ENERGY, INFRASTRUCTURE & TRANSPORT

Overview

The focus of this chapter is on energy generation. Also see the <u>national electricity and gas transmission chapter</u> for activities undertaken near transmission structures and the <u>network utilities chapter</u> for activities undertaken by network utility operators. Energy is essential to the efficient functioning of our communities and economy and energy demand is growing. Oil and petrol fuel our vehicles and electricity heats and lights our homes and workplaces. Renewable electricity generation is becoming increasingly important as a way of meeting future demand in an environmentally sustainable manner. The benefits of using renewable sources of energy is a matter that particular regard must be given to under section 7 of the Resource Management Act 1991, along with energy efficiency and climate change.

The contribution of renewable electricity generation towards addressing the effects of climate change plays a vital role in the wellbeing of New Zealand, its people and the environment. The country's strategic target is that 100 per cent of electricity generated in New Zealand should be derived from renewable energy sources by 2035. Increasing renewable electricity generation can have local, regional and national benefits.

The Act defines renewable energy as energy produced from solar, wind, hydro, geothermal, biomass, tidal, wave, and ocean current sources. To achieve this, the government has put in place a National Policy Statement for Renewable Electricity Generation (NPSREG). This plan must give effect to the NPSREG. In order to meet the government's target, it will be necessary to increase the output capacity of renewable electricity generation through the development of new renewable electricity generation activities along with the protection of output from existing activities.

In Waitomo District, the most probable forms of energy are based on renewable sources. There are several existing hydro-electricity generation schemes and there is the potential for similar schemes to develop in the future. The western hills are a recognised wind resource and over time wind farms are expected to develop in this area. The feasibility of solar energy for large scale electricity generation is improving. Large scale solar electricity generation facilities may also be developed on suitable urban or rural land in the district. As well as large scale energy projects, it is likely that more people and businesses will develop generation sources using wind or solar power. This could be on site at an individual/household scale or a community scale. Given the relative isolation of some parts of the district and the dependency on distribution networks, there are significant benefits in terms of cost and security of supply, for people to generate energy on-site. Other forms of fuel energy, such as biofuels and waste to energy plants, also have the potential to contribute to meeting future energy demands.

The location of renewable electricity generation activities is often driven by their functional and operational need to access natural resources. Often, these locations have other values associated with them such as important natural features and landscapes, coastal environment values and significant natural areas. Where possible a balance is required to ensure renewable electricity generation activities can locate where resources are, providing these values are not unduly compromised. In some cases, applying a

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balancing approach is not appropriate because the values of the identified overlay, scheduled site or feature are so significant. For this reason, the development of new larger scale energy activities has been listed as a prohibited activity within identified outstanding natural features and areas of outstanding natural character. Additionally, it is not appropriate for safety reasons, for any structure that does not comply with the flightpath height restrictions for the Te Kūiti Aerodrome to be constructed. For this reason, this activity has also been listed as a prohibited activity.

Renewable electricity generation activities are often seen as a change to amenity that some people embrace - while others do not. The provisions in this chapter seek to manage these effects through controlling the location, scale and noise levels, whilst recognising visual amenity values may change over time.

This plan also provides for the efficient operation, management and upgrading of four existing hydro generation facilities in the district. The four facilities are Wairere Hydro Power Station, Mokauiti Hydro Power Station, Speedies Road Hydro Power Station and Boulder Creek Road Hydro Power Station. All of these facilities are located in the rural production zone and generate over 1MW of electricity and as such, are recognised as being regionally significant infrastructure. In the main, the rules for these facilities are located within this chapter. Depending on the type of activity and the characteristics of the site, other chapters in the plan may be relevant such as subdivision, financial contributions and natural hazards. A plan change to include new major energy infrastructure as a rural production zone is an option for energy companies and/or developers to consider.

Objectives

Refer also to the relevant objectives in Part 2 District - Wide Matters and Part 3 - Area Specific Matters

- **ENGY-O1.** Increase the resilience of communities within the district by:
 - Enabling renewable electricity generation activities where appropriate; and
 - 2. Encouraging the development of on-site and community scale renewable electricity generation activities; and
 - 3. Recognising the positive benefits and contribution of renewable electricity generation towards reducing the effects of climate change.
- **ENGY O2.** Recognise and provide for the national significance of renewable electricity generation activities by:
 - 1. Maintaining or increasing the use and supply of renewable electricity to communities both within the Waitomo district and wider network; and
 - 2. Protecting existing renewable electricity generation activities; and
 - 3. Enabling the appropriate development of new renewable electricity generation activities; and
 - 4. Acknowledging the functional and operational need of renewable electricity generation activities.
- **ENGY-03.** Encourage the efficient use of energy.
- **ENGY-O4.** Provide for authorised activities in the rural production zone by:

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- 1. Enabling the growth and expansion of such activities to meet the future demand of the district; and
- 2. Managing adverse environmental effects on the receiving environment by internalising effects to the property boundary, or through avoid, remedy, or mitigation measures as far as practicable.

