

Chapter 53A RENEWABLE ELECTRICITY GENERATION**53A.1 INTRODUCTION**

In response to climate change, the New Zealand Government has set a target for 90% of the country's electricity to be generated from renewable resources by the year 2025. To achieve this, a National Policy Statement for Renewable Electricity Generation (2011) ('the NPS') has been put in place. This District Plan must give effect to the NPS. It is recognised that to achieve the target, New Zealand will require significant development of renewable electricity generation activities along with the protection of output from existing activities. This is further reinforced by Section 7(j) of the Act which requires Council to have particular regard to the benefits derived from the use and development of renewable energy.

As defined by the NPS, and for the purposes of this District Plan, renewable electricity generation means the generation of electricity produced from solar, wind, hydro-electricity, geothermal, biomass, tidal, wave or ocean current energy sources. Renewable electricity generation activities mean the construction, operation and maintenance and upgrading of structures associated with renewable electricity generation. This includes small and community-scale distributed renewable generation activities and the system of electricity conveyance required to convey electricity to the distribution network and/or the national grid and electricity storage technologies associated with renewable electricity.

This section recognises that renewable electricity generation is an essential resource, and sets direction for activities that convert natural resources into electricity, this section inter-relates with the activities enabled for network utility operators in Section 53.

53A.2 SIGNIFICANT RESOURCE MANAGEMENT ISSUES

The following resource management issues have been identified as significant within Napier City in respect of renewable electricity generation activities.

53A.2.1 Developing sustainable energy

The use of energy is of fundamental importance to the function and development of our society. The Resource Management Act 1991 (RMA) definition of "natural and physical resources" includes energy and, as a consequence, the development and use of energy resources must be addressed by the District Plan.

53A.2.2 Managing environmental impacts

While electricity is critical to the efficient functioning of our communities, the development of generation facilities has the potential to both adversely and positively affect the environment. Depending on the type of generation facility developed, these effects can occur at a local level through to the global level. Global level adverse effects can arise from generation facilities that release greenhouse gases, whereas renewable electricity generation facilities can result in positive global effects.

OBJECTIVES, POLICIES AND METHODS**Objective 53A.3**

To enable the sustainable use and development of renewable resources for electricity generation across the City.

Policies

To achieve this objective the Council will:

53A.3.1 Recognise that the use and development of renewable resources for electricity generation has particular benefits to the long term environmental sustainability of Napier City.

Principal Reasons for Adopting the Objective and Policy

The use of renewable energy resources can: maintain or enhance electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions; maintain or enhance the security of electricity supply at local, regional and national levels by diversifying the type and/or location of electricity generation; assist in meeting international climate change obligations; and avoid or reduce reliance on fossil fuels for the purpose of generating electricity.

Objective 53A.4

To enable renewable electricity generation while managing the adverse effects.

Policies

To achieve this objective the Council will:

53A.4.1 Provide for the identification, investigation, establishment, development, upgrading, operation and maintenance of new and established renewable electricity generation facilities.

53A.4.2 Manage existing and new renewable electricity generation activities in association with any environmental constraints.

53A.4.3 Provide for small and community-scale distributed renewable electricity generation facilities.

53A.4.4 Protect renewable electricity generation activities from reverse sensitivity effects.

Principal Reasons for Adopting Objective and Policies

Meeting or exceeding the 90% national target for the generation of electricity from renewable resources will require the significant development of renewable electricity generation activities. Investigation, identification and assessment of potential sites and energy sources for renewable electricity generation will be supported by rules in this Plan. Maintenance of the generation output of renewable electricity generation activities can require protection of the assets, operational capacity and continued availability of the renewable energy resource.

It is practical to locate renewable electricity generation activities close to the renewable energy resource. There are also logistical and/or technical practicalities associated with developing, upgrading, operating or maintaining renewable electricity generation activities. Necessary associated structures and infrastructure may include roads, telecommunication structures and facilities, the distribution network and the national grid (and connection to it). Development and operation of existing and new renewable electricity generation activities need to be balanced against other important factors concerning the sensitivity of the landscape, and areas of cultural, historical or ecological importance.

