This entire chapter has been notified using the RMA Part One, Schedule 1 process (P1 Sch1).

Text shown in **red** (both <u>underlined</u> and <u>struck out</u>) represents all changes recommended by the Panel from the notified Plan provisions.

Te Waihangatanga ā-Hiko Whakahou

Renewable Electricity Generation

REG Renewable Electricity Generation

Introduction

The primary use of renewable energy resources is for electricity generation. The purpose of the Renewable Electricity Generation Chapter is to provide for the development, operation, maintenance and repair, and upgrade of renewable electricity generation activities while managing adverse environmental effects.

The benefits to be derived from the use and development of renewable energy is a matter the District Plan must have particular regard to under section 7 of the RMA. The District Plan must also give effect to the National Policy Statement on Renewable Electricity Generation 2011 (NPSREG) which requires recognition of the national significance and benefits of renewable electricity generation.

Energy is essential to the efficient and effective functioning of the City. Energy demand is growing overall and there is a shift to electrification of energy uses such as transportation. The use and development of renewable energy resources is becoming increasingly important as a way of meeting future energy demand in an environmentally sustainable manner. It is also a key contribution to meeting climate change commitments.

The use and development of renewable energy resources to generate electricity offers a range of benefits to the City, region and nation, including:

- 1. Maintaining or increasing generation capacity while avoiding, reducing or displacing greenhouse gas emissions:
- 2. Supporting the transition to a low emissions economy:
- 3. Supporting security of electricity supply through diversification of the type, scale and location of generation;
- 4. Using renewable natural resources rather than finite resources; and
- 5. The reversibility of the adverse effects on the environment of some renewable electricity generation technologies.

The location of renewable electricity generation activities is often driven by their functional and operational need to access renewable energy resources. These activities can only occur where renewable energy resources are found, limiting the geographic areas where they can occur. Logistical or technical practicalities, and the need to integrate with existing supporting infrastructure, also place constraints on the location of these activities.

Depending on the nature and scale of the proposal and its location, Renewable electricity generation activities can have adverse effects on the environment. Renewable electricity generation structures may need to locate in visually prominent locations and can produce other amenity effects such as noise. Earthworks may also be required to enable the required structures. It is therefore important to recognise the benefits renewable electricity generation activities provide while ensuring adverse effects are managed effectively.

New subdivision, use and development in close proximity to existing or consented renewable electricity generation activities requires careful management as it can lead to adverse effects on the operation, maintenance and upgrading of renewable electricity generation activities.

The most feasible forms of renewable electricity generation within the City are currently wind power and small scale solar. Other forms, such as larger scale solar generation, biofuels, tidal, wave and ocean current, have the potential to contribute to meeting future energy demands. At a domestic scale, there are various ways to use renewable sources of energy, including integration into subdivision and building design, solar water heating, solar panels and small scale wind turbines.

The provisions within this chapter apply on a City-wide basis and are specific to renewable electricity generation activities. As such, the <u>objectives</u>, <u>policies and</u> rules in the Zone chapters, and the <u>objectives</u>, <u>policies and</u> rules in the Infrastructure, Noise, Earthworks and Overlay chapters, do not apply to renewable electricity generation activities unless specifically stated within a renewable electricity generation rule or standard.

Other relevant District Plan provisions

It is important to note that in addition to the provisions in this chapter, a number of other Part 2: District-Wide chapters also contain provisions that may be relevant for renewable electricity generation activities, including:

- Strategic Direction The Strategic Direction Chapter contains objectives for a range of key strategic issues and significant resource management issues for the City and provides district-wide strategic considerations to guide decision making at a strategic level.
- Infrastructure The Infrastructure Chapter (including the infrastructure sub-chapters) contains policies and rules relating to the maintenance and repair, removal, upgrading and development of network utilities, including the electricity transmission and distribution network, necessary to support the operation of renewable electricity generation facilities.
- Historical and Cultural Values Many areas and sites have identified historical and cultural values,
 including archaeological sites. The values of these areas and sites are described in the Historic Heritage
 Chapter, Notable Trees Chapter, Sites and Areas of Significance to Māori Chapter and the Viewshafts
 Chapter, and the associated maps, appendices and schedules.
- Natural Environment Values Some areas and sites have identified natural environment values. The values
 of these areas and sites are described in the Ecosystems and Indigenous Biodiversity Chapter, Natural
 Character Chapter, and the Natural Features and Landscapes Chapter, and the associated maps, appendices
 and schedules.
- Coastal Environment The Coastal Environment Chapter and the associated maps, appendices and schedules identify the inland extent of the coastal environment and areas with high or very high coastal natural character value.
- Subdivision The Subdivision Chapter contains provisions for managing the subdivision of land, including ensuring subdivision design and layout makes efficient use of renewable energy sources.
- Contaminated Land The Contaminated Land Chapter manages the use and development of Contaminated Land or potentially Contaminated Land.
- Hazardous Substances The Hazardous Substances Chapter contains provisions to manage Hazardous Substances.

Resource consent may therefore be required under rules in this chapter as well as other chapters. Unless specifically stated in a rule or in this chapter, resource consent is required under each relevant rule. The steps to determine the status of an activity are set out in the General Approach chapter.

Objectives		
REG-O1	Benefits of renewable energy use and development	
	The use and development of renewable energy sources is enabled and renewable electricity generation is increased.	
REG-O2	Adverse effects of renewable electricity generation activities	
	The actual and potential adverse effects on the environment and communities of the investigation, development, operation, maintenance and repair, and upgrading of renewable electricity generation activities are effectively managed, while recognising their functional needs	

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	IHP Recommended Changes
	and operational needs of renewable electricity generation activities and the potential national benefits.
REG-O3	Adverse effects on renewable electricity generation activities
	The efficient operation, maintenance and repair, and upgrading of renewable electricity generation activities are not constrained or compromised by effects caused by other activities, including reverse sensitivity effects.
REG-04	Energy efficiency and conservation
Subdivision layout, site layout and building design and development supports increa efficiency and conservation and reduces energy demand.	
Policies	
REG-P1	Recognising the significance and benefits of the use and development of renewable energy
	 Recognise the national significance and the local, regional and national benefits of the use and development of renewable energy sources and renewable electricity generation activities, including: The contribution to Central Government energy and climate change policy objectives, renewable energy targets, and the transition to a low emissions economy; The contribution to reducing reliance on the use of non-renewable energy sources for electricity generation; The contribution to the City's long-term sustainability and carbon zero goals; The contribution to security of electricity supply, increased energy independence; and community resilience through the development of local energy resources and networks; and The contribution to the economic, social, cultural and environmental wellbeing of people and communities and their health and safety.
REG-P2	Providing for renewable electricity generation activities
	 When making decisions on the investigation, development, operation, maintenance and repair, and upgrading of renewable electricity generation activities: 1. Recognise the need to locate renewable electricity generation activities where renewable energy sources are available; 2. Recognise the locational, technical and practical constraints associated with renewable electricity generation activities, including their functional needs and operational needs; 3. Enable the development of a range of scales of renewable electricity generation and generation from a range of renewable energy sources; 4. Recognise the benefits of locating renewable electricity generation activities close to end use and to electricity transmission or distribution infrastructure; 5. Recognise the benefits of having a distributed electricity generation network for greater energy resilience; 6. Enable the operation and maintenance and repair of existing renewable electricity generation activities; 7. Have particular regard to the potential for, and mitigation required to address, special audible characteristics of wind turbines; and 8. Require that during or following decommissioning of any renewable electricity generation activity, the site is remediated including by removal of all buildings, structures, equipment, transmission facilities and cabling.
REG-P3	Renewable electricity generation investigation activities
	1. Enable renewable electricity generation investigation activities in areas outside Overlays specified in REG-P5, REG-P7, and REG-PX and outside high coastal natural character areas, and coastal margins and riparian margins in the coastal environment, where adverse effects are minimized as far as practicable.