Policies

Refer also to the relevant policies in Part 2 District - Wide Matters and Part 3 - Area Specific Matters

- **ENGY-P1.** Enable the ongoing operation, maintenance, repair and minor upgrade of existing renewable electricity generation activities within the district, providing significant adverse effects on the environment are avoided, remedied or mitigated.
- **ENGY-P2.** In all zones and precincts, recognise the benefits of small-scale electricity generation in a form that is commensurate with the function, nature and scale of the anticipated activities, while managing the values of overlays and scheduled sites and features.
- **ENGY-P3.** Recognise the potential for community scale renewable electricity generation activities in most zones in the district where the electricity generated is shared with consumers in the same community. For any application recognise the social and economic benefit to the community from sharing electricity that has been generated locally.
- **ENGY-P4.** Manage the development of new renewable electricity generation activities including community scale renewable electricity generation activities, recognising that developments will be of varying scale with different benefits and levels of effects. Matters to consider include:
 - 1. The benefits of the activity, recognising that benefits may offset anticipated changes in amenity; and
 - 2. Any functional or operational needs or constraints; and
 - 3. The scale, intensity duration or frequency of the activity's effects including at the time of construction; and
 - 4. Adverse amenity, visual, traffic generation, safety, light overspill, shadow, earthworks, glare and noise effects; and
 - 5. Adequate separation distances from existing and consented sensitive activities to ensure conflict between activities, adverse effects and reverse sensitivity effects are minimised; and
 - 6. Effects on scheduled sites, features or overlays.

In doing so, recognise large scale activities will be more appropriate within the industrial, rural production, and general rural zones.

- **ENGY-P5.** Allow activities associated with the investigation, identification and assessment of potential sites and energy sources for renewable electricity generation, however they must be avoided within:
 - 1. An identified outstanding natural landscape or an outstanding natural feature: or
 - 2. An area of outstanding natural character or high/very high natural character; or

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- 3. The site or surroundings of a heritage building or structure; or
- 4. A significant archaeological site; or
- 5. A site or area of significance to Māori; or
- 6. A significant natural area.
- **ENGY-P6.** Recognise that increasing levels of renewable electricity generation activities may alter existing visual amenity values, but the level of adverse visual effects may not be appropriate in some overlays, scheduled sites and features.
- **ENGY-P7.** Manage new development and land use activities near existing renewable electricity generation activities to minimise reverse sensitivity effects.
- **ENGY-P8.** Development must comply with the flightpath height restrictions for the Te Kūiti Aerodrome.
- **ENGY-P9.** Recognise the short-term benefits from temporary generators at the time of an emergency or when electricity supply is disrupted.
- **ENGY-P10**. For any co-generation or waste to energy conversion:
 - 1. Acknowledge the benefits of the efficient use and disposal of waste; and
 - 2. Manage more than minor adverse environmental effects created by this activity; and
 - 3. Appropriately locate these activities within the:
 - a. Rural production zone; or
 - b. General rural zone: or
 - c. Industrial zone.
- **ENGY-P11.** Allow facilities which produce biogas by anaerobic fermentation of waste, ensuring both the benefits and any effects, including the potential for reverse sensitivity effects, are taken into account. Avoid locating these facilities in areas of the district where a non-complying activity status is signalled in the rules.
- **ENGY-P12**. Avoid activities where:
 - The radiofrequency emission cannot comply with NZS 27721:1999 Radiofrequency Fields – Maximum Exposure Levels – 3KHz to 300GHz; or
 - The emission of electric and magnetic fields exceeds the International Commission on Non-Ionising Radiation Protection Guidelines for limiting exposure to time varying electric and magnetic fields (1Hz-100kHz) (Health Physics, 2010, 99(6); 818-836) and recommendations from the World Health Organisation monograph Environmental Health Criteria (No 238, June 2007); or
 - 3. The activity is coal fired electricity generation or is based on non-renewable resources; or
 - 4. The activity is hydro-electricity generation with an output of more than 5 kW in an outstanding natural feature.
- **ENGY-P13.** Within the rural production zone where the the removal of indigenous vegetation in a significant natural area is unavoidable to provide for

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regionally significant infrastructure, adverse effects must be remedied in the first instance, or mitigated or offset if this is not possible:

- 1. If offsetting adverse effects is the only practicable option, indigenous biodiversity values and ecological characteristics of the significant natural area will be maintained by:
 - a. Providing a biodiversity offset that is consistent with the framework detailed in Appendix 4 Biodiversity Offsetting Framework; and
 - b. Ensuring the biodiversity offset can achieve no net loss of indigenous biodiversity values at a regional scale, preferably in the affected significant natural area, or where that is not practicable, in the ecological district in which the affected significant natural area is located.
- **ENGY-P14.** Enable existing hydro-electricity generation and associated activities located within the rural production zone, provided that the adverse effects of the activities are internalised, or avoided, remedied or mitigated as far as practicable through methods such as management practices, rehabilitation plans and mitigation measures that include:
 - 1. Managing dust, odour, noise, vibration, access, debris on roads and illumination to maintain amenity values, particularly during the night time; and
 - 2. Ensuring that noise and vibration effects are not unreasonable and do not adversely affect amenity values in the surrounding area; and
 - 3. Managing actual and potential effects on public health and safety.
- **ENGY-P15.** Ensure the scale and location of any expansion of an existing hydroelectricity generation facilities located within the rural production zone do not adversely affect local character or amenity by:
 - 1. Maintaining boundary setbacks for activities and structures; and
 - 2. Ensuring that outdoor storage is sufficiently landscaped and screened from roads, public spaces and adjoining neighbours; and
 - 3. Ensuring that industrial buildings are designed as far as practicable to not overshadow or overly dominate the wider surrounding area.

Rules

The rules that apply to energy generation activities are contained in the tables listed below. To undertake any activity, it must comply with all the rules listed in:

- ENGY Table 1 Activities Rules; and
- ENGY Table 2 Performance Standards; and
- Any relevant provision in Part 2 District-Wide Matters; and
- Unless specifically referenced in a rule, Part 3 Area Specific Matters do not apply to this chapter.

Where an activity breaches more than one rule, the most restrictive status shall apply to the activity.

Refer to Part 1 - How the Plan Works for an explanation of how to use this Plan, including activity status abbreviations.

Note: Where sites and areas of significance to Māori are referred to it means the mapped extent of sites listed in <u>SCHED3</u> and <u>SCHED4</u>.

Note: Where Heritage Buildings and Structures are referred to it means the site or surroundings (of any building or structure listed in SCHED1)

Pursuant to Section 86B(3) of the RMA, the following rules that protect areas of significant indigenous vegetation or areas of significant habitats of indigenous fauna, protect historic heritage, protect or relate to water have immediate legal effect: ENGY-R18.3.

ENGY - Table 1 - Activities Rules

	All zones and all precincts. All overlays, scheduled sites and features						
ENGY-R1.	The operation, maintenance, repair, replacement, minor upgrade, demolition or removal of existing buildings and structures of any existing energy generation activity.						
	Activity Status: PER Where: 1. Performance standards ENGY-R17 and ENGY-R18, and ENGY-R21 and ENGY-R22 are complied with.	Activity status where compliance is not achieved with ENGY-R17 or ENGY-R18: Refer to Table 2 Activity status where compliance is not achieved with ENGY-R21 or ENGY-R22: NC Note: Where the building is listed in SCHED1 - Heritage Buildings and Structures, also see the historic heritage chapter.					

	Rural production zone only. All overlays, scheduled sites and features				
ENGY-R2.	The operation, maintenance, repair, replacement and minor upgrade of an existing hydro-electricity generation activity infrastructure dentified on the Planning Maps as RPROZ-14 to RPROZ-17 including the demolition or removal of existing buildings and structures and the use of the surface of the water for hydroelectric activities.				
	Activity Status: PER Where: 1. All of the performance standards in ENGY-R21 through to ENGY-R23 is complied with.	Activity status where compliance is not achieved with ENGY-R21 or ENGY-R22: NC Activity status where compliance is not achieved with ENGY-R23: RDIS Where the activity is RDIS, the matters over which discretion is restricted are: (a) The matters of discretion associated with any performance standard which cannot be complied with in ENGY – Table 2.			

	All zones and all precincts. All overlays, scheduled sites and features					
ENGY-R3.	7-R3. Temporary Generators					
	Activity Status: PER Where: 1. The temporary generator is associated with an energy activity and used for no longer than one (1) calendar month; or 2. The temporary generator is used during outages of electricity supply.	Activity status where compliance is not achieved with ENGY-R3.1 or ENGY-R3.2: DIS Activity status where compliance is not achieved with ENGY-R21 or ENGY-R22: NC Note: The use of generators and mobile equipment (including vehicles) for emergency purposes is permitted. Note: There are no noise rules applicable to temporary generators, however the duty to avoid unreasonable noise still applies.				

ENGY-R4.	Residential, future urban, rural lifestyle, settlement, commercial, Māori purpose, tourism, open space and natural open space zones, all Precincts except PREC3 Coutstanding Natural Landscapes, Outstanding Natural Features, outstanding Natural Character, tourism, open space zones, all sites. Coutstanding Natural Character, and rural production conduction condu					
	PER	PER where attached to buildings: Outstanding natural landscapes, outstanding natural features, sites and areas of significance to Māori, significant archaeological sites, outstanding natural character	PER	PER		

		RDIS where attached to buildings: Heritage buildings and structures		
Where the active restricted are:	rity is RDIS, the m	atters over which discretion is	Note: Refer to the <u>Hapori wha</u>	<u>anui chapter</u> for rules related to glare
(a) The locati	on of the panels; an	d		
(b) The size of the panels; and				
(c) Actual or	potential effects on	the values associated with the scheduled		
historical	heritage site or feati	ure.		

