
MARLBOROUGH ENVIRONMENT PLAN

Section 32 Report Chapter 18: Energy

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Overview

Background

Section 32 of the Resource Management Act 1991 (RMA) requires that in the process of reviewing its regional policy statement and resource management plans, the Marlborough District Council (the Council) must prepare and publish an evaluation report. The three documents being reviewed are the Marlborough Regional Policy Statement (MRPS), the Marlborough Sounds Resource Management Plan (MSRMP) and the Wairau/Awatere Resource Management Plan (WARMP). Each resource management plan is a combined regional, coastal and district plan.

Section 32¹ of the RMA requires that:

- reviewed regional policy statements and plans 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, economy and environment be clearly identified and assessed; and
- the written evaluation must be made available for public inspection.

The Section 32 process is intended to ensure that the objectives, policies and methods the Council decides to include in the new resource management framework have been well-tested against the sustainable management purpose of the RMA. The Section 32 evaluation report for the proposed Marlborough Environment Plan² (MEP) has been prepared on a topic basis, centred on the policy chapters of Volume 1 of the MEP. Individual reports have been prepared on the following:

Topic	Volume 1 Chapter of the MEP
Introduction to Section 32 evaluation reports	
Marlborough's tangata whenua iwi	3
Use of natural and physical resources	4
Allocation of public resources – freshwater allocation	5
Allocation of public resources – coastal allocation	5
Natural character	6
Landscape	7
Indigenous biodiversity	8
Public access and open space	9
Heritage resources	10
Natural hazards	11
Urban environments	12
Use of the coastal environment – subdivision, use and development activities in the coastal environment, recreational activities, fishing, residential activity, shipping activity and Lake Grassmere Salt Works	13
Use of the coastal environment – ports and marinas	13
Use of the coastal environment – coastal structures, reclamation and seabed disturbance	13
Use of the rural environment	14

¹ See Appendix A.

² The Marlborough Environment Plan is a combined regional policy statement, regional plan, regional coastal plan and district plan.

Section 32: Chapter 18 - Energy

Topic	Volume 1 Chapter of the MEP
Resource quality – water	15
Resource quality – air	15
Resource quality – soil	15
Waste	16
Transportation	17
Energy	18
Climate change	19

Chapters 1 and 2 of the MEP are not included within the Section 32 evaluation as they provide an introduction and background to the proposed document. These chapters do not include provisions that must be evaluated in accordance with Section 32.

The Introduction report covers the scope of the review that the Council has undertaken, including consultation and the nature of information gathered, investigations and research undertaken and analysis that has occurred. An overview of the Council's statutory obligations, the relationship of the MEP with other plans and strategies and working with Marlborough's tangata whenua iwi is described. A set of guiding principles the Council has used in the development of the objectives, policies and methods for the MEP is provided. The Council acknowledges that the principles have no statutory basis and do not in themselves have specific objectives, policies or methods. However, they provide the philosophy and values underlying the content of the MEP and consequently help to inform the Section 32 evaluation.

The policy provisions relating to energy are set out in Chapter 18 - Energy of Volume 1 of the MEP. This Section 32 evaluation report on these provisions is set out as follows:

- Description of issues – provides an overview of the resource management issue.
- Statutory obligations – the extent to which there are direct links with Section 6 or 7 matters and whether the provisions are directed or influenced by national policy statements or national environmental standards.
- Information and analysis – whether specific projects, investigations or other information have influenced the inclusion of provisions or other responses to dealing with resource management issues.
- Consultation – an overview of the extent and nature of specific consultation undertaken on the proposed provisions.
- Evaluation – an assessment of the provisions under the identified issue. Where appropriate, reference is made to supporting material that has helped to inform why a particular option has been chosen. In some cases the evaluation is undertaken on an individual provision, while in others groups of policies or methods have been assessed together.

In some parts of this evaluation report there are references to provisions within other chapters of the MEP. This is due to those provisions assisting in implementing the management framework for the subject matter of this report or vice versa. A reader should consider the evaluation report for these other provisions where they are referred to in this report.

Key changes

The key changes from the approach in the MRPS, WARMP and MSRMP are:

- Greater emphasis on the use and development of renewable energy resources.
- A specific focus on promoting the use and development of solar energy.
- Guidance on the nature of positive and adverse effects of proposals to use and develop renewable energy resources.

