



SECTION 32 REPORT Energy

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1 Executive Summary

Energy activities have been part of the New Plymouth environment, community and economy for a number of decades, with oil and gas activities in particular being a significant contributor to the energy resource supply at a national level. Energy activities can also have the potential to generate a range of adverse effects if not carefully managed.

Over the life of the Operative District Plan, Council has experienced issues in the implementation of the Plan and how it manages energy use and development, including:

- The functional and technical constraints of energy activities and how this is balanced against adverse effects on the environment.
- The potential amenity impacts on special features, rural character and established rural communities.
- The need to manage petroleum exploration and production activities through the resource consent process given the differences in the scale and magnitude of their effects, including cumulative effects.
- The potential for reverse sensitivity issues connected with existing production facilities.
- Opportunities for renewable electricity generation at small and large scales, and the emergence of new technologies exploring alternative sources of energy.

The above issues, coupled with the recent changes to the South Taranaki District Plan and the desire for greater regional consistency between District Plans in Taranaki, has resulted in the New Plymouth District Council reconsidering its current approach to managing energy resource use and development in the District.

This involves the introduction of proposed policy framework that both recognises the benefits of the existing energy activities and future potential energy activities and the need for potential adverse effects to be appropriately managed. Zone and other district-wide provisions such as Hazardous Substances, Transport and Connectivity and Noise also apply to Energy activities to ensure that these matters (and potential effects) are taken into account in considering energy resource use and development.

Importantly, the energy rule framework manages the location of energy activities within or adjacent to scheduled features and the coastal environment. It also requires that new sensitive activities are appropriately located and separated from existing energy activities to minimise incompatibility and/or reverse sensitivity effects.

2 Introduction and Purpose

This report contains a section 32 evaluation of the objectives, policies and methods relating to the Energy section of the Proposed New Plymouth District Plan. It should also be read in conjunction with the section 32 overview report which contains further information and an evaluation relating to the overall approach and direction of the District Plan review and Proposed District Plan.

The term 'energy resources' refers to natural and physical resources which are used to produce or generate fuel and electricity. The use of these resources involves the

exploration, development and production of non-renewable energy (also referred to as petroleum energy) resources such as oil, gas and coal, as well as renewable energy resources such as wind, hydro, solar, geothermal, biomass, tidal, ocean current and wave energy sources. However, if inappropriately managed such uses can result in adverse effects on the environment being experienced, particularly on the amenity values enjoyed by surrounding landowners (e.g. traffic, noise, and visual amenity).

To inform consideration of the proposed provisions the report sets out the statutory and policy context for energy, the key resource management issues, consultation undertaken and the approach to evaluating the proposed provisions relating to this topic. It also includes a review of the existing plan provisions and an evaluation of alternative methods to achieve the purpose of the Resource Management Act 1991 (RMA) in relation to energy matters.

Although this report covers the district-wide provisions in the Energy Section other sections of the proposed District Plan of relevance to the energy topic include:

- Hazardous Substances.
- Rural Production Zone.
- Major Facilities Zone.
- Noise.
- Transport and Connectivity.

Given this overlap it may also be important to consider the proposed provisions of these sections, with the associated evaluation set out in the Section 32 reports specific to each topic.

3 Statutory and Policy Context

3.1 Resource Management Act

The RMA sets out the functions of territorial authorities in Section 31. The key function for the district council is the integrated management of the use, development, or protection of land and associated natural and physical resources of the district. When referring to "natural and physical resources" it is important to recognise that the RMA includes land, water, air, soil, minerals, and energy, all forms of plants and animals (whether indigenous to New Zealand or introduced), and all structures.

Section 5 sets out the purpose of the RMA, which is to promote sustainable management of natural and physical resources, and is explained more in Section 5(2):

In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety.

Section 6 of the RMA specifically requires that the Council recognise and provide for matters of national importance. One of the district's most iconic outstanding natural features and landscapes is Mount Taranaki. A number of other important features and landscapes are present in our coastal environment, including the coastal extent from Waihi Stream to Pariokariwa Point; and Paritutu, Nga Motu/Sugar Loaf Islands and Tapuae. In addition, archaeological and heritage sites and indigenous vegetation are

also present in the District, with wāhi taonga/sites of significance to Māori and archaeological sites particularly widespread. Section 6 matters of national importance relevant to the proposed energy provisions are:

- (a) *the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development*
- (b) *the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development*
- (c) *the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:*
- (d) *the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers*
- (e) *the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga*
- (f) *the protection of historic heritage from inappropriate subdivision, use, and development*
- (g) *the protection of protected customary rights.*

Section 7 of the Act requires the Council to have particular regard to the following matters:

- (b) *the efficient use and development of natural and physical resources:*
 - (ba) *the efficiency of the end use of energy*
 - (c) *the maintenance and enhancement of amenity values*
 - (f) *maintenance and enhancement of the quality of the environment*
 - (j) *the benefits to be derived from the use and development of renewable energy.*

All of the above matters are relevant when considering energy issues and ensuring that provision is made for the ongoing development and operation of petroleum production and renewable electricity generation activities, while also managing their adverse effects.

Section 8 of the RMA requires the Council to take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi). Tangata whenua, through iwi authorities have been consulted as part of the District Plan review process. This feedback has informed the section 32 evaluation, and the obligation to make informed decisions based on that consultation is noted.

3.2 Statutory Planning Documents

When considering Energy matters, the following National Policy Statements and National Environmental Standards are relevant.

3.2.1 National Policy Statement for Renewable Electricity Generation 2011 (NPSREG)

The NPSREG identifies renewable electricity generation activities as a matter of national importance and sets out one Objective and 14 Policies. The policy direction is to be given effect to in regional and district plans. In summary, the direction for the Energy provisions are:

- Policies A & B: To ensure the national, regional and local benefits of renewable electricity generation are recognised and provided for, and acknowledging NZ's target for generation from renewable sources and the requirement of the significant developments to meet this target.
- Policy C1: To acknowledge the range of constraints to renewable electricity development projects and that these are factored into decision making.
- Policy C2: To have regard to offsetting measures or environmental compensation.
- Policy D: To manage reverse sensitivity effects on existing renewable electricity generation activities.
- Policies E1 – E4: To provide for the development, operation, maintenance, and upgrading of new and existing renewable electricity generation activities, where applicable to energy resources in the district.
- Policy F: To provide for small-scale renewable electricity generation activities.
- Policy G: To provide for the identification and assessment of potential sites and energy sources.

3.2.2 New Zealand Coastal Policy Statement 2010 (NZCPS)

The NZCPS outlines the policies for achieving the purpose of the Act in relation to the coastal environment. Council must give effect to the NZCPS in the District Plan, with the policies most relevant to the Energy section being:

- Policy 1 Extent and characteristics of the coastal environment.
- Policy 3 Precautionary approach.
- Policy 4 Integration.
- Policy 6 Activities in the coastal environment.
- Policy 13 Preservation of natural character.
- Policy 14 Restoration of natural character.
- Policy 15 Natural features and natural landscapes.
- Policy 18 Public open space.
- Policy 25 Subdivision, use and development in areas of coastal hazard risk.

3.2.3 Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (NESCS)

The NESCS is a relevant consideration in Energy resource use, in particular, when such activities cease operating and new land use activities are proposed.

3.3 Regional Policy Statement

Under Section 75(3)(c) of the RMA, the District Plan must give effect to the Regional Policy Statement. The Taranaki Regional Policy Statement (RPS) discusses use and development of resources, as well as Energy matters. It sets a number of objectives to direct how the region will respond to these matters. Relevant provisions include:

Use and development of resources

UDR OBJECTIVE 1

To recognise the role of resource use and development in the Taranaki region and its contribution to enabling people and communities to provide for their social, economic and cultural wellbeing.

UDR POLICY 1

Recognition will be given in resource management processes to the role of resource use and development in the Taranaki region and its contribution to enabling people and communities to provide for their economic, social and cultural wellbeing.

The RPS also states that territorial authorities may wish to consider the following method:

UDR METH 2 Implement as appropriate all methods of implementation listed in this Regional Policy Statement for territorial authorities to consider.

Energy

ENE OBJECTIVE 1

To promote the exploration, development, production, transmission and distribution of energy to meet the energy supply needs of the region and New Zealand in a manner that avoids, remedies or mitigates adverse effects on the environment.

ENE OBJECTIVE 2

To promote the use and development of renewable sources of energy in a manner that avoids, remedies or mitigates adverse effects on the environment.

ENE OBJECTIVE 3

To increase efficiency in the exploration, development use, production, transmission and distribution of energy.

ENE POLICY 1 Energy supply

Provision will be made for the exploration, development, production, transmission and distribution of energy in Taranaki to enable people and communities access to an adequate supply of energy and thereby to provide for their economic and social wellbeing and for their health and safety.

The RPS also states that territorial authorities may wish to consider the following method:

ENE METH 10

Include provisions in district plans that make appropriate provision for the exploration, development, production, transmission and distribution of energy.

Other relevant Sections of the RPS include Managing the Effects of Hazardous Substances and Contaminated Sites, Air and Climate Change.

Taranaki Regional Council has also prepared four Regional Plans which give effect to the above provisions, namely:

- Regional Air Quality Plan for Taranaki (1997).
- Regional Coastal Plan for Taranaki (1997).
- Regional Fresh Water Plan for Taranaki (2001).
- Regional Soil Plan for Taranaki (2001).

3.4 Iwi Environmental Management Plans

For the purposes of the District Plan Review, Iwi Environmental Management Plans must be taken into account under Section 74(2A) of the RMA. The following iwi management plans are relevant:

3.4.1 Taiao, Taiora: An Iwi Environmental Management Plan for the Taranaki Rohe (2018) (lodged with Council) which includes:

- An identified issue: "oil and gas exploration and extraction removes finite resources from the whenua. These activities pose significant risk of pollution of the land and groundwater. The intended use of these resources directly leads to increased greenhouse gas emissions and climate change".
- Objectives that the mauri of Papatūānuku in the Taranaki Iwi rohe will be protected, care for and restored; The whenua will be cared for by Taranaki Iwi and others for mutual, reciprocal benefit for the whole community, and that Industrial discharges that reduce the quality of the air will be reduced, so that all air sheds have acceptable levels of pollutants which are able to sustain the health and wellbeing of people in our rohe.
- Policies for decision-makers to consider the effects of an activity on the mauri of Papatūānuku.
- Policies that Taranaki iwi will not support any new prospecting, exploration and extraction of minerals, coal, gas or petroleum within its rohe that is likely to lead to the degradation of the environment; and will advocate against the extraction and use of fossil fuels.

