

# **SECTION 32 REPORT**

# Renewable Electricity Generation

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# **1 Executive Summary**

The report provides an evaluation of the proposed provisions in the Renewable Electricity Generation chapter of the Proposed Far North District Plan (PDP) in accordance with section 32 of the Resource Management Act 1991 (RMA). The management of physical and natural resources in an integrated way, including sources of renewable energy, is a core function of territorial authorities under section 31(1)(a) of the RMA. The benefits to be derived from the use and development of renewable energy is also an 'other matter' under section 7 of the RMA that particular regard must be given to. In the Far North District, there is potential to significantly increase the proportion of electricity in the district that is generated from renewable sources such as wind and solar and to better recognise the social, economic, cultural and environmental benefits of renewable electricity generation activities.

The approach for Renewable Electricity Generation chapter in the Proposed District Plan (**PDP**) is to give effect to the relevant higher order documents. These include the National Policy Statement for Renewable Electricity Generation 2011 (**NPS-REG**) and the Northland Regional Policy Statement 2016 (**RPS**), which give effect to Part 2 of the RMA. The policy framework gives effect to this direction by focusing on enabling and protecting renewable electricity generation as regionally significant infrastructure, and recognising the technical, operational and functional needs of this infrastructure. This sets the foundation for an enabling rule framework, particularly for small and community-scale renewable electricity generation projects, which should help increase the proportion of electricity generated from renewable sources in the district.

The proposed provisions in the Renewable Electricity Generation chapter retain more control in situations where renewable electricity projects are large scale and/or have the potential to impact areas with historical, cultural, natural environment or coastal values. This balances the need to be more enabling of renewable electricity generation projects with the need to manage adverse effects in more sensitive environments, particularly in areas where other higher order documents require a more stringent approach to managing and avoiding adverse effects, particularly for outstanding and significant areas in the coastal environment to give effect to the New Zealand Coastal Policy Statement 2010 (NZCPS). Overall, this section 32 evaluation concludes that the objectives for the Renewable Electricity Generation chapter in the PDP are the most appropriate way to achieve the purpose of the RMA and the proposed provisions are the most appropriate way to achieve the objectives, based on an assessment of effectiveness, efficiency, benefits and costs.

# 2 Introduction and Purpose

# **2.1 Purpose of report**

This report provides an evaluation of the district plan provisions in the Renewable Electricity Generation chapter in the Proposed Far North District Plan (PDP). This evaluation report has been undertaken by the Far North District Council (Council) and is required under section 32 of the Resource Management Act 1991 (RMA).

Section 32 of the RMA requires Councils to examine whether the objectives within proposed plans are the most appropriate to achieve the purpose of the RMA and whether the provisions (i.e. policies, rules and standards) are the most appropriate way to achieve the objectives. This assessment must assess the effectiveness and efficiency of the provisions in achieving the objectives, including the environmental, economic, social, and cultural effects, benefits and costs anticipated from the implementation of the provisions. Section 32 evaluations are part of an on-going process in RMA plan development. A further evaluation under section 32AA of the RMA is expected in response to submissions received on the Renewable Electricity Generation chapter following notification of the PDP.

# 2.2 Overview of topic

This section 32 evaluation report relates to the provisions in Renewable Electricity Generation chapter in the PDP. The focus of the chapter is enabling renewable electricity generation activities to give effect to the National Policy Statement on Renewable Electricity Generation 2011 (NPS-REG). The general intent is consistent with the Operative District Plan, but the proposed provisions have been refined to clarify and strengthen the policy direction to recognise some renewable electricity generation as regionally significant infrastructure and enable all types of renewable electricity generation activities with targeted policies and rules for small, community and large-scale renewable electricity generation activities. The proposed provisions also clarify how the adverse effects of enabling renewable electricity generation activities are to be managed, including avoiding and minimising certain adverse effects within and outside the coastal environment, and consideration of offsetting and compensation measures in some circumstances for more than minor residual adverse effects that cannot be avoided.

The overall intent is to enable the development of renewable electricity generation to provide benefits to the district and wider region, including:

- Helping communities move towards more self-sufficiency in terms of renewable electricity generation
- Contributing to reductions in greenhouse gas emissions
- Improving the security and affordability of renewable electricity
- Providing for economic opportunities and enhancing economic and social well-being.

# 3 Statutory and Policy Context

# 3.1 Resource Management Act 1991

The **Section 32 Overview Report for the PDP** provides a summary of the relevant statutory requirements in the RMA relevant to the PDP. This section provides a summary of the matters in Part 2 of the RMA (purpose and principles) of direct relevance to renewable electricity generation.

Section 74(1) of the RMA states that district plans must be prepared in accordance with the provisions of Part 2. The purpose of the RMA is the sustainable management of natural and physical resources which is defined in section 5(2) of the RMA as:

"...sustainable management means managing the use, development and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic and cultural wellbeing, and for their health and safety while —

- (a) Sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and
- (b) Safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and
- (c) Avoiding, remedying, or mitigating any adverse effects of activities on the environment."

To achieve the purpose of the RMA, all those exercising functions and powers under the RMA are required to:

- Recognise and provide for the matters of national importance identified in section 6
- Have particular regard to the other matters in section 7
- Take into account the principles of the Treaty of Waitangi in section 8 of the RMA.

The following section 6 matters are directly relevant to the management of renewable electricity generation activities:

- (a) The preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:
- (b) The protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:
- (c) The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:
- (d) The maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:
- (e) The relationship of maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:
- (f) The protection of historic heritage from inappropriate subdivision, use, and development:
- (g) The protection of protected customary rights:
- (h) The management of significant risks from natural hazards.

Renewable electricity generation activities have the potential to affect all the matters of national importance in section 6 of the RMA. While the adverse effects of renewable electricity generation activities can generally be avoided or effectively mitigated through appropriate site selection and design, the locational, operational and functional needs and constraints of renewable electricity generation activities means that some projects have unavoidable adverse effects. Therefore, the PDP includes proposed controls to appropriately manage the adverse effects on historic, cultural, natural environment values from renewable electricity generation activities.

The following section 7 matters are directly relevant to the management of renewable electricity generation activities:

- (a) The efficient use and development of natural and physical resources:
- (ba) The efficiency of the end use of energy:
- (b) The maintenance and enhancement of amenity values:
- (c) Intrinsic values of ecosystems:
- (d) Maintenance and enhancement of the quality of the environment:
- (j) The benefits to be derived from the use and development of renewable energy.

The provisions seek to provide for the benefits associated with the use and development of renewable energy through the objectives and policies, and supporting permitted and consenting pathways for small, community and large-scale renewable electricity generation activities. However, renewable electricity generation activities can also result in adverse effects on amenity values, ecosystem health and the quality of the environment if not appropriately located, designed and/or managed. Therefore, the PDP includes provisions that seek to ensure actual and potential adverse effects of renewable electricity generation activities are avoided or appropriately managed.

The provisions are also consistent with section 8 of the RMA which requires the principles of the Treaty of Waitangi to be taken into account through specific recognition of the impacts of renewable electricity generation on cultural values.

# **3.2 Higher order planning instruments**

Section 75(3) of the RMA requires district plans to give effect to higher order planning instruments - national policy statements, the New Zealand Coastal Policy Statement, national planning standards, and the relevant regional policy statement. The **Section 32 Overview Report** provides a more detailed summary of the relevant RMA higher order planning instruments relevant to the PDP. The sections below provide an overview of provisions in higher order planning instruments directly relevant to renewable electricity generation.

# 3.2.1 National Planning Standards

Section 75(3)(ba) of the RMA requires that district plans give effect to a Planning Standards. The Planning Standards were gazetted in April 2019 and the purpose of the planning standards is to assist in achieving the purpose of the RMA and improve consistency in the structure, format and content of RMA plans.

Standard 4 – District Plan Structure Standard sets out the structure for district plans. This requires district plans to include a 'Energy, Infrastructure and Transport' section in Part 2 (District-Wide Matters) and Standard 7 – District-wide Matters Standards sets out more specific directions for the energy, infrastructure and transport section as follows:

- 5. Provisions relating to energy, infrastructure and transport that are not specific to the Special purpose zones chapter or sections must be located in one or more chapters under the Energy, infrastructure and transport heading. These provisions may include:
  - a. statement about the status of transport corridors eg, the adjoining zoning applies to the centre line of mapped roads
  - b. noise-related metrics and noise measurement methods relating to energy, infrastructure and transport, which must be consistent with the 15. Noise and vibration metrics Standard
  - c. the management of reverse sensitivity effects between infrastructure and other activities.
- 6. The chapters under the Energy, infrastructure and transport heading must include cross-references to any energy, infrastructure and transport provisions in a Special purpose zones chapter or sections.
- 7. Zone chapters must include cross-references to relevant provisions under the Energy, infrastructure and transport heading.
- 8. All chapters must be included alphabetically.