- - a. Significant adverse effects on the identified values are avoided; and
 - Other adverse effects on the identified values are avoided, remedied or mitigated by:
 - The use of structures, masts and equipment that minimise the visibility of those features from public roads and sensitive activities;
 - ii. Limiting the extent of any vegetation removal and earthworks to the minimum necessary to establish the necessary structures, masts and equipment; and
 - iii. Limiting the duration that visible structures, masts and equipment are in place.

REG-P4 Small scale renewable electricity generation outside Specified Overlays, high coastal natural character areas, and coastal and riparian margins

Enable small scale renewable electricity generation activities, including within the coastal environment, where:

- 1. They are located outside:
 - a. The overlays specified in REG-P5;
 - b. High coastal natural character areas identified in SCHED12;
 - c. Coastal margins and riparian margins within the coastal environment; and
- 2. The activity is of a form, location and scale that avoids, remedies or mitigates any adverse effects on the environment and is consistent with the anticipated amenity and character of the zone.

REG-P5 Small-scale renewable electricity generation activities within <u>Specified</u> Overlays, high coastal natural character areas, and coastal and riparian margins

Allow small scale renewable electricity generation activities within <u>the</u> overlays <u>specified below</u>, high coastal natural character areas, or coastal margins and riparian margins within the coastal environment, where:

- If located within or on any sites, areas, items or features identified in SCHED1 Heritage Buildings, SCHED2 - Heritage structures, SCHED3 - Heritage areas, SCHED4 -Archaeological sites, SCHED7 - Sites and areas of significance to Māori, or SCHED5 -Schedule of viewshafts:
 - a. Its form and location is sympathetic to the identified values; and
 - b. Any structure is not visible from any adjacent public areas and is aligned with the plane of the roof where located on a roof;
- 2. If located within the root protection area of a tree identified in SCHED6 Schedule of Notable Trees, the work will not compromise the long-term health, natural life or values of the notable tree:
- 3. If located within an area identified as ridgelines and hilltops, any adverse effects on visual amenity and landscape values are minimised;
- 4. If located within an area identified in SCHED11 Special Amenity Landscapes:
 - a. The activity is of a scale that maintains or restores the identified values, including restoration and conservation activities;
 - Outside the coastal environment any adverse effects are avoided, remedied or mitigated;
 - c. Within the coastal environment, any significant adverse effects are avoided and any other adverse effects are avoided, remedied or mitigated; and
 - d. There is a functional need or operational need for the activity to be undertaken inside a Special Amenity Landscape and there are no reasonably practical alternative locations outside of these areas;
 - while having regard to the matters in NFL-P3 and NFL-P4;
- 5. If located within an area identified in SCHED10 Outstanding Natural Features and Landscapes:
 - a. The activity is of a scale that maintains or restores the identified values, including restoration and conservation activities;
 - Outside the coastal environment significant adverse effects on the identified values are avoided and any other adverse effects on the identified values are avoided, remedied or mitigated;

- c. Within the coastal environment any adverse effects on the identified values are avoided; and
- d. There is a functional need or operational need for the activity to be undertaken inside an Outstanding Natural Feature or Landscape and there are no reasonably practical alternative locations outside of these areas; while having regard to the matters in NFL-P5 and NFL-P6;
- 6. If located within an area identified in SCHED8 Significant Natural Areas:
 - a. The activity is of a scale that maintains or restores the identified values, including restoration and conservation activities;
 - Outside the coastal environment, significant adverse effects on the identified values are avoided and any other adverse effects on the identified values are avoided, remedied or mitigated;
 - c. Within the coastal environment:
 - i. Adverse effects on the matters in Policy 11(a) of the New Zealand Coastal Policy Statement 2010 are avoided; and
 - ii. Significant adverse effects on the matters in Policy 11(b) of the New Zealand Coastal Policy Statement 2010 are avoided, and other adverse effects on these matters are avoided, remedied or mitigated; and
 - d. There is a functional need or operational need for the activity to be undertaken inside a Significant Natural Area and there are no reasonably practical alternative locations outside of these areas;

while having regard to the matters in ECO-P2, ECO-P7;

- 7. If located within an area identified in SCHED12 High Coastal Natural Character Areas, or a coastal margin or riparian margin within the coastal environment:
 - a. The activity is of a scale that maintains or restores the identified values, including restoration and conservation activities;
 - b. Any significant adverse effects are avoided and any other adverse effects are avoided, remedied or mitigated;
 - c. The design and location of the activity is subordinate to and does not compromise the identified characteristics and values of the high coastal natural character area, or the coastal or riparian margin within the coastal environment; and
 - d. There is a functional need or operational need for the activity to be undertaken inside a high coastal natural character area or within coastal or riparian margins within the coastal environment, and there are no reasonably practical alternative locations outside of these areas;

while having regard to the matters in CE-P5, CE-P6 and CE-P7;

- 8. If located within an area in a Hazard Overlay it:
 - a. Does not increase the risk from the natural hazard to people, or other property or infrastructure:
 - b. Has a functional need or operational need that means its location cannot be avoided and there are no reasonable alternatives:
 - c. Is not vulnerable to the natural hazard; and
 - d. Is designed to maintain reasonable and safe operation during and in the immediate period after a natural hazard event.