3.4.2 Tai Whenua, Tai Tangata, Tai Ao, Te Atiawa Iwi Environmental Management Plan (2019) (in draft, not yet lodged with Council) which includes:

- An issue of "onshore oil and gas exploration can generate adverse effects on the landscape, environment and cultural values".
- An Objective to protect the mauri of our ancestral lands and wāhi tapu/wāhi taonga, urupā and sites of significance to Maori.
- An Objective to transfer petroleum and mineral ownership rights to Te Atiawa within its rohe and provide for involvement of Te Atiawa in decision making relating to the release of future petroleum and minerals permits.
- Policies to require land use activities to occur in a manner that is consistent with land capability, natural resource capacity, availability and limits, and the overall capacity of catchments.
- Policies to oppose petroleum and minerals activities that affect and contribute towards climate change and global warming.
- Policies to *Require that all applications relating to petroleum and mineral activities avoid:*
 - Damage to wāhi tapu/wāhi taonga, urupā and sites of significance to Māori;
 - Damage to forest ecosystems and biodiversity;
 - Contamination of waterways; and
 - Damage to culturally important landscapes.
- A Policy to require that all structures both above and below ground are decommissioned and removed, provided the environmental impact is acceptable, and sites are restored following the completion of petroleum and mineral activities.

- Policies to oppose any application for onshore petroleum activities within our Te Atiawa rohe which use hydraulic fracturing, and Oppose any application for seismic survey activity for onshore petroleum activities on or near wāhi tapu/wāhi taonga, urupā and sites of significance to Māori to Te Atiawa.

3.4.3 The Maniapoto Iwi Environmental Management Plan (Ko Tā Maniapoto Mahere Taiao) (2016) (under revision, not yet lodged with Council), which includes:

- An issue regarding the heavy reliance on imported fossil fuels, and that the future shortages will impact on the health and wellbeing of Maniapoto and the economy unless alternative sustainable methods are implemented. Additionally there are concerns at the environmental impact on harvesting and utilising fossil fuels.
- An issue that states the engagement with the people of Maniapoto for energy generation and transmission projects has historically been inadequate leading to the inability for Maniapoto to exercise kaitiakitanga and rangatiratanga to protect, enhance and use cultural heritage and resources important to Maniapoto.
- Objectives to ensure that electricity generation, transmission and distribution benefits Maniapoto and protects the mauri of the environment, and that electricity generation, transmission and distribution within Maniapoto rohe does not result in negative effects on the mauri of the environment. These policies are supported by a range of 'actions' (Section 22.3), including to:
 - Ensure energy generation and infrastructure is appropriately separated from human sites of occupation/habitation; and
 - Ensure energy generation and transmission infrastructure is developed in a manner otherwise consistent with this Plan.

3.4.4 Ngati Mutunga Iwi Environmental Management Plan (2014 update) (under revision, not yet lodged with Council), which includes a section on Energy (page 19), which includes:

- An Objective to provide for development while managing the adverse effects of the generation and use of energy.
- Policies to encourage the development of renewable energy in preference to non-renewable energy, and adopt alternative energy sources provided they do not have an adverse effect on indigenous biodiversity or cultural values.
- Policies relating to involvement of Ngati Mutunga on new technologies and development programmes for reduction in greenhouse gas emissions and responding to climate change.

The direction in these Iwi Management Plans, in relation to energy, has been taken into account in the evaluation below.

3.5 Other Legislation and Policy Documents

3.5.1 Legislation and regulations

The legislation and regulations listed below are particularly relevant to the oil and gas industry and have been taken into account in reviewing and preparing the Energy provisions:

- The Hazardous Substances and New Organisms (HSNO) Act 1996.
- Health and Safety at Work Act 2015 (HSWA).

- Health and Safety at Work (Petroleum Exploration and Extraction) Regulations 2016.
- Crown Minerals Act 1991.

3.5.2 Proposed South Taranaki District Plan 2015

Notified on 15 August 2015, the Proposed South Taranaki District Plan applies an overall zoning based approach with overlays for managing specific resources or areas. This planning approach is a continuation of the approach used in the Operative South Taranaki District Plan.

With regard to Energy activities, the well-established large-scale petroleum production activities in South Taranaki are zoned Rural Industrial (i.e. Kapuni Production Station, Kapuni Gas Treatment Plant and Maui Production Station). Sites zoned Rural Industrial are generally located in a rural context with predominantly primary production activities surrounding them. The purpose of the Rural Industrial Zone is to provide for the ongoing use and development of these sites for the existing activities contained within this zone. Therefore, the rules permit the ongoing use and development of these activities, subject to performance standards that are applied to manage the activities' potential effects.

Other sites which use Energy based resources (including larger scale wind resource use such as the proposed Waverly Wind Farm) in the South Taranaki District are managed under the general Rural zoning.

The proposed rules in the Rural Industrial and Rural Zones are specifically designed to cater for Energy related activities. By contrast, petroleum activities and large scale renewable electricity generation activities in urban zones such as Residential, Township, Commercial and Industrial are treated more restrictively. For example, in the Rural Zone, a new petroleum production activity is a discretionary activity, while in the urban zones it is a non-complying activity.

The Proposed Plan also applies standalone, district-wide Energy and Hazardous Substances chapters and related provisions to specifically recognise these activities and manage any associated adverse effects. In terms of Energy, this represents a change from the Operative Plan which contains no explicit Objectives or Policies relating to energy matters.

The decision version of the Proposed Plan was notified 5 November 2016, with decisions relating to the Energy and Hazardous Substances chapters appealed by Taranaki Energy Watch (TEW).

The TEW appeal focuses on the framework for managing the effects and risks of petroleum activities on human health and the environment, and is reflected in the following amendments TEW has sought to the rule framework:

- Jurisdiction in managing hazardous substances.
- Managing risks to new sensitive activities from existing petroleum exploration and petroleum production.
- Managing specific activities associated with petroleum exploration and petroleum production.

The Proposed South Taranaki District Plan and subsequent appeal (outcome) are particularly relevant to the New Plymouth District Plan Review. Primarily for the sake of regional consistency, the local authorities in Taranaki have attempted, as far as practicable, to align the Energy provisions in their respective plans, with the Proposed New Plymouth District Plan adopting a similar framework to that of the Proposed South Taranaki District Plan. New Plymouth District Council, together with Stratford District Council (and others), are a party to the TEW appeal and have attended mediation discussions.

The Environment Court Hearing was held 19 March 2018, with New Plymouth District Council and Stratford District Council producing a joint legal submission in support of South Taranaki District Council. At the time of preparing this s32 report, the Environment Court's final decision was still pending.

3.5.3 Drilling for oil and gas in New Zealand: Environmental oversight and regulation, a report by the Parliamentary Commissioner for the Environment (2014)

On 4 June 2014, the Parliamentary Commissioner released her report on hydraulic fracturing, or fracking, entitled *Drilling for oil and gas in New Zealand: Environmental oversight and regulation*. While territorial authorities are not explicitly required to respond to the Commissioner's report a range of plan deficiencies requiring attention were highlighted, including:

- The lack of consideration of cumulative effects (page 36).
- The permissive nature of plan rules and standards (i.e. wells being permitted or controlled activities in regional plans when the Commissioner considers they should be discretionary (page 77)).
- Inconsistency between plans; i.e. noise standards (pages 33 & 34); hazardous substances regulations (page 54).
- Wanting public trust and confidence in environmental regulation (pages 69 & 70).
- Complexity in managing hazardous substances.

These recommendations have been considered in relation to Energy matters in the Proposed Plan, as well as for other relevant matters (i.e. noise and hazardous substances) connected with the wider District Plan review.

3.5.4 Managing Environmental Effects of Onshore Petroleum Development Activities (Including Hydraulic Fracking): Guidelines for Local Government, Ministry for the Environment (2014)

In March 2014 the Ministry for the Environment released guidelines on managing the environmental effects of petroleum development activities. These guidelines clarify the regulatory roles of onshore hydraulic fracturing-related activities across central and local government, outline the life-cycle of a well, canvasses key environmental issues and effects management, and outlines the Resource Management Act policy framework with examples from various local government authorities. While the guidelines discuss good practice for environmental management, they do not explore what good practice policies and provisions look like for District Plans.

This document has been considered in preparing the Energy chapter provisions.

3.5.5 Regional Economic Development

Make Way for Taranaki project (Tapuae Roa) is a culmination of work undertaken by the district councils and regional council of Taranaki in partnership with Ngā Iwi o Taranaki. It is designed to feed into the Long Term Plans of all the councils in the region, influence private sector investment decision-making and contribute to the future activities and investment decisions of Ngā Iwi o Taranaki.

This has culminated in the production of the *Taranaki Regional Economic Development Strategy August 2017*. Key things to note in the document are:

- Oil and Gas is recognised as a “Foundation Sector”.
- The oil and gas portion of the energy sector is one that is likely to be in decline and growth will be incremental. It suggests the need to move beyond extracting oil, towards an economy that is broader in its focus, and built on the talent and skills of its residents.
- Importantly, the sector should not be forsaken and it will continue to be important and underpin the Taranaki economy for the foreseeable future.

Other documents which have highlighted the energy sector in Taranaki are:

- *The Wealth Beneath Our Feet. The Next Steps. Venture Taranaki, March 2015.* Measures the economic value of oil and gas to Taranaki (and New Zealand). It describes the oil and gas industry, discusses new exploration opportunities, public awareness and so the regulatory framework under which it operates.
- *Taranaki Industry Projections 2013 – 2036 (2007)*
Provides an independent assessment of the Taranaki economy and projections of regional employment and GDP over the coming decades. Key projections relevant to the Energy matters relate to projected employment growth in the oil, gas and energy industry (and related industry).

3.6 Local Policies, Plans and Strategies

3.6.1 New Plymouth District Strategic Framework

The vision for the New Plymouth Strategic Framework is Building a Lifestyle capital (He Whakatutu Haupu Rawa Hei Ahua Noho). The community outcomes this will achieve are: Putting people first (Aroha kit e Tangata), Caring for our place (Manaaki whenua, manaaki tangata, haere whakamua) and Supporting a prosperous community (Awhi mai, Wahi atu, tatou katoa).

3.6.2 The New Plymouth District Blueprint

The New Plymouth District Blueprint, first adopted in June 2015, is a 30-year spatial plan that provides eight key directions for Council. The following key directions are relevant to associated high-level initiatives in the Blueprint relevant to the Energy Section are:

- Economy – secure and strengthen the rural economy, industry, the port and airport.
Our economy has a strong agricultural base and a nationally significant oil and gas sector. It also has a fast-growing poultry sector with significant expansion likely in the short term. Protecting and strengthening these industries will be important for ongoing economic growth and the subsequent benefits for the community. The Council’s role is through its funding of economic development initiatives (Venture Taranaki Trust) to help drive economic activity in the region. The Council can also

support industry through appropriate infrastructure provision and a pragmatic solutions-focused District Plan and regulatory framework.

Other relevant key directions in the document are:

- Communities – strengthen and connect local communities.
- Citizens – enable engaged and resilient citizens.
- Growth – direct a cohesive growth strategy that strengthens the city and townships.
- Talent – grow new economies that attract and retain entrepreneurs, talented workers, and visitors.

