Overview

The focus of this chapter is on energy generation. Also see the national electricity and gas transmission chapter for activities undertaken near transmission structures and the network utilities chapter for activities undertaken by network utility operators. Energy is essential to the efficient functioning of our communities and economy and energy demand is growing. Currently oil and petrol fuel the majority of 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

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

ENGY-01. Increase the resilience of communities within the district by:

- 1. Enabling renewable electricity generation activities; 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 02.** Recognise and provide for the national significance of renewable electricity generation activities by:
 - Maintaining and/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 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-04.** Provide for authorised activities in the rural production zone by:

- 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

- **ENGY-P1.** Enable the ongoing operation, maintenance, repair and 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, environmental 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 adverse effects on 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;
 - 6. Effects on scheduled sites, features or overlays;
 - 7. The contribution of the activity to the District, Regional and National electricity needs and security of supply; and
 - 8. Effects on indigenous species including highly mobile species.

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

ENGY-P5. Provide for activities associated with the investigation, identification and assessment of potential sites and energy sources for renewable electricity generation, however adverse effects must be no more than minor in scale 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
- 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 avoid reverse sensitivity effects to the extent reasonably possible.
- **ENGY-P8.** Avoid development that does not 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.** Provide for 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 nonrenewable resources; or

- **ENGY-P13.** Provide for lawfully established 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-P14.** Ensure the scale and location of any expansion of an existing hydroelectricity generation activity 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 buildings are designed as far as practicable to not overshadow or overly dominate the wider surrounding area.

ENGY-P15.

- 1. Ensure consideration of the values, qualities and characteristics of overlays, scheduled sites and features when proposing new renewable electricity generation activities or undertaking significant upgrades to existing renewable electricity generation activities.
- 2. Provide for regionally significant infrastructure within overlay, scheduled site and feature where:
 - a. There is a demonstrated functional or operational need for the infrastructure to be located within the overlay, scheduled site and feature; and
 - b. It is demonstrated through an options assessment that locating within the overlay, scheduled site and feature is the best practicable option, having particular regard to the financial implications, social, cultural and environmental effects of the preferred option, compared to other alternative options.

Rules

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

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

Note: Where sites and areas of significance to Maori 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 <u>SCHED1</u>)

	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 renewable electricity generation activity.				
	Activity Status: PER Where: 1. Performance standards ENGY-S1 and ENGY-S2, and ENGY-S5 and ENGY-S6 are complied with.	Activity status where compliance is not achieved with ENGY-S1 or ENGY-S2: Refer to Table 2 Activity status where compliance is not achieved with ENGY-S5 or ENGY-S6: NC Note: Where the building is listed in <u>SCHED1 - Heritage Buildings and</u> <u>Structures</u> , also see the historic heritage chapter.			

ENGY - Table 1 - Activities Rules

	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 identified 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:	Activity status where compliance is not achieved with ENGY-S5 or ENGY-S6: NC			
	1. All of the performance standards in ENGY-S5 through to ENGY-S7 is complied with.	Activity status where compliance is not achieved with ENGY-S7: 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.	Temporary Generators				
	Activity Status: PER Where:	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-S5 or			
	 The temporary generator is associated with an energy activity and used for no longer than one (1) calendar month; or The temporary generator is used during outages of electricity supply. Compliance with performance standards in ENGY-S5 and ENGY-S6. 	ENGY-S6: 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.			

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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-R4.	Solar panels attached to an existing building.				
	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 RDIS where attached to buildings: Heritage buildings and structures 	PER	PER	
	Where the activity is RDIS, the matters over which discretion is restricted are:		Note: Refer to the Hapori whā	nui chapter for rules related to glare	
	(a) The location of the panels; an	d			
	(b) The size of the panels; and				
	(c) Actual or potential effects on historical heritage site or feat	the values associated with the scheduled ure.			