REG-P6

Community scale renewable electricity generation activities in the General Rural Zone, General Industrial and Airport Zones, outside <u>Specified</u> Overlays, high coastal natural character areas, and coastal and riparian margins

Provide for community scale renewable electricity generation activities in the General Rural Zone, General Industrial Zone and Airport Zone, including within the coastal environment, where:

- 1. They are located outside:
 - a. The Overlays specified in REG-P7;
 - b. High coastal natural character areas identified in SCHED12;
 - c. Coastal margins and riparian margins within the coastal environment; and
- 2. Any adverse effects on the environment are avoided, remedied or mitigated, having regard to:
 - a. The scale, intensity, duration and frequency of the activity and the effects on the surrounding environment;
 - b. The design and site layout of the activity and its ability to internalise adverse effects;
 - c. The capacity of the roading and infrastructure network to accommodate the activity;

- d. Any potential adverse landscape, visual or amenity effects from scale, colour, shading, light spill, glare, reflectivity, blade or shadow flicker, or noise, and the potential to cause sleep disturbance or annoyance;
- The location of the activity and whether there is adequate separation and buffering from existing sensitive activities to ensure conflict between activities, including potential reverse sensitivity effects, are minimised;
- f. Ecological and biodiversity effects, including adverse effects on terrestrial ecology and avifauna;
- g. Effects on the natural character of the coastal environment;
- h. Effects on the natural character of riparian margins;
- i. Traffic generation, earthworks and construction effects; and
- j. Any adverse cumulative effects.

REG-P7 Community-scale renewable electricity generation activities within other zones, locations and Specified Overlays

Only allow community-scale renewable <u>electricity</u> energy generation activities in other zones, locations and Overlays <u>specified below</u> where:

- If located within or on any sites, areas, items or features identified in SCHED1 Heritage Buildings, SCHED2 Heritage Structures, SCHED3 Heritage Areas, SCHED4 Archaeological Sites, any significant adverse effects on the Heritage Building, Heritage Structure, Heritage Area or Archaeological Site (as applicable) are avoided and any other adverse effects on the Heritage Building, Heritage Structure, Heritage Area or Archaeological Site (as applicable) are avoided, remedied or mitigated, while having regard to the matters in HH-P8, HH-P4112, HH-P4415, HH-P2021 and HH-P2122;
- If located within a viewshaft identified in SCHED5 Schedule of Viewshafts, any significant adverse effects on the Viewshaft are avoided and any other adverse effects on the Viewshaft are avoided, remedied or mitigated, while having regard to the matters in VIEW-P2 and VIEW-P5;
- 3. If located within the root protection area of a tree identified in SCHED6 Schedule of Notable Trees the work will not compromise the long-term health, natural life or values of the notable tree:
- 4. If located on a site within an area identified in SCHED7 Sites and Areas of Significance to Māori, any significant adverse effects on the area are avoided and any other adverse effects on the area are avoided, remedied or mitigated, while having regard to the matters in SASM-P4 and SASM-P5;
- 5. If located on a site within an area identified in SCHED8 Significant Natural Areas:
 - a. Outside the coastal environment, significant adverse effects on the identified values
 of the area are avoided and any other adverse effects on the identified values of the
 area are avoided, remedied or mitigated;
 - b. Within the coastal environment:
 - i. Adverse effects on the matters in Policy 11(a) of the New Zealand Coastal Policy Statement 2010 are avoided; and
 - ii. Significant adverse effects on the matters in Policy 11(b) of the New Zealand Coastal Policy Statement 2010 are avoided, and other adverse effects on these matters are avoided, remedied or mitigated;
 while having regard to the matters in ECO-P2, ECO-P3, ECO-P4 and ECO-P7.
- 6. If located within an area identified in SCHED12 High Coastal Natural Character Areas, or a coastal margin or riparian margin within the coastal environment, any significant adverse effects on the identified values of the area, or on the coastal or riparian margin (as applicable) are avoided and any other adverse effects on the identified values of the area, or on the coastal or riparian margin (as applicable) are avoided, remedied or mitigated, while having regard to the matters in CE-P5, CE-P6 and CE-P7, and:
 - a. The activity is of a scale that maintains or restores the identified values, including restoration and conservation activities; and
 - b. The design and location of the activity is subordinate to and does not compromise the identified characteristics and values;
- 7. If located within an area identified in SCHED10 Outstanding Natural Features and Landscapes:

- a. Outside the coastal environment, significant adverse effects on the identified values are avoided and any other adverse effects on the identified values are avoided, remedied or mitigated;
- Within the coastal environment, any adverse effects on the identified values are avoided:
- The activity is of a scale that maintains or restores the identified values, including restoration and conservation activities; and
- d. The design and location of the activity is subordinate to and does not compromise the identified characteristics and values;
 while having regard to the matters in NFL-P5 and NFL-P6;
- 8. If located on a site within an area identified in SCHED11 Special Amenity Landscapes:
 - a. Outside the coastal environment, any adverse effects on the identified values of the area are avoided, remedied or mitigated; and
 - b. Within the coastal environment, any significant adverse effects on the identified values of the area are avoided and any other adverse effects on the identified values of the area are avoided, remedied or mitigated; while having regard to the matters in NFL-P2 and NFL-P4.
- 9. If located within an area identified as ridgelines and hilltops, any adverse effects on visual amenity and landscape values are minimised:
- 10. If located within a Hazard Overlay, the activity:
 - a. Does not increase the risk from the natural hazard to people, other properties or infrastructure:
 - b. Is not vulnerable to the natural hazard; and
 - c. Is designed to maintain reasonable and safe operation during and in the immediate aftermath of a natural hazard event;
- 11. There is an operational need or functional need for the identified location and there are no reasonable alternatives; and
- 12. Adverse effects are avoided, remedied or mitigated having regard to:
 - a. The scale, intensity, duration or frequency of the activity's effects and the effects on the surrounding environment;
 - Any potential adverse landscape, visual or amenity effects from scale, colour, shading, lighting, glare, reflectivity, blade or shadow flicker, or noise, and the potential to cause sleep disturbance or annoyance;
 - c. The design and site layout of the activity and its ability to internalise effects;
 - d. Whether there is adequate separation and buffering from existing sensitive activities to ensure conflict between activities, including potential reverse sensitivity effects, are minimised;
 - e. The capacity of the roading and infrastructure network to accommodate the activity;
 - f. Traffic generation, earthworks and construction effects:
 - g. Ecological and biodiversity effects, including adverse effects on terrestrial ecology and avifauna:
 - h. The extent to which the proposed activity recognises and provides for tangata whenua cultural and spiritual values and practices;
 - i. Any existing navigation or telecommunication facilities;
 - j. Any adverse cumulative effects; and
 - k. Any adaptive management, offsetting measures or environmental compensation which may benefit the local environment or the community affected.