4 Context, Research and Trends

4.1 Operative District Plan Approach

4.1.1 Context

The Operative District Plan became operative in August 2005. As described in the Overview Report, the Operative Plan is an effects based plan and standards are used within each environment area to determine what is appropriate based on the character and amenity values that the community seeks to protect, as opposed to listing activities that are permitted, or are subject to some type of consent application.

Provided an activity can meet the required standards, generally there is no reason to preclude it from a particular environment area even though that particular activity is not generally associated with it. Where an activity does not meet the baseline standards, applicants would be required to apply for resource consent.

Given this effects-based framework, the Operative Plan does not have a chapter that specifically manages energy related activities, rather rules and standards are repeated for each Environment Area.

4.1.2 Plan Changes

Plan Change 37: Implementation of the National Policy Statement on Renewable Electricity Generation (PLC12/00037) became Operative 30 June 2014.

The purpose of this Plan Change was to implement the National Policy Statement on Renewable Electricity Generation (NPSREG) through the New Plymouth District Plan. The main changes introduced included:

- The addition of a new Issue into the Management Strategy: "Issue 24: Provision for Renewable Electricity Generation Activities while managing their adverse effects".
- Addition of an assessment criterion pertaining to renewable electricity generation to some rules in all environment areas.
- The introduction of three new definitions.
- References to management of wind farm noise in Issue 24, Res 69, Rur 89, Bus83, Ind 81, OS 76, Appendix 12 Noise 4.1.
- Introduction of rules applicable to the development, operation, maintenance, and upgrading of renewable electricity generation activities.

- Amendment to the definition of L95 and Appendix 12, regarding permitted noise level.

4.1.3 Operative Plan Provisions

The 'Management Strategy' that informs the Operative District Plan contains the framework to manage the Energy Activities in the District. The relevant Issues, Objectives and Policies are detailed below:

- *Issue 1: The adverse effects of activities on the character of areas and on other activities.* Issue 1 specifically recognises the role and function of the rural environment area for rural industries, including the established activities of the petroleum exploration and production industry.

Objective 1

To ensure activities do not adversely affect the environmental and amenity values of areas within the district or adversely affect existing activities.

Policy 1.1

Activities should be located in areas where their effects are compatible with the character of the area.

Policy 1.2

Activities within an area should not have adverse effects that diminish the amenity of neighbouring areas, having regard to the character of the receiving environment and cumulative effects.

- *Issue 2 Adverse effects on amenity, health and safety due to LIGHT OVERSPILL, GLARE, noise, dust and the consumption of liquor.* Issue 2 notes that these effects include the flaring of energy (oil and gas) products and noise from helicopters.

Objective 2

To avoid, remedy or mitigate the adverse effects of LIGHT OVERSPILL and GLARE, noise, and the consumption of liquor on amenity values and health.

Policy 2.1

LIGHT OVERSPILL should not result in adverse effects on amenity values and community health

Policy 2.2

Activities should not result in adverse effects on amenity values, community health and safety due to GLARE from artificial light, flaring or reflected light

Policy 2.3

Noise that results in adverse effects on health or amenity should be avoided, remedied or mitigated

- *Issue 4: Loss or reduction of rural amenity and character.* Issue 4 recognises the scale of rural based industry varies, noting the more frequent presence of petroleum industry activities and associated infrastructure (e.g. pipelines), well sites and production facilities, and petrochemical plants. Issue 4 also recognises local roads and some collector roads are a strong 'infrastructural element' of rural

character. Additionally, it notes that quarrying, forestry and petroleum exploration and production activities can impact on rural character and amenity effects.

Objective 4

To ensure the subdivision, use and development of land maintains the elements of RURAL CHARACTER.

Policy 4.3

Control the density, scale, location (including on-site location) and design of activities by;

- (a) Imposing a maximum HEIGHT for all buildings to allow for rural uses to operate.*
- (b) Providing a maximum area that can be covered by BUILDINGS to control the effects of larger scale activities on small sites.*
- (c) Requiring BUILDINGS to be setback from the ROAD BOUNDARY in order to maintain spaciousness.*
- (d) Requiring BUILDINGS to be setback from the SIDE BOUNDARY to maintain separation between BUILDINGS and related activities.*
- (e) Providing for the RELOCATION of BUILDINGS to ensure they are reinstated.*
- (f) Requiring landscaping (planting and screening) to mitigate the effects of:*
 - (i) OUTDOOR STORAGE areas visible from an adjoining RESIDENTIAL ENVIRONMENT AREA or New Plymouth entrance corridor and;*
 - (ii) VEHICLE parking either visible from the ROAD or an adjoining RESIDENTIAL ENVIRONMENT AREA or New Plymouth entrance corridor;*
 - (iii) of large SUBSTATIONS and SWITCHING STATIONS.*
- (g) Imposing controls on the size, HEIGHT, location, content, number and duration of ADVERTISING SIGNS.*
- (h) Imposing controls on the quantity, composition and reinstatement of EXCAVATION and FILL to ensure adverse effects are mitigated.*

Policy 4.4

Control the density, HEIGHT and on-site location of HABITABLE BUILDINGS by:

- (a) Allowing additional HABITABLE BUILDINGS at appropriate densities and of a size that maintain Spaciousness and a Low Density, Production Orientated environment, while allowing some flexible living opportunities.*
- (b) Allowing HABITABLE BUILDINGS to a maximum HEIGHT that allows typical residential use to occur.*
- (c) Requiring HABITABLE BUILDINGS to be setback from the SIDE BOUNDARY to ensure privacy between dwellings and separation from other rural uses*

Policy 4.5

Ensure that the design of subdivision and development is sensitive to the surrounding environment. In particular the following design principles will be considered:

- (a) Ensure appropriate overall density by maintaining the level of built form expected in the rural environment.*

- (b) *Ensure the intensity and scale of the development is in keeping with RURAL CHARACTER.*
- (c) *Ensure that ALLOTMENTS and BUILDINGS are in context with the surrounding environment and are positioned to recognise natural features in the landform.*
- (d) *Ensure that ALLOTMENTS and BUILDINGS are sited and designed in a manner that is integrated with the surrounding environment with minimal disturbance to the landform by considering:*
 - (i) *softening with vegetation related to the area and treatment of boundary elements;*
 - (ii) *BUILDING design of a form and scale that is in keeping with the landscape;*
 - (iii) *the use of materials, that are in keeping with the environment, including consideration of colour and low reflectivity;*
 - (iv) *low level INFRASTRUCTURE and services that is rural in nature.*
 - (e) *Consistency of any full discretionary activity with design guidelines.*
 - (f) *Consideration towards any recommendations from a design panel.*

Policy 4.8

Activities within the rural environment should not generate traffic effects that will adversely affect RURAL CHARACTER and the intensity of traffic generation should be of a scale that maintains RURAL CHARACTER

- *Issue 10 Adverse effects from the storage, use, disposal and transportation of HAZARDOUS SUBSTANCES on the environment.*

Objective 10

To protect the quality of the environment, including the health and safety of people, from the adverse effects of the storage, use, disposal and transportation of HAZARDOUS SUBSTANCES.

Policy 10.1

HAZARDOUS FACILITIES should be located so that any risks to the environment, including to people, are minimised.

Policy 10.2

HAZARDOUS FACILITIES should be designed, constructed and managed to prevent or mitigate adverse effects and unacceptable risks to the environment, including people.

- *Issue 24: Provision for Renewable Electricity Generation Activities while managing their adverse effects. Gives effect to the NPSREG.*

Objective 24

To recognise the national significance of RENEWABLE ELECTRICITY GENERATION ACTIVITIES while managing their adverse effects.

Policy 24.1

The need to develop, operate, maintain and upgrade RENEWABLE ELECTRICITY GENERATION ACTIVITIES shall be provided for while managing their adverse effects.

Associated rules and standards tailored for each environment area provide for:

- Erection of building and structures, subject to height, daylighting and setback etc. requirements.
- Signage, subject to height, size and locational requirements.
- Earthworks, subject to excavation, fill and locational requirements.
- Hazardous Substances, subject to setbacks, locational and effects ratio requirements.
- Outdoor storage, subject to bulk and locational requirements.
- Lighting, subject to locational and emission requirements.
- Noise, subject to specific environment area, constrictions, wind turbine, helicopter, emergency services, temporary event noise requirements.
- Traffic and transport, subject to locational thresholds/vehicle equivalent movements and landscaping/requirements.
- Temporary events, subject to durational, environment area, noise emission and other requirements.

The Operative District Plan generally provides for energy related activities as Permitted activities within the Environment Area chapters. Activities that are unable to meet relevant permitted activity standards are treated as a Restricted Discretionary or Discretionary activity.

The planning maps also identify energy pipeline corridors throughout the district.

A non-regulatory Rural Subdivision and Development Design Guideline is also available on the Council's website to help guide subdivision and other development in rural areas (see other methods).

4.2 Other Methods

Other methods that can be used by Council and plan users when managing/considering energy related activities include:

- New Plymouth Rural Subdivision and Development Design Guidelines (May 2012).
- These non-statutory guidelines encourage people to consider the wider environmental impacts of their projects, and cover matters such as land types, sensitive landscapes, rural character, rural design considerations, design and layout, building location, landscaping and vegetation, and servicing, all of which are relevant and applicable to the Energy topic.
- The use of land information memoranda and property information memoranda.
- Information and education advice on possible management techniques to address reverse sensitivity issues, including design guidelines to help attenuate sound in noise sensitive rooms.

4.3 State of the Environment

4.3.1 Oil and Gas Energy Resources

The discovery of oil in New Plymouth, and indeed to start of the oil gas sector in Taranaki, can be traced back as early as 1865, where oil was found at Ngāmotu Beach. The Alpha well dug in 1865 on the Moturoa foreshore saw the early establishment of

the oil and gas sector, with various other wells, rigs and even a refinery following. However, it wasn't until the development and use of new technologies in the 1950s that the oil and gas sector fully established itself in the region. The discovery in 1959 of the onshore Kapuni gas-condensate field in South Taranaki, followed by the discovery of the Maui gas-condensate field in 1969, allowed the development of the North Island gas transmission network which runs through the District. This advancement brought natural gas directly to homes and industries in the North Island, and importantly made New Zealand self-sufficient in gas. The discovery in the District of the McKee Oil Field in 1979 saw further advancement of the sector, this time in oil production¹.

This, in turn, has resulted in oil and gas sector being part of the New Plymouth environment, community and economy for several decades. In RMA terms, the gas and condensate fields are natural resources, with the existing petroleum facilities and activities and associated infrastructure constituting physical resources. These facilities, activities and infrastructure make a significant contribution to the energy resource supply at a national level, particularly for the supply of gas. In 2013, for example, the oil and gas industry contributed \$982 million directly to the Taranaki regional economy and created employment for 7,070 FTEs.²

Within New Plymouth District, the process³ for oil and gas resource use is as follows:

Block Offer

The New Zealand Government allocates exploration permits in an annual tender process called a Block Offer. This process has been undertaken annually since 2012, and the selection of areas for inclusion in a Block Offer is based on such factors as their prospectivity and commercial interest.