Standard 15 – Noise and Vibration Metrics Standard is also relevant as this requires any plan rule to manage noise emissions to be in accordance with the mandatory noise measurement methods and symbols in the applicable New Zealand Standards incorporated by reference into the planning standards. Those standards include *New Zealand Standard 6808:2010 Acoustics – Wind farm noise*.

The following definitions in the national planning standards are also directly relevant to renewable electricity generation activities:

- Building means a temporary or permanent movable or immovable physical construction that is:
  - Partially or fully roofed; and
  - Fixed or located on or in land; but excludes any motorised vehicle or other mode of transport that could be moved under its own power.
- **Functional need** means the need for a proposal or activity to traverse, locate or operate in a particular environment because the activity can only occur in that environment
- Operational need means the need for a proposal or activity to traverse, locate or operate in a
  particular environment because of technical, logistical or operational characteristics or
  constraints.

#### 3.2.2 National Policy Statements

Section 75(3)(a) of the RMA requires that district plans give effect to any National Policy Statement ("NPS"). The National Policy Statement on Renewable Electricity Generation 2011 (NPS-REG) and New Zealand Coastal Policy Statement 2010 (NZCPS) are directly relevant to the Renewable Electricity Generation chapter in the PDP.

The table below provides a summary of the key provisions in the NPS-REG that are to be given effect to in the renewable electricity generation chapter of the PDP.

NPS-REG		
Objective	"To recognise the national significance of renewable electricity generation activities by providing for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities, such that the proportion of New Zealand's electricity generated from renewable energy sources increases to a level that meets or exceeds the New Zealand Government's national target for renewable electricity generation."	
Policy A	Recognising the benefits of renewable electricity generation activities	
Policy B	Acknowledging the practical implications of achieving New Zealand's target for electricity generation from renewable resources	
Policies C1 and C2	Acknowledging the practical constraints associated with the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities	
	Have regard to offsetting measures or environmental compensation when considering any residual adverse effects of renewable electricity generation activities	
Policy D	Managing reverse sensitivity effects on renewable electricity generation activities	
Policies E1, E2, E3 and E4	Incorporating provisions for renewable electricity generation activities into district plans (including solar, wind, geothermal) to the extent applicable in the region/district	
Policy F	Incorporating provisions for small and community-scale renewable electricity	

	generation activities into district plans
Policy G	Enabling identification of renewable electricity generation possibilities

In summary, the NPS-REG requires the PDP to:

- Recognise and provide for the national significance and benefits of renewable electricity generation activities.
- Include provisions that recognise the practical constraints associated with developing, operating, maintaining and upgrading of new and existing renewable electricity generation activities, including locational constraints determined by the availability of renewable resources, logistical and technical practicalities, and the need to connect to national grid and distribution network.
- Have regard to use of offsetting and environmental compensation to address the residual adverse effects of renewable electricity generation activities that cannot be avoided, remedied or mitigated.
- Manage activities to avoid reverse sensitivity effects on renewable electricity generation activities, to the extent reasonably possible.
- Include provisions to enable solar, wind and geothermal generation to the extent applicable in the Far North District.
- Include provisions to enable small and community-scale renewable electricity generation activities, to the extent applicable in the Far North District.
- Enable the investigation, identification and assessment of generation sites.

The PDP provisions give effect to the NPS-REG as the objectives and policies seek to recognise and provide for the significant local, regional and national benefits of renewable electricity generation activities, as well as their locational, operational and functional needs and constraints while managing potential adverse effects. This is to be achieved through rules that permit small scale and community-scale renewable electricity generation activities, provided specific conditions are met. The PDP provisions also provide a consenting pathway for large-scale renewable electricity generation activities, subject to a robust effects management approach that is consistent with other PDP chapters relating to heritage, cultural and natural environment values within and outside the coastal environment. The PDP provisions also require decision-makers to have regard to proposed offsetting and compensation measures for more than minor residual adverse effects that cannot be avoided.

The table below provides a summary of the key provisions in NZCPS that are directly relevant to the Renewable Electricity Generation chapter.

NZCPS	
Policy 6(1)(a)(b)	Activities in the coastal environment
Policy 11	Indigenous biological diversity
Policy 13	Preservation of natural character
Policy 15	Natural features and natural landscapes

In summary, the NZCPS policies require the PDP to:

 Recognise that in the coastal environment, the provision of infrastructure including generation and transmission of electricity is important to the social, economic and cultural well-being of people and communities  Avoid adverse effects of renewable electricity generation activities on significant indigenous biodiversity, areas of outstanding natural character, and outstanding natural features and landscapes in the coastal environment, and avoid, remedy and mitigate adverse effects on other areas and values within the coastal environment.

The provisions in the PDP are consistent with, and give effect to, the to the NZCPS through more restrictive provisions for renewable electricity generation activities infrastructure in areas of outstanding and significant value in the coastal environment while also recognising the importance of these activities to the social, economic and cultural well-being of people and communities.

#### 3.2.3 National Environmental Standards

Section 44 of the RMA requires local authorities to recognise NES by ensuring plan rules do not conflict or duplicate with provisions in a NES. There are no NES's directly relevant to the management of renewable electricity generation activities.

#### 3.2.4 Regional Policy Statement for Northland

Section 75(3)(c) of the RMA requires district plans to 'give effect' to any RPS. The RPS was made operative on 14 June 2018. Table 2 below outlines the objectives and policies in the RPS¹ are directly relevant to managing renewable electricity generation activities.

RPS	
Objective 3.5	Enabling economic wellbeing
Objective 3.6	Economic activities – reverse sensitivity and sterilisation (including existing and planned regionally significant infrastructure)
Objective 3.7	Regionally significant infrastructure
Objective 3.9	Security of energy supply
Policy 5.1.3	Avoiding the adverse effects of new use(s) and development
Policy 5.3.1	The regional and district councils shall recognise the activities identified in Appendix 2 <sup>2</sup> of this document as being regionally significant infrastructure.
Policy 5.3.2	Benefits of regionally significant infrastructure
Policy 5.3.3	Managing adverse effects arising from regionally significant infrastructure
Policy 5.4.1	Recognising and providing for the benefits of renewable electricity generation activities and supporting the sustainable use and development of Northland's renewable energy resources
Policy 5.4.2	Community and small-scale renewable electricity generation activities

In summary, the RPS objectives and policies require the PDP to:

 Recognise and promote the benefits of regionally significant infrastructure (in this case, renewable electricity generation activities) while also managing adverse effects arising from this infrastructure.

<sup>&</sup>lt;sup>1</sup> The RPS also inlcudes methods that direct district plans but these are not repeated here.

<sup>&</sup>lt;sup>2</sup> The list of regionally significant infrastructure in Appendix 2 of the RPS includes "(f) Electricity generation facilities (including Ngāwhā geothermal power station and Wairua hydroelectric power station) which supply electricity to either the national grid or the local distribution network".

- Recognise and provide for the national significance of renewable electricity generation activities, including the national, regional and local benefits and support the use and development of renewable energy resources in the region
- Encourage and provide for the development, operation, maintenance and upgrading of community and small-scale renewable electricity generation activities
- Avoid the adverse effects, including reverse sensitivity effects, on existing or planned regionally significant infrastructure.

The provisions in the PDP are consistent with, and give effect to, the RPS, as the objectives and policies seeks to specifically recognise renewable electricity generation activities as regionally significant infrastructure and seek to recognise the local, regional and national benefits of renewable electricity generation activities that supply electricity to the National Grid or local distribution network from renewable sources. The PDP provisions also seek to enable renewable electricity generation activities to provide benefits for the district, including security of supply, and provide permitted activity pathways for small and community-scale renewable electricity generation activities, provided specified standards are met.