Residential, future urban, rural lifestyle, settlement,	Outstanding Natural Landscapes, Outstanding Natural Features,	Industrial, general rural and rural production	Significant Natural Areas, Coastal Environment, Karst
commercial, Māori purpose,	Outstanding Natural Character,	zones and PREC3	Overlay, Landscapes of High
tourism, open space and	Heritage buildings and structures,		Amenity Value, High/Very High
natural open space zones, all	sites or areas of significance to		Natural Character
Precincts except PREC3			

Proposed Waitomo District Plan Part 2 – District-Wide Matters – Energy, Infrastructure and Transport – Energy Chapter

		Māori and significant archaeological sites.		
ENGY-R5.	Freestanding solar panels up to and including 6 m ² in area per site			
	PER	RDIS	PER	PER
		significant natural area, the rules for contained in the ecosystems and indigenous I with.	restricted are:(a)The location and size of t(b)Actual or potential effectsoverlay or scheduled site	te matters over which discretion is the panels; and s on the values associated with any

	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 than 6 m ² and up to 25 m ² in area per site				
	RDIS	RDIS	PER	RDIS	
	For PER Activities: Where:		Activity status where complia achieved: RDIS Note: Refer to the Hapori whā	nce with ENGY-R6.1 is not	

1.		Where the activity is RDIS, the matters over which discre restricted are:	
	relevant zone are complied with.	(a) (b) (c)	The extent and effect of non-compliance with any relevant rule or standard and any relevant matters of discretion in the infringed rule(s); and The location and size of the panels; and Actual or potential effects on the values associated with any precinct, overlay or scheduled 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.	Industrial, general rura and rural production zones 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	o to and including 5kW of electricity per s	iite		
	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-S5 and ENGY-S6: NC Where the activity is RDIS, the matters over which discretion is restricted are: 		
			(a) The effects at the tir	me of construction; and	
			. ,	e generation of energy from using a	
			renewable resource;		
			.,	ffects on the values associated with any	
			,	site or feature; and	
			 (d) Effects on the natura and its margins; and 	al character of the coastline or water body	

(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 NATC-R2.

	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.	IGY-R8. Hydro electricity generation activities with an output of more than 5kW and up to 20kW of electricity per site				
	RDIS	RDIS: Outstanding natural landscapes DIS: Heritage buildings and structures, sites and areas of significance to Māori, significant archaeological sites, outstanding natural character NC: Outstanding natural features	RDIS	RDIS	
	For RDIS and DIS activities: Where: 1. The performance standards in EN	NGY-S5 and ENGY-S6 are complied with.	not achieved: NC Where the activity is RDIS, the restricted are: (a) The effects at the time of co	nce with ENGY-S5 and ENGY-S6 is ne matters over which discretion is onstruction; and eration of energy from using a	

	(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)	Actual or potential effects on the values associated with any
		overlay or scheduled site or feature; and
	(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 zones & 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 NC: Outstanding natural features	PER	PER		
-	Where: ac		Activity status where compliance with ENGY-R9.1 is not achieved: Refer ECO-R12			
			Activity status where compliance is not achieved with ENGY-S1 or ENGY-S2: Refer to Table 2			

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indigenous vegetation clearance contained in the ecosyst	the rules for Activity status where compliance with ENGY-S3 to ENGY-S4 is not achieved: RDIS
biodiversity chapter are complied with; and	(a) The matters of discretion associated with any performance standard which cannot be complied with in ENGY – Table 2.
2. All of the performance standards in Table 2 are complied	with. Activity status where compliance ENGY-S5 or ENGY-S6 is not
For DIS Activities:	achieved: NC
3. The performance standards in ENGY-S5 or ENGY-S6 are	complied with. 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.

	provided for in this rule, the relevant rule is ENGY-R11. Note: In PREC3 see the Te Kūiti Aerodrome flightpath height restrictions – ENGY-R16.						
es, , res, D	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: Significant natural area (local significance), Coastal					

	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-R10.	. Renewable energy exploration activities					
	RDIS	RDIS: Outstanding natural landscapes, outstanding natural character, heritage buildings and structures, sites or areas of significance to Māori, significant archaeological sites NC: Outstanding natural features	PER	RDIS: Significant natural area (local significance), Coastal environment, karst overlay, landscapes of high amenity value RDIS: Significant natural area (regional, national and international significance), high/very high natural character		
	For PER Activities: Where:		Activity status where compliance with ENGY-R10.1 through to ENGY-R10.4 is not achieved: RDIS			
			Activity status where compliance with ENGY-S5 and ENGY-S6 is not achieved: NC			