REG-P8 Upgrading existing large scale renewable electricity generation activities

Provide for the upgrading of existing large scale renewable electricity generation activities, including replacing or upgrading wind turbines and their support structures and ancillary facilities within existing wind farms, where the activity:

- 4. Avoids significant adverse effects and avoids, remedies or mitigates other adverse effects on the identified values of any Overlay or any adjacent Overlay, high coastal natural character area, or coastal margin or riparian margin in the coastal environment;
- 2. Has a functional need or operational need for its location; and
- 3. Minimises adverse effects, including adverse cumulative effects, on:
 - a. Landscape, visual or amenity values of the site and surrounding area, having regard to:
 - i. The scale, intensity, duration or frequency of effects;
 - ii. The size and shading of any structures associated with the activity;

- iii. The design and site layout of the activity and its ability to internalise effects, including and blade or shadow flicker;
- iv. Traffic generation, earthworks and construction effects;
- v. Potential adverse effects from scale, colour, shading, lighting, glare, reflectivity, blade or shadow flicker, or noise, and the potential to cause sleep disturbance or annoyance; and
- vi. Whether there is adequate separation from existing sensitive activities to ensure conflict between activities, including potential reverse sensitivity effects, are minimised;
- b. The natural character of the coastal environment;
- c. The natural character of coastal margins and riparian margins;
- d. Ecology and biodiversity values, including terrestrial ecology and avifauna; and
- e. Existing navigation or telecommunication facilities;

while having regard to any adaptive management, offsetting measures or environmental compensation which may benefit the local environment or affected community.

REG-P9

New IL arge scale renewable electricity generation activities in the General Rural Zone outside specified Overlays, high coastal natural character areas, and coastal and riparian margins

Provide for new large scale renewable electricity generation activities, including the upgrading of existing activities, in the General Rural Zone, including within the coastal environment, where:

- 1. They are located outside:
 - a. The Overlays specified in REG-PX (other than ridgelines and hilltops, and low and medium hazard areas within the Hazard Overlays);
 - b. High coastal natural character areas identified in SCHED12; and
 - c. Coastal margins and riparian margins within the coastal environment;
- 2. They have an operational need or functional need to locate where the renewable energy resources are available;
- There is or will be sufficient roading and infrastructure capacity to accommodate the activity:
- 4. They avoid any significant adverse effects and avoid, remedy or mitigate any other adverse effect on the identified values and qualities of any adjacent Overlay or high coastal natural character area;
- 5. They minimise any adverse effects, including adverse cumulative effects, on:
 - a. The natural character of the coastal environment;
 - b. The natural character of riparian margins;
 - c. Landscape, visual or amenity values of the site and surrounding area including any ridgelines and hilltops area, having regard to:
 - i. The scale, intensity, duration or frequency of the activity's effects;
 - ii. The size and shading of any structures associated with the activity;
 - iii. The design and site layout of the activity and its ability to internalise effects, including and blade or shadow flicker;
 - iv. Traffic generation, earthworks and construction effects;
 - v. Potential adverse effects from scale, colour, shading, lighting, glare, reflectivity, blade or shadow flicker, or noise, and the potential to cause sleep disturbance or annoyance; and
 - vi. Whether there is adequate separation from existing sensitive activities to ensure conflict between activities, including potential reverse sensitivity effects, are minimised;
 - d. Ecology and biodiversity values, including effects on terrestrial ecology and avifauna; and
 - e. Any existing navigation or telecommunication facilities;

while having regard to any adaptive management, offsetting measures or environmental compensation which may benefit the local environment or the community affected.

REG-PX

Large scale renewable electricity generation activities within Specified Overlays

Only allow new or altered buildings, structures, access tracks, roads, transmission facilities and earthworks for the purpose of large scale renewable electricity generation activities, including

the upgrading of existing activities, in the General Rural Zone in the Overlays specified below where:

- If located within or on any areas, items or features identified in SCHED1 Heritage
 Buildings, SCHED2 Heritage Structures, SCHED3 Heritage Areas, SCHED4 Archaeological Sites, any significant adverse effects on the Heritage Building, Heritage
 Structure, Heritage Area or Archaeological Site (as applicable) are avoided and any
 other adverse effects on the Heritage Building, Heritage Structure, Heritage Area or
 Archaeological Site (as applicable) are avoided, remedied or mitigated, while having
 regard to the matters in HH-P8, HH-P12, HH-P15, HH-P21 and HH-P22;
- If located within an area identified in SCHED7 Sites and Areas of Significance to Māori, any significant adverse effects on the area are avoided and any other adverse effects on the area are avoided, remedied or mitigated, while having regard to the matters in SASM-P4 and SASM-P5;
- 3. If located within an area identified in SCHED8 Significant Natural Areas:
 - a. Outside the coastal environment, significant adverse effects on the identified values of the area are avoided and any other adverse effects on the identified values are avoided, remedied or mitigated;
 - b. Within the coastal environment:
 - i. Adverse effects on the matters in Policy 11(a) of the New Zealand Coastal Policy Statement 2010 are avoided; and
 - ii. Significant adverse effects on the matters in Policy 11(b) of the New Zealand Coastal Policy Statement 2010 are avoided, and other adverse effects on these matters are avoided, remedied or mitigated;
- 4. If located within an area identified in SCHED12 High Coastal Natural Character Areas, or a coastal margin or riparian margin within the coastal environment, any significant adverse effects on the identified values of the area, or on the coastal or riparian margin (as applicable) are avoided and any other adverse effects on the identified values of the area, or on the coastal or riparian margin (as applicable) are avoided, remedied or mitigated, while having regard to the matters in CE-P5, CE-P6 and CE-P7, and:
 - a. The activity is of a scale that maintains or restores the identified values, including restoration and conservation activities; and
 - b. The design and location of the activity is subordinate to and does not compromise the identified characteristics and values;
- 5. <u>If located within an area identified in SCHED10 Outstanding Natural Features and Landscapes:</u>
 - a. Outside the coastal environment, significant adverse effects on the identified values
 of the area are avoided and any other adverse effects on the identified values of the
 area are avoided, remedied or mitigated;
 - b. Within the coastal environment, any adverse effects on the identified values of the area are avoided;
 - c. The activity is of a scale that maintains or restores the identified values of the area, including restoration and conservation activities; and
 - d. The design and location of the activity is subordinate to and does not compromise the identified characteristics and values of the area; while having regard to the matters in NFL-P5 and NFL-P6;
- 6. If located within an area identified in SCHED11 Special Amenity Landscapes:
 - a. <u>Outside the coastal environment, any adverse effects on the identified values of the area are avoided, remedied or mitigated; and</u>
 - b. Within the coastal environment, any significant adverse effects on the identified values of the area are avoided and any other adverse effects on the identified values of the area are avoided, remedied or mitigated; while having regard to the matters in NFL-P2 and NFL-P4.
- 7. <u>If located within a Hazard Overlay, the activity:</u>
 - a. <u>Does not increase the risk from the natural hazard to people, other properties or infrastructure;</u>
 - b. Is not vulnerable to the natural hazard; and
 - c. <u>Is designed to maintain reasonable and safe operation during and in the immediate</u> aftermath of a natural hazard event;
- 8. There is an operational need or functional need for the identified location and there are no reasonable alternatives; and
- 9. Adverse effects are avoided, remedied or mitigated having regard to:

IHP Recommended Changes

	IHP Recommended Changes		
	a. The scale, intensity, duration or frequency of the activity's effects and the effects on the surrounding environment;		
	 b. Any potential adverse landscape, visual or amenity effects from scale, colour, shading, lighting, glare, reflectivity, blade or shadow flicker, or noise, and the 		
	potential to cause sleep disturbance or annoyance;		
	c. The design and site layout of the activity and its ability to internalise effects;d. Whether there is adequate separation and buffering from existing sensitive activities		
	to ensure conflict between activities, including potential reverse sensitivity effects,		
	are minimised;		
	 e. <u>The capacity of the roading and infrastructure network to accommodate the activity;</u> f. Traffic generation, earthworks and construction effects; 		
	 g. Ecological and biodiversity effects, including adverse effects on terrestrial ecolog and avifauna; h. The extent to which the proposed activity recognises and provides for tangata whenua cultural and spiritual values and practices; 		
	i. Any existing navigation or telecommunication facilities;		
	j. Any adverse cumulative effects; and		
	 k. Any adaptive management, offsetting measures or environmental compensation which may benefit the local environment or the community affected. 		
REG-P10	New large-scale renewable electricity generation activities in other zones, locations and Overlays		
	Avoid locating new large scale renewable electricity generation activities within:		
	1. Any zone, other than the General Rural Zone;		
	2. Any Overlay, other than ridgelines and hilltops, and low and medium hazard areas within		
	the Hazard Overlays; 3. High coastal natural character areas identified in SCHED12; and		
	4. Any coastal margins and riparian margins within the coastal environment.		
REG-P11	Upgrading existing renewable electricity generation activities and providing for technological advances		
	Recognise the benefits of upgrading of existing renewable electricity generation activities, including the adoption of new and updated technologies and the repowering of existing wind turbines, where the upgrading or repowering activity: 1. Increases the generation capacity of existing renewable electricity generation activities and improves generation efficiency; 2. Improves access to renewable energy sources; 3. Allows for the re-use of existing structures and associated infrastructure where appropriate; 4. Increases the resilience, safety or reliability of renewable electricity generation activities;		
	or 5. Results in other environmental benefits or enhancements.		
REG-P12	Reverse sensitivity effects		
	Require new sensitive activities to be designed, located and undertaken to avoid conflict with including reverse sensitivity effects on, existing renewable electricity generation activities.		
REG-P13	Energy efficient subdivision and development		
	Encourage subdivision and development to be designed so that buildings can utilise energy efficiency and conservation measures, including by orientation to the sun and the use of energy efficient materials, to assist in improving energy efficiency and reducing energy consumption.		
Rules	Rules		
REG-R1	Maintenance and repair of existing renewable electricity generation activities		
All Zones	Activity status: Permitted Note: The maintenance and repair of existing renewable electricity generation activities outside of significant natural areas is a permitted activity. The operation and removal of legally		

	IHP Recommended Changes
	established existing renewable electricity generation activities may rely on existing use rights or any resource consent obtained for those renewable electricity generation activities.
All Zones	2. Activity status: Permitted

a. The activity is located within an area identified as a significant natural area:

i. Compliance is achieved with REG-S1 and REG-S2.

All Zones



3. Activity status: Restricted Discretionary

Where:

Where:

a. Compliance with any of the requirements of REG-R1.2 cannot be is not achieved. Matters of discretion are:

- 1. The extent and effect of non-compliance with any relevant standard as specified in the associated assessment criteria for the infringed standard; and
- 2. The matters in REG-P1 and REG-P2.

Notification status: An application for resource consent made in respect of rule REG-R1.3 is precluded from being either publicly or limited notified.

REG-R2

Renewable electricity generation investigation activities

All Zones

1. Activity status: Permitted

Where:

- a. Compliance is achieved with:
 - i. REG-S3;
 - ii. The earthworks standards applying to the underlying zone; and
 - iii. The noise standards applying to the underlying zone.
 - b. The activity is not located in one of the areas specified in REG-R2.3.a.

All Zones

2. Activity status: Restricted Discretionary

Where:

- a. Compliance with the requirements of REG-R2.1.a cannot be is not achieved. Matters of discretion are:
 - 1. The matters in REG-P1, REG-P2 and REG-P3; and
 - 2. The extent and effect of non-compliance with any relevant standard as specified in the associated assessment criteria for the infringed standard.

Notification status: An application for resource consent made in respect of rule REG-R2.2 is precluded from being either publicly or limited notified.

IHP Recommended Changes

	IHP Recommended Changes		
All Zones	3. Activity status: Restricted discretionary		
	Where:		
	 a. The activity is located: i. Within or on any sites, areas, items and/or features identified in SCHED1 - Heritage Buildings, SCHED2 - Heritage Structures, SCHED3 - Heritage Areas, SCHED4 - Archaeological Sites, SCHED7 - Sites and Areas of Significance to Māori, or SCHED5 - Schedule of Viewshafts; ii. Within the root protection area of a tree identified in SCHED6 - Schedule of Notable Trees; iii. Within any area identified as SCHED8 - Significant Natural Areas, SCHED11 - Special Amenity Landscapes, or within identified ridgelines and hilltops; iv. Within any area identified as SCHED10 - Outstanding Natural Features and Landscapes, SCHED12 - High Coastal Natural Character Areas, or a coastal margin or riparian margin within the coastal environment; or v. Within a Hazard Overlay. Matters of discretion are: 		
	 The matters in REG-P1, REG-P2 and REG-P3; The matters in CE-P5, CE-P6 and CE-P7; The matters in NFL-P2, NFL-P3, NFL-P4, NFL-P5 and NFL-P6; The matters in ECO-P2, ECO-P3, ECO-P4, ECO-P7, NFL-P2, NFL-P4 and NFL-P5; The matters in HH-P8, HH-P4412, HH-P4415, HH-P2021 and HH-P2422; The matters in SASM-P4 and SASM-P5; and The matters in VIEW-P2. Notification status: An application for resource consent made in respect of rule REG-R2.3 is precluded from being publicly notified. Note: This rule only has immediate legal effect for Overlays relating to historic heritage, sites 		
	and areas of significance to Māori and significant natural areas.		
REG-R3	Small scale renewable electricity generation activities		
All Zones	Activity status: Permitted		
	Where:		
	 a. Compliance with the following standards is achieved: REG-S4 or REG-S5 or REG-S6, whichever is relevant to the proposal; The earthworks standards applying to the underlying zone; and The noise standards applying to the underlying zone or for any proposal involving wind generation compliance is achieved with NZS 6808:2010 Acoustics - Wind farm noise, REG-S9 and REG-S10. b. The activity is not located in one of the areas specified in REG-R3.3.a. 		
All zones	2. Activity status: Restricted Discretionary		
	Where:		
	a. Compliance with any of the requirements of REG-R3.1.a.cannot be is not achieved. Matters of discretion are:		
	 The matters in REG-P1, REG-P2, REG-P4 and REG-P11, as relevant to the proposal. The extent and effect of non-compliance with any relevant standard as specified in the associated assessment criteria for the infringed standard. Notification status: An application for resource consent made in respect of rule REG-R3.2 is precluded from being either publicly or limited notified. 		