# 3.3 Regional Plan for Northland

Section 75(4)(b) of the RMA states that any district must not be inconsistent with a regional plan for any matter stated in section 30(1) of the RMA. The operative Northland Regional Plans and proposed Northland Regional Plan are summarised in detail in the **Section 32 Overview Report**. The table(s) below provides an overview of provisions in the proposed Northland Regional Plan (appeals version) directly relevant to managing renewable electricity generation activities. The only provision in Table 3 still subject to appeal is Policy D.2.9.

Proposed Regional Plan		
Objective F.1.6	Regionally significant infrastructure	
Objective F.1.7	Security of energy supply	
Policy D.2.5	Benefits of regionally significant infrastructure	
Policy D.2.7	Minor adverse effects arising from the establishment and operation of regionally significant infrastructure	
Policy D.2.8	Maintenance, repair and upgrading of regionally significant infrastructure	
Policy D.2.9	Appropriateness of regionally significant infrastructure proposals	
Policy D.2.11	Protection of regionally significant infrastructure	
Policy D.2.12	Renewable energy	

These provisions are provided in full in **Section 10**. In summary, these proposed regional plan objectives and policies seek to:

- Recognise and promote the benefits of regionally significant infrastructure (in this case, renewable electricity generation activities).
- Support electricity generation projects that will improve security of energy supply, particularly when these use renewable sources.
- Enable minor adverse effects arising from establishing and operating renewable electricity generation activities, provided historic, cultural and natural environment values can be appropriately managed.

- Enable maintenance, repair and upgrading of renewable electricity generation activities if the adverse effects are not significant or temporary and are similar to the effects generated before the work began.
- Set out specific criteria to consider when renewable electricity generation proposals involve more
  than minor adverse effects, including consideration of the practical limitations and benefits of
  renewable electricity generation activities.
- Protect renewable electricity generation activities when considering the impacts of new use and development.

The proposed PDP provisions are consistent with the above objectives and policies in the proposed Northland Regional Plan approach as the PDP objectives and policies specifically recognise renewable electricity generation activities as regionally significant infrastructure and seek to recognise and realise the social, economic, environmental and cultural benefits of renewable electricity generation activities. The PDP provisions are also intended to work alongside regional rules for activities such as hydro-generation, where some aspects will be subject to regional rules while other aspects will be subject to district rules (e.g. buildings and structures associated with in-stream hydro-generation).

# 3.4 Iwi and Hapū Environmental Management Plans

When preparing and changing district plans, Section 74(2A) of the RMA requires Council to take into account any relevant planning document recognised by an iwi authority and lodged with the territorial authority, to the extent that its content has a bearing on the resource management issues of the district. At present there are ten iwi planning documents accepted by Council which are set out and summarised in the **Section 32 Overview Report**. The plans contain statements of identity and whakapapa and identify the rohe over which mana whenua are held. The cultural and spiritual values associated with the role of kaitiaki over resources within their rohe are articulated.

Many of the identified issues within the various management plans relate to concerns over genetically modified organisms, cultural landscapes, sites of cultural significance, indigenous flora and fauna, public access, climate change, landscapes and features, minerals, soil, air quality and water quality, particularly with regards to subdivision and development activities. These key issues and values have been taken into account in the development of the proposed provisions in the Renewable Electricity Generation chapter which seek to avoid and manage adverse effects on cultural and natural environment values from renewable electricity generation activities. The proposed provisions in the Renewable Electricity Generation chapter also seek to support the cultural, economic and social well-being of tangata whenua through increasing the security and affordability of electricity supply and providing economic opportunities for tangata whenua.

# 3.5 Other legislation and policy documents

When preparing or changing a district plan, section 74(2)(b)(i) of the RMA requires council to have regard to management plans and strategies prepared under other Acts to the extent that it has a bearing on resource management issues of the district. The **Section 32 Overview Report** provides a more detailed overview of strategies and plans prepared under legislation that are relevant to PDP. There are no local strategies and plans prepared under other legislation directly relevant to renewable electricity generation in the Far North district. The long-term plan and infrastructure strategy including outcomes and strategies relating to climate change, but these are primarily focused on adaptation rather than mitigation. However, there is national legislation and plans relevant to renewable electricity generation and climate change mitigation as outlined below.

#### 3.5.1 Climate Change Response Act 2002

The Climate Change Response Act 2002 (CCRA) puts in place a legal framework to enable New Zealand to meet its international obligations under the United Nations Framework Convention on Climate Change, the Kyoto Protocol and the Paris Agreement. In 2019, the CCRA was amended by the Climate Change Response (Zero Carbon) Amendment Act 2019 came into force on 13 November 2019. The

amendments provide a framework by which New Zealand can develop and implement clear and stable climate change policies that:

- Contribute to the global effort under the Paris Agreement to limit the global average temperature increase to 1.5° Celsius above pre-industrial levels; and
- Enable New Zealand to prepare for, and adapt to, the effects of climate change.

The Climate Change Response (Zero Carbon) Amendment Act 2019 introduced four key changes to the CCRA:

- Legally binding domestic GHG emission reduction targets for New Zealand to:
  - o Reduce net emissions of all GHG emissions (except biogenic methane) to zero by 2050
  - o Reduce emissions of biogenic methane to 24-47 % below 2017 levels by 2050;
- A system of five-yearly emissions budgets to act as stepping-stones towards the long-term target;
- A requirement for the Government to develop and implement policies for climate change mitigation and adaptation through an emissions reduction plan and a national adaptation plan; and
- Establishing an independent Climate Change Commission to provide expert advice and monitoring to help keep successive governments on track to meeting long-term goals.

#### 3.5.2 The role of electrification in meeting CCRA emission reduction targets

Electrification of the economy, particularly greenhouse gas emissions from transport and process heat, which make up 30% of New Zealand's total emissions is critical to meeting New Zealand's emission reduction targets. This has been recognized by the Climate Change Commission in their advice to the Government and by the Ministry for the Environment through consultation on the Emission Reduction Plan. More specifically, accelerating electrification is identified as a low regret option under all future scenarios modelled by the Climate Change Commission<sup>3</sup>. The scale of change required to electrify the transport system "cannot be overstated" and "speeding up the rollout of renewable electricity generation will be a key factor in replacing fossil fuels in other sectors."<sup>4</sup>

To meet projected demand, electrify other sectors (including transport and process heat) and meet our renewable electricity and legal biding emissions reduction targets, it has been projected that current renewable electricity generation will need to increase by between 50% to 70% by 2035, and continue to grow substantially out to 2050 (increasing 165% by 2050). This will require the maintenance of existing renewable electricity generation capacity, as well an average annual renewable electricity generation capacity increase of 278MW to 414MW per year (to 2035)<sup>5</sup>. Significant growth in solar and wind generation is anticipated, as modelled by the Climate Change Commission.

<sup>&</sup>lt;sup>3</sup> Pou a Rangi the Climate Change Commission (May 2021) *Ināia Tonu Nei: a low emissions future for Aotearoa.* 

<sup>&</sup>lt;sup>4</sup> Ministry for the Environment (October 2021). *Te hau mārohi ki anamata: Transitioning to a low-emissions and climate-resilient future: Have your say and shape the emissions reduction plan* 

<sup>&</sup>lt;sup>5</sup> Modelling carried out by the Climate Change Comission anticipates that under their 'Demonstration Path' renewable electricity generation will need to total 11.03GW by 2035. This represents 96.6% of total modelled electricity generation in 2035 (excluding co-generation) and 94.2% (including co-generation). Transpower's modelling for their Whakamana i Te Mauri Hiko report, anticipates a higher renewable electricity generation capacity by 2035; with renewable electricity generation capacity increasing to 12.8GW by 2035. This represents 95% of their total modelled electricity generation for 2035 under their base case. Transpower's model shows renewable electricity generation capacity growing to 19.6GW by 2050, with 2.2GW of added firming from almost entirely renewable thermal plants. The Transpower model anticipates 1.2GW battery storage by 2035, and 3.2GW by 2050.

# 4 Current State and Resource Management Issues

This section provides an overview of the relevant context for the Renewable Electricity Generation chapter in the PDP, current approach to manage renewable electricity generation through chapter 12.9 of the Operative District Plan, and key issues raised through consultation on the draft district plan. It concludes with a summary of the key resource management issues for renewable electricity generation to be addressed through the PDP.

