles will have a material impact on the viability of current DG which is largely renewable and will hinder future development and DG sector investment. Significant investment uncertainty and financial shocks are being proposed through fundamental policy changes which reduce revenue and increase connection costs.
- Removing peak demand pricing signals will also potentially impact consumer demand management which, through the ability to delay new investment, is a key to transmission and distribution cost efficiencies.

- The public sector has been identified as a group for which to develop an objective and actions. The group should be widened to include local government. Both central and local government should be at the forefront of leading agreed actions such as building energy efficiency standards, conversion to renewable resources for heat and procurement of electric vehicles.
- We recommend Government review procurement policies to ensure a full lifecycle evaluation is undertaken include consideration of other Government policies such as climate change.
- Greater promotion of renewable energy options and the benefits to New Zealand.

Q9	What in your view are the major opportunities (technologies and actions) that could help you, your organisation or your sector become more energy efficient? Do you find that there are barriers that prevent you from making the most of these opportunities? If so, what are they?
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- New technologies around energy storage can enhance wind's role in meeting peak electricity demand and reducing network losses.
- In addition, there is an opportunity to use wind to support ancillary services which should improve transmission performance.

Q10	What in your view are the major opportunities (technologies and actions) that could help you, your organisation or your sector to make greater use of renewable energy? Do you find that there are barriers that prevent you from making the most of these opportunities? If so, what are they?
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#### Near Term Opportunities

- The 2011 National Policy Statement for Renewable Energy Generation (NPSREG) recognises the national significance of renewable electricity generation and sets a target of 90% of electricity generated should be derived from renewable energy sources by 2025. NZWEA considers it will be a challenging target to achieve and MBIE should update industry models to confirm the expected level of renewal generation in 2025. If the target appears unlikely to be met policy setting should be reviewed to further support renewable generation.
- Ensure the consistent use of the National Standard for Wind Farm Noise limits in resource consent applications. In 2010 a new standard NZS 6808 was developed to recommend limits on noise from windfarms. The standard reflects international best practice and is adhered to by all NZWEA members. There is however no requirement for local authorities to adhere to the Standard when making consenting decisions under the RMA. Incorporating NZ6808 into the RMA would provide greater consistency in wind farm consent decisions and provide certainty to applicants, thereby reducing consent timeframes and costs.

#### Near Term Risks:

- NZWEA consider that the EA's proposed removal of peak pricing signals, avoided cost of transmission payments and changes to distributed generators connection costs will severely impact the viability of existing distributed generation and create a barrier to future investment.

- Peak pricing signals have proven very effective in supporting transmission and distribution efficiency, demand side management innovation and technology deployment. A move to capacity charging is also not reflective of the long term nature of transmission investment.
- NZWEA also considers that establishing pricing based capacity charges within an area of benefit will be difficult to implement particularly when power flows can depend on many factors including plant availability, hydrology and other weather conditions.

#### Longer Term Opportunities

- Renewable electricity resources in New Zealand are abundant, limited only by the lack of strong demand growth. Renewable energy should be included in the Government's Business Growth agenda, through more international promotion of NZ as a low carbon energy producer which is increasing providing attractive to business.
- The future development of a smart grid which enables the connectivity of distributed generation is viewed as a key opportunity in realising renewable energy opportunities. These renewable generation opportunities include small scale commercial and community wind farm developments and have the ability to generate lower cost electricity, offset distribution and transmission investment and reduce transmission losses.

Q11	How could the government ensure that the new strategy is relevant to you?
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- NZWEA considers that the electricity system section in the current NZEECS has considerable relevance to future energy sector development. The strategy for example focuses on innovations such as smart grid infrastructure enabling higher levels of distributed generation including smaller scale deployment.
- It is the Associations view that insufficient focus has been given to the design of a future smart grid and policy enablers to encourage its deployment. NZWEA also considers that the policy areas outlined for focus such as the impact of renewable technologies on the electricity system and demand side management have received insufficient attention.
- As noted in section 1 NZWEA would like to see an increased focus on promoting renewable energy sources in the refreshed strategy.
- Regular reporting on implementation progress every 6 months.
- Include collaboration with the relevant sector/industry associations in the NZEECS and meet annually with each to discuss progress and agree appropriate actions.
- Establish targets that are relevant to each sector and develop implementation plans with each collaborating sector/industry association through EECA.

Q12	What do you see as your role in helping achieve the objectives of the NZEECS?
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- The three areas of focus in the consultation document are expected to lead to increased electricity demand. The increase in demand alongside carbon reduction targets should result in new renewable generation capacity being required which is an opportunity for the wind industry to grow. NZWEA and its members are focused the development of wind as a reliable, sustainable, clean and commercially viable energy source.

- Our role is to also ensure that wind is effectively integrated into the electricity system, work with industry participants to understand the wind proposition and communicate the benefits of wind to New Zealanders thereby assisting in increasing deployed wind capacity. In deploying more wind, we directly assist meeting the strategic renewable energy goal and reduce carbon emissions from the electricity generation.
- NZWEA would also like to establish a Collaboration Agreement with EECA similar to the Bioenergy Association / EECA agreement to work collectively with Government on achieving the goal of the NZES.

Q13	Please add any other comments you have
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- The refreshed strategy should include an assessment of performance in implementing the existing strategy and whether objectives and targets have been met. Future targets should also be defined at a specific level so as to enable measurement.
- In particular, NZWEA would like to see an assessment of the progress towards meeting the 90% of electricity generated from renewable resources by 2025 and whether the target is considered able to be met.
- We consider that a title change to the strategy should be made to include renewable energy. The proposed change is to reflect the importance of increasing the percentage of renewable electricity generation as a strategic Government target to reduce carbon emissions.
- We also consider that an overall theme for the Strategy should be developed as this assists conveying the purpose of the strategy. The New Zealand Energy Strategy has as the theme to “Developing our energy potential”. For the energy efficiency, conservation and use of renewable sources of energy strategy we consider a theme such as “transitioning to a more energy productive and lower emissions economy” would be appropriate.

#### **About the NZ Wind Energy Association (NZWEA)**

- The NZWEA is an industry association that promotes the development of wind as a reliable, sustainable, clean and commercially viable energy source.
- We aim to fairly represent wind energy to the public, Government and energy sector.
- Our members are involved in the wind energy sector and include electricity generators, wind farm developers, lines companies, turbine manufacturers, consulting organisations and other providers of services to the wind sector.
- By being a member of NZWEA you are assisting the development of wind energy in New Zealand and helping to reduce our greenhouse gas emissions to meet climate change targets.

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