All zones



3. Activity status: Restricted Discretionary

Where:

- a. The activity is located:
 - Within or on any sites, areas, items and/or features identified in SCHED1 -Heritage Buildings, SCHED2 - Heritage Structures, SCHED3 - Heritage Areas, SCHED4 - Archaeological Sites, SCHED7 - Sites and Areas of Significance to Māori, or SCHED5 - Schedule of Viewshafts;
 - Within the root protection area of a tree identified in SCHED6 Schedule of Notable Trees;
 - iii. Within any area identified as SCHED8 Significant Natural Areas, SCHED11 Special Amenity Landscapes, or identified Ridgelines and Hilltops;
 - iv. Within any area identified as SCHED10 Outstanding Natural Features and Landscapes, SCHED12 High Coastal Natural Character Areas, or a coastal margin or riparian margin within the coastal environment; or
 - v. Within a Hazard Overlay.

Matters of discretion are:

- 1. The matters in REG-P1 and REG-P2; and
- 2. The matters in REG-P5.

Notification status: An application for resource consent made in respect of rule REG-R3.23 is precluded from being publicly notified.

Note: This rule only has immediate legal effect for Overlays relating to historic heritage, sites and areas of significance to Māori and significant natural areas.

REG-R4

Community scale renewable electricity generation activities

General Rural Zone

General Industrial

Zone

Airport Zone

1. Activity status: Restricted Discretionary

Where:

- a. Compliance with the following standards is achieved:
 - i. REG-S7 or REG-S8, whichever is relevant to the proposal; and
- b. Compliance is achieved with:
 - NZS6801:2008 Acoustics Measurement of Environmental Sounds or NZS6802:2008 Acoustics – Environmental Noise, whichever is relevant to the proposal; or
 - ii. For any proposal involving wind generation, compliance is achieved with NZS 6808:2010 Acoustics - Wind farm noise, REG-S9 and REG-S10.
- c. The activity is not located in one of the areas specified in REG-R4.3.a.

Matters of discretion are:

- 1. The matters in REG-P1, REG-P2, REG-P6 and REG-P11, as relevant to the proposal;
- 2. The extent and effect of non-compliance with any relevant standard as specified in the associated assessment criteria for the infringed standard;
- 3. The ability to mitigate any adverse noise effects experienced by adjacent properties; and
- 4. For wind generation activities, the provisions for safeguards and contingencies particularly concerning:
 - a. The confirmation of the manufacturer's noise emission levels for the wind turbines to be installed when these have been determined;
 - b. The early identification and remedy of any special audible characteristics present when the wind turbines commence operation;
 - c. Changes to background sound levels that may occur between the time consent is granted and when the wind turbines are installed;
 - d. Effective noise monitoring programmes to demonstrate compliance beyond the commissioning stage;
 - e. Procedures for addressing turbine malfunctions; and

IHP Recommended Changes Community liaison and methods of dealing with complaints and reporting such f. complaints to the Council. 5. For solar generation activities: a. The scale, form and location of the panel. b. Landscape, streetscape, visual and amenity effects and the extent to which any effects can be mitigated including by alternative siting, design, colour, finish, or number of panels and any ancillary buildings or structures. Notification status: An application for resource consent made in respect of rule REG-R4.1 is not precluded from being publicly notified. General 2. Activity status: Discretionary Rural Zone Where: General Industrial a. Compliance cannot be achieved with any of the requirements of REG-R4.1.a or Zone REG-R4.1.b. Airport Zone All other 3. Activity status: Discretionary **Zones** All Zones 4. 3. Activity status: Discretionary <u>General</u> Rural Zone Where: General a. The activity is located: Industrial i. Within or on any sites, areas, items and/or features identified in SCHED1 -Zone Heritage Buildings, SCHED2 - Heritage Structures, SCHED3 - Heritage Areas, SCHED4 - Archaeological Sites, SCHED7 - Sites and Areas of Significance to Airport Zone Māori, or SCHED5 - Schedule of Viewshafts; ii. Within the root protection area of a tree identified in SCHED6 - Schedule of Notable Trees: iii. Within any area identified as SCHED8 - Significant Natural Areas, SCHED11 -Special Amenity Landscapes, or identified Ridgelines and Hilltops: iv. Within any area identified as SCHED10 - Outstanding Natural Features and Landscapes, SCHED12 – High Coastal Natural Character Areas, or a coastal margin or riparian margin within the coastal environment; or v. Within a Hazard Overlay. Note: This rule only has immediate legal effect for Overlays relating to historic heritage, sites and areas of significance to Māori and significant natural areas. All other 4. Activity status: Discretionary Zones REG-R5 Upgrading of existing large scale renewable electricity generation activities General 1. Activity status: Restricted Discretionary Rural Zone Where: Brooklyn Hill Wind a. Compliance is achieved with REG-S11; and Turbine in b. For any proposal involving wind generation, compliance is achieved with NZS the Natural 6808:2010 Acoustics - Wind farm noise, REG-S9 and REG-S10. Open Space Matters of discretion are:

- 1. Any new or additional adverse effects;
- 2. The relevant matters in REG-P1, REG-P2, REG-P8 REG-P9, REG-PX and REG-P11;
- 3. The extent and effect of non-compliance with any relevant standard as specified in the associated assessment criteria for the infringed standard;
- 4. The ability to mitigate any adverse noise effects experienced by adjacent properties;

Zone

IHP Recommended Changes 5. For wind generation activities, the provisions for safeguards and contingencies particularly concerning: a. The confirmation of the manufacturer's noise emission levels for the wind turbines to be installed when these have been determined; b. The early identification and remedy of any special audible characteristics present when the wind turbines commence operation; c. Changes to background sound levels that may occur between the time consent is granted and when the wind turbines are installed; d. Effective noise monitoring programmes to demonstrate compliance beyond the commissioning stage; e. Procedures for addressing turbine malfunctions; and f. Community liaison and methods of dealing with complaints and reporting such complaints to the Council. General 4. 2. Activity status: **Discretionary** Rural Zone Where: Brooklyn Hill Wind a. Compliance is not achieved with any of the requirements of REG-R5.1. Turbine in the Natural Open Space Zone REG-R6 New large scale renewable electricity generation activities General 1. Activity status: Discretionary Rural Zone Where: a. For any proposal involving wind generation, compliance is achieved with NZS 6808:2010 Acoustics - Wind farm noise, REG-S9 and REG-S10. Note: This rule only has immediate legal effect for Overlays relating to historic heritage, sites and areas of significance to Māori and significant natural areas. General Rural Zone 2. Activity status: Non-complying Where: a. Compliance is not achieved with REG-R6.1; orb. The activity is located: i. Within or on any sites, areas, items and/or features identified in SCHED1-Heritage Buildings, SCHED2 - Heritage Structures, SCHED3 - Heritage Areas, SCHED4 - Archaeological Sites, SCHED7 - Sites and Areas of Significance to Māori, or SCHED5 - Schedule of Viewshafts; ii. Within the root protection area of a tree identified in SCHED6 - Schedule of Notable Trees: iii. Within any area identified as SCHED8 - Significant Natural Areas, SCHED11 -Special Amenity Landscapes; iv. Within any area identified as SCHED10 - Outstanding Natural Features and Landscapes, SCHED12 - High Coastal Natural Character Areas, or a coastal margin or riparian margin within the coastal environment; or Within the stream corridor of the flood hazard extent or high hazard area of the Coastal Hazard Overlay. Note: This rule only has immediate legal effect for Overlays relating to historic heritage, sites and areas of significance to Māori and significant natural areas.