# 4.1 Operative District Plan Approach

# 4.1.1 Summary of current management approach

The Operative Far North District Plan was notified in 2000 and was prepared prior to 2004 amendments to the RMA relating to renewable energy and energy efficiency. Section 12.9 of the Operative District Plan - Renewable Energy and Energy Efficiency – was inserted through Plan Change 1 in 2007 response to the 2004 amendments to the RMA. The desired outcome from the plan change at that time were as follows:

- The District is self sufficient in energy production and generates a high percentage of its energy needs from renewable energy resources.
- Domestic and community based distributed renewable energy becomes a significant part of the energy generated and used in the District.
- All renewable energy developments are sustainable and in keeping with the special values and characteristics identified in the Plan.
- The people and communities of the District have access to relevant information to enable them to achieve better energy efficiency, including appropriate new technologies, funding opportunities and design guidelines.
- All new land use, subdivision and development in the District incorporates appropriate energy efficiency design, technologies and initiatives.
- An efficient and effective integrated resource management framework which enables communities to generate their energy from renewable energy resources<sup>6</sup>.

To achieve these outcomes, the Renewable Energy and Energy Efficiency chapter in the Operative District Plan includes:

- Eight objectives and nine policies focused on a range of outcomes and actions relevant to renewable energy and energy efficiency
- An extensive list of district plan methods and 'other' non-regulatory methods
- Rules that include:

- Permitted activity rules for domestic scale renewable energy devices, investigation structures and monitoring masts, free standing renewable energy devices, community scale renewable energy devices, subject to a number of conditions controlling bulk, location, height etc.
- Restricted discretionary rules for the above activities where the permitted activity standards are not complied with.
- Discretionary rules for 'wind energy facility' and any other renewable electricity generation activity not provided for in another rule.

# 4.1.2 Limitation with current approach

Section 12.9 of the Operative District Plan was prepared prior to the NPS-REG being gazetted. While the Operative District Plan provisions are consistent with the policy direction in the NPS-REG, these do not have appeared to have enabled renewable electricity generation in the district to support New

<sup>&</sup>lt;sup>6</sup> Section 32 report for Proposed Change 1 to the Far North District Plan, Renewable Energy and Energy Efficiency, October 2007.

Zealand's renewable electricity targets and delivered the desired outcomes of Plan Change 1 (i.e. for the Far North to become among the most energy self-sufficient districts in New Zealand). Section 12.9 of the Operative District Plan also has a number of issues and limitations that can be improved through the PDP. For example:

- The chapter includes extensive non-mandatory plan context (context, issues, expected outcomes, non-regulatory methods) which can be removed and rationalised.
- The objectives and policies provide limited direction to assist decision-making (e.g. 'promote' the development of renewable electricity generation).
- The objectives and policies provide limited direction on how to manage adverse effects from renewable electricity generation.
- There are redundant, generic policies (e.g. 'encourage early engagement') that are not specific to renewable electricity generation.
- The objective and policies relating to energy efficiency are not supported by rules and appear to be having limited (if any) impact on land use and subdivision.
- Some of the permitted activity threshold for domestic and community scale renewable electricity generation are overly restrictive and do not reflect current technology.
- There is a lack of clarify in the distinction between small (domestic), community and largescale renewable electricity generation activities.
- There are inconsistencies in the thresholds (e.g. definition of community scale includes threshold of 4MW whereas permitted activity standards limits this to 1.5MW).

# 4.2 Key issues identified through consultation

The **Section 32 Overview Report** provides a detailed overview of the consultation and engagement Council has undertaken with tangata whenua, stakeholders and communities throughout the district to inform the development of the PDP and the key issues identified through this consultation and engagement. This section provides an overview of key issues raised through feedback on the draft renewable electricity generation chapter released in 2021 and a summary of advice received from iwi authorities in relation to renewable electricity generation.

# 4.2.1 Summary of issue raised through consultation on the draft district plan

Overall, there was a relatively low level of interest in the renewable electricity generation topic from the community through consultation and engagement of the PDP, and feedback was only provided by larger submitter organisations as opposed to individual members of the public. Key issues identified through this process include:

- Request for stricter consenting pathways (non-complying was suggested) for renewable electricity generation projects in sensitive overlays, such as significant natural areas.
- Support for provisions that enable renewable electricity generation projects and provisions
  that anticipate changes in technology that will allow improvements to the electricity
  distribution network.
- Request for the policy direction to protect existing renewable electricity generation sites from reverse sensitivity effects to be supported by specific reverse sensitivity rules.
- Request for more specific enabling provisions for solar electricity generation projects given increasing interest and potential for this generation in the district.
- Request for specific provision for farm scale renewable electricity generation projects, including a permissive consenting pathway.

# 4.2.2 Summary of advice from iwi authorities

Section 32(4A)(a) of the RMA requires that evaluation reports include a summary of advice on a proposed plan received from iwi authorities. The **Section 32 Overview Report** provides an overview of the process to engage with tangata whenua and iwi authorities in the development of the PDP and

key issues raised through that process. In relation to renewable electricity generation 3 pieces of feedback were received on the Draft District Plan. In summary the feedback sought:

- Ease of access and development of renewable energy infrastructure
- Clarification over whether renewable energy options needed to be considered at the time of subdivision
- Greater protection of cultural values.

Section 5 of this report outlines how the proposed management approach responds to this advice in accordance with section 32(4A)(b) of the RMA.

# 4.3 Summary of resource management issues

Based on the analysis of the statutory and policy context, the current management approach, and feedback from consultation on the draft district plan, the key resource management issues for the renewable electricity generation chapter to be addressed through the PDP are:

- Ensuring that the policy and rule framework is more enabling of renewable electricity generation projects at all scales, but particularly small and community scale renewable electricity generation and wind/solar projects as it is recognised that large-scale electricity generation can give rise to more significant adverse effects. This will better meet the intention of the NPS-REG in terms of enabling renewable electricity generation activities of all types and scales.
- Ensuring that the objectives and policies in the renewable electricity generation chapter
  provide clear, strong direction to decision-makers so they understand both the benefits of
  renewable electricity projects and how to manage potential adverse effects from these
  projects, particularly on areas with historic, cultural and natural environment values.
- Providing clear links between the Renewable Electricity Generation chapter and the Historical and Cultural Values, Natural Environment, and Coastal Environment chapters in the PDP to make it clear that these chapters may have more stringent provisions for renewable electricity generation activities located in overlay areas.

# 5 Proposed District Plan Provisions

The proposed provisions are set out in the Renewable Electricity Generation chapter of the Proposed Far North District Plan. These proposed provisions should be referred to in conjunction with this section 32 evaluation report.

# **5.1 Strategic objectives**

The PDP includes a strategic direction section which provides high level direction on the strategic or significant matters for the District and objectives to guide strategic decision-making under the PDP. The strategic objectives in the PDP of direct relevance to renewable electricity generation are:

- SD-IE-O1 The benefits of infrastructure and renewable electricity generation activities across
  the district are recognised and provided for, while ensuring their adverse effects are well
  managed.
- SD-IE-O2 Infrastructure and renewable electricity generation activities are protected from incompatible land use, subdivision and development that may compromise its effective operation, maintenance and upgrading.
- SD-SP-O3 Encourage opportunities for fulfilment of our cultural, spiritual, environmental, and economic wellbeing. An enabling Renewable Electricity Generation chapter will encourage and support communities to establish their own renewable electricity projects.
   This will have both environmental benefits from reduced reliance on fossil fuel energy sources

but also economic benefits from access to locally sourced, sustainable and more affordable energy.

- SD-SP-O4 Promotion of communities and places that will meet the needs for not only our present population but future generations which are adaptive to climate change. Enabling renewable electricity generation projects is consistent with national legislation and policy to mitigate climate change and the adverse effect climate change is having on the environment, people and the economy. Renewable electricity generation projects have both positive impacts in terms of reducing greenhouse gas emissions from fossil fuel sources but can also be adaptive to the impacts of climate change when appropriately sited.
- SD-EP-O5 Land use practices reverse climate change by enabling carbon storage and reducing carbon emissions. Renewable electricity generation projects reduce carbon emissions by providing an alternative to traditional fossil fuel-based sources of energy.
- SD-UFD-O3 Appropriate development infrastructure in place or planned to meet the anticipated demands for housing and business activities. An enabling framework for renewable electricity generation projects, particularly small scale and community scale projects, provides an alternative option to fossil fuel energy sources and can provide local electricity supply to reduce reliance on the National Grid for a source of electricity. This means that future demand for housing and business activities is less likely to be constrained by a lack of electricity supply as renewable electricity generation options will be available to address potential future shortfalls.