Permits

New Zealand Petroleum & Minerals issues permits to prospect, explore, or mine petroleum onshore or offshore. The permits are defined in the Crown Minerals Act 1991 (CMA) and the Minerals Programme for Petroleum 2013. Petroleum mining permits grant the holder rights to develop a discovered petroleum field to extract and produce petroleum. Activities allowed include extraction, separation, treatment and processing of petroleum. Permits are granted subsequent to an exploration permit, and are granted based on the evaluation of an appraisal programme and work programme. The size and duration of the permit is constrained to the extent of the discovery. It is possible to apply for a resource consent on a site where no permit exists.

Seismic Surveying

Seismic surveys are carried out to understand the geology of the earth and to identify the location and size of oil and gas reservoirs. It involves sending out an acoustic wave that is absorbed into the earth's surface, hitting rocks below the surface, which bounce the wave back to the surface. The returning wave is then captured by sensors, producing detailed images of various rock types and their location beneath the earth's surface. On land, this may involve either a specialised truck that carries a heavy plate

¹ Paraphrased from: An introduction to New Zealand's Oil and Gas Industry, PEPANZ

² The Wealth Beneath Our Feet, Venture Taranaki, March 2015

³ Paraphrased from: An introduction to New Zealand's Oil and Gas Industry, PEPANZ

that is used to send a wave into the earth, or the use of small detonated charges to send out a wave. The time it takes for each wave to return to the sensor provides geologists with information about the depth of different structures under the earth and possible gases or fluids trapped in rock formations.

Drilling

Drilling begins by creating a surface hole and inserting a drill bit to commence the drilling process. When the desired depth of initial drilling is reached, the hole is "cased" with three or four layers of steel tubing. As drilling progresses, it continues to be cased. Cement is then pumped to the bottom which backfills the gap between the rock wall and the outside of the steel tube to lock it in place. As the drilling reaches greater depths, the size of the hole decreases. The casing and the cement form a solid barrier that prevents any oil and gas seeping through steel tubing and contaminating the surrounding earth or any fresh water aquifers. During drilling a blowout preventer is also fitted, which is a large mechanical device that can control or close the well if necessary to prevent a blowout (the uncontrolled release of crude oil and/or natural gas).

Fracking

Hydraulic fracturing, is a process used at some drill sites to extract oil and gas. The process injects water, proppant (sand or ceramic beads) and a very small proportion of chemical additives into a well at high pressure. This creates small cracks in the rock, usually only a few millimetres wide. The proppant keeps the cracks open, creating channels the oil and gas can travel through to the well. Hydraulic fracturing is only effective with rock that has extremely low permeability (low ability for liquids or gas to pass through). Once the operation has been completed, the fracking fluids are recovered and are stored, treated and diluted. It is then disposed of by deep well injection (pumped into old wells and stored several thousand metres underground). Any fracking operation has to go through a resource consenting process with the Taranaki Regional Council to ensure it complies with relevant regional plan requirements.

Seismic surveys, drilling and fracking are collectively referenced to as prospecting and exploration activities, with the scale and intensity of these activities varying over time. Exploration activities only reoccur on the same site if a viable field is found and a new well in the location is considered appropriate, with the associated timeframe extending from a few months to a number of years. By contrast, drilling can be anywhere between a few weeks to a few months, with any residual time consumed by site establishment and well completion or abandonment.

Landfarming

Drilling for oil and gas produces significant quantities of drilling cuttings. Cuttings consist of sedimentary rock, clay, hydrocarbons, minerals and salts that need to be disposed of responsibly and sustainably. Landfarming involves the spreading of the cuttings over land, with these being subsequently worked into the soil by tractors. The land is then left for a period of time to allow naturally occurring microbes to break down the organic compounds found in the cuttings – particularly the hydrocarbons.

The issue of landfarming is complex in several respects, including jurisdictional responsibilities and environmental management. Primary responsibility for managing landfarming rests with the Taranaki Regional Council as the waste disposal component

of the process is considered a 'discharge to land' involving an assessment as to whether it would result in the contamination of land, water or air. By contrast, the District Council's jurisdiction relates to the 'land use' component of landfarming. In terms of the Operative District Plan landfarming (effectively earthworks) is a permitted activity, unless it is located in a sensitive environment (e.g. Coastal Protection Area) or near a significant site (e.g. historic site). In these cases, resource consent is required and the effects of the proposed earthworks are assessed.

Although some benefits are considered to be derived from landfarming (e.g. disposing of waste material from the oil and gas industry, transforming unproductive land into more productive land), there are questions about its short and long term impacts such as loss of natural character in the coastal environment, disturbance of significance sites, and concentrations of contaminated substances in the soil. Such effects are managed through a variety of other provisions in the District Plan.

Production

'Production' is an industry term that refers to the process where the raw oil, gas and water mix from a well is separated into its constituent parts. Production stations typically consist of buildings/installations that are surrounded by pipes and other infrastructure. The pipes reticulate and distribute the oil, gas and water through a separation process. Once complete, the separated oil is transported, either by pipe or truck, to the nearest port for export to refineries (predominately in Australia and Singapore) or for further processing and/or distribution in New Zealand.

Gas, once suitably purified, is compressed into natural gas and is transported by pipe for distribution around the North Island. Liquid petroleum gas (LPG) is also produced and is transported around the country by truck or gas bottle to be used domestically and commercially.

There are five existing production stations in the District:

- McKee Mangahewa Production Station (Todd Energy), Tikorangi. Began operation in 1979 and is supplied by 20 wells from 9 wellsites located in surrounding farmland.
- Pohokura Production Station (Shell Taranaki), Moturoa. Began production in 2009 and is supplied by an offshore platform via submarine pipelines.
- Kaimiro Production Station (Greymouth Petroleum) Upland Rd, Inglewood, separates and treats oil and gas from wells in the Kaimiro and Ngatoro fields.
- Turangi Production Station (Greymouth Petroleum). Turangi Rd, Motunui, processes oil and gas from Greymouth's northern Taranaki operations including the Turangi and Kowhai wellsites.
- Kowhai Production Station (Greymouth Petroleum).

There are also two petrochemical plants in the District:

- Methanex Motunui, Petrochemical Plant Methanol.
- Methanex Waitara Petrochemical Valley Methanol.

4.3.2 Renewable Energy Resources

While the energy sector in New Plymouth is dominated by oil and gas, there is also scope in the District for increased development of renewable energy resources, particularly wind and water (hydro). Renewable electricity generation options⁴ relevant to the New Plymouth context include:

Solar energy

Solar energy is captured using photovoltaic (PV) panel technology which converts radiation from the sun into electricity. The PV panels are typically 1.5 - 2m² in surface area and can be fixed to roofs or mounted. PV installations can operate 'off-grid' (i.e. stand alone with batteries for electricity storage), or be 'grid connected' (i.e. no battery storage). With a grid connected system a typical residence can sell any surplus energy back to the electricity retailer.

Biomass

Refers to the use of organic material as a source of fuel. In the context of renewable energy, fuel sources can include plant material such as crops and forests. Animal wastes, including those from agricultural production and downstream food processing, and municipal wastes, are all potential sources of biomass. The production of energy from biomass usually requires some form of processing of the organic material and, as much of the productive rural land in the district is used for agricultural purposes, there are a wide range of potential biomass sources available.

Tidal, Wave, Ocean Current

These typically fall into three methods of generation: large underwater turbines fixed to the sea floor; detention structures where the incoming and/or outgoing tides pass through turbines located within a detention bridge or dam to generate electricity and floating structures with moving parts designed to generate electricity.

Hydro

Hydro energy is created using the gravitational force of flowing water within water courses. Typically, water is impounded behind a dam and when released passes through a turbine connected to a generator resulting in electricity being generated. The infrastructure associated with hydro electricity generating activities can vary considerably in scale, ranging from a single water wheel in a stream to large scale weirs and dams with lakes formed behind them.

Wind

Energy from wind is captured and converted into electricity using wind turbines connected to generators. Most wind turbines have two or three blades which rotate around a central hub on a horizontal axis at the top of a tower. Towers sit in a steel reinforced concrete foundation below ground level which is designed to ensure that the turbine can withstand very strong winds. Towers supporting wind turbines can vary in height from a few metres (small scale domestic) up to 60 - 80 metres in height with blade spans of 10-30 metres. As the wind rotates the blades, a generator within the turbine uses magnetic fields to convert the rotational energy into electrical energy.

⁴ Source: Operative District Plan

Hydrogen

Taranaki has a history of producing and using hydrogen in the energy industry. It is mainly produced industrially through steam reforming of natural gas to produce methanol and fertiliser at Methanex and Ballance respectively. Hydrogen can also be produced from electrolysis of water. This involves running an electrical current through water in an electrolyser to split the water (H₂O) into hydrogen (H₂) and oxygen (O₂). By using electricity from renewable sources, electrolysis can provide a zero-emission energy source.

Hydrogen acts as an energy storage medium. It can be stored until it is needed for a wide range of uses, including being converted back to electricity through a fuel cell in vehicles, generators or in principle, anything that requires electrical energy to operate.

When the electricity that is generated from intermittent renewables such as wind is used to produce hydrogen, it can have the effect of taking the energy that cannot be fed into the electricity grid and storing it for use as required. As a result, hydrogen can be used to help balance supply and demand for renewable electricity and enable intermittent renewable energy to play a bigger part in a low carbon future.

4.3.3 Energy Related Activity Issues

A range of issues typically associated with a number of these energy related activities have been identified which are relevant from a District Plan perspective, some of which have the potential to impact on the surrounding receiving environment if inappropriately managed. These include:⁵

- Vegetation and soil disturbance (e.g. 'shot-hole' drilling, site preparation and associated earthworks).
- Vibration (e.g. detonation of charges, site preparation, operation of large-scale equipment, hydraulic fracturing).
- Increased traffic movement, particularly heavy vehicles (e.g. site preparation and associated earthworks, well rig mobilisation, multiple-well site establishment).
- Hazardous substance use/storage (e.g. storage of chemicals used in drilling/hydraulic fracturing operations, entry of drilling/hydraulic fracturing fluids into waterways).
- Visual impacts (e.g. large-scale dams/weirs, well rig/wind turbine assemblies, associated operational/production facilities, light spill/glare from well flaring).
- Historic heritage/cultural impacts (e.g. disturbance of scheduled/wahi tapu sites).
- Noise (e.g. flaring during well testing, well drilling/hydraulic fracturing, and wind turbine blade movement).
- Dust (e.g. site preparation and associated earthworks).
- Odour (e.g. location of waste disposal sites/storage pits).