- A commitment to more accurately scope the potential renewable energy resources that exist in Marlborough.
- More specific methods of implementation with respect to promoting the use and development of local energy resources and promoting energy efficiency. This includes methods to enable small scale renewable energy generation.
- A focus on complementing the initiatives of central government in promoting energy conservation and efficiency especially programmes run by the Energy Efficiency and Conservation Authority.

Summary of reasons for the proposed provisions

Section 32(1)(b)(iii) requires a summary of the reasons for deciding on the provisions included in the MEP. The summary of the reasons for the provisions in relation to energy are set out below. However, a more detailed evaluation is set out in the remainder of this report.

There is a strong statutory direction for the proposed provisions. Section 7 of the RMA requires the Council to have particular regard to the efficient use and development of the energy resource. As any non-renewable energy resource is essentially unsustainable, Section 7 also requires the Council to have particular regard to the benefits to be derived from the use and development of renewable energy.

The Council is also required to give effect to the National Policy Statement on Renewable Energy Generation (NPSREG). In particular, policies are included in the NPSREG to ensure planning documents prepared under the RMA provide for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities.

The majority of Marlborough's energy sources are imported into the District, creating vulnerability to supply disruptions. There is a potential to reduce this vulnerability by optimising the use of local energy resources and making better use of electricity through efficiency gains. As recorded elsewhere in this report, there is also widespread community support for the use and development of renewable energy resources locally and the positive effects potentially created. However, there is also an acute awareness that specific proposals may have the potential for adverse effects on the surrounding environment.

The above reasoning emphasises the need for provisions that set out how Marlborough's energy resources will be utilised.

The proposed provisions were chosen for the following reasons:

- The NPSREG requires the Council to include provisions to provide for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities. In addition to the provisions of Chapter 4 - Use of Natural and Physical Resources, which provide for the social, economic, environmental, health and safety benefits of existing facilities for generating electricity, the provisions of this chapter seek to promote and encourage the use and development of renewable energy resources.
- Previous work has identified a latent potential in Marlborough in terms of hydro, wind, wave, tidal solar and biomass energy resources. However, there is still some uncertainty regarding the location of the resources and the feasibility of developing them. Further work to provide more certainty in this regard is signalled in the proposed methods.
- A particular emphasis has been placed on solar energy due to Marlborough's sunny climate and in recognition of the fact that solar resources can be accessed in a reasonably passive manner, minimising the potential for adverse effects.
- Provision for renewable electricity generation also acknowledges the community support for the use and development of renewable energy resources, as expressed through community consultation.

- Specific proposals to use and develop renewable energy resources can have both positive and negative effects. The nature of these effects is identified to ensure that they are appropriately considered as part of the process of assessing any specific proposal and the environmental setting within which the proposal is to be located. In some circumstances, micro-generation can be enabled as the nature of adverse effects is considered to be no more than minor.
- There can be physical, technological and financial constraints to utilising local renewable energy sources. In promoting and encouraging the use of local energy resources, the focus is on providing information and incentives that may lead to the uptake of those resources. This allows people to make informed decisions and preferentially utilise local sources. The approach also recognises that decisions on the use and/or development of local renewable energy resources are currently best made by the individual, given the constraints identified above. In addition, the Council also seeks to increase certainty with respect to the location and feasibility of developing renewable energy resources.
- A per capita reduction in the use of energy across Marlborough through efficiency gains will assist to reduce the reliance on out-of-district supplies and also act to reduce the need to develop local sources of energy.

Description of issue

Energy is used to provide heat, light and transport and enables people to provide for their wellbeing, health and safety. Sufficient affordable energy is also a key factor in the health of the transport, primary production, industrial and commercial sectors and therefore the Marlborough economy. In short, energy is an essential part of our lives.

Energy is only a resource insofar as other natural and physical resources may have stored or potential energy released to do useful work. The majority of Marlborough's energy needs are met by out-of-district energy sources; the only significant sources of domestic energy are from wood used for domestic heating and from the Branch and Waihopai hydroelectric schemes, which supply approximately 18% of Marlborough's electricity needs.

The provisions for this chapter are based on one issue:

Issue 18A – Marlborough requires a secure and efficient supply of energy.