# **5.2 Proposed management approach**

This section provides a summary of the proposed management approach for Renewable Electricity Generation chapter in the PDP focusing on the key changes from the Operative District Plan. The **Section 32 Overview Report** outlines and evaluates general differences between the PDP provisions and Operative District Plan, includes moving from an effects-based plan to a 'hybrid plan' that includes effects and activities-based planning and an updated plan format and structure to align with the national planning standards.

The main changes in the overall proposed management approach are:

- Refining the objectives and policies to clarify and strengthen the policy direction to recognise
  and provide for identified renewable electricity generation activities as regionally significant
  infrastructure, consistent with the RPS.
- Amendments to the provisions to enable (subject to managing adverse effects) all types of renewable electricity generation activities with targeted policies and rules for small, community and large-scale renewable electricity generation activities.
- New provisions to clarify how the adverse effects of enabling renewable electricity generation
  activities are to be managed. This includes a more string approach to avoid adverse effects on
  areas with historical, cultural, and natural environment values within outside the coastal
  environment and avoid, or otherwise minimise, adverse effects on these values outside the
  coastal environment. The policies also direct decision-makers to have regards to offsetting
  and compensation measures for more than minor residual adverse effects that cannot be
  avoided.
- A clear focus on renewable electricity generation activities and removal of energy efficiency
  provisions on the basis that energy efficiency is better dealt with through zone chapters
  focusing on land development and subdivision.
- A refinement of the chapter to remove and rationalise non-mandatory chapter content.
- A policy managing potential reverse sensitivity effects between sensitive activities and existing
  or consented renewable energy activities, noting that provisions that control the location of
  sensitive activities relative to renewable electricity generation projects are to be located in
  zone chapters.

The sections below provide a high-level summary of the objectives, policies, and rules and other methods for renewable electricity generation.

# **5.3 Summary of proposed objectives and provisions**

This section provides a summary of the proposed objectives and provisions which are the focus of the section 32 evaluation in section 6 and 7 of this report.

# **5.3.1** Summary of objectives

The proposed management approach for the Renewable Electricity Generation chapter includes objectives that:

- Recognise the significant benefits of renewable electricity generation at the local, regional and national level.
- Recognise and provide for the technical, operational and functional needs and constraints of renewable electricity generation.
- Minimise adverse effects from renewable electricity generation projects on areas with historical and cultural values, natural environment values, and coastal values.
- Manage the potential reverse sensitivity effects resulting from sensitive activities locating in close proximity to community and large-scale renewable electricity generation projects.

# **5.3.2** Summary of provisions

For the purposes of section 32 evaluations, 'provisions' are the "policies, rules, or other methods that implement, or give effect to, the objectives of the proposed plan or change". The proposed management approach for the Renewable Electricity Generation chapter includes policies that seek to:

- Recognise that renewable electricity generation activities that supply electricity to the National Grid or local distribution network or directly to high energy users are regionally significant infrastructure, consistent with the RPS, and as such provide significant benefits and essential services to local, regional and national communities and the economy.
- Ensure that renewable electricity generation activities are able to maintain generation capacity.
- Enable small scale renewable electricity generation activities provided their environmental, character and amenity impacts can be appropriately managed.
- Provide for the benefits of new community scale and new large-scale renewable electricity generation activities (benefits are listed in the policy).
- Allow for the development, operation, maintenance and upgrading of renewable electricity generation activities provided specified effects are avoided or otherwise appropriately managed.
- Provide a framework for managing the potential adverse effects of renewable electricity generation activities, including offsetting and environmental compensation as options for mitigation in some circumstances.
- Require sensitive activities to be managed to minimise reverse sensitivity impacts on community or large-scale renewable electricity generation activities than may affect their ongoing operation or development.
- Direct large scale renewable electricity generation projects to the Rural Production Zone.
- Specifically enable solar generation projects in recognition of the fact that most adverse effects from solar can be avoided or effectively mitigated.
- Direct that the decommission of renewable electricity generation activities should involve the removal of structures, buildings and concrete areas or otherwise mitigate these to be compatible with the future land use (if imposed as consent condition).

• Set out specific matters to consider when assessing the adverse effects of renewable electricity generation projects through resource consent process.

The proposed management approach for the Renewable Electricity Generation chapter includes rules and standards that:

- Provide for the following activities as permitted activities, subject to compliance with various standards:
  - Small scale renewable electricity activities attached to buildings or structures
  - o In-stream hydro investigation and electricity generation
  - Temporary monitoring masts
  - Free standing small scale renewable energy activities
  - Community scale renewable electricity generation activities.
- Provide for the following activities as discretionary activities, subject to compliance with various standards:
  - Large scale renewable energy generation activities
  - Any activity not provided for as permitted or non-complying activity

No specific rules have been included in the Renewable Electricity Generation chapter to ensure new sensitive activities are kept separated from existing large scale renewable energy generation. This is for a number of reasons:

- The management of sensitive activities is generally best addressed in the zone chapters where land use activities are evaluated.
- Most large-scale renewable energy generation activities are likely to establish in the Rural Production Zone (based on practical needs for land and policy direction). In this zone, most sensitive activities (with the exception of residential units, minor residential units and small-scale visitor accommodation) will require consent for a discretionary activity, e.g. retirement homes, healthcare activities, community facilities. As such, the policy direction relating to reverse sensitivity effects on renewable energy generation activities will be relevant without the need for a specific rule triggering a resource consent requirement.
- The potential adverse effects from different renewable energy generation activities vary significantly (i.e. solar farms generally have fewer adverse effects on sensitive activities compared to windfarms). A 'one size fits all' setback from all large-scale renewable energy generation activities would not be appropriate and there is no clear evidence base at this stage as to what an appropriate setback from each type of renewable energy generation activity would be (compared to the National Grid, for example).

The proposed management approach for the Renewable Electricity Generation chapter also involves the following definitions to help ensure the provisions are implemented as intended:

- Community scale renewable electricity generation activities
- Small scale renewable electricity generation
- Renewable electricity generation activities (consistent with NPS-REG)
- Renewable electricity generation (consistent with NPS-REG)
- Large-scale renewable electricity generation activities.

#### 5.3.3 Responding to advice from iwi authorities

Section 32(4A) of the RMA requires evaluation reports to summarise advice received from iwi authorities on a proposed plan and the response to that advice, including any provisions that are intended to give effect to the advice. Section 3.3 of this report provides a summary of advice received from iwi authorities on renewable electricity generation. The proposed management approach responds to this advice as follows:

• Te Runanga O Ngāti Rēhia advised:

- That is important to provide easier access and development of new renewable energy systems. It is considered that the framework in the PDP does provide for this.
- A question was raised over policy REE-P5, and whether it required all subdivision applications to consider renewable energy options as part of the development. The policy has not been included in the PDP. Instead, it is considered that regard to that should sit in the subdivision chapter and should be more targeted to the issue of considering layout of subdivision e.g. passive solar.

#### • Te Runanga O Te Rarawa

Supported objectives REE01-04 and accompanying policies but raised concerns over the protection of cultural values. These objective and associated policies and rules have been changed in the PDP. However, it is considered that they appropriately manage adverse effects in relation to "cultural values". Additionally, these values are also protected in the historic heritage and sites and areas of cultural significance chapters. It is not considered appropriate to have automatically avoid large scale developments within any sites of cultural significance; this should be managed through a resources consent process.

# 6 Approach to evaluation

# **6.1 Introduction**

The overarching purpose of section 32 of the RMA is to ensure all proposed statements, standards, regulations, plans or changes are robust, evidence-based and are the most appropriate, efficient and effective means to achieve the purpose of the RMA. At a broad level, section 32 requires evaluation reports to:

- Examine whether the objectives in the proposal are the most appropriate to achieve the purpose of the RMA
- Examine whether the provisions are the most appropriate way to achieve the objectives through identifying reasonably practicable options and assessing the efficiency and effectiveness of the provisions, including an assessment of environment, economic, social and cultural economic benefits and costs.

These steps are important to ensure transparent and robust decision-making and to ensure stakeholders and decision-makers can understand the rational for the proposal. There are also requirements in section 32(4A) of the RMA to summarise advice received from iwi authorities on the proposal and the response to that advice through the provisions.