4.3.4 Resource Consent Trends/Data

Since 2008 the Council has received and processed a total of 34 resource consent applications relating to non-compliance with a range of rules in the Operative Plan. While the number of applications received per year is moderate, the number of rules

⁵ Refer, for example, to 'Managing Environmental Effects of Onshore Petroleum Development Activities (Including Hydraulic Fracturing): Guidelines for Local Government', MfE, 2014

breached per application, can be in some cases high due to the complexity of the consent (refer Figure 1 below).

The breaches typically relate to the Rural Environment Area, with the rules most commonly triggered by oil and gas related activities comprising the following:

- OL80 – Hazardous facilities effects ratio (3% of rules triggered).
- Rur62 – Excavation and filling (4% of rules triggered).
- Rur69 – Establishment of hazardous facilities (25% of rules triggered).
- Rur92 – Noise emission (10% of rules triggered).
- Rur93 – Vehicle access, parking, loading and manoeuvring (4% of rules triggered).
- Rur101 and Rur102 – Traffic generation (40% of rules triggered).

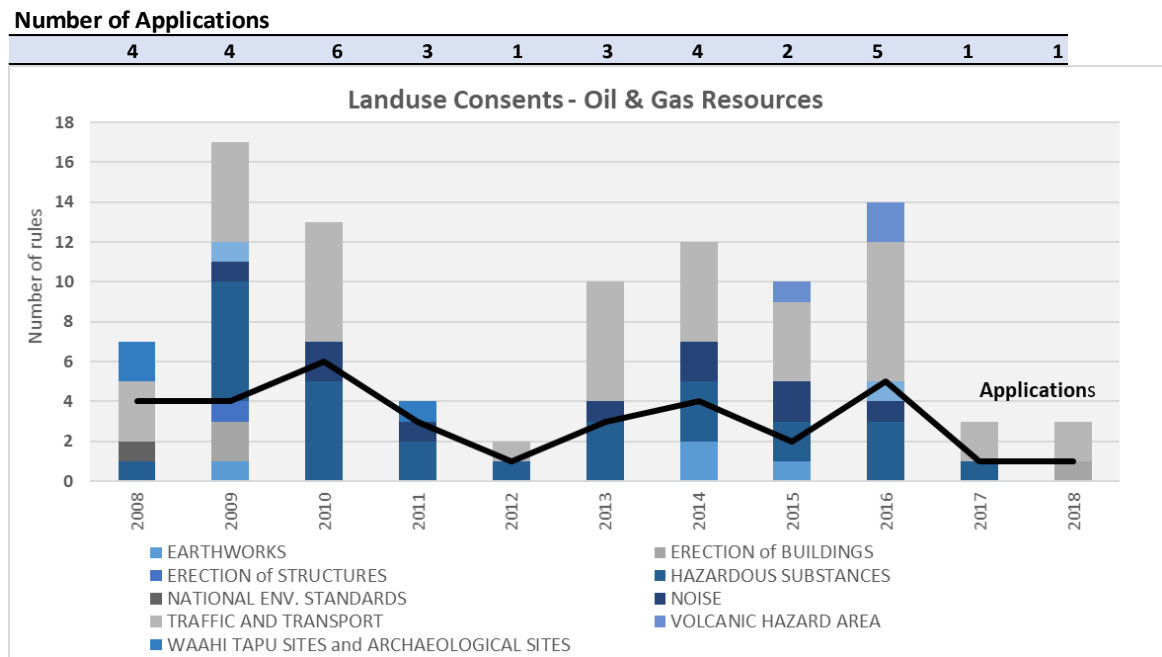


Figure 1: Oil & Gas Landuse Consents

This data is further expanded on below:

Oil and Gas Exploration/Production

As described in section 4.3.1 above, new oil and gas activities generally commence with prospecting and seismic surveys which are permitted under the Operative Plan. When the scheme reaches the stage of exploration or production, resource consent is generally required. New developments, such as exploration of a well site, generally cover exploration drilling, fracking and production. The fracking element does not change the consent triggers under the Plan, and as such consent for discharge to land is required under the Regional Soil Plan for Taranaki administered by Taranaki Regional Council.

The establishment and operation for a new well site can typically involve:

- Construction of well site.
- New vehicle access point(s) and access track(s).
- Establishment of earth bunds, grassing and landscaping.
- Drilling exploration wells.

- Mobilisation and demobilisation of a drilling rig and ancillary equipment.
- Site and accommodation huts and ablution facilities.
- Traffic generation related to drilling and production testing operations.
- Well drilling operations.
- Well clean up and initial well testing and stimulation, including gas flaring.
- Wellhead facility construction.
- A minor production facility involving minor wellhead and associated facilities.
- Installation of pipelines from the well site to connect to a production station if the wells are successful.
- Production of oil and gas from the wells if the wells are successful.
- Use and storage of hazardous substances.
- Decommissioning, abandonment, clear and restoration of site.

Whilst the consenting requirements associated with the establishment and operation of well sites often result in highly detailed and sometimes long consenting processes, Council and the community has experienced issues in the implementation of the Plan, with the most common areas of concern relating to amenity impacts, rural character and established rural communities such as:

- Traffic - high/intense volume of vehicles on roads, in particular large trucks.
- Noise and light – plant noise and light, flaring, helicopters.
- Visual Impacts – tall structures which are incongruous with their rural setting.
- Hazardous substances use and storage – risk to human health.

Traffic

Under the Operative District Plan traffic movements are assessed against RULE Rur101, which restricts the maximum daily trip generation measured in Vehicle Equivalent Movements to 50 (over a total of 24 hours), and Rule Rur102 which restricts movements to 30 per day as specified in Appendix 27 (Tongaporutu-Whitecliffs Station)⁶. These rules explicitly exclude traffic generated by construction work, which is defined in the Operative District Plan as follows:

CONSTRUCTION WORK (as defined in section 2 of the Construction Act 1959) means any work in connection with the construction, **ERECTION**, installation, carrying out, repair, maintenance, cleaning, painting, renewal, alteration, dismantling, or demolition of:

- (a) Any BUILDING, ERECTION, edifice, STRUCTURE, wall, fence, or chimney, whether constructed wholly or partly above or below ground;*
- (b) Any ROAD, motorway, harbour works, railway, cableway, tramway, canal, or aerodrome;*
- (c) Any drainage, irrigation or RIVER control work;*
- (d) Any electricity, water, gas, telephone, or telegraph reticulation;*
- (e) Any bridge, viaduct, dam, reservoir, earth-works, pipeline, aqueduct, culvert, drive, shaft, tunnel, or reclamation;*

⁶ The Proposed District Plan no longer uses Vehicle Equivalent Movements as a traffic generation measure. Instead, activities are identified as High Trip Generators - See Transport and Connectivity Effects Standard TC-R6 and the Transport and Connectivity s32 for further explanation.

(f) *Any scaffolding;*

and includes any work in connection with any EXCAVATION, SITE preparation or preparatory work carried out for the purpose of any CONSTRUCTION WORK; and also includes use of any plant, tools, gear, or materials for the purpose of any CONSTRUCTION WORK but does not include PETROLEUM EXPLORATION.

This, in turn, means that if the traffic associated with oil and gas is related to "construction work" it would be considered construction traffic under the Operative District Plan. Conversely, traffic that is not associated with construction work would be considered as "operational traffic".

Over the life time of the Plan, interpretation of what constitutes "construction traffic" associated with well-sites and production stations has come under considerable debate, resulting in community frustration particularly when other land use activities are added to the mix of construction and operational related traffic. In 2013 Council sought legal advice to help distinguish the difference between construction and operational traffic. Based on this advice, and for the purposes of resource consent processing and monitoring, Council Officers have informally grouped construction traffic and operational traffic as follows:

Construction Traffic	Operational Traffic
Rig mobilisation and demobilisation e.g.: equipment installation and dismantling	Rigs used for " <i>petroleum exploration</i> ".
Setting up and removing operational equipment i.e. cement pumps, fracking pumps	Equipment uses for <i>well drilling, well testing</i> and <i>interim production</i>
Incident related work such as a spill clean-up is " <i>cleaning</i> "	Well testing work remains " <i>petroleum exploration</i> "
Emergency traffic	Regular checks
Maintenance and repair i.e. well casing replacement	Workovers e.g. work to side-track (drill) or seal the well and perforate into new formations with subsequent testing

What the above table illustrates is that a lot of traffic generation associated with oil and gas activities can be interpreted as "construction work", meaning it is exempt from Rules Rur101 and Rur102. Operational traffic is generally associated with the production phase and is typically at either a lower level and within the parameters of the above rules or provided for through the parent resource consent.

This issue is further compounded when a number of oil and gas activities are clustered together, creating a potential cumulative effect, or where simultaneous operations (SIMOPS) occur. SIMOPS is where another concurrently operating land use activity is located nearby (i.e. major construction or another rural industry activity), adding to the traffic generation in the area. With wellsites SIMOPS are much more complex, with two or more potentially conflicting activities or process operations co-located on the same location at any time. This situation can be further exacerbated where construction is involved.

Over the life of the Plan, traffic movement to and from oil and gas sites, (particularly for unplanned and maintenance events covered by construction work), cumulative oil and gas activities locating together and SIMOPs have caused considerable concern for local communities, particularly in Tikorangi.

Renewable Energy Resources

Unlike oil and gas related resources, there have been no consent applications lodged with Council regarding renewable energy related activities.

4.4 Effectiveness of the Operative District Plan Approach

4.4.1 Oil and Gas

Generally, the operative provisions are focussed on managing the effects of oil and gas on amenity, rural character, traffic generation, noise and hazardous substances, with the following issues identified regarding their interpretation and implementation:

- The need for more detailed policy guidance, particularly acknowledging:
 - The presence of existing oil and gas operations, with provision for their ongoing efficient and effective functioning as well as opportunities for further exploration and development.
 - The functional and technical constraints of these activities, while ensuring that any associated adverse effects on the environment are effectively managed.
 - The role that the oil and gas sector plays in the social and economic wellbeing of the District, as well as its significance at a regional and national level.
 - The potential amenity impact that oil and gas activities can have on special features, rural character and established rural communities.
- The need to manage petroleum exploration and production activities through the resource consent process as each proposal is different in terms of the scale and magnitude of effects, including cumulative effects.
- The potential for reverse sensitivity issues associated with existing production facilities.
- The need for greater consistency in the approach to oil and gas related activities adopted in District Plans throughout the region, and for the Operative Plan to be updated to reflect this outcome.

4.4.2 Renewable Energy Resources

The existing renewable energy provisions are meeting Council's obligations under the NPSREG and achieving the overall existing District Plan objective of recognising the national significance of renewable electricity generation activities while managing their adverse effects.