- The majority of Marlborough's energy sources are imported into the District: fossil fuels for transportation, commercial and industrial needs are brought in by truck and the majority of electricity demand is satisfied from the national grid.
- Disruption in supply caused by fuel or electricity shortage or problems with the transportation infrastructure is a significant issue given the reliance on these out-of-district energy sources. In the future, such disruptions could potentially increase if volatility in international oil markets and fluctuations in electricity generation capacity increase. Having resilient and diverse means of energy generation and transmission in Marlborough will therefore be important in this regard.
- Irrespective of their non-renewable character and contribution to greenhouse gas emissions, for the foreseeable future it is likely that people and communities will continue to rely on fossil fuels for their transportation needs. For this reason, it is likely that Marlborough will remain vulnerable to supply disruptions for the life of the MEP.
- In contrast, there is the ability to reduce dependence on imported electricity. This can be achieved by making use of the energy sources that exist within Marlborough, reducing the demand for electricity through conservation efforts and making better use of electricity through efficiency gains.
- Marlborough's energy resources are predominantly rural in nature. Renewable energy is that which comes from a naturally replenished resource. There is the potential to develop hydro, wind, wave, tidal solar and biomass energy resources in Marlborough.

Statutory obligations

Historically, central government has had primary responsibility for energy resources. Through central government ministries and agencies such as the Ministry of Business, Innovation and Employment, the Electricity Authority, the Commerce Commission and the Energy Efficiency and Conservation Authority, there are a variety of statutes, regulations and strategies in place to manage energy resources and issues.

Local government has an important role in supporting central government, especially in the implementation of the New Zealand Energy Strategy, which proposes a target of generating 90 percent of electricity from renewable sources by 2025.

Section 7 of the RMA requires the Council to have particular regard to the efficient use and development of the energy resource. As any non-renewable energy resource is essentially unsustainable, Section 7 also requires the Council to have particular regard to the benefits to be derived from the use and development of renewable energy.

National Policy Statement for Renewable Electricity Generation

Through the NPSREG, which came into effect in 2011, central government has recognised the importance of renewable electricity generation. The NPSREG defines matters of significance relating to renewable electricity generation activities throughout New Zealand. These matters are strengthened in the objective to the NPSREG, which states its purpose as being:

“To recognise the national significance of renewable electricity generation activities by providing for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities, such that the proportion of New Zealand’s electricity generated from renewable energy resources increases to a level that meets or exceeds the New Zealand Government’s national target for renewable electricity generation.”

Policies are included in the NPSREG to ensure planning documents prepared under the RMA provide for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities. Policies are also included in the NPSREG to specifically guide decision making with respect to plan making processes and resource consents. As such, the intent of the NPSREG is to promote a more consistent approach to balancing the competing values associated with the development of New Zealand’s renewable energy resources when councils make decisions on resource consent applications. The Council is required to give effect to the NPSREG in the MEP.

Sections 30 and 31 of the RMA also set out a range of statutory functions for the Council that enable it to establish management frameworks in response to the identified issue.

Information and analysis

A limited number of investigations have helped to inform the review of the provisions of Chapter 18. In particular, the Council and the Energy Efficiency and Conservation Authority undertook a study to identify and assess Marlborough’s renewable energy potential. The purpose of the study, undertaken by Sinclair Knight Mertz, was partly to assist the Council in identifying its role in realising the potential through the use of regulatory and non-regulatory approaches.

At the time, the significant renewable energy resources identified were hydro, wave, solar and the production of ethanol from woody biomass. A range of recommendations were also made with respect to how development of the potential could be realised, including the role of planning documents prepared under the RMA. Regard has been made to these recommendations throughout the review process.

As noted in the section on statutory obligations, central government has historically had primary responsibility for energy resources and the Council has had regard to strategies and policies prepared by central government. Particular regard has been had to the New Zealand Energy Strategy (2011-2021), central government’s 10 year plan for the energy sector. The overall goal is to make the most of New Zealand’s abundant energy potential, for the benefit of all New Zealanders. Regard has also

been had to the programmes delivered by the Energy Efficiency and Conservation Authority to support and promote energy efficiency, energy conservation and the use of renewable energy sources.