# **6.2 Evaluation of scale and significance**

Section 32(1)(c) of the RMA requires that evaluation reports contain a level of detail that corresponds with the scale and significance of the environmental, economic, social and cultural effects that are anticipated from the implementation of this proposal. This step is important as it determine the level of detail required in the evaluation of objectives and provisions so that it is focused on key changes from the status quo.

The scale and significance of the environmental, economic, social and cultural effects of the provisions for renewable electricity generation chapter in the PDP are evaluated in the Table below.

Criteria	Comment	Assessment
Raises any principles	The proposed provisions have limited significance in	Low
of the Treaty of	relation to the principles of the Treaty of Waitangi. The	
Waitangi	proposed policy direction is to direct large-scale renewable	
	electricity generation projects to the Rural Production Zone,	

Criteria	Comment	Assessment
	which will be away from Māori owned land. The enabling rules for small scale and community scale renewable electricity generation activities will provide opportunities for iwi groups to establish their own locally sourced, sustainable electricity supply (if desired) to support their ambitions for housing and other business opportunities. Further, new proposals for renewable electricity generation activities will consider the potential cultural impacts of a project and the Sites and Areas of Significance to Māori overlay will provide the rule interface with the Renewable Electricity Generation chapter to ensure adverse cultural effects are avoided or appropriately mitigated.	
Degree of change from the Operative Plan	The key changes to the Renewable Electricity Generation chapter occur at the objectives and policies level, notably the clearer focus on enabling renewable electricity generation projects of all scales and types and stronger, direction to assist decision-makers that is better aligned with the NPS-REG and the RPS. The key changes to the rules involve some refinements to the way different renewable electricity generation projects are defined, more enabling provisions for small scale and community scale renewable electricity generation activities and some refinements to the thresholds and standards. However, the general approach structure of the chapter to be more enabling of smaller scale renewable electricity generation activities and require resource consent for larger scale renewable electricity generation activities is similar to the Operative District Plan approach.	Low
Effects on matters of national importance	The provisions address matters of national importance, as noted in <b>Section 3</b> of this evaluation report. The location of renewable electricity generation activities (particularly large scale) can pose risks to RMA section 6 matters and therefore the PDP includes controls to ensure that impacts of renewable electricity generation activities on the historic, cultural and natural environment values recognised in section 6 of the RMA are appropriately managed.	Medium
Scale of effects – geographically (local, district wide, regional, national).	Although the demand for renewable electricity generation is increasing, there are few large-scale renewable electricity generation projects establishing in the Far North District currently (notable exceptions are Ngawha Geothermal Plan and New Zealand's largest solar farm, currently under construction in Pukenui). A more enabling renewable electricity generation chapter will assist with these types of activities being established in the District but the overall scale of the impact is likely to be small and limited geographically to the individual site or community it serves.	Low
Scale of people affected – current	Establishing alternative sources of locally generated renewable electricity generation will have an impact on	Low

Criteria	Comment	Assessment
and future generations (how many will be affected – single landowners, multiple landowners, neighbourhoods, the public generally, future generations?).	generators and users of electricity in the District. This is likely to have an intergenerational impact as upfront investments in renewable electricity generation projects will permanently change the renewable electricity generation landscape in the Far North District and Northland region, particularly if more larger scale renewable electricity generation projects are approved. It is anticipated that more small and community scale renewable electricity generation projects are likely compared to large scale projects, which means the scale of people likely to be impacted will be limited to the individuals and communities that directly benefit from those projects.	
Scale of effects on those with specific interests, e.g., Tangata Whenua	Companies that are considering establishing enabling renewable electricity generation have specific interests in the provisions and are likely to get the greater benefits. However, the provisions enable renewable electricity generation projects (particularly small-scale) may also benefit communities and people with specific interests, including more isolated communities seeking to have local, renewable, security of electricity generation. Network utility providers (e.g. Top Energy) will also have an interest in the provisions in terms of how this might generate more demand on the distribution network.	Low
Degree of policy risk  – does it involve effects that have been considered implicitly or explicitly by higher order documents? Does it involve effects addressed by other standards/commonly accepted best practice?	The Renewable Electricity Generation chapter is giving effect to the RPS with respect to managing regionally significant infrastructure and is better aligned with the NPS-REG than the Operative Plan. As such, there is no/limited policy risk with respect to consistency with higher order documents. Further, the approach to scaling the resource consent response to match the scale of the renewable electricity generation project proposed (i.e. more permissive for small scale, consent requirements for large scale) is not changing significantly from the Operative District Plan. Although the policy direction and definitions used in the chapter are clearer, directive and slightly more enabling than the Operative Plan, the overall intent is the same.	Low

# **6.3 Summary of scale and significance assessment**

Overall, the scale and significance of the effects from the proposal is assessed as being low. Consequently, a low level of detail is appropriate for the evaluation of the objectives and provisions for the Renewable Electricity Generation chapter of the PDP in accordance with section 32(1)(c) of the RMA. This evaluation below focuses on key changes in the proposed management approach from the Operative District Plan - minor changes to provisions for clarification and to reflect new national and regional policy direction are not included in the evaluation in section 6 and 7 below.

# 7 Evaluation of objectives

Section 32(1)(a) of the RMA requires that the evaluation report examine the extent to which the objectives of the proposal are the most appropriate way to achieve the purpose of the RMA. The assessment of the appropriateness of the objectives for the Renewable Electricity Generation chapter has been undertaken against four criteria to test different aspects of 'appropriateness' consistent with best practice guidance as outlined below.

Criteria	Assessment	
Relevance	<ul> <li>Is the objective directly related to a resource management issue?</li> <li>Is the objective focused on achieving the purpose of the RMA?</li> </ul>	
Usefulness	<ul> <li>Will the objective help Council carry out its RMA functions?</li> <li>Does the objective provide clear direction to decision-makers?</li> </ul>	
Reasonableness	• Can the objective be achieved without imposing unjustified high costs on Council, tangata whenua, stakeholders and the wider community?	
Achievability	• Can the objective be achieved by those responsible for implementation?	

Section 32 of the RMA encourages a holistic approach to assessing objectives rather than necessarily assessing each objective individually. This recognises that the objectives of a proposal generally work inter-dependently to achieve the purpose of the RMA. As such, some of the objectives for the Renewable Electricity Generation chapter have been grouped in the evaluation below.

**Objective(s):** REE-O1 and REE-O2 – Recognise and provide for significant local, regional and national benefits of renewable electricity generation activities and for their technical, operational and functional needs and constraints.

#### Relevance

# Directly related to a resource management issue

These two objectives are directly related to the resource management issue of recognising and providing for the benefits of renewable electricity generation activities. REE-O1 sets out the direction to recognise and provide for the benefits while REE-O2 provides more specificity as to what the benefits are. Recognising and providing for the technical, operational and functional needs of renewable electricity generation activities is also a key resource management issue as opportunities for renewable electricity generation projects to establish are severely limited if the objectives and supporting policy and rule framework do not address these particular needs.

# Focused on achieving the purpose of the RMA

The purpose of the RMA is the sustainable management of natural and physical resources as stated in section 5(2) of the RMA. A key part of sustainable management is enabling people and communities to use resources in a way that provides for their social, economic, and cultural well-being.

These objectives seek to provide for the social, economic and cultural wellbeing of people by providing them with the benefits of renewable electricity generation projects, which can be scaled and tailored to the needs of individuals, communities or whole districts/regions. Electricity generated from renewable electricity generation projects is inherently more sustainable than fossil fuel-based generation so is an effective and efficient use of our resources and will also assist in reducing greenhouse gases.