Development and operation of small and community-scale distributed renewable electricity generation facilities where the benefits are local and significant adverse environmental effects are avoided, remedied or mitigated, will be provided for through rules and associated performance standards.

Renewable electricity generation activities need to be protected from sensitive activities locating in close proximity to them and compromising their ability to operate. This can be addressed firstly by the consideration of buffer areas and boundary setbacks when the renewable electricity generation activity is established.

Methods

- (1) District Plan Rules.
- (2) Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009
- (3) National Policy Statement on Electricity Transmission 2008.
- (4) New Zealand Code of Practice For Electricity Safety Distances 2001 (NZECP 34:2001).
- (5) National Policy Statement for Renewable Electricity Generation 2011.

Principal Reasons for Methods

The District Plan recognises the importance of renewable energy. This needs clear identification within the Plan. Through district plan rules, these operational requirements can be identified, while any adverse effects can be managed through the resource consent process.

The Resource Management (National Environmental Standards for Electricity Transmission Activities) Regulations 2009 sets out a national framework of permissions and consent requirements for activities on existing high voltage electricity transmission network (the national grid).

The National Policy Statement on Electricity Transmission 2008 sets out the objective and policies to enable the management of the effects of the national grid including transmission lines and cables, stations and substations. This national policy statement also requires local authorities to identify high voltage transmission lines on their planning maps and a subsequent buffer corridor where specific land use activities are subject to additional controls.

The New Zealand Code of Practice for Electricity Safety Distances 2001 (NZECP 34:2001) sets minimum safe electrical distance requirements for overhead electric line installations and other works associated with the supply of electricity from generating stations to end users. The minimum safe distances have been set primarily to protect persons, property, vehicles and mobile plant from harm or damage from electrical hazards.

The National Policy Statement for Renewable Electricity Generation 2011 sets out an objective and policies to enable the sustainable management of renewable electricity generation. The proportion of New Zealand's electricity generated from renewable energy sources needs to increase to a level that meets or exceeds the New Zealand Government's 90% national target for renewable energy generation.

53A.5 ANTICIPATED ENVIRONMENTAL RESULTS

The benefits of the City's renewable energy resources and the electricity generation facilities that utilise such resources are recognised (locally, and/or regionally/nationally) in the sustainable management of the City's resources.

A range of renewable electricity generation initiatives are supported by the District Plan's objectives, policies and provisions, in a manner that integrates with the protection of the City's amenity.

The City's communities can be self-sufficient in energy, and can meet the majority of their electricity needs from a diverse range and scale of renewable energy resources.

Individuals and communities can choose to generate their own electricity from renewable energy resources.

RULES

All rules contained in Chapter 53A apply throughout the City and over-ride the specific zone rules (except for above ground operations in the Airport Zone) and other district wide rules, unless otherwise stated in this Chapter.

53A.6 Summary of Rules for Renewable Electricity Generation Activities

The following is a quick reference guide that summarises the Rules Table. It is intended as a guide only and should not be used in place of the Activity Table and Condition Table elsewhere in this Chapter.

Rule Number and Description		Classification	Page Number
Rule 53A.7	Domestic/small scale renewable electricity generation activities including solar panels, wind turbines, electric vehicle charging points.	Permitted	6
Rule 53A.7A	Operation, maintenance, or upgrading of existing renewable electricity activities.	Permitted	
Rule 53A.8	Domestic/small scale renewable electricity generation activities not meeting the specific conditions in the Condition Table.	Restricted Discretionary	6
Rule 53A.9	The construction and commissioning of new Renewable Electricity Generation Activities, or any work associated with the operation, maintenance or upgrading of any lawfully established Renewable Electricity Generation Activity not already covered by Rule 53A.7.	Discretionary	6
Rule 53A.10	Any renewable electricity generation activity not otherwise covered by Rules 53A.7, 53A.8, 53A.9 or the rules in Section 53 Network Utilities.	Non Complying	6