 Any which monitoring mast must be set back a distance of at least term (10) times the mast's height, as measured from ground level, from the boundary of the holding; and The performance standards in ENGY-S5 and ENGY-S6 are complied with. For RDIS Activities: Where: 	Actual or potential effects on the values associated with any overlay or scheduled site or feature; and The type, scale and form of any wind monitoring mast; and The location of the equipment and/or wind monitoring mast on the site; and The benefits from locating the equipment and/or wind monitoring mast in the proposed location; and Any technological constraints.
6. The performance standards in ENGY-S5 and ENGY-S6 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-R11.	New renewable electricity generation activities including community scale renewable electricity activities not provided for elsewhere in Table 1					
	DIS	NC: Outstanding natural landscapes, heritage buildings and structures, sites or areas of significance to Māori, significant archaeological sites	DIS: General rural, industrial, rural production zones and PREC3	DIS: Karst overlay, landscapes of high amenity value, significant natural areas (local significance), coastal environment.		
				NC: High/very high natural character, significant natural		

	PR: Outstanding natural features, outstanding natural character		areas (regional, national or international significance)	
For DIS Activities: Where:		Activity status where complia not achieved: NC	ance with ENGY-S5 and ENGY-S6 is	(
	n ENGY-S5 or ENGY-S6 are complied			
Residential, future urban, rural lifestyle, settlement,	Outstanding Natural Landscapes, Outstanding Natural Features,	Industrial, general rural and rural production	Significant Natural Areas, Coastal Environment, Karst	

	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 fer	mentation 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 2. The waste must not be stored and fermented within 250 m of the boundary of a residential, future urban, rural lifestyle, commercial, Māori purpose, 		Activity status where compliance with ENGY-R12.1 or ENGY- R12.2 is not achieved: RDIS Activity status where compliance with ENGY-S5 and ENGY-S6 is not achieved: NC Where the activity is RDIS, the matters over which discretion is restricted are:	
	tourism, settlement, open space	,, , , , , , , ,	(a) The effects at the time(b) The potential for reverse	of construction; and se sensitivity effects; and

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(c)	c)	Actual or potential effects on the values associated with any
		overlay or scheduled site or feature; and
(d)	d)	How the generation activity and any required structures or
		connections affect anticipated levels of amenity; and
(e)	e)	The volume and type of waste, and the potential for effects;
		and
(f)	f)	How the waste is managed; and
(g)	g)	Location of the waste and associated plant on the site; and
(h)	h)	The benefits obtained from using the waste.
Not	ote: Re	esource Consent from Waikato Regional Council or Manawatū-
Wh	hanga	nui 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 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-R13.	Co-generation plants and waste t	o energy plants		
	NC	NC	DIS: General rural, rural production and industrial zones NC: PREC3	NC
	For DIS Activities:		Activity status where complia not achieved: NC	nce with ENGY-S5 or ENGY-S6 is
	Where:			
	1. The performance standards in E	ENGY-S5 or ENGY-S6 are complied with.		

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ENGY- R14.	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
	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-S7			
	Refer to the network utilities chapter.			
ENGY-R16.	Non-compliance with the Te Kūiti Aerodrome Flightpath height restrictions shown on the Planning Maps			
	PR			

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Proposed Waitomo District Plan Part 2 – District-Wide Matters – Energy, Infrastructure and Transport – Energy Chapter

ENGY - Table 2 – Performance Standards

ENGY-S1.	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 coastal environment chapter and in the natural character chapter apply to activities adjacent to the coastline and water bodies.