Consultation

Early consultation

In 2006, the first round of consultation was initially undertaken solely for the review of the MRPS and saw the distribution of a community flyer to all ratepayers advising of the review. The aim of this exercise was to discover the community's views on the most important resource management issues that Marlborough would face over the next ten years. Approximately 380 responses were received, including comments on energy.

Many respondents considered the provision of sustainable energy and alternative forms of energy to be a regionally significant issue. Renewable energy sources are already being harnessed in Marlborough and respondents saw potential for more renewable energy developments in the future. They recognised a need for local energy sources to support an escalating power demand. Many also thought that the Council needed to promote exploration of wind, solar and tidal energy. There was some support for the existing policies in the MRPS on energy efficiency and a desire expressed for these to be translated into action.

In the responses, solar energy was the most commonly discussed form of renewable energy and many people strongly believed there should be much greater investment in developing solar energy systems. There was support for incentives to encourage use of solar energy.

Responses ranged between support for and resistance to hydro power in Marlborough, with most comments directed at the then Trustpower proposals for the Wairau River. Some saw hydro power as a means to a reliable and continuous supply of power, the cheapest option in the long term, while others expressed concerns about the potential impacts of the scheme on the Wairau River and the values that it supports.

Following this initial consultation, a series of discussion papers were prepared by the Council and released for public feedback in late 2007. One of these papers is particularly relevant to this Section 32 evaluation report: *Discussion Paper 9: Energy* identified seven issues:

- securing existing energy supply resources;
- securing a sustainable future energy supply;
- conserving energy resources (energy efficiency);
- maximising Marlborough's considerable solar energy potential;
- enabling and encouraging larger-scale sustainable renewable energy initiatives;
- enabling and encouraging smaller-scale sustainable renewable energy initiatives; and
- ensuring that the adverse environmental effects of energy generation and energy supply are adequately avoided, remedied or mitigated.

In total, *Discussion Paper 9* received 44 responses from individuals, iwi, industry groups and environmental groups. Comments received through the feedback noted the following:

- There was support for provisions promoting the benefits and appropriateness of renewable energy and a recognition of the need to encourage new renewable energy developments in Marlborough. Many noted the opportunities to develop local hydro, wind, solar and wave/tidal energy sources.
- The discussion paper was available for comment during the process of Trustpower seeking resource consent to build and operate a new hydro scheme on the Wairau River. As a result, and as occurred during the earlier consultation, a number of respondents commented on the benefits and/or costs of the specific proposal, particularly the potential adverse effects this hydro power scheme would have on the Wairau River.

- A high proportion of respondents emphasised the potential for Marlborough to utilise solar energy. However, two electricity generators noted that at the time of consultation, solar energy was not economically viable on a large scale and suggested that planning provisions should not promote solar energy above other methods.
- Some respondents considered it vital for emphasis to be placed on larger-scale sustainable renewable energy initiatives as such facilities would provide the bulk of Marlborough's energy. However, this opinion also received criticism on the basis that any efficiencies gained by large-scale projects may be negated by ecological, landscape and community losses.
- There was support for provisions to encourage small-scale renewable energy installations. Respondents stated that mini- and micro-schemes can have wide applications and be very important in maintaining security of supply at a local level. One method suggested to actively encourage micro-energy installations was to make them permitted activities. Electricity providers suggested that small-scale installations should not be presented as any more appropriate than larger scale operations. In the view of respondents, larger operations were generally seen as more efficient and sustainable from both economic and environmental perspectives.
- Taking into account the generic support for renewable energy, the potential for adverse environmental effects associated with both micro and larger scale energy developments created some concern. Respondents gave multiple examples of the potential adverse effects of such schemes. Caution was expressed regarding the local development of renewable energy resources that may create new issues for the Council or conflict with Part 2 of the RMA.
- The development of renewable energy sources can involve trade-offs between positive and negative effects. For some respondents, this raised questions regarding the Council's role in promoting the use and development of energy resources given its statutory functions to avoid, remedy and mitigate adverse effects. Other respondents considered that energy is such a significant issue that at times the benefits of renewable energy projects may need to be given priority over any actual or potential adverse effects.
- There was support for a planning framework to provide for the protection and upgrade of existing energy infrastructure. There was also support for recognition of the ongoing reliance by some critical infrastructure assets on traditional energy sources (e.g. coal, diesel) while promoting use of renewable energy sources.
- It was felt that the community should take greater responsibility for reducing future demand by creating greater efficiencies in current use. There was widespread support for an increased focus on energy efficiency and conservation and for the Council to take the lead in promoting this objective. It was suggested that the Council should insist on the highest levels of efficiency in all aspects of new development. A range of potential energy efficiency and conservation initiatives were identified, including a suggestion that the Council lead by example.
- Walking and cycling opportunities within and between townships should be promoted and that land development should be planned for and designed with a priority on walking and cycling. It was also felt that planning provisions should direct the Regional Land Transport Plan to prioritise rather than accommodate walking and cycling.
- More research should be undertaken into Marlborough's future energy requirements and local energy sources.
- The relationship between the Council and central government is important in managing energy resources and promoting energy efficiency. There was acknowledgement that the New Zealand Energy Strategy and the National Energy Efficiency and Conservation Strategy would have implications for the Council and the community.
- It was suggested that local government influence the national targets for generation of energy from renewable sources set out in these strategies through provisions in regional policy statements and regional plans.