DISTRICT WIDE RENEWABLE ELECTRICITY GENERATION ACTIVITIES - ACTIVITY TABLE

PERMITTED ACTIVITIES	Matters the Council will restrict its discretion to for restricted discretionary activities.
<p>53A.7 Domestic/small scale renewable electricity activities including:</p> <ul style="list-style-type: none"> (i) Solar panels attached to dwellings, commercial and industrial buildings, (ii) A single wind turbine per site, (iii) A single electric vehicle charging point per site, and (iv) Electric vehicle charging points provided in public road reserve <p>Which comply with the Conditions specified in the Condition Table</p>	<p>The Council will restrict its discretion to the matters referred to in Rule 53A.8</p>
<p>53A.7A Operation, maintenance, or upgrading of existing renewable electricity activities:</p> <p>Work or activity associated with the operation, maintenance, or upgrading of the originally consented or authorised footprint of any lawfully established Renewable Electricity Generation Activity.</p>	
RESTRICTED DISCRETIONARY ACTIVITIES	Matters the Council will restrict its discretion to for restricted discretionary activities.
<p>53A.8 Domestic/small scale renewable electricity generation activities not complying with conditions.</p> <p>1. Any domestic/small scale renewable electricity generation activity referred to in rule 53A.7 that does not comply with all of the relevant conditions in the Activity Table and Condition Table is a Restricted Discretionary activity, unless stated by a rule elsewhere in this Chapter.</p>	<p>The Council will have regard to the relevant objectives and policies of the Plan and will restrict its discretion to:</p> <ul style="list-style-type: none"> - The matters identified in the second column of the Activity Table and/or Condition Table only insofar as those matters result directly from non-compliance with the particular condition. - The cumulative effect of non-compliance with more than one condition. - The matters set out in Chapter 1.6.5. - The assessment criteria specified in section 53.18 where applicable.
DISCRETIONARY ACTIVITIES	
<p>53A.9 Discretionary Activities</p> <p>1. The following are discretionary activities. A resource consent application must be made and consent may be declined or granted with or without conditions. The Council will have regard to the objectives and policies of this Plan and the assessment criteria in this Chapter. The Council's discretion is unrestricted.</p> <p>The construction and commissioning of new Renewable Electricity Generation Activities, or any work associated with the operation, maintenance or upgrading of any lawfully established Renewable Electricity Generation Activity not already covered by Rule 53A.7A including (but not limited to):</p> <ul style="list-style-type: none"> (i) Wind turbines, windmills, wind power generators (excluding a single wind turbine per site as identified in Rule 53A.7(ii)) (ii) Solar Power (excluding solar panels attached to dwellings, commercial and industrial buildings as identified in Rule 53A.7(i)) (iii) Hydroelectric power (iv) Geothermal, biomass, biogas 	

NON COMPLYING ACTIVITIES	
<p>53A.10 Non Complying Activities</p> <p>Any Renewable Electricity Generation Activity not otherwise covered by Rules 53A.7, 53A.8, 53A.9, or the rules in Section 53 Network Utilities.</p>	
PROHIBITED ACTIVITIES	
<p>53A.11 Prohibited Activities</p> <p>1. There are no renewable electricity activities that are a prohibited activity.</p>	