All other

REG-R7

Zones

3. Activity status: Non-complying

Renewable electricity generation activities not otherwise provided for

		IHP Recommended Changes
All Zones	Activity status: Discretionary	
All Zones	 2. Activity status: Non-complying Where: a. The activity is located: i. Within or on any sites, areas, items and/or features identified in SCHED1 - Heritage Buildings, SCHED2 - Heritage Structures, SCHED3 - Heritage Areas, SCHED4 - Archaeological Sites, SCHED7 - Sites and Areas of Significance to Māori, or SCHED5 - Schedule of Viewshafts; ii. Within the root protection area of a tree identified in SCHED6 - Schedule of Notable Trees; iii. Within any area identified as SCHED8 - Significant Natural Areas, SCHED11 - Special Amenity Landscapes; iv. Within any area identified as SCHED10 - Outstanding Natural Features and Landscapes, SCHED12 - High Coastal Natural Character Areas, or a coastal margin or riparian margin within the coastal environment; or v. Within the stream corridor of the flood hazard extent or high hazard area of the Coastal Hazard Overlay. Note: This rule only has immediate legal effect for Overlays relating to historic heritage, sites and areas of significance to Māori and significant natural areas. 	
Standards		
REG-S1	Trimming, pruning or removal of indigenous vegetation within a significant natural area	
All Zones	1. Trimming, pruning or removal of indigenous vegetation or trees within a significant natural area must be limited to: a. Within 2m of the existing renewable electricity generation activity building or structure, measured at ground level; b. 2m either side of any ancillary road or access track or fence; and c. Must not involve the removal of a tree with a trunk greater than 15cm in diameter measured 1.4m above ground level. This standard does not apply to: a. Indigenous vegetation to be trimmed, pruned or removed that is located within the formed width of an existing road; or b. Works undertaken in accordance with the Electricity (Hazards from Trees) Regulations 2003 or the Telecommunications Act 2001.	Assessment criteria where the standard is infringed: 1. Operational needs, functional needs or other technical considerations; and 2. The effects on the identified ecological and biodiversity values of the significant natural area, including cultural values, and the measures taken to avoid, remedy or mitigate the effects and where relevant the ability to offset effects. 3. The degree to which the trimming or removal of affected vegetation will provide for the health and safety of people, property, and the environment through the management of fire risk.
REG-S2	Earthworks within a significant natural area	
All Zones	Earthworks within a significant natural area must not exceed: a. 50m³ per structure or support structure; or b. 100m³ per access track.	Assessment criteria where the standard is infringed: 1. Operational needs, functional needs or other technical considerations; and 2. The effects on the identified biodiversity values of the significant natural area and the measures taken to avoid, remedy or mitigate the

	IHP Recommended Changes		
		effects and where relevant the ability to offset biodiversity effects.	
REG-S3	Renewable electricity generation investigation	activities	
All Zones	 Any anemometer (wind monitoring) mast must not exceed a maximum height above ground level of 80m in the General Rural Zone and 20m in all other zones, except for a Residential Zone where the maximum height is the zone height; Any building or structure must not exceed the permitted height in relation to boundary and setback standards for the underlying Zone; Investigation activities must not be undertaken on a site for a total period of more than ten years; All buildings and structures including anemometers (wind monitoring) masts must be removed at the end of investigation period; and The site must be restored to pre-works condition after removal of the investigation activities. 	Assessment criteria where the standard is infringed: 1. The suitability of the site for the proposed activity; 2. The type, scale, height, form and location of any building or structure (including masts); 3. Landscape, visual and amenity effects and the extent to which any effects can be mitigated including by alternative siting, design, colour, finish, attachment to an existing structure or number of structures (including masts); 4. The duration of the activity and the plans for its removal; 5. Operational needs, functional needs or other technical considerations; 6. Health and safety effects, including effects on public access; 7. Noise effects; 8. Effects on natural character; 9. Effects on existing navigation or telecommunication facilities; 10. Any adverse cumulative effects; and 11. The values and characteristics of any adjacent Overlay or high coastal natural character area.	
REG-S4	Small scale renewable electricity generation activities - roof-mounted solar panels		
All Zones	1. Any solar panel must not exceed: a. The permitted building height standard for the underlying Zone by more than 1.5m measured vertically; or b. The permitted height in relation to boundary standard for the underlying Zone by more than 1m measured vertically.	Assessment criteria where the standard is infringed: 1. The form and location of the panel; 2. Landscape, streetscape, visual and amenity effects and the extent to which any effects can be mitigated including by alternative siting, design, colour, finish, or number of panels and any ancillary structures; 3. Dominance and shading effects on adjoining sites; 4. Whether there are topographical or other site constraints that make compliance with the standard impractical; 5. Health and safety effects; 6. Any adverse cumulative effects; and 7. The values and characteristics of any adjacent Overlay or high coastal natural character area.	
REG-S5	Small scale renewable electricity generation ac	Small scale renewable electricity generation activities - roof-mounted wind turbines	
All Zones	The wind turbine must not exceed:	Assessment criteria where the standard is infringed:	

IHP Recommended Changes a. the permitted building height standard of the underlying Zone by more than 1. The type, scale, form and location 3m measured vertically; of the wind turbine; b. the permitted height in relation to 2. Landscape, streetscape, visual and boundary standard for the underlying amenity effects and the extent to Zone by more than 1m measured which any effects can be mitigated vertically; or including by alternative siting, c. a maximum rotor diameter of 2.5m. design, colour, or finish of the wind 2. There must be no more than one wind turbine and any ancillary structures;

- 3. Dominance and shading effects on turbine per site. adjoining sites; 4. Noise effects, including sleep disturbance or public health;

 - 5. Health and safety effects;
 - 6. Whether there are topographical or other site constraints that make compliance with the standard impractical;
 - 7. Any adverse cumulative effects: and