The Operative Plan also contains sufficient recognition of the need to develop, operate, maintain and upgrade renewable electricity generation activities while managing their adverse effects. Therefore, in a general sense, the renewable energy provisions appear to be achieving the objectives of each 'environment area' which are to:

- Maintain rural character in rural environment areas.
- Protect residential amenity in residential environment areas.
- Ensure the open space character of open space environment areas.

- Ensure the attractive, safe, efficient and convenient character of the business environment areas.
- Maintain a level of amenity within the industrial environment which is consistent with the character of the area and provides a safe working environment.

Despite this, improvements can be made by providing greater policy direction to help determine the type, form, scale and location of renewable energy activities that are appropriate to the District and that promote a more consistent their management across the region.

These implementation issues discussed above are summarised as follows:

Issue	Comment	Response
No specific policy framework to provide for and manage oil and gas activities	Oil and gas activities are managed through the objectives and policies under environment areas in the management strategy	<ul style="list-style-type: none"> • A separate Energy chapter • Oil and gas specific policy framework
The location, scale, duration and cumulative effects of multiple petroleum exploration and production activities	Lack of clear direction in the Operative Plan means that the Council is limited to considering certain aspects of a development, particularly where this involves multiple activities	<ul style="list-style-type: none"> • Specific objectives, policies and rules to determine the type, form, scale and location of energy activities that are appropriate
The functional and technical constraints of energy activities	Lack of explicit recognition in the Operative Plan	<ul style="list-style-type: none"> • Greater policy recognition of associated functional and technical constraints
Lack of clarity regarding potential amenity impacts on special features, rural character and established rural communities.	The adverse effects of energy activities on the environment need to be appropriately managed to ensure that they do not significantly adversely affect amenity, landscape character, heritage values, or public health and safety	<ul style="list-style-type: none"> • A strengthened emphasis on protecting special values and qualities of outstanding natural features and landscapes (particularly in the coastal environment), historic heritage and scheduled features • Greater recognition of adverse effects on character and amenity values
Reverse sensitivity concerns relating to established energy activities	Lack of clarity in the Operative Plan regarding location of sensitive activities near established energy activities	<ul style="list-style-type: none"> • Specific objectives, policies and rules to manage conflicting activities and potential reverse sensitivity concerns
Recognition of the contribution that energy activities make to the social and economic wellbeing of the District, and their significance to the wider	Lack of explicit recognition in the Operative Plan	<ul style="list-style-type: none"> • Greater policy recognition of the social and economic contribution of energy activities at a local, regional and national level

Issue	Comment	Response
regional and national economy		
Lack of consistency in approach to addressing similar energy related matters across the region	The Operative Plan is effects-based and adopts a markedly different approach to managing energy compared to other District Plans in the Taranaki region	<ul style="list-style-type: none"> Align, as far as practicable, energy related objectives, policies and rules with those employed in the Proposed South Taranaki District Plan

4.5 Effectiveness of Other Methods

No other matters are specifically used for energy.

4.6 Other Relevant Research/Documents

There is no additional research or background documents of relevance to this topic.

5 Consultation

5.1 General Consultation

Extensive consultation has been undertaken as part of this District Plan Review process with key stakeholders and the local community - refer to the General Overview Section 32 Report for details on the methods that were used to carry out that consultation.

In terms of the energy section, specific feedback received from consultation relevant to this topic is summarised below.

The first Draft District Plan released for public comment in October 2016 contained draft provisions for each section, including energy. There was both support and opposition to the proposed energy provisions, with this predominantly centred around the approach to managing oil and gas activities. Generally, the oil and gas sector supported the suggested approach subject to some additional amendment. Conversely, other parties were concerned about the location of oil and gas activities near houses, the coast and natural features; notification of resource consents and involvement of affected parties; and the cumulative effects arising from multiple sites. Indirect comments were also made regarding the Hazardous Substances and Major Facilities Sections.

Details of the feedback is summarised as follows:

- Restrict any further oil and gas activities in the District.
- Encourage and provide for renewable energy generation activities.
- Improve recognition of locational constraints relating to oil and gas resources.
- Improve clarity of remediation requirements for redundant oil and gas sites.
- Application of non-complying activity status to oil and gas activities located near sensitive activities, the coast, historic heritage and scheduled features is too restrictive.
- Consider the effects of oil and gas activities on "housing occupants", not just the general community or the environment.

- Broaden notification of oil and gas related resource consents and involvement of affected parties.
- Use of 'offsetting' as a mechanism to address the effects of oil and gas activities is opposed.
- Retain the ability to consider the cumulative effects of oil and gas activities.
- Strengthen the requirement for traffic management plans to be employed for oil and gas activities.
- Manage oil and gas activities through the introduction of a separate zone.

In terms of renewable energy activities, the feedback was supportive and acknowledged the draft provisions generally gave effect to national and regional policy directives. Some policy amendments were suggested to help clarify the intent of the provisions.

Targeted consultation with key stakeholders operating within the Energy Sector has also been carried out over the District Plan Review/drafting of the Proposed Plan, including an opportunity to comment on the provisions prior to public release of the Full Draft in February 2018. This consultation has involved working meetings and suggested policy redrafting.

The Full Draft District Plan was released in a digital format in February 2018. Like the earlier draft limited feedback on the oil and gas provisions in Energy section was received, with comments expressing a polarity of views ranging from support for the general direction of the new framework and policy direction to opposing any framework that allowed new oil and gas activities to establish in the District. Feedback from interested parties also supported having all the energy provisions, or as many as possible, incorporated into a single plan chapter.

Throughout the District Plan Review and Proposed Plan process, discussions were also held with Taranaki Regional Council, South Taranaki District Council and Stratford District Council. Informing those discussions and the response to the proposed direction New Plymouth District Council have taken has been the TEW Environment Court Appeal on the South Taranaki Proposed District Plan. The neighbouring local Councils have been supportive of the draft provisions put forward by New Plymouth, and are collectively committed to ensuring, where practicable, use of consistent energy provisions in their District Plans.

This feedback has been considered during the evaluation of the energy provisions and changes made to the provisions where relevant.

5.2 Consultation with Iwi Authorities

Ngā Kaitiaki provided feedback on the two versions of the Draft District Plan (2016 and 2018) Energy chapter. The comments from Ngā Kaitiaki on the Draft Plans, are summarised below:

- Specific issues identified by Ngā Kaitiaki in relation to non-renewable energy activities include:
 - Consideration of the entire activity through the consent process, including pipeline routes (and associated construction and maintenance) and the disposal of wastes generated from wellsite development.

- Land farming as an energy related activity requiring management.
- The density of wellsite's in the landscape, and encouragement of directional drilling as much as possible.
- Legacy issues resulting from historic wellsite's and associated activities.
- Flaring and light pollution, and associated ecological impacts, night time amenity.
- The remediation of activities at their conclusion. Legacy issues associated with the non-remediation of historic oil and gas activity in the District.
- Proposed objectives apply to both renewable and non-renewable energy sources equally. Ngā Kaitiaki suggest there are specific outcomes and objectives for renewable and non-renewable energy sources. Also sought the objectives be made more explicit in terms of the environmental outcomes to be achieved.
- Support discretionary activity status for non-renewable energy activities due to variation in nature and scale of activities, and technology advances and methods of working.
- Suggests that additional policy direction addressing the changes to oil and gas activity over time, including different phases of wellsite development — whole of life consenting (wellsite, access, pipeline route, phases of wellsite/field development, restoration of the site. Maintenance works – pipelines etc.).
- Policy E-P6 is not supported. This policy undermines the direction of the rest of the chapter by providing policy support for oil and gas activities to generated unavoidable adverse effects on the environment. It is not clear what constitutes a natural resource based locational constraint. Ngā Kaitiaki recommend this policy is removed in its entirety.
- More certainty in policy language is sought, for example clarity on terms such as "in proximity" or "adequate separation".
- Proposed objectives and policies are silent regarding opportunities for Māori to engage at key stages of the decision-making process for oil and gas activities. Ngā Kaitiaki recommend that policy direction specific for oil and gas activities is required for this issue.
- Specific objectives relating to renewable electricity generation activities, including at a community scale are suggested.
- Policy S-P2 (Subdivision) promotes design of subdivision to consider locating allotments for solar gain and other sustainable development approaches. A policy in this section supporting community scale renewable energy activities alongside subdivision design is suggested.
- It is understood that renewable electricity generation activities may occur in sensitive environments (e.g. the coastal area). Ngā Kaitiaki suggest that provisions provide direction on the removal of infrastructure associated with renewable energy activities at their completion.
- Suggest supportive provisions in this section for renewable electricity generation activities are required – particularly at a community scale.
- Prospecting is identified as a permitted activity. Ngā Kaitiaki suggest that some management is required of these activities through the consent process, where these activities interact with areas/values/sites and places significant to Tangata Whenua.

The feedback from Ngā Kaitiaki was considered during redrafting of the provisions and consequent amendments to the provisions were made. In particular, the proposed provisions comprise:

- Two sets of policies, one relating to oil and gas activities and second relating to renewable electricity generation activities.
- More explicit policy wording to provide greater certainty on the management framework and matters to be assessed during the resource consent process. Includes consideration of the entire lifecycle of oil and gas activities and cumulative effects of multiple activities in an area.
- Retaining discretionary or non-complying activity status for petroleum exploration and petroleum production in all zones except the Major Facilities Zone (which have existing petroleum production activities).
- Rules permitted small-scale renewable electricity generation activities.
- Reliance on the district-wide sites of significance to Maori provisions to protect significant sites.

6 Key Resource Management Issues

The key resource management issues for energy in the New Plymouth district are:

- Recognising existing oil and gas operations in the District, and providing for their continuing efficient and effective functioning and opportunities for further exploration and development.
- Recognising the national, regional and local benefits derived from energy activities
- Managing the adverse effects of energy activities on the environment to ensure that these do not significantly adversely affect amenity, landscape character, streetscape, heritage values, or public health and safety.
- Managing the potential adverse effects of incompatible land-use activities on the efficient operation, maintenance and upgrade of existing energy activities, including effects such as reverse sensitivity.
- Providing greater regional consistency in the approach adopted to managing energy activities in District Plans.

7 Proposed District Plan Provisions (Objectives, Policies and Methods/Rules)

The proposed provisions are set out in the Energy section of the Proposed New Plymouth District Plan. These provisions should be referred to in conjunction with this evaluation report.

7.1 Strategic Objectives

The applicability/relevance of all the proposed Strategic Objectives will need to be considered for all development proposals requiring resource consent under the Proposed District Plan. Of particular relevance to Energy provisions are the following proposed Strategic Objectives:

HC-1 The district's heritage and cultural values contribute to the district's sense of place and identity, and are recognised and protected.

HC-3 Tangata whenua's relationships, interests and associations with their culture, traditions, ancestral lands, waterbodies, sites, areas and landscapes, and other taonga of significance are recognised and provided for.