DISTRICT WIDE RENEWABLE ELECTRICITY GENERATION ACTIVITIES – CONDITION TABLE

CONDITIONS FOR PERMITTED ACTIVITIES AND CONTROLLED ACTIVITIES	Matters the Council will restrict its discretion to for restricted discretionary activities.
<p>53A.12 Building Height</p> <p>1. The maximum height of all new buildings and structures shall meet the underlying Zone requirements including height in relation to boundary provisions where applicable.</p>	<p>Matters:</p> <ul style="list-style-type: none"> - The effects on amenity values. - The scale in relation to the surrounding environment. - The bulk and form of the building or structure. - The effects of shading.
<p>53A.13 Yards</p> <p>1. All new buildings and structures shall meet the underlying zone setback requirements, including front yard setbacks, side, rear and/or other yard setbacks.</p>	<p>Matters:</p> <ul style="list-style-type: none"> - The existing streetscape and protection from road frontage domination. - The effects of shading and visual dominance on adjoining uses. - The effects on amenity values.
<p>53A.14 Noise</p> <p>1. All activities shall comply with the underlying zone noise provisions and/or the provisions of Section 57 of the District Plan on Noise where relevant.</p>	<p>Matters:</p> <ul style="list-style-type: none"> - The sound level likely to be generated. - The nature and frequency of the noise including any special audible characteristics. - The compatibility within the neighbourhood. - The effects of noise on amenity values. - The length of time for which specified noise levels is exceeded, especially at night. - The likely adverse effects on-site and beyond the site. - The mitigation measures to reduce noise generation.
<p>53A.15 Light Spill</p> <p>1. All external lighting spill shall comply with the provisions of the relevant underlying zone provisions for acceptable lux levels.</p>	<p>Matters:</p> <ul style="list-style-type: none"> - The orientation, strength intensity, colour and frequency of any light. - The effects on traffic safety. - The effects on pedestrian safety. - The effects on amenity values. - The effects on the health, safety, security and wellbeing of people.
<p>53A.16 District Wide Rules</p> <p>1. All renewable energy operations shall comply with the relevant rules of the following chapters of this Plan:</p> <p style="margin-left: 20px;">a) Chapters 56 to 66 (relating to Earthworks, Heritage, Noise, Signs, Art Deco Quarter Signs, Trees, Transport, Natural Hazards, Hazardous Substances, Financial Contributions and the Code of Practice for Subdivision and Land Development).</p> <p style="margin-left: 40px;">Refer to the relevant Chapter(s) of this Plan</p>	<p>Refer to the relevant Chapter(s) of this Plan.</p>
<p>53A.17 Reinstatement</p> <p>1. Where work is undertaken underground or above ground for the purposes of installing, maintaining, upgrading or removing renewable energy operations, the person or organisation responsible for the work shall restore the ground (and any underground services damaged during the work) at the completion of the work, to the condition existing prior to commencement of the works as far as practicable, and in terms of any approvals obtained from the Council.</p>	<p>Matters:</p> <ul style="list-style-type: none"> - The effects on amenity values. - The effects on heritage values. - The effects on public health and wellbeing. - The effects on efficiency and safety of roads. - The prominence of the location, taking into account any significant public views and any significant landscapes.

ADVISORY NOTE: Notice of Works

1. Where any work is to be undertaken in, or on, a road, road reserve, other reserve land or other land owned or controlled by the Council, the person or organisation responsible for the work shall:
 - a) Advise the Council of the work in accordance with any statutory requirements stipulated in the various utility empowering acts, but generally at least a minimum of 10 working days in advance of undertaking the work.
 - b) Obtain a road opening notice in terms of "Specification for Service Maintenance Operations and New Service Installations within Road Reserve (Including Trench Excavation and Reinstatement) before any work is carried out on road reserve.

NOTE: This notice of works shall not apply to any work undertaken as a result of an emergency or disaster, or where the person or organisation considers there could be a risk to life or property.

53.18 ASSESSMENT CRITERIA

Discretionary activity and restricted discretionary rules refer to assessment criteria to assist the Council in considering resource consent applications. The Council will have regard to the Assessment Criteria outlined below for network utility operations when considering an application under Sections 104 and 105 of the Act.