8. The values and characteristics of any adjacent Overlay or high coastal natural character area. Ecological and biodiversity effects: REG-S6 Small scale renewable electricity generation activities - freestanding wind turbines All Zones 1. The wind turbine must not exceed: Assessment criteria where the standard is a. The permitted height in relation to infringed: boundary standard for the underlying 1. The type, scale, form and location of b. A maximum height of 20m above the wind turbine: ground level (including the full vertical 2. Landscape, streetscape, visual and extent of the blades); or amenity effects and the extent to c. A maximum rotor diameter of 5m; or which any effects can be mitigated including by alternative siting, design, d. A maximum rotor area of 200m². colour, finish, or number of wind 2. The wind turbine must not be located within turbines and any ancillary structures; the greater of: 3. Dominance and shading effects on a. 15m of a site boundary 60m of a adjoining sites; habitable building on an adjacent site; 4. Noise effects, including sleep disturbance or public health and b. A distance of 10 times the wind safety: turbine tower's height above ground 5. Ecological and biodiversity effects; level from any site boundary that is 6. Effects on natural character; not held in the same record of title; 7. Whether there are topographical or 3. There must be no more than: other site constraints that make a. One wind turbine per site for sites compliance with the standard comprising 20ha or less; and impractical; b. Three wind turbines per site for sites 8. Any adverse cumulative effects; and comprising more than 20ha. 9. The values and characteristics of any adjacent Overlay or high coastal natural character area. **REG-S7** Community scale wind turbines All Zones 1. Any wind turbine or structure must not Assessment criteria where the standard is exceed: infringed: a. The permitted height in relation to boundary standard for the underlying 1. The type, scale, form and location of the wind turbine: Zone: or b. A maximum height of 25m above 2. Landscape, streetscape, visual and ground level. amenity effects and the extent to

IHP Recommended Changes 2. Any wind turbine or structure must not be which any effects can be mitigated located within a distance of three times the including by alternative siting, design, wind turbine tower's or structure's height colour, finish, or number of wind above ground level from: turbines and any ancillary buildings or a. A habitable building on an adjacent structures: 3. Dominance and shading effects on b. Any site boundary that is not held in adjoining sites: common ownership. 4. Noise effects, including sleep disturbance or public health; 5. Health and safety effects, including effects on public access; 6. Ecological and biodiversity effects; 7. Effects on natural character; 8. Whether there are topographical or other site constraints that make compliance with the standard impractical; 9. Any adverse cumulative effects; and 10. The values and characteristics of any adjacent Overlay or high coastal natural character area. **REG-S8** Community scale freestanding solar panels All Zones 1. Any <u>freestanding solar panel</u> structure must Assessment criteria where the standard is not exceed: infringed: a. The permitted height in relation to boundary standard for the underlying 1. The type, scale, form and location of the panel: b. The permitted setback standards for 2. Landscape, streetscape, visual and the underlying Zone: or amenity effects and the extent to c. A maximum height of 6m above which any effects can be mitigated ground level; including by alternative siting, design, 2. The cumulative area of solar panels on the colour, finish, or number of panels and site must not exceed 450m²: the horizontal any ancillary buildings or structures; 3. Dominance and shading effects on area of the building's roof, where the solar adjoining sites; panels are fixed to a building roof. 4. Noise effects, including sleep disturbance or public health; 5. Health and safety effects, including effects on public access; 6. Ecological and biodiversity effects; 7. Effects on natural character; 8. Whether there are topographical or other site constraints that make compliance with the standard impractical; 9. Any adverse cumulative effects; and 10. The values and characteristics of any adjacent Overlay or high coastal natural character area. REG-S9 Wind turbine noise limits All Zones Assessment criteria where the standard is 1. At any wind speed, the L_{A90} (10min) sound infringed: pressure level from a wind turbine or wind farm must not exceed the background 1. The type, scale, form and location of sound level by more than 5 dB, or a level of the wind turbine(s); 40 dB L_{A90 (10min)}, whichever is the greater, 2. Noise effects, including sleep when measured at the notational boundary disturbance or public health and of any dwelling or sensitive activity which is safety; a noise sensitive location as defined in New

IHP	Recommended	Changes
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Zealand Standard on Acoustics Wind Farm
Noise "NZS 6808: 2010 Acoustics - Wind
farm noise", except where a location is
identified by Council as a high amenity area
a noise limit of 35 dB LA90(10 min) will apply;
and
The sound level of a wind turbing or wind

- 2. The sound level of a wind turbine or wind farm must be measured and assessed to the in accordance with the requirements of New Zealand Standard on Acoustics Wind Farm Noise "NZS 6808: 2010 Acoustics Wind farm noise".
- Whether there are topographical or other site constraints that make compliance with the standard impractical; and
- 4. Any adverse cumulative effects.

REG-S10

Wind turbine special audible characteristics (SAC's)

All Zones

- Wind turbine sound pressure levels with special audible characteristics, such as tonality, impulsiveness or amplitude modulation, must be adjusted by arithmetically adding up to +6 dB to the measured level at the notional boundary; and
- The assessment of special audible characteristics must be conducted in accordance with Appendix B of New Zealand Standard on Acoustics – Wind Farm Noise "NZS 6808: 2010 Acoustics -Wind farm noise".

Assessment criteria where the standard is infringed:

- 1. The type, scale, form and location of the wind turbine(s):
- Noise effects, including sleep disturbance or public health and safety;
- Whether there are topographical or other site constraints that make compliance with the standard impractical; and
- 4. Any adverse cumulative effects.

REG-S11

Upgrading of existing large scale renewable electricity generation activities

General Rural Zone

Brooklyn Hill Wind Turbine in the Natural Open Space Zone

- The upgrade, relocation or replacement of any building or structure (including any wind turbine) must be located within 5m of the existing building or structure to be replaced;
- A replacement building or structure (including any wind turbine) must not exceed the height of the existing building or structure to be replaced by more than 10%;
- The footprint of a replacement building or structure (including any wind turbine and supporting structures) must not increase the footprint of the existing building or structure by more than 25%; and
- 4. The upgrade must not include any additional buildings or structures (including wind turbines).

Assessment criteria where the standard is infringed:

- 1. Operational needs, functional needs or other technical considerations;
- The type, scale, form and location of any wind turbine, structure or building;
- Noise effects, including sleep disturbance or public health and safety;
- Landscape, streetscape, visual and amenity effects and the extent to which any effects can be mitigated including by alternative siting, design, colour, finish, or number of buildings or structures;
- Dominance and shading effects on adjoining sites;
- 6. Health and safety effects, including effects on public access;
- 7. Ecological and biodiversity effects;
- 8. Effects on natural character;
- Whether there are topographical or other site constraints that make compliance with the standard impractical;
- The values and characteristics of any adjacent Overlay or high coastal natural character area; and
- 11. Any adverse cumulative effects.

IHP	Recommended	Changes
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Definitions relevant to the REG Chapter

Wind farm	means wind turbines (and support pylons or towers) used to
	generate electricity from the wind which is then conveyed toby the
	distribution network or National Grid. It includes ancillary access
	roads and tracks, buildings and structures (including substations,
	transmission lines and poles/supporting structures), communications
	equipment, electricity storage technologies, and the system of
	electricity conveyance required to convey the electricity to an
	associated substation.