



ENERGY - POLICY

EG2.1 Introduction

New Zealand has a long history of providing electricity through both renewable and non-renewable sources, with the use of hydro-electric generation and recently the introduction of wind to coal combustion and natural gas production.

The Ruapehu District has, and will continue to contribute significantly to meeting national and regional energy demands. The District houses part of the Tongariro Power Scheme and has coal reserves that were utilised throughout the 20th century. It became uneconomic to continue mining in the 1960s and most of the coal mines closed down. However, coal mining to fuel energy generation could return to the District should extraction technology progress and economic conditions become favourable and should not be ruled out by planning provisions.

The future of renewable electricity generation within the Ruapehu District is strong. The Tongariro Power Scheme will continue to make a significant contribution to meeting national demand. Additionally, the District has an identified wind resource that is suited to energy generation and a number of waterways where opportunities for additional hydroelectric generation exist, particularly small scale hydro generation activities of less than 10MW. These, and other renewable electricity generation opportunities, have the potential to provide wider environmental benefits through reducing greenhouse gas emissions and providing generation from “reversible” technology, reducing our dependency on imported energy resources – such as oil and coal, security of and the diversification of our energy sources, as well as social and economic benefits and should be recognised and provided for within the District Plan.

Council notes, however, that all forms of energy generation also have the potential to generate adverse environmental effects including on ecology and habitat, outstanding landforms and natural features, rural amenity, district and national infrastructure and on the social and cultural environment of the District, if not appropriately sited. For this reason, the District Plan requires consent for larger commercial scale energy generation facilities so that thorough assessments of the environmental effects of such facilities can be undertaken.

The National Policy Statement on Renewable Electricity Generation (NPSREG) came into effect on 13 May 2011 and therefore needs to be considered. The NPSREG sets out an objective and policies to enable the sustainable management of renewable electricity generation under the Resource Management Act 1991.

The NPSREG was developed in accordance with the New Zealand Energy Strategy which was released by central Government in October 2007. The Energy Strategy states that the major energy challenges facing New Zealand are the need to respond to the risks of climate change by reducing greenhouse gas emissions caused by the production and use of energy and the need to deliver clean, secure, affordable energy while treating the environment responsibly. The Strategy also sets out central Government's goal that 90% of electricity generated in New Zealand should be derived from renewable energy sources by the year 2025.

EG2.2 Issue

- (a) Future subdivision and land use can provide opportunities for increased energy efficiency.

**EG2.2.1 Objective**

- (a) Energy efficiency is encouraged through the design and layout of subdivision.

EG2.2.2 Policy

- (a) Energy efficiency and conservation measures should be incorporated into the design of subdivision and land development so that buildings can be orientated to take advantage of the sun.

EG2.2.3 Explanation of Policies

Section 7(ba) of the Resource Management Act 1991 requires regard to be had to the efficiency of the end use of energy. In this situation, the design and layout of subdivision can play a major role in this end use. If properties are appropriately orientated towards the sun, homes will be warmer, drier and less expensive to heat. This then has an impact on the demand for energy at the local level. A reduced demand for energy will overall reduce demand on non-renewable resources which currently provide approximately 35% of New Zealand's energy and, in turn, would make development more environmentally friendly.

EG2.3 Issue

- (a) Renewable energy resources are under-utilised, resulting in lost opportunities of environmental benefits.

EG2.3.1 Objective

- (a) To encourage the use of renewable energy resources within the District through appropriately sited and designed energy generation facilities, activities, including the connection of these activities to the National Grid or a distribution system while ensuring any significant adverse effects are avoided, remedied or mitigated.

EG2.3.2 Policies

- (a) The encouragement of developing and using alternative sources of energy that are renewable, such as solar, hydro and wind power and biomass production, of varying scales in domestic and commercial situations.
- (b) To recognise and take into account the benefits to be derived from the use and development of renewable energy resources:
 - (i) When considering potential adverse effects; and
 - (ii) In relation to climate change, national energy production and social and economic wellbeing.
- (c) To recognise the practical constraints associated with the development, operation, maintenance and upgrading of renewable electricity generation activities including location, and functional and technical practicalities.
- (d) To have particular regard to the benefits of enabling the increased generation capacity and efficiency of existing renewable electricity generation facilities.



EG2.3.3 Explanation of Policies

The Resource Management Act requires the Plan to have particular regard to the benefits to be derived from the use and development of renewable energy. Renewable energy has the potential to provide security of supply with the long term future of non-renewable resources not being sustainable. Renewable energy can also supply greater reliability through diversification of supply as well as reducing greenhouse gas emissions. There is a trend towards less reliance on traditional forms of energy and continued investigation into non traditional renewable energy sources such as solar, wind, biofuel, wave and tidal, electricity generation from waste gas, as well as small scale hydro and geothermal energy production. This Plan recognises that the production and use of renewable energy resources will have positive effects on the environment and community.

There is potential for the use of renewable resources to have some adverse impact on the other resources, particularly landscape when wind energy is to be harnessed. The benefits derived from the use and development of renewable energy must be taken into account when considering potential adverse impacts.

Recognition must be given to the locational, functional and technical constraints of renewable electricity generation facilities when development proposals are assessed and conditions of consent are imposed. This recognition includes the need for renewable electricity generation facilities to be located where such resources are available and the location of existing structures and infrastructure.

EG2.4 Issue

- (a) Non-renewable energy may need to be utilised to maintain social and economic wellbeing, while renewable energy sources are developed.

EG2.4.1 Objective

- (a) Non-renewable energy resources can be utilised, where necessary, to maintain social and economic wellbeing, while ensuring adverse environmental impacts are avoided, remedied or mitigated.

EG2.4.2 Policy

- (a) The non-renewable resources of the District should be recognised for their potential contribution to national energy production.

EG2.4.3 Explanation of Policies

It is important to recognise the ongoing availability of non-renewable energy within the District. Energy production within the District has largely been based on coal, of which the District has significant reserves which could, in the future, be more economic to extract. These reserves have the potential to make an important contribution to the national and regional economic wellbeing, which is not about to be replaced by renewable energy sources in the short to medium term.