ENGY-R5.	Residential, future urban, rural lifestyle, settlement, commercial, Māori purpose, tourism, open space and natural open space zones, all Precincts except PREC3 Freestanding solar panels up to and including 6 m² in area per site		Industrial, general rural and rural production zones and PREC3	Significant Natural Areas, Coastal Environment, Karst Overlay, Landscapes of High Amenity Value, High/Very High Natural Character
	PER	RDIS	PER	PER
	, -	significant natural area, the rules for contained in the ecosystems and indigenous d with.	restricted are: (a) The location and size of t (b) Actual or potential effects overlay or scheduled site	he matters over which discretion is he panels; and s on the values associated with any

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	Residential, future urban, rural lifestyle, settlement, commercial, Māori purpose, tourism, open space and natural open space zones, all Precincts except PREC3	Outstanding Natural Landscapes, Outstanding Natural Features, Outstanding Natural Character, Heritage buildings and structures, sites or areas of significance to Māori and significant archaeological sites.	Industrial, general rural and rural production zones and PREC3	Significant Natural Areas, Coastal Environment, Karst Overlay, Landscapes of High Amenity Value, High/Very High Natural Character	
ENGY-R6.	Freestanding solar panels greater	r than 6 m² and up to 25 m² in area per si	te		
	RDIS	RDIS	PER	RDIS	
	For PER Activities:		Activity status where compliance with ENGY-R6.1 is not achieved: RDIS		
	Where:		Note: Refer to the <u>Hapori whānui chapter</u> for rules related to glare		
			Where the activity is RDIS, the matters over which discretion is restricted are:		
				non-compliance with any relevant rule evant matters of discretion in the	
			infringed rule(s); and		
			(b) The location and size of	,	
			(c) Actual or potential effect precinct, overlay or sche	s on the values associated with any duled site or feature	

	Residential, future urban, rural lifestyle, settlement, commercial, Māori purpose, tourism, open space and natural open space zones, all Precincts except PREC3	Outstanding Natural Landscapes, Outstanding Natural Features, Outstanding Natural Character, Heritage buildings and structures, sites or areas of significance to Māori and significant archaeological sites.	and	lustrial, general rural I rural production les and PREC3	Significant Natural Areas, Coastal Environment, Karst Overlay, Landscapes of High Amenity Value, High/Very High Natural Character	
ENGY-R7.	Hydro-electricity generation of up	to and including 5kW of electricity per s	site			
	PER	PER: Outstanding natural landscapes, heritage buildings and structures.	PER	?	PER	
		RDIS: Outstanding natural features, sites and areas of significance to Māori, significant archaeological sites, outstanding natural character				
	For PER and RDIS Activities: Where:			Activity status where compliance with ENGY-R7.1 is not achieved: Refer ECO-R12		
	1. located within or partly within a s	ignificant natural area, the rules for	Activity status where ENGY-R7.2 is not achieved: RDIS			
	 biodiversity chapter are complied with; and the maximum total gross floor area of all structures must not exceed 2 m². 		Activity status where compliance is not achieved with ENGY-R21 and ENGY-R22: NC Where the activity is RDIS, the matters over which discretion is restricted are:			
			(a)	The effects at the time of	f construction; and	
			(b)	The benefits from the ge	neration of energy from using a	
				renewable resource; and		
			(c) Actual or potential effects on the values associated with any			
				overlay or scheduled site	·	
			(d)		aracter of the coastline or water body	
				and its margins; and		

(e) The extent to which re-planting will assist in mitigating the
adverse effects associated with any earthworks and vegetation
clearance.
Note: Resource Consent from Waikato Regional Council or Manawatū-
Whanganui Regional Council may be required
Note: All structures must also comply with <u>NATC-R2</u> .

	Residential, future urban, rural lifestyle, settlement, commercial, Māori purpose, tourism, open space and natural open space zones, all Precincts except PREC3	Outstanding Natural Landscapes, Outstanding Natural Features, Outstanding Natural Character, Heritage buildings and structures, sites or areas of significance to Māori and significant archaeological sites.	Industrial, general rural and rural production zones and PREC3	Significant Natural Areas, Coastal Environment, Karst Overlay, Landscapes of High Amenity Value, High/Very High Natural Character
ENGY-R8.	Hydro electricity generation activ	ities with an output of more than 5kW ar	nd up to 20kW of electricity per	site
	RDIS	RDIS: Outstanding natural landscapes	RDIS	RDIS
		DIS: Heritage buildings and structures, sites and areas of significance to Māori, significant archaeological sites, outstanding natural character		
		NC: Outstanding natural features		
	For RDIS and DIS activities: Where: 1. The performance standards in ENGY-R21 and ENGY-R22 are complied with.		Activity status where compliance with ENGY-R21 and ENGY-R22 is not achieved: NC	
			Where the activity is RDIS, the matters over which discretion is restricted are:	
			(a) The effects at the time of co	enstruction; and
			, , , , , , , , , , , , , , , , , , ,	ration of energy from using a
			renewable resource; and	