TW-11 Provide for the relationship of tangata whenua with their culture, traditions, ancestral lands, waterbodies, sites, areas and landscapes and other taonga of significance to Māori.

TW-12 Recognise the contribution that tangata whenua and their relationship with their culture, traditions, ancestral lands, waterbodies, sites, areas and landscapes, and other taonga of significance make to the district's identity and sense of belonging.

UFD-21 Airport, port, major facilities and large scale industrial activities are able to operate efficiently and effectively and the contribution they make to the economic and social well-being and prosperity of the district is recognised.

UFD-22 There is sufficient land for industrial activities in the short, medium and long term in appropriate locations, including:

- 1. along key transport routes to ensure efficient transportation of products and minimisation of heavy vehicles and high traffic volumes on local roads; and/or*
- 2. areas that are separated from sensitive activities through distance and/or topography to ensure risk and/or conflict between incompatible activities is minimised.*

UFD-23 Primary production and rural industry activities are able to operate efficiently and effectively and the contribution they make to the economic and social well-being and prosperity of the district is recognised.

7.2 Objectives and Policies

In summary, the proposed objectives and policies provide a framework that:

- Recognises and provides for the national, regional, and local benefits derived from the use and development of energy resources.
- Requires new sensitive activities to be appropriately located and separated from energy activities to minimise conflict and/or reverse sensitivity effects.
- Requires exploration and production activities to minimise adverse cumulative effects associated with the co-location of multiple oil and gas activities.
- Allows for the operation, maintenance, upgrading, and replacement of existing renewable electricity generation activities, while managing potential adverse effects.
- Avoids energy activities which have significant adverse effects on outstanding natural features and landscapes, and historic heritage and scheduled features.

7.3 Rules

7.3.1 Permitted Activity rules provide for the following, subject to standards:

- Petroleum prospecting (all zones).
- Seismic surveys (Rural Production and Major Facilities Zone).
- Petroleum exploration activities (Major Facilities Zone).
- Petroleum production activities (Major Facilities Zone).
- Operation, maintenance, or upgrade of small-scale renewable electricity generation activities (all zones).
- Exploratory wind generation activities (Rural Production Zone).

7.3.2 Discretionary Activity for:

- Petroleum exploration activities (Rural Production Zone).
- Petroleum production activities (Rural Production Zone).
- Operation, maintenance, or upgrade of large-scale renewable electricity generation activities (Rural Production Zone).

7.3.3 Non-Complying Activity for:

- Seismic surveys (all other zones).
- Petroleum exploration activities (all other zones).
- Petroleum production activities (all other zones).
- Exploratory wind generation activities (all other zones).
- Operation, maintenance, or upgrade of large-scale renewable electricity generation activities (all other zones).

8 Approach to Evaluation

The Act requires that this report contain a level of detail that corresponds with the scale and significance of the environmental, economic, social and cultural effects that are anticipated from the implementation of this proposal.

This section of the RMA requires that:

- New proposals must be examined for their appropriateness in achieving the purpose of the RMA.
- The benefits, costs and risks of new policies and rules on the community, the economy and the environment need to be clearly identified and assessed.
- All advice received from iwi authorities, and the response to this advice, needs to be summarised.
- The analysis must be documented so stakeholders and decision-makers can understand the rationale for policy choices.

8.1 Evaluation of Scale and Significance

	Minor	Low	Medium	High
Degree of change from the Operative Plan			✓	
Effects on matters of national importance			✓	

	Minor	Low	Medium	High
Scale of effects – geographically (local, district wide, regional, national).		✓		
Scale of effects on people (how many will be affected – single landowners, multiple landowners, neighbourhoods, the public generally, future generations?).		✓		
Scale of effects on those with specific interests, e.g., Tangata Whenua		✓		
Degree of policy risk – does it involve effects that have been considered implicitly or explicitly by higher order documents? Does it involve effects addressed by other standards/commonly accepted best practice?		✓		
Likelihood of increased costs or restrictions on individuals, communities or businesses.			✓	

8.2 Explanation Summary

In summary:

- The degree of change from the Operative District Plan is moderate, considering:
 - The Council is proposing a new objective and associated policy framework and rules specific to energy.
 - Although the energy provisions are District Wide they are anticipated to affect only a limited number of properties, particularly as oil and gas activities are rurally situated and adequately separated from sensitive features in most instances.
- The efficient operation of energy use and development has wide-ranging community benefits.
- The geographic scale of effects is considered minor, with such effects anticipated to largely be restricted to circumstances where a new energy activity is established or where maintenance and upgrade of existing energy activities occurs.
- Although the proposal does not directly relate to a s6 matter of national importance it is of relevance; two s7 'Other Matters' are also of particular relevance: 7(c) maintenance and enhancement of amenity values, and 7(f) maintenance and enhancement of the quality of the environment.
- The proposed provisions in the Energy Section are similar to those adopted in the Proposed South Taranaki District Plan and introduce greater consistency in approach to the way in which energy activities are managed across the region.

Overall, it is considered that the scale and significance of the proposal is moderate, with the level of detail in this report corresponding with the scale and significance of the environmental, economic and cultural effects that are anticipated from the implementation of the energy provisions.

9 Evaluation of Objectives

Existing Objective(s)	Appropriateness to existing objectives
<p>The energy specific objective is limited to renewable energy activities (i.e. no objective specific to oil and gas activities), with oil and gas activities subject to generic, zone-based 'amenity' objectives:</p> <p>Objective 1 <i>To ensure activities do not adversely affect the environmental and amenity values of areas within the district or adversely affect existing activities.</i></p> <p>Objective 2 <i>To avoid, remedy or mitigate the adverse effects of LIGHT OVERSPILL and GLARE, noise, and the consumption of liquor on amenity values and health.</i></p> <p>Objective 4 <i>To ensure the subdivision, use and development of land maintains the elements of RURAL CHARACTER.</i></p> <p>Objective 10 <i>To protect the quality of the environment, including the health and safety of people, from the adverse effects of the storage, use, disposal and transportation of HAZARDOUS SUBSTANCES.</i></p> <p>Objective 24 <i>To recognise the national significance of RENEWABLE ELECTRICITY GENERATION ACTIVITIES while managing their adverse effects.</i></p>	<p>Currently only one objective in the operative plan is specifically energy related (Objective 24), with its sole focus on renewable energy activities. The result is that expectations concerning the way in which the broader range of energy related activities in the District are managed through the District Plan are not explicitly articulated, thus offering limited guidance or direction on the outcomes that the plan is seeking to achieve with respect to these activities. This, in turn, could have a bearing on future decisions regarding energy resource use and development proposals in the District from both a consenting and operational/developmental perspective.</p> <p>The other objectives relate to character and amenity and are not suitably tailored to address the resource management issues identified above, particularly recognition of existing oil and gas operations in the District and provision for their continued use and development, and the national, regional and local benefits derived from energy activities. While this suite of objectives attends to amenity and character matters, it provides inadequate certainty to plan users regarding anticipated outcomes concerning, for example, incompatible land use and effects such as reverse sensitivity. Consequently, this raises the prospect of unanticipated outcomes resulting from inadequate identification and consideration of relevant adverse environmental effects, and their efficacy in achieving the sustainable management purpose of the Act.</p>

Proposed Objective(s)	Appropriateness to achieve the purpose of the Act
<p>ENGY-01 The significant local, regional and national benefits from the use and development of energy resources are recognised and energy activities are provided for</p> <p>ENGY-02 Energy activities are designed and located to minimise adverse effects on communities and the environment while recognising their technical, locational and operational constraints</p>	<p>The purpose of the RMA is to promote the sustainable management of natural and physical resources by managing the use, development and protection of physical resources in a way which enables people and communities to provide for their social, economic and cultural well-being. This includes Section 6 and Section 7 matters of the RMA described in Section 2.1 of this report.</p> <p>The objectives specifically and clearly set out the outcomes anticipated by the Proposed District Plan in relation to energy, along with addressing the resource management issues identified in Section 6 of this report; in particular, they recognise existing energy operations and provide for their ongoing use and development; the benefits derived from energy related activities at a national, regional and local level; associated technical, locational and operational constraints. Additionally, they aim to ensure that energy activities are appropriately designed and located to minimise adverse effects on the community and environment.</p> <p>Further, the proposed objectives give effect to the specific policy direction in the RPS relating to resource use and development in the region, the use and development of renewables and the exploration, development, production, transmission and distribution of energy (i.e. UDR OBJ 1/POL 1, ENE OBJ 1-3/POL 1); provide owners/operators, Council officers, decision makers and plan users with increased certainty as to the outcomes anticipated under the District Plan; are considered reasonable and relevant in that they are unlikely to impose prohibitive costs on energy operators and the wider community; will assist the Council to more effectively undertake its statutory functions in relation to these important natural resources; are consistent with the approach adopted in the Proposed South Taranaki District Plan.</p> <p>Consequently, the above the objectives are considered appropriate in achieving the purpose of the Act in relation to managing energy related activities located in the district.</p>

Evaluation of Alternative Options	Appropriateness to achieve the purpose of the Act
Do not define expectations for energy	This option would hinder decision makers when assessing resource consent applications as they would have little guidance on what outcomes are expected. It would also fail to address the various issues and outcomes being experienced with the Operative District Plan provisions and would not achieve the purpose of the Act.

Summary

The proposed objectives achieve the purpose of the RMA as they recognise the social and economic contribution that energy related activities make at a national/regional/local level while ensuring that any associated adverse effects on the community and environment are minimised; they also give effect to the RPS, particularly objectives UDR OBJ 1 and ENE OBJ 1-3, and provide increased certainty regarding the anticipated outcomes sought under the District Plan in relation to energy resource use and development.

10 Evaluation of Options to Achieve the Objectives

Options to achieve the District Plan objectives relating to Energy	Benefits	Costs	Efficiency and Effectiveness	Risks of acting/not acting
<p>Option A: Proposed approach</p> <p>Introduce energy specific provisions to manage energy resource use and development</p> <p>Specific objectives, policies and rules tailored to manage the location, design, layout, visual effects, traffic impacts and cumulative effects of energy activities</p> <p>Introduce activity status based on the type, scale and</p>	<ul style="list-style-type: none"> • Explicitly recognises the presence of existing oil and gas activities in the District • Aligns with the approach to district wide matters specified in the recently gazetted National Planning Standards (7 District-wide Matters Standard) • Facilitates the policy outcomes sought by the RPS regarding the use and development of 	<ul style="list-style-type: none"> • Rules may potentially limit some activities and development, particularly if they do not reflect current or future development aspirations • Costs to operators of applying for resource consents, including associated time and uncertainty • Costs to other parties of participating in resource consent processes if applications publicly notified 	<ul style="list-style-type: none"> • The introduction of a stand-alone Energy Section aligns with the direction in the National Planning Standards and specifically recognises the importance of energy use and resources to the District. • The provisions give effect to the NPSREG, NZCPS and the RPS. • The proposed approach is effective as it considers the benefits of developing energy resources and electricity generation and the adverse effects and constraints associated with their development. The associated provisions also protect 	<ul style="list-style-type: none"> • The risk of not acting on these provisions would result in Council failing to comply with the provisions of Part 2 of the RMA (particularly section 6 and 7), and the likelihood of continuing inefficient use of natural and physical resources and potential loss of amenity values and quality of the environment. • It is considered that there is sufficient information on which to base the proposed policies and methods.