- The costs involved in both the development of energy resources and implementation of energy efficiency initiatives were commonly raised. There were requests for the use of financial and other incentives to assist with these costs.

Later consultation

Early in the review process, the Council decided on an iterative approach to developing provisions for the MEP. This sought to test as many of the provisions as possible before the new resource management documents were formally notified under the First Schedule of the RMA. The rationale for this was that the greatest flexibility for change to provisions exists prior to notification of a proposed document; once notified, only those provisions submitted on can be changed and then only within the scope of those submissions. The Council therefore established a number of focus groups with the task of reviewing the provisions to discuss their likely effectiveness or otherwise. The aim was to have as much community participation as possible in developing the provisions to reflect the community's views and to resolve any substantive issues prior to notification.

Reflecting the importance of energy in a Marlborough context, a specific focus group was created to identify and address issues related to the use of energy. It comprised the Energy Efficiency and Conservation Authority, Transpower, Marlborough Lines, national generators that had a local presence and local companies involved in the small-scale electricity generation and provision of energy efficiency measures. The provisions of the chapter were prepared over a period of four years in very close association with this focus group. In addition, the draft provisions prepared by the Council and the Energy Focus Group were also considered by the other focus groups established by the Council for the purpose of the review.

Some of group members continued to provide feedback on draft provisions on an ongoing basis. For example, Transpower, Mighty River Power and Trustpower provided further feedback following the release of relevant national policy statements. There was also ongoing dialogue with the Energy Efficiency and Conservation Authority, particularly over how the Council might complement the delivery of national energy conservation and energy programmes.

Evaluation for Issue 18A

Issue 18A – Marlborough requires a secure and efficient supply of energy.

Appropriateness of Objective 18.1

Objective 18.1 – Optimise the use of Marlborough's energy resources.

Relevance

The majority of Marlborough's energy needs are supplied from out-of-district supplies, including electricity and fuels, making Marlborough vulnerable to supply disruptions. Any disruptions have the potential to cause significant adverse effects on economic activity and the community's social wellbeing. Optimising the use of local sources of energy reduces the potential for and significance of any effects caused by disruption in out-of-district supplies of energy.

As reflected in the assessment undertaken by the Energy Efficiency and Conservation Authority, Marlborough energy resources are renewable in nature and there is significant potential to increase local production/generation.

The NPSREG requires the Council to recognise the national significance of renewable electricity generation activities. As Marlborough's energy sources are renewable in nature, the objective also makes a contribution to achieving central government's targets with respect to renewable electricity generation contained in the New Zealand Energy Strategy (2011-2021).

Given the matters identified above, Objective 18.1 is considered to be very relevant in achieving the purpose of the RMA. It is clearly within the Council's functions in both Sections 30 and 31, assists in giving effect to the NPSREG and central government's targets and is directed at addressing Issue 18A.

Feasibility

It is likely that for the foreseeable future people and communities will continue to rely on fossil fuels for their transportation needs. For this reason, it is likely that Marlborough will remain vulnerable to supply disruptions for the life of the MEP.

A range of factors will influence the uptake of local sources of energy, including the costs of development relative to conventional sources of energy and the technological ability to develop or use the resource. As the balance of energy costs shift and technology advances, the feasibility of achieving the objective will more than likely increase.