(c)	c) The effect on the provisions of the Te Ture Whaimana o Te Awa
	o Waikato (the Vision and Strategy for the Waikato River); and
(d)	d) Actual or potential effects on the values associated with any
	overlay or scheduled site or feature; and
(e)	e) Effects on the natural character of the coastline or water body
	and its margins; and
(f)	The extent to which re-planting will assist in mitigating the
	adverse effects associated with any earthworks and vegetation
	clearance.

	Residential, future urban, rural lifestyle, settlement, commercial, Māori purpose, tourism, open space and natural open space zones, all Precincts except PREC3	Outstanding Natural Landscapes, Outstanding Natural Features, Outstanding Natural Character, Heritage buildings and structures, sites or areas of significance to Māori and significant archaeological sites.	Industrial, general rural and rural production zones and PREC3	Significant Natural Areas, Coastal Environment, Karst Overlay, Landscapes of High Amenity Value, High/Very High Natural Character
ENGY-R9.	One wind turbine with a rated capacity of up to and including 5kW per site, except for the industrial, general rural, rural production zo & PREC3 where the maximum is two wind turbines with a rated capacity of up to and including 5kW each per holding			
	PER	PER: Outstanding natural landscapes DIS: Heritage buildings and structures, sites and areas of significance to Māori, significant archaeological sites, outstanding natural character PR: Outstanding natural features	PER	PER
	For PER Activities: Where:		Activity status where complia achieved: Refer ECO-R12 Activity status where complia R17 or ENGY-R18: Refer to Ta	nce is not achieved with ENGY-

1.	located within or partly within a significant natural area, the rules for
	indigenous vegetation clearance contained in the ecosystems and indigenous
	biodiversity chapter are complied with; and

2. All of the performance standards in Table 2 are complied with.

For DIS Activities:

3. The performance standards in ENGY-R21 or ENGY-R22 are complied with.

Activity status where compliance with ENGY-R19 to ENGY-R20 is not achieved: RDIS

(a) The matters of discretion associated with any performance standard which cannot be complied with in ENGY – Table 2.

Activity status where compliance ENGY-R21 or ENGY-R22 is not achieved: NC

Note: Where the number of wind turbines exceed the number provided for in this rule, the relevant rule is ENGY-R11.

Note: In PREC3 see the Te Kūiti Aerodrome flightpath height restrictions – ENGY-R16.

ENGY-R10.	Residential, future urban, rural lifestyle, settlement, commercial, Māori purpose, tourism, open space and natural open space zones, all Precincts except PREC3	Outstanding Natural Landscapes, Outstanding Natural Features, Outstanding Natural Character, Heritage buildings and structures, sites or areas of significance to Māori and significant archaeological sites.	Industrial, general rural and rural production zones and PREC3	Significant Natural Areas, Coastal Environment, Karst Overlay, Landscapes of High Amenity Value, High/Very High Natural Character
ENGT-RTO.	RDIS	NC: Outstanding natural landscapes, outstanding natural character, heritage buildings and structures, sites or areas of significance to Māori, significant archaeological sites PR: Outstanding natural features	PER	RDIS: Significant natural area (local significance), Coastal environment, karst overlay, landscapes of high amenity value NC: Significant natural area (regional, national and international significance), high/very high natural character
	For PER Activities: Where:		Activity status where compliance ENGY-R10.4 is not achieved: RDI Activity status where compliance not achieved: NC	•

1.	The activity must occur for no more than five (5) years from the date the
	equipment is erected; and

- 2. The person responsible for erecting the equipment is required to notify the Council in writing as to the date the equipment is erected; and
- 3. The equipment must be removed no later than two months after the monitoring has finished on the site; and
- Any wind monitoring mast must be set back a distance of at least ten
 (10) times the mast's height, as measured from ground level, from the boundary of the holding; and
- 5. The performance standards in ENGY-R21 and ENGY-R22 are complied with.

For RDIS Activities:

Where:

6. The performance standards in ENGY-R21 and ENGY-R22 are complied with.

Where the activity is RDIS, the matters over which discretion is restricted are:

- (a) The effects at the time of construction; and
- (b) How the activity and any required structures or connections affect anticipated levels of amenity including noise, visual effects, operating hours and traffic generation; and
- (c) Actual or potential effects on the values associated with any overlay or scheduled site or feature; and
- (d) The type, scale and form of any wind monitoring mast; and
- e) The location of the equipment and/or wind monitoring mast on the site; and
- (f) The benefits from locating the equipment and/or wind monitoring mast in the proposed location; and
- (g) Any technological constraints.