The objectives also give effect to the NPS-REG and RPS provisions relating to

	renewable electricity generation and these higher level documents give effect to Part 2 of the RMA. The objectives are therefore directly relevant to achieving the purpose of the RMA.	
Usefulness	Assists in addressing the identified resource management issue	
	The proposed objectives explicit listing the benefits of renewable electricity generation activities to help ensure decision-makers take these benefits into account when making decisions. The objectives also set out the technical (requirements or limitations of different renewable electricity generation technologies), operational (how a renewable electricity generation project needs to operate in terms of scale to deliver the desired service) and functional (the location that the renewable electricity generation infrastructure needs to be in to function i.e. the best location for wind/sun or the source of geothermal resource) requirements for renewable electricity generation projects. This approach gives effect to the direction in higher order planning documents (NPS-REG, RPS) and will assist in addressing identified issues, particularly with respect to recognising the local, regional and national benefits that renewable electricity generation activities have and the need to recognise that there are specific factors that mean renewable electricity generation projects need to be located in particular areas, or at a particular scale to be viable.	
Reasonableness	Consistent with desired community and iwi/Māori outcomes, and will not result in unjustifiably high costs on the community or parts of the community	
	The objectives must take into account desired community and Māori/iwi outcomes but should not result in unjustifiably high costs on the community or parts of the community.	
	These objectives seek to recognise and provide for renewable electricity generation activities to support the economic, cultural, environmental and social wellbeing of current and future generations. This is in line with community expectations that renewable electricity generation will continue to increase across the district and supply a greater proportion of power in the Far North in the future. It is also broadly consistent with consistent with desired iwi/Māori outcomes for more sustainable resource use in the district.	
	The objectives are not considered to create unjustifiably high costs on the community, either through implementation, resource consenting or compliance.	
Achievability	Ability to achieve the objective with the available powers, skills, and resources of councils	
	These objectives are considered to implementable within the skills and resources available to Council as the wording of the objectives has been drafted to better give effect to the NPS-REG and RPS to enable renewable electricity generation and regionally significant infrastructure. It is not anticipated that the objectives will substantially increase resource consenting / compliance requirements beyond available resource levels.	
	An acceptable level of uncertainty and risk	
	These objectives and associated provisions have a low degree of uncertainty and risk. These objectives are based on higher level direction from the NPS-REG and RPS and are consistent with standard resource management practice.	

#### Overall evaluation

The above assessment concludes that the proposed objectives are the most appropriate way to achieve the purpose of the RMA, in terms of relevance, usefulness, reasonableness and achievability, and are preferred over the status quo objectives. The proposed objectives are consistent with, and give effect to, direction set in the NPS-REG and RPS.

**Objective(s):** REE-O3 and REE-O4 – Ensure renewable electricity generation activities are designed and located to avoid and minimise adverse effects on areas with specified values and to avoid, or otherwise mitigate, reverse sensitivity effects.

#### Relevance

# Directly related to a resource management issue

These objectives are directly related to the resource management issue of the adverse effects of renewable electricity generation projects on areas with historical and cultural values, natural environment values, and coastal values. REE-O4 also focuses on avoiding or otherwise mitigating potential reverse sensitivity effects on renewable electricity generation activities.

Large-scale renewable electricity generation activities have the potential for significant adverse effects on the environment if not appropriately managed. In particular, new renewable electricity generation infrastructure in sensitive environments (e.g. significant natural areas, outstanding natural features and landscapes, historic heritage sites) can adversely affect the values of these environments unless adverse effects are effectively addressed through appropriate design, mitigation and location choices.

The requirement to manage reverse sensitivity effects appropriately recognises that renewable electricity generation activities are vulnerable when sensitive activities establish in close proximity as complaints can impinge on their ability to operate effectively and efficiently as needed. The proposed approach gives effect to Policy D of the NPS-REG.

# Focused on achieving the purpose of the RMA

The purpose of the RMA is the sustainable management of natural and physical resources as stated in section 5(2) of the RMA.

These objectives seek to give effect to a number of 'matters of national importance' under section 6 and many 'other matters' under section 7 of the RMA, as outlined in the assessment of relevant provisions in section 2.1 of this report. The objective and implementing provisions also give effect to key NZCPS policies by providing a more stringent 'avoidance' approach for managing the adverse effects of renewable electricity generation activities on outstanding and significant areas in the coastal environment. The objectives are therefore directly relevant in terms of achieving the purpose of the RMA.

# Usefulness

# Assists in addressing the identified resource management issue

The objectives must assist in addressing the identified resource management issue (in this case the need to manage the adverse effects of renewable electricity generation projects on the environment, including areas of historic, cultural, and natural environment values, and manage potential reverse sensitivity effects appropriately) and must also assist a council to carry out its statutory RMA functions.

The proposed objectives focus on managing the impacts of renewable electricity generation projects on specific environments identified elsewhere in the PDP as having historical, cultural, natural environment or coastal values and specifically focus on avoiding or otherwise mitigating reverse sensitivity effects on renewable electricity generation activities.

#### Reasonableness

# Consistent with desired community and iwi/Māori outcomes, and will not result in unjustifiably high costs on the community or parts of the community

These objectives seek to manage potential risks associated with designing or locating renewable electricity generation projects in areas identified as having historical, cultural, natural environment or coastal values. This promotes location and design choices for renewable electricity generation projects that minimise impacts on these high value areas and aligns the direction of the infrastructure chapter with other PDP chapters that manage sensitive environment overlays such as SNAs, ONL/ONF and sites of significance to iwi/Māori.

Objective REE-O4 specifically addresses potential reverse sensitivity effects that can occur when sensitive activities establish close to renewable electricity generation activities. This is consistent with community and iwi/Màori expectations to have reliable access to renewable electricity generation power (if they are connected to a REG power source) without that supply being reduced or interrupted due to constraints on operations imposed due to neighbour complaints.

The objectives are not considered to create unjustifiably high costs on the community, either through implementation, resource consenting or compliance.

# **Achievability**

# Ability to achieve the objective with the available powers, skills, and resources of councils

These objectives are considered to implementable within the skills and resources available to Council as they seek to align the Renewable Electricity Generation chapter with the management of high value areas through overlays in other PDP chapters and ensure that reverse sensitivity effects are managed appropriately. It is not anticipated that the objectives will substantially increase resource consenting / compliance requirements beyond available resource levels.

# An acceptable level of uncertainty and risk

The objectives do not introduce a high degree of uncertainty and risk. The objectives are based on current best practice being implemented nationally to manage high value, sensitive environments and are consistent with standard resource management practice.

#### **Overall evaluation**

The above assessment concludes that the proposed objectives are the most appropriate way to achieve the purpose of the RMA, in terms of relevance, usefulness, reasonableness and achievability, and is preferred over the status quo.

# 8 Evaluation of provisions to achieve the objectives

# 8.1 Introduction

Section 32(1)(b) of the RMA requires the evaluation report to examine whether the provisions are the most appropriate way to achieve the objectives by:

- (i) identifying other reasonably practicable options for achieving the objectives; and
- (ii) assessing the efficiency and effectiveness of the provisions in achieving the objectives; and
- (iii) summarising the reasons for deciding on the provisions.

When assessing the efficiency and effectiveness of the provisions in achieving the objectives, section 32(2) of the RMA requires that the assessment:

- (a) identify and assess the benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions, including the opportunities for—
  - (i) economic growth that are anticipated to be provided or reduced; and
  - (ii) employment that are anticipated to be provided or reduced; and
- (b) if practicable, quantify the benefits and costs referred to in paragraph (a); and
- (c) assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.

This section provides an assessment of reasonably options and associated provisions (policies, rules and standards) for achieving the objectives in accordance with these requirements. This assessment of options is focused on the key changes from the status quo as outlined in the 'proposed management approach' in **section 5.2** of this report.

Each option is assessed in terms of the benefits, costs, and effectiveness and efficiency of the provisions, along with the risks of not acting or acting when information is uncertain or insufficient. For the purposes of this assessment:

- *effectiveness* assesses how successful the provisions are likely to be in achieving the objectives and addressing the identified issues
- *efficiency* measures whether the provisions will be likely to achieve the objectives at the least cost or highest net benefit to society.

The sections below provide an assessment of options (and associated provisions) for achieving the objectives in accordance with sections 32(1)(b) and 32(2) of the RMA.

# **8.2 Quantification of benefits and costs**

Section 32(2)(b) of the RMA requires that, where practicable, the benefits and costs (environmental, economic, social and cultural) of a proposal are quantified. The requirement to quantify benefits and costs if practicable recognises it is often difficult and, in some cases, inappropriate to quantify certain costs and benefits through section 32 evaluations, particularly those relating to non-market values.

As discussed in **section 6.3**, the scale and significance of the effects of proposed changes for the Renewable Electricity Generation chapter are assessed as being **low**. Therefore, exact quantification of the benefits and costs of the different options to achieve the objectives is not considered to be necessary or practicable for the REG chapter. Rather this evaluation focuses on providing a qualitative assessment of the environmental, economic, social and cultural benefits and costs anticipated from the provisions.