The objective does not seek to maximise the use of local sources of energy, partly as a result of the constraints to use and development that might already exist (as highlighted above). An objective of optimising recognises that the Council has limited statutory powers to compel people to uptake local sources of energy. Instead, the emphasis of the provisions seeking to achieve Objective 18.1 focus on promoting and encouraging people to utilise local sources of energy in preference to other sources.

A specific measure is included in the Anticipated Environmental Results to establish whether the objective is being achieved.

Acceptability

Through the feedback received during the early consultation and through the development phase of the policy provisions, there was support for the Council to encourage the use and development of local sources of energy. Feedback also highlighted that the development of some energy resources creates the potential for adverse effects on the surrounding environment. Policies under Objective 18.1 and elsewhere in the MEP address the management of those adverse effects.

As the policies seeking to achieve Objective 18.1 focus on promoting and encouraging people to utilise local sources of energy, there will be limited costs imposed on people and the community.

Assessment of provisions to achieve Objective 18.1***Policies 18.1.1 and 18.1.2***

Policy 18.1.1 – Promote and encourage the use and development of renewable energy resources.
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Policy 18.1.2 – Promote and encourage the wide utilisation of solar thermal energy.

Benefits

The major benefit of these policies is that they may result in people taking action to use and develop the renewable sources of energy available in the Marlborough environment. The assessment undertaken by the Energy Efficiency and Conservation Authority identified that there are significant sources of renewable energy available in Marlborough. Although that assessment was undertaken some time ago, the resources have not diminished and the potential to utilise renewable energy sources remains.

The majority of Marlborough's energy needs are supplied from out-of-district supplies. The use and development of local sources of renewable energy would make a contribution to reducing that reliance and reduce the vulnerability to supply disruptions. In appropriate circumstances, permitted activity rules can be used to enable the use of land and water resources for renewable energy developments. Avoiding the costs associated with the processing of resource consent applications will encourage the uptake of renewable energy resources in Marlborough. From a national perspective, any increased utilisation of local renewable energy sources makes a contribution to meeting central government's objectives with respect to increasing the proportion of electricity generated from renewable sources.

Marlborough enjoys a sunny climate and Policy 18.1.2 seeks to maximise the local opportunity to utilise solar thermal energy to generate electricity and/or heat hot water. The benefits derived are similar to those identified above, but at a household or business level there is the potential to reduce energy expenses in the long term. The policy also recognises that there is a unique opportunity in Marlborough with respect to utilising a particular source of renewable energy use. It also reflects strong community support for the use and development of solar energy sources.

Section 32: Chapter 18 - Energy

Policies elsewhere in the MEP addressing specific natural resources recognise the importance of renewable energy resources. These provisions are subject to a separate Section 32 evaluation.

Costs

The implementation of methods to promote and encourage the use and development of renewable energy does involve a cost to the ratepayer. This includes costs associated with undertaking a stock take of renewable energy resources, the provision of incentives for the uptake of solar thermal technologies, the provision of information and any liaison and advocacy work. Costs will depend upon the nature of the methods and the timing of implementation.

There is a potential cost to the resource user in developing and using renewable energy sources, especially as implementation involves an initial capital investment. However, the policies do not require individuals to utilise renewable energy sources. The focus of the policies is on the provision of information so that people can make informed decisions with respect to their energy needs and how to they can best be met as well as the use of incentives to encourage preferential uptake of renewable energy sources. The decision as to whether the benefits of using/developing renewable energy resources outweigh the costs (or vice versa) is a decision best made by the individual.

Efficiency

The benefits derived from any local uptake of renewable energy resources are significantly greater at both a local and national level than the cost of regulatory and non-regulatory methods of promoting and encouraging the use and development of those resources. The policies are considered an efficient means of achieving the objective, particularly considering Marlborough's latent potential in terms of renewable energy resources.

Effectiveness

The effectiveness of the policies will be determined by the preferential use and development of renewable energy resources within Marlborough. Those decisions in the community will be influenced by factors that are beyond the control of the Council, particularly the costs of using/developing renewable energy resources relative to the long-term benefits and the price of alternative sources of energy. The Council intends to monitor the uptake of renewable energy resources (as reflected in the Anticipated Environmental Results section) to assess the effectiveness of the policies in the long term.