	Residential, future urban, rural lifestyle, settlement, commercial, Māori purpose, tourism, open space and natural open space zones, all Precincts except PREC3	Outstanding Natural Landscapes, Outstanding Natural Features, Outstanding Natural Character, Heritage buildings and structures, sites or areas of significance to Māori and significant archaeological sites.	Industrial, general rural and rural production zones and PREC3	Significant Natural Areas, Coastal Environment, Karst Overlay, Landscapes of High Amenity Value, High/Very High Natural Character
ENGY-R11.	New renewable electricity general Table 1	ation activities including community scale	renewable electricity activitie	s not provided for elsewhere in
	DIS	NC: Outstanding natural landscapes, outstanding natural features, heritage buildings and structures, sites or areas	DIS: General rural, industrial, rural production zones and PREC3	DIS: Karst overlay, landscapes of high amenity value, significant natural areas (local significance), coastal environment.

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		of significance to Māori, significant archaeological sites PR: Outstanding natural features, outstanding natural character		NC: High/very high natural character, significant natural areas (regional, national or international significance)
For DIS Activities:		Activity status where compliance with ENGY-R21 and ENGY-R22 is not achieved: NC		
Where	e:			
The performance standards in ENGY-R21 or ENGY-R22 are complied				
	with.			

	Residential, future urban, rural lifestyle, settlement, commercial, Māori purpose, tourism, open space and natural open space zones, all Precincts except PREC3	Outstanding Natural Landscapes, Outstanding Natural Features, Outstanding Natural Character, Heritage buildings and structures, sites or areas of significance to Māori and significant archaeological sites.	Industrial, general rural and rural production zones and PREC3	Significant Natural Areas, Coastal Environment, Karst Overlay, Landscapes of High Amenity Value, High/Very High Natural Character		
ENGY-R12.	Biogas produced by anaerobic fermentation of waste					
	NC	PER: Outstanding natural landscapes NC: Outstanding natural features, outstanding natural character, heritage buildings and structures, sites or areas of significance to Māori, significant archaeological sites	PER: General rural, rural production and industrial zones NC: PREC3	PER: Coastal environment, karst overlay, high/very high natural character, landscapes of high amenity value NC: Significant natural area		
	For PER Activities: Where: 1. The waste must not exceed 4 m³ per day; and		Activity status where compliance with ENGY-R12.1 or ENGY-R2 is not achieved: RDIS			
			Activity status where compliance with ENGY-R21 and ENGY-R22 is not achieved: NC			
			Where the activity is RDIS, th restricted are:	e matters over which discretion is		

2.	The waste must not be stored and fermented within 250 m of the boundary	(a)	The effects at the time of construction; and
	of a residential, future urban, rural lifestyle, commercial, Māori purpose,	(b)	The potential for reverse sensitivity effects; and
	tourism, settlement, open space or natural open space zone; and	(c)	Actual or potential effects on the values associated with any
3.	The performance standards in ENGY-R21 and ENGY-R22 are complied with.		overlay or scheduled site or feature; and
		(d)	How the generation activity and any required structures or
			connections affect anticipated levels of amenity; and
		(e)	The volume and type of waste, and the potential for effects;
			and
		(f)	How the waste is managed; and
		(g)	Location of the waste and associated plant on the site; and
		(h)	The benefits obtained from using the waste.
		Note: I	Resource Consent from Waikato Regional Council or Manawatū-
		Whang	ganui Regional Council may be required.

	Residential, future urban, rural lifestyle, settlement, commercial, Māori purpose, tourism, open space and natural open space zones, all Precincts except PREC3 Outstanding Natural Landscapes, Outstanding Natural Character, Heritage buildings and structures, sites or areas of significance to Māori and significant archaeological sites.		Industrial, general rural and rural production zones and PREC3	Significant Natural Areas, Coastal Environment, Karst Overlay, Landscapes of High Amenity Value, High/Very High Natural Character
ENGY-R13.	Co-generation plants and waste t	o energy plants NC	DIS: General rural, rural	NC
			production and industrial zones NC: PREC3	
	For DIS Activities:		Activity status where complia is not achieved: NC	nce with ENGY-R21 or ENGY-R22

Where:	
1. The performance standards in ENGY-R21 or ENGY-R22 are complied with.	