NGY-S2.		Earthworks associated with an energy activity					
1. 2. 3. 4. 5.	 natural character NFL-R8 applies; and In the coastal environment CE-R8 applies; and 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; In natural hazard areas within the coastal environment, NH-R6 applies; and 						
1 GY-9		One wind turbine per site outside of the industrial, general rural, r cated within or partly within a significant natural area, the rules for	ural production zones & PREC3 Matters over which discretion is restricted:				
2. 3. 4. 5.	where located within or party within a significant natural area, the rules for indigenous vegetation clearance contained in the ecosystems and indigenous 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 The maximum diameter of any support structure must not exceed 200 mm; and Where attached to a building, the structure must not protrude more than 1 m above the highest point of the roof; and 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		 (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 				

Proposed Waitomo District Plan Part 2 – District-Wide Matters – Energy, Infrastructure and Transport – Energy Chapter

 Noise levels must be compliant with the recommended noise limits in NZS6808:2010 "Acoustics – Wind farm noise". 			Actual or potential effects on the values associated with any overlay or scheduled site or feature; and Any technical difficulties associated with locating a wind turbine on the site.	
ENGY-S4.	Up to two wind turbines per holding within the industrial, general	rural, rural production zones & PREC3		
 indigenou biodivers 2. The maxi measured above the applicable 3. Where at above the 4. All parts of boundarie boundarie 5. Were the purpose, minimum 6. Noise lev 	cated within or partly within a significant natural area, the rules for us vegetation clearance contained in the ecosystems and indigenous sity chapter are complied with; and imum height as measured from ground level, of any wind turbine (as d from the top of the mast/support structure) must be no more than 5 m e maximum height permitted in the relevant zone or overlay (as e), with a maximum rotor diameter of 2.5 m; and ttached to a building, the structure must not protrude more than 2 m e highest point of the roof; and of the wind turbine must comply with the minimum setback from road es, minimum setback from internal boundaries and height in relation to y standards for the relevant zone, except where ENGY-S4.6 applies; and e site adjoins a residential, future urban, rural lifestyle, commercial, Māori tourism, settlement, open space or natural open space zone, the n setback from internal boundaries must be at least 30 m; and yels must be compliant with the recommended noise limits in <u>3:2010 "Acoustics – Wind farm noise"</u> .	Ma (a) (b) (c) (d) (e) (f) (g) (h) (i)	The scale of the wind turbine(s) and the actual and potential effects on amenity; and The location of the wind turbine(s) within the site; and The proximity of the wind turbine(s) to sensitive activities; and The proximity of the wind turbine(s) to any significant natural areas and whether there are any effects associated with this proximity; and The level of noise and any special noise characteristics, and the potential to affect sensitive activities; and The benefits obtained from the use and development of renewable energy; and The effects at the time of construction; and Actual or potential effects on the values associated with any overlay or scheduled site or feature; and Any technical difficulties associated with locating a wind turbine(s) on the site.	

ENGY-S5. Emission of radiofrequency fields					
1.	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-S6. 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

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

ENGY-S7.

- 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 m^2 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
- For Mokauiti Hydro Power Station (RPROZ-15), any new structure must be setback
 20 m from the boundary with the adjacent urupā; and
- The total building coverage on a site must not exceed 30% of the net site area; 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

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
- (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

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
- 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 historic heritage chapter.

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 $m^2,$ with the total area of signs per site being no more than 8 $m^2;$ and
- 12. The maximum height of any freestanding sign must not exceed 10 m as measured from ground level; and
- 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-S7.10 S7.13 apply in place of the provisions of the signs chapter;

AND

Noise and light

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

AND

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
 - Proposed Waitomo District Plan Part 2 – District-Wide Matters – Energy, Infrastructure and Transport – Energy Chapter

(h) Effects on riparian margins or areas of indigenous vegetation and the

rivers and their margins.

extent to which any proposed re-vegetation mitigates or offsets effects

on identified significant natural areas and/or the natural character of

apply to earthworks incidental to an approved resource consent or building consent; and

- No earthworks shall occur within 20 m of the urupā that adjoins Mokauiti Hydro Power Station (RPROZ-15); and
- 19. ENGY-S7.17 S7.18 apply in place of the provisions of the earthworks chapter; and
- 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 <u>RPROZ-R17</u>;

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.