Options to achieve the District Plan objectives relating to Energy	Benefits	Costs	Efficiency and Effectiveness	Risks of acting/not acting
location of the energy activity proposed	<p>renewables and the exploration, development, production, transmission and distribution of energy in the region</p> <ul style="list-style-type: none"> • Largely aligns with approach adopted in the Proposed South Taranaki District Plan, promoting greater regional consistency between District Plan provisions • Rules provide certainty to owners/operators, neighbours, community and Council about the nature and scale of activities and development anticipated • Tailored rules, effects standards and assessment matters provide a clear framework to manage energy 	<ul style="list-style-type: none"> • Costs to Council of monitoring resource consents 	<p>existing energy activities from other more sensitive uses (e.g. residential) establishing nearby.</p> <ul style="list-style-type: none"> • Rules are effective in that they provide a high level of certainty regarding the nature and scale of work and activities that can be undertaken with/ without resource consent. They are also efficient as they enable a case-by-case assessment of the appropriateness of each proposal to be undertaken. 	

Options to achieve the District Plan objectives relating to Energy	Benefits	Costs	Efficiency and Effectiveness	Risks of acting/not acting
	<p>activities and seek to strike a balance between efficient site development and avoiding or minimising adverse effects on neighbouring areas</p> <ul style="list-style-type: none"> • Recognises the operational requirements associated with energy activities • Provides for the effective operation, maintenance and upgrading of renewable energy activities • Provides a consistent approach to managing potential effects of energy activities on the environment, scheduled features and sensitive activities • Restricts energy activities from locating on or 			

Options to achieve the District Plan objectives relating to Energy	Benefits	Costs	Efficiency and Effectiveness	Risks of acting/not acting
	<p>adjacent to scheduled features and sensitive environments, ensuring that their special values are protected</p> <ul style="list-style-type: none"> • Contributes to the realisation of national renewable electricity generation targets • Enables the uptake of new technology • Potential to increase economic growth and employment opportunities through enabling managed expansion of existing operations 			
<p>Option B: Status quo regulatory approach</p> <p>(Rely on Issue 24 provisions, plus general amenity and environment area rules and other methods to manage</p>	<ul style="list-style-type: none"> • Level of familiarity for existing plan users and degree of certainty for some energy activities such as renewables • Maintains amenity values for the community and protects neighbouring 	<ul style="list-style-type: none"> • Misalignment with the approach to district wide matters specified in the recently gazetted National Planning Standards (7 District-wide Matters Standard) • Only partially facilitates the policy outcomes sought by the RPS regarding the use and 	<ul style="list-style-type: none"> • Retaining the status quo fails to achieve the objectives sought for energy and to align with the approach to structuring energy related provisions directed by the National Planning Standards. • It also fails to give full effect to the NPSREG, NZCPS and the RPS. 	<ul style="list-style-type: none"> • The risk of acting is that resource management issues relating to energy activities would continue to be inadequately addressed by this option, particularly in relation to the national, regional and local benefits derived from the use and development of energy resources and the adverse

Options to achieve the District Plan objectives relating to Energy	Benefits	Costs	Efficiency and Effectiveness	Risks of acting/not acting
energy resource use and development)	<p>properties from adverse effects of network utilities</p> <ul style="list-style-type: none"> • Allows initial works which typically have minimal environmental effects to occur such as surveying and resource investigations • Local and national economic benefits arising from employment and revenue generation • Enables reasonable scope and flexibility regarding the scale and number of energy activities that can establish in the District • Cost savings to owners/operators due to no additional compliance costs, processing delays or participation in plan process 	<p>development of renewables and the exploration, development, production, transmission and distribution of energy in the region</p> <ul style="list-style-type: none"> • Misalignment with the approach adopted in the Proposed South Taranaki District Plan, leading to regional inconsistency • Fails to explicitly recognise the presence of existing oil and gas activities in the District, resulting in uncertainty regarding their appropriateness/inappropriateness in the District • The limited discretionary activity status under the Operative District Plan has the potential to unduly constrain Council from fully assessing and managing the effects of 	<ul style="list-style-type: none"> • There is a lack of recognition in the current provisions of the oil and gas industry and little guidance is provided to help inform consideration and assessment of applications. This option also fails to adequately address potential amenity and environmental effects that can result from energy use and development, as well as reverse sensitivity effects resulting from neighbouring development. • In addition to the above, maintaining the status quo would be inefficient and ineffective in addressing several matters relevant to energy activities, including: • Potential availability of local resources • Location, operation and technical constraints of the use and development of energy • Potential cumulative effects associated with the use and development of energy 	<p>effects and constraints associated with their development.</p> <ul style="list-style-type: none"> • It would also result in Council failing to comply with the provisions of Part 2 of the RMA (particularly section 6 and 7). • It is considered that the risk of acting on these provisions outweighs the risk of not acting. There is sufficient information not to act on this approach.

Options to achieve the District Plan objectives relating to Energy	Benefits	Costs	Efficiency and Effectiveness	Risks of acting/not acting
		<p>a proposal, particularly the cumulative effects of multiple energy activities by one or more operators</p> <ul style="list-style-type: none"> • Potential locational effects from petroleum production and electricity generation may not be effectively managed • Potential for reverse sensitivity impacts resulting from more sensitive activities locating near existing energy activities • Costs to energy operators in applying for resource consents, including associated time and uncertainty • Reduces certainty and clarity for neighbours and plan users regarding the nature and scale of energy related development anticipated • Reduced potential for public participation at 	<ul style="list-style-type: none"> • Potential impacts of energy use on sensitive environments (e.g. the coast, ONLs) • Offset measures and/or environmental compensation 	

Options to achieve the District Plan objectives relating to Energy	Benefits	Costs	Efficiency and Effectiveness	Risks of acting/not acting
		<p>the time of development given generic nature of current provisions</p> <ul style="list-style-type: none"> • Potential limitations on economic growth and employment opportunities due to retention of provisions that are unresponsive to the current and future operational and development needs of energy activities • Costs to Council of monitoring consent conditions 		

Options to achieve the District Plan objectives relating to Energy	Benefits	Costs	Efficiency and Effectiveness	Risks of acting/not acting
<p>Option C: Non-Regulatory Approach</p>	<ul style="list-style-type: none"> • Reduced costs to operators could lead to greater economic and employment opportunities in the District • Provides flexibility for operators to locate energy activities anywhere in the District 	<ul style="list-style-type: none"> • Potential for adverse effects on the environment, scheduled features and sensitive activities. • Little to no community involvement in decision-making • Inconsistent with national and regional policy direction. 	<p>Reliance on no rules or performance based standards would result in energy related activities and associated subdivision and development being unconstrained/ unmanaged.</p> <p>This approach has the potential to result in significant adverse effects, particularly for affected landowners. Defaulting to reliance on a non-regulatory approach would also be ineffective in achieving the objectives sought for energy activities.</p> <p>This option would also be inefficient and ineffective in addressing several matters relevant to energy activities, including:</p> <ul style="list-style-type: none"> • Potential availability of local resources and recognition of the benefits derived at a local, regional and national level • Location, operation and technical constraints of the use and development of energy 	<ul style="list-style-type: none"> • The risk of acting on the non-regulatory approach means that Council would fail to adequately carry out its duties/requirements under the RMA. • Under this option it is also highly likely that resource management issues relating to energy activities would continue to be inadequately addressed, particularly in relation to the national, regional and local benefits derived from the use and development of energy resources and the adverse effects and constraints associated with their development. • It is considered that there is sufficient information not to act on this approach.

Options to achieve the District Plan objectives relating to Energy	Benefits	Costs	Efficiency and Effectiveness	Risks of acting/not acting
			<ul style="list-style-type: none"> • Potential cumulative effects associated with the use and development of energy • Potential impacts of energy use on sensitive environments (e.g. the coast, ONLs) • Offset measures and/or environmental compensation 	

Quantification

Section 32(2)(b) requires that if practicable the benefits and costs of a proposal are quantified.

Given the assessment of the scale and significance of the proposed changes above it is considered that quantifying costs and benefits would add significant time and cost to the s32 evaluation processes. The evaluation in this report identifies where there may be additional cost(s), however the exact quantification of the benefits and costs discussed was not considered necessary, beneficial or practicable.

Options to achieve the District Plan objectives relating to Energy	Benefits	Costs	Efficiency and Effectiveness	Risks of acting/not acting
<p>Summary</p> <p>The above table demonstrates that Option A is the most appropriate method to achieve the objectives relating to energy resource use and development in the district. The existing regulatory approach to managing energy resources in the operative plan is generic and lacks sufficient specificity and clarity to effectively and efficiently address the resource management issues identified, particularly the benefits provided by national, regional, and local benefits derived for energy related activities and the adverse effects and constraints associated with their development.</p> <p>Consequently, an alternative approach is proposed that more explicitly recognises the specialised nature of these activities and their contribution to the district and wider regional/national economy, and makes specific provision for the use and development of existing energy related activities while ensuring that any associated effects are appropriately managed. It is also the option that gives clear effect to the RPS, particularly objectives UDR OBJ 1 and ENE OBJ 1-3 and associated policies UDR POL 1 and ENE POL 1, as well as promoting greater consistency between District Plan provisions in the region by closely aligning with the approach adopted in the Proposed South Taranaki District Plan.</p>				

11 Summary

This evaluation has been undertaken in accordance with Section 32 of the Act in order to identify the need, benefits and costs and the appropriateness of the proposal having regard to its effectiveness and efficiency relative to other means in achieving the purpose of the RMA. The evaluation demonstrates that this proposal is the most appropriate option as:

- The objective and policies provide clear direction and align with current legislation, the Proposed South Taranaki District Plan and other regulatory requirements
- The objectives and policies give effect to the NPSREG and RPS
- The provisions enable the use and development of energy resources in the District and more effectively address potential adverse reverse sensitivity effects
- The objectives and policies are responsive to the operational requirements of energy activities
- The rules provide certainty to energy operators and the community about the nature and scale of activities anticipated
- It provides a clear decision-making framework for plan users

Overall, it is considered that the set of proposed provisions are the most appropriate given that the benefits outweigh the costs, and there are considerable efficiencies to be gained from adopting these provisions. Conversely, the risk of not acting on these provisions could result in perpetuation of the implementation issues experienced with the current Operative District Plan approach, leading to inefficient use of the District's natural and physical resources and an incremental loss of amenity values and of the quality of the environment.