1. Restricted Discretionary Activities

For Restricted Discretionary Activities, the following criteria identify those matters which Council has restricted its discretion over in assessing Resource Consent applications:

- (a) The extent to which the adjacent properties will be adversely affected in terms of visual domination, overshadowing, loss of privacy and loss of access to sunlight and daylight, and the ability to mitigate any adverse effects; and
- (b) The character, level and duration of noise as received at the boundary, or notional boundary of another site; and
- (c) If applicable the extent to which the activity may adversely affect the District Plan identified heritage item, significant landscapes within the City as identified in the Napier City Landscape Assessment, and areas of significance to Maori.

2. Discretionary Activities

For Discretionary Activities, Council's assessment is not restricted to the following matters, but may consider the following where relevant:

- (a) The contribution the proposal will make to Central Government energy policy objectives and renewable energy targets.
- (b) The contribution the proposal will make to the security of supply and increased energy independence for the communities of Napier City.
- (c) Any other benefits or positive effects that the project is able to demonstrate. This may include adding to and diversifying the City's generation base, increased network resilience, reduced grid investment, local industry development, and price security for the local community.
- (d) The actual and potential noise effects of the proposal, and the ability (if relevant) to meet NZS 6808:2010 Acoustics Wind Farm Noise, and other relevant standards such as NZS 6802:1991 "Assessment of Environmental Sound".
- (e) The actual and potential effects of the proposal, with particular consideration of the following:
 - (i) The effects on outstanding or significant landscapes within the City as identified in the Napier City Landscape Assessment;
 - (ii) The extent to which the proposal will impact on the natural character of the coastal environment and rural environment;
 - (iii) The extent to which the proposal will adversely impact on cultural values, and areas of significance to Maori;
 - (iv) The extent to which the proposal will adversely impact on dwellings, key public places including major roads and recreation areas;

- (v) The extent to which any aspects of the proposal can be sited underground where practicable.
- (f) The effect of the overall scale of the proposed development, including the number of structures, their height, the visual effect of the development as a whole, staging of the development and temporary effects as a result of construction.
- (g) The extent to which the proposal will affect amenity values of the surrounding environment with particular regard being given to the impact of the development on residential dwellings, including consideration of any potential adverse effect on amenity values discernible at the dwelling including:
 - (i) Electromagnetic interference to broadcast or other signals;
 - (ii) If wind turbines are involved, blade glint resulting from the reflection of the sun from the turbine blades;
 - (iii) If wind turbines are involved, shadow flicker resulting from sunlight on the rotating blades casting a shadow that rapidly moves across the windows of a dwelling within 10 rotor diameters distance of a turbine.
- (h) The extent of the ecological effects of the proposal, in particular:
 - (i) The extent to which significant indigenous vegetation and significant habitats of indigenous fauna are affected.
 - (ii) The potential effects on birds or other fauna, either migratory species or resident populations on site;
 - (iii) The sensitivity of the site to disturbance;
 - (iv) The extent of any proposed earthworks and the degree to which runoff and the effects on local catchments can be managed.
- (i) The effects on archaeological sites, heritage and cultural values, including areas of significance to Maori.
- (j) The effects of the proposal on traffic safety including air traffic safety (including blade glint and shadow flicker if involving wind turbines).
- (k) The effects of traffic and vehicle movements as a result of the proposal and the extent that traffic or site management plans can be implemented to mitigate effects.
- (l) The extent to which the activity may exacerbate or be adversely affected by natural hazards.
- (m) The extent of any required earthworks, including access tracks, roads and building platforms and the rehabilitation proposed.
- (n) The extent to which any adverse effects can be mitigated by the following:
 - (i) Alternative siting of the structure(s) including any ancillary structure(s);
 - (ii) Alternative design of the structure(s) including any ancillary structures(s);
 - (iii) Alternative colour of the structure(s) including any ancillary structures(s).
- (o) The electromagnetic effects of the proposal, including effects on existing telecommunications.

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