# 8.3 Evaluation of options

As the scale and significance of the proposed changes to the Renewable Electricity Generation chapter was assessed as 'low' in section 6.3 of this report, the evaluation below has assessed two options – the status quo and the proposed provisions in the Renewable Electricity Generation chapter of the PDP.

#### 8.3.1 Option 1: Status quo

**Option 1:** Retain operative Renewable Energy and Energy Efficiency chapter from the Operative District Plan

Benefits Costs Risk of acting / not acting

- Controls are generally well understood by both Council staff and plan users.
- Will be able to operate 'business as usual' with little to no disruption to current consenting and compliance practice.

#### **Economic growth and employment opportunities**

- As the status quo seeks to retain 'business as usual', limited economic growth is anticipated.
- Potential environmental impacts if provisions are not aligned with other chapters that manage historical, cultural, natural and coastal values.
- Lost opportunities for REG projects to establish as permitted pathways through the chapter are too stringent and require resource consents for some small scale and community scale projects.
- The risk of retaining the status quo is that existing operational issues with the current renewable energy and energy efficiency chapter will not be resolved. This includes lack of integration with environmental protection chapters, overly stringent permitted activity rules, lack of emphasis on the benefits of renewable electricity generation, and lack of clear policy direction on how to manage adverse effects. Further, the operative provisions were prepared prior to the NPS-REG and RPS coming into force and do not fully give effect to these higher order documents.

#### **Effectiveness**

- No change in effectiveness of operative provisions in practice activity rules
  that allow very small scale renewable electricity generation activities as
  permitted and require a resource consent process for other scales of REG
  activities are likely to continue to achieve some of the desired objectives
  relating to recognising and providing for the functional needs of renewable
  electricity generation activities and managing reverse sensitivity effects.
- However, status quo provisions will not give effect to the objectives that
  recognise the benefits of renewable electricity generation activities,
  appropriately manage adverse effects on historical, cultural, natural
  environment, and coastal values, and recognise and provide for the technical
  and operational needs of REG activities (not just functional considerations

# **Efficiency**

- Rolling over the activity rules is somewhat efficient as they are currently meeting some of the objectives of the PDP and are managing the adverse effects of renewable electricity generation projects through a resource consent process. However, more projects than necessary are required to obtain a resource consent due to the overly conservative thresholds for small scale and community scale renewable electricity generation activities, which is not an efficient outcome at the lower end of the project scale.
- Rolling over the policy framework is not efficient as it is not currently giving effect to two of the four proposed objectives in the PDP (operative policies do not fully give effect to objectives REE-O2 and REE-O3 and only partially give effect to REE-O1).

like location).

# **Overall evaluation**

On balance this option is not considered to be the most appropriate option to achieve the objectives because:

- The operative policy framework does not fully give effect to the majority of proposed renewable electricity generation objectives in the PDP.
- The operative provisions do not integrate well with other chapters that seek to protect areas with historical, cultural, natural environment and coastal values.
- The operative provisions do not fully give effect to the NPS-REG and the RPS to recognise and provide for the benefits of REG projects and the technical, operational and functional needs of renewable electricity generation projects.

# 8.3.2 Option 2: Proposed approach

**Option 2:** The proposed provisions of the Renewable Electricity Generation chapter of the PDP

Benefits	Costs	Risk of acting / not acting
Renewable electricity generation projects will benefit from a more	The new provisions will require both	There is limited risk of acting as the
supportive and enabling policy framework that recognises both the	Council staff and plan users to upskill in	proposed provisions give better effect to
benefits of renewable electricity generation projects but also the technical, operational and functional needs of renewable electricity	order to apply the new provisions correctly, which will result in some	relevant national and regional policy direction (than the operative provisions)
generation projects. This should both enable more small and	training costs and lost productivity.	and are consistent with REG provisions in
community renewable electricity generation projects to be established as permitted activities (subject to compliance with	However, this is likely to be minimal due to the limited degree of change and the	second generation RMA plans. Although the activity status of some of the
conditions) and provide a more certain consenting pathway for larger-scale renewable electricity projects.	increased threshold for small scale projects, thus reducing consent	activities is more permissive, this approach is consistent with REG
There could be an increase in smaller scale and community REG	requirements.	provisions accepted by industry and
projects establishing as some of the barriers in the Operative Plan (i.e. low thresholds for needing resource consents) will be removed.		implemented in other districts and consistent with national direction and
Increased numbers of REG projects setting up at all scales will		that of the RPS.
collectively contribute to the percentage of electricity generated in the Far North District from renewable sources. This has		
environmental benefits as it reduces the reliance of the district on fossil fuels, reduces emissions from electricity generation, and will		
assist in meeting New Zealand's renewable electricity targets.		

There may be consequential social and economic benefits if
individual sites and communities are able to supply their own power
and reduce their reliance on the National Grid and local distribution
networks. Having a local electricity supply increases the resilience of
activities and communities to disruptions in the network and can be
particularly beneficial for more remote sites and settlements.

#### Economic growth and employment opportunities

 An increased number of renewable electricity generation projects, particularly larger scale projects, may generate economic growth and employment opportunities in the district. Localised generation will also help to supports growth potential and reduce infrastructure and electricity transmission costs.

#### **Effectiveness**

- Provisions that are enabling of renewable electricity generation projects (subject to specified environmental constraints) will be more effective in supporting new renewable electricity generation projects establishing at every scale compared to than the operative provisions and better aligned with higher order documents, namely the NPS-REG and RPS.
- A more enabling policy and rule framework should result in fewer barriers to renewable electricity generation projects setting up in the Far North District, with improved conditions tailored to the anticipated adverse effects and the technical, operational and functional constraints of the project.
- While more enabling, the provisions also provide clear direction on the management of potential adverse effects and protecting areas of significant values from inappropriate development.

#### Efficiency

- A more enabling policy and rule framework should result in fewer consents and lower consenting costs for renewable electricity generation projects, particularly small and community scale projects, as they will be able to progress as a permitted activity.
- Clearer direction in the PDP will assist council staff having to balance competing
  considerations for provision of renewable electricity generation projects with
  protecting key environmental values the proposed policy framework and
  integration with other environmental protection chapters should make these
  decisions easier.

#### **Overall evaluation**

On balance this option is considered to be the most appropriate option to achieve the objectives because:

- The proposed provisions will better give effect to the NPS-REG and the RPS with respect to recognising and providing for the benefits of renewable electricity generation projects and taking into account their technical, operational and functional needs.
- The proposed provisions achieve improved cross chapter alignment and better protection of areas with historical, cultural, natural environment and coastal values from the potential adverse effects of larger renewable electricity generation projects.
- The more enabling policy and rule framework, particularly for small and community scale projects, should support renewable electricity generation projects setting up in the Far North District and contribute to an increase in the proportion of electricity in the district being supplied from renewable sources.
- The approach better enables small scale renewable energy generation and the cumulative benefits of this.

# 9 Summary

An evaluation of the proposed objectives and provisions for the Renewable Electricity Generation chapter has been carried out in accordance with section 32 of the RMA. This evaluation has concluded that the objectives are the most appropriate way to the achieve the purpose of the RMA and the provisions are the most appropriate way to achieve the objectives for the following reasons:

- The PDP objectives seek to provide for the social, economic and cultural wellbeing of people by providing for the local, regional and national benefits of renewable electricity generation activities. The objectives also give effect to the NPS-REG and RPS provisions relating to renewable electricity generation and these higher level documents give effect to Part 2 of the RMA. The proposed objectives are therefore directly relevant to achieving the purpose of the RMA.
- The proposed provisions will better give effect to the NPS-REG and the RPS with respect to enabling and protecting renewable electricity generation as regionally significant infrastructure, and recognising the technical, operational and functional needs of this infrastructure.
- The proposed provisions achieve improved cross chapter alignment and better protection of areas
  with historical, cultural, natural environment and coastal values from the potential adverse effects
  of large-scale renewable electricity generation projects. The provisions also give effect to key
  NZCPS policies by providing a more stringent 'avoidance' approach for adverse effects on
  outstanding and significant areas in the coastal environment.
- The more enabling policy and rule framework, particularly for small and community scale projects, should support renewable electricity generation projects establishing in the Far North District and contribute to an increase in the proportion of electricity in the district being supplied from renewable sources.
- The approach better enables small scale renewable energy generation and the cumulative benefits of this to communities in the Far North District.