ENGY- R14.	Residential, future urban, rural lifestyle, settlement, commercial, Māori purpose, tourism, open space and natural open space zones, all Precincts except PREC3 Coal Fired Electricity Generation and settlements of the settlement	Outstanding Natural Landscapes, Outstanding Natural Features, Outstanding Natural Character, Heritage buildings and structures, sites or areas of significance to Māori and significant archaeological sites. and energy generated from non-renewable	Industrial, general rural and rural production zones and PREC3 le sources not listed in Table 1	Significant Natural Areas, Coastal Environment, Karst Overlay, Landscapes of High Amenity Value, High/Very High Natural Character
	NC	NC: Outstanding natural landscapes, heritage buildings and structures, sites or areas of significance to Māori, significant archaeological sites PR: Outstanding natural features, outstanding natural character	NC	NC

	All zones and all precincts. All overlays, scheduled sites and features
ENGY-R15.	Erection of any new electricity lines and associated support structures, except where provided for as part of ENGY-R23
	Refer to the <u>network utilities chapter</u> .
ENGY-R16.	Non-compliance with the Te Kūiti Aerodrome Flightpath height restrictions shown on the Planning Maps
	PR

ENGY - Table 2 - Performance Standards

ENGY-R17. Structures, earthworks and removal of indigenous vegetation adjacent to water bodies, the open coast, Kawhia Harbour or a river in the coastal marine area

1. The rules in the <u>coastal environment chapter</u> and in the <u>natural character chapter</u> apply to activities adjacent to the coastline and water bodies.

ENGY-R18. Earthworks associated with an energy a
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- 1. In outstanding natural landscapes, outstanding natural features, outstanding natural character, karst overlay, landscapes of high amenity value, high/very high natural character NFL-R8 applies; and
- 2. In the coastal environment CE-R8 applies; and
- 3. In significant natural areas, significant archaeological sites, heritage buildings, and structures and sites and area of significance to Māori, earthworks associated with an energy activity are **DIS activities**; and
- 4. In all other situations, refer to the rules in the earthworks chapter.

ENGY-R19. One wind turbine per site outside of the industrial, general rural, rural production zones & PREC3

- Where located within or partly within a significant natural area, the rules for indigenous vegetation clearance contained in the <u>ecosystems and indigenous</u> biodiversity chapter are complied with; and
- The maximum height as measured from ground level, of any wind turbine (as measured from the top of the mast/support structure) must be no more than 2 m above the maximum height permitted in the relevant zone or overlay (as applicable), with a maximum rotor diameter of 2 m; and
- 3. The maximum diameter of any support structure must not exceed 200 mm; and
- 4. Where attached to a building, the structure must not protrude more than 1 m above the highest point of the roof; and
- 5. All parts of the wind turbine must comply with the minimum setback from road boundaries, minimum setback from internal boundaries and height in relation to boundary standards for the relevant zone; and

Matters over which discretion is restricted:

- (a) The scale of the wind turbine and the actual and potential effects on amenity; and
- (b) The location of the wind turbine within the site; and
- (c) The proximity of the wind turbine to sensitive activities; and
- (d) The proximity of the wind turbine to any significant natural areas and whether there are any effects associated with this proximity; and
- (e) The level of noise and any special noise characteristics, and the potential to affect sensitive activities; and
- (f) The benefits obtained from the use and development of renewable energy; and
- (g) The effects at the time of construction; and
- h) Actual or potential effects on the values associated with any overlay or scheduled site or feature; and

ENERGY

6.	Noise levels must be compliant with the recommended noise limits in
	NZS6808: 2010 "Acoustics – Wind farm noise".

(i) Any technical difficulties associated with locating a wind turbine on the site.

ENGY-R20.

Up to two wind turbines per holding within the industrial, general rural, rural production zones & PREC3

- Where located within or partly within a significant natural area, the rules for indigenous vegetation clearance contained in the <u>ecosystems and indigenous</u> <u>biodiversity chapter</u> are complied with; and
- The maximum height as measured from ground level, of any wind turbine (as measured from the top of the mast/support structure) must be no more than 5 m above the maximum height permitted in the relevant zone or overlay (as applicable), with a maximum rotor diameter of 2.5 m; and
- 3. Where attached to a building, the structure must not protrude more than 2 m above the highest point of the roof; and
- 4. All parts of the wind turbine must comply with the minimum setback from road boundaries, minimum setback from internal boundaries and height in relation to boundary standards for the relevant zone, except where ENGY-R20.6 applies; and
- Were the site adjoins a residential, future urban, rural lifestyle, commercial, Māori purpose, tourism, settlement, open space or natural open space zone, the minimum setback from internal boundaries must be at least 30 m; and
- 6. Noise levels must be compliant with the recommended noise limits in NZS6808:2010 "Acoustics Wind farm noise".

Matters over which discretion is restricted:

- (a) The scale of the wind turbine(s) and the actual and potential effects on amenity; and
- (b) The location of the wind turbine(s) within the site; and
- (c) The proximity of the wind turbine(s) to sensitive activities; and
- (d) The proximity of the wind turbine(s) to any significant natural areas and whether there are any effects associated with this proximity; and
- (e) The level of noise and any special noise characteristics, and the potential to affect sensitive activities; and
- (f) The benefits obtained from the use and development of renewable energy; and
- (g) The effects at the time of construction; and
- (h) Actual or potential effects on the values associated with any overlay or scheduled site or feature; and
- (i) Any technical difficulties associated with locating a wind turbine(s) on the site.

ENGY-R21. Emission of radiofrequency fields

The radiofrequency emission complies with NZS 27721:1999 Radiofrequency
 Fields – Maximum Exposure Levels – 3KHz to 300GHz.

Activity status where compliance is not achieved: NC

ENGY-R22. Emission of electric and magnetic fields

 The emission of electric and magnetic fields must not exceed the International Commission on Non-Ionising Radiation Protection Guidelines for limiting exposure to time varying electric and magnetic fields (1Hz-100kHz) (Health Physics, 2010, 99(6); 818-836) and recommendations from the World Health Organisation monograph Environmental Health Criteria (No 238, June 2007). Activity status where compliance is not achieved: NC

Rural Production Zone Only

ENGY-R23.

The operation, maintenance, repair and minor upgrade of existing hydro-electricity generation infrastructure identified on the Planning Maps as RPROZ-14 to RPROZ-17 including the demolition and removal of existing buildings and structures and the use of the surface of the water for hydroelectric activities.

Buildings and structures

- 1. An alteration or extension to any existing building must be no greater than 50 m² in gross floor area; and
- 2. Any new building must be no greater than 100 m² in gross floor area; and
- Structures must not exceed 10 m in height as measured from ground level. Where
 the structure is proposed to be erected on a dam or spillway structure, the
 maximum height must be measured from the top of the existing dam or spillway;
 and
- 4. Any new building or building extension must be setback 10 m from internal site boundaries; and
- 5. For Mokauiti Hydro Power Station (RPROZ-15), any new structure must be setback20 m from the boundary with the adjacent urupā; and
- 6. The total building coverage on a site must not exceed 30% of the net site area;

Matters over which discretion is restricted:

- (a) Visual effects including the bulk, location and scale of structures, signs, support poles or fences on adjoining properties and on rural character;
 and
- (b) Whether alternative options are proposed to preserve the amenity, character and values of the surrounding environment; and
- (c) Effects on the natural character of the river and its margins; and
- (d) For RPROZ-15, any actual and potential effects on the adjoining urupa; and
- (e) The extent of the activity and the ability to internalise adverse effects; and
- (f) The location, timing, design and density of earthworks and vegetation removal activities and any proposed rehabilitation measures; and

FNFRGV

and

- 7. New overhead and underground lines, operation, maintenance, upgrading and extension in length of lines conveying electricity and their support poles, at a voltage up to and including 110 kV are permitted provided that no support pole is greater than 25 m in height as measured from ground level; and
- 8. Any temporary building incidental to a construction or demolition project must be removed within two months of the completion of the project; and
- 9. Security fencing must be no higher than 3 m above ground level. Where a fence is proposed to be located on a dam or spillway structure, the maximum height must be measured from the top of the existing dam or spillway structure;

AND

Note: Where the building is listed in <u>SCHED1 - Heritage Buildings and Structures</u>, also see the <u>historic heritage chapter</u>.

Signs

- Signs must only relate to hydro-electricity generation activities undertaken on-site
 or health and safety or be for the direction and control of traffic or pedestrians;
 and
- 11. No individual sign may exceed 2 m², with the total area of signs per zone being no more than 8 m²; and
- 12. The maximum height of any freestanding sign must not exceed 10 m as measured from ground level; and
- 13. Signs must not be placed so that they block sight distances at entranceways and must be no closer than 20 m from an intersection; and
- 14. ENGY-R23.10 R23.13 apply in place of the provisions of the <u>signs chapter</u>;

Noise and light

- 15. Noise see NOISE-R12; and
- 16. Light- see LIGHT-R1;

AND

- (g) Measures taken during earthworks to maintain slope stability or prevent exacerbation of any pre-existing deep-seated land instability, methods of sediment retention and sediment runoff control to be adopted; and
- (h) Effects on riparian margins or areas of indigenous vegetation and the extent to which any proposed re-vegetation mitigates or offsets effects on identified significant natural areas and/or the natural character of rivers and their margins.

Earthworks and vegetation clearance

- 17. Earthworks must not exceed a total volume of 1,000 m³ in a single activity or in cumulative activities in any one calendar year, provided that this rule does not apply to earthworks incidental to an approved resource consent or building consent; and
- 18. No earthworks shall occur within 20 m of the urupā that adjoins Mokauiti Hydro Power Station (RPROZ-15); and
- ENGY-R23.17 R23.18 apply in place of the provisions of the <u>earthworks chapter</u>;
 and
- 20. No more than 50 m² of indigenous vegetation shall be cleared from any identified significant natural area across a rural production zone in any one calendar year. This rule applies in place of the provisions of the ecosystems and indigenous biodiversity chapter;

AND

High trip generating activities

21. See rule RPROZ-R17;

AND

Screening outdoor storage

22. Any outdoor storage area visible from an adjacent residential property or road must be screened from the adjacent residential property or road by solid walls or fences not less than 1.8 m in height or landscaping with planting that will, within two years of planting, reach a minimum height of 2 m and a minimum width of at least 2 m from any shared internal boundary or road boundary.