Policy 18.1.3

Policy 18.1.3 - When considering the environmental effects of proposals to use and develop renewable energy resources, to have regard to:

- (a) the benefits to be obtained from the proposal at local, regional or national levels, including:
 - (i) maintaining or increasing security of renewable electricity supply by diversifying the type and/or location of electricity generation;
 - (ii) maintaining or increasing renewable electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions;
 - (iii) for economic, social or cultural wellbeing; and
- (b) effects on the immediate and surrounding environment, including effects on air quality, water quality, water quantity, ecosystems, natural character, outstanding landscapes, visual amenities and from noise;
- (c) the degree of effect (extent, magnitude) and the degree to which unavoidable adverse effects can be remedied or mitigated, including the relative degree of reversibility of the adverse effects associated with the proposed generation technologies;
- (d) where the adverse effects are significant, alternatives to the development in terms of either means, location or scale; and
- (e) the environmental values affected or enhanced and whether these are of local, regional or national significance.

Benefits

The policy provides specific direction for considering the effects of specific proposals to use and develop renewable energy resources that require resource consent. In particular, the policy identifies the nature of both the positive and negative effects. This will ensure that decisions on proposals to

use and develop renewable energy sources are informed by consideration of the relevant effects. This will also give effect to the NPSREG by balancing the competing values associated with the development of Marlborough's renewable energy resources.

The policy recognises that the benefits and costs of renewable energy developments can occur at a national as well as local level. Of particular note in this respect are the benefits of maintaining security of supply and national generation output, and offsetting greenhouse gas emissions.

Costs

The policy is intended to guide resource consent applicants and decision makers and does not in itself create costs. It identifies the nature of the different environmental effects, both positive and negative. The way in which decision makers apply the matters in (a) to (e) may result in costs to a proposal, including the financial costs associated with complying with conditions imposed on the exercise of consent or the costs of not being able to progress with a proposal if a decision is made to decline a resource consent application. However, the policy merely identifies the matters that are relevant to the consideration of effects and the application of the policy will depend on the nature of the specific proposal and the environmental setting. For this reason it is not possible to estimate the specific costs of the policy.

Efficiency

The policy is considered efficient as it identifies the nature of the relevant environmental effects. The effects identified were informed by focus group feedback, particularly the Energy Focus Group and through other direct feedback from others in the community (including electricity generators). This will assist resource consent applicants to target any assessment of environmental effects.

Effectiveness

As identified above, the influence of the policy will depend on the nature of the specific proposal and the environmental setting. The policy identifies the positive effects of using/developing renewable energy resources and in that respect assists to achieve the objective. However, the negative effects identified and the way in which other provisions in the MEP influence the consideration of those effects may result in a proposal being constrained or declined. Obviously, any such outcome would not be effective in achieving the objective. However, it is important that any proposal to use and develop natural resources for renewable energy production is sustainable. The policy identifies the effects that are relevant to that determination and in that regard is still considered to be effective.

Policy 18.1.4

Policy 18.1.4 – When considering resource consent applications and plan changes, the extent to which any likely increase in energy consumption will be reduced through the use of local sources of renewable energy can be taken into account.

Benefits

The policy recognises that the utilisation of local sources of renewable energy is potentially positive. This effect can be taken into account by decision makers when considering any application for resource consent that will result in an increase in energy consumption. This provides opportunities for applicants to demonstrate that any increased energy consumption can be mitigated through the use of local sources to meet energy needs. The use of local sources of renewable energy may be a significant factor in the context of the consideration of the environmental effects created by the proposal, especially given the national priorities placed on renewable electricity generation.

The policy may also encourage the preferential uptake of renewable energy resources.

Costs

There are no direct costs created by with the policy. The policy is intended to provide applicants with the opportunity to mitigate the effects of increased energy consumption created by any proposal requiring resource consent. The extent to which the policy is relevant to any circumstance and/or applied will be determined by the decision maker.

Efficiency and Effectiveness

The efficiency and effectiveness of the policy in achieving the objective will be determined by the way in which it is applied by decision makers. Other provisions of the MEP will also be relevant to the

determination of the application. The policy allows the use of renewable energy resources to be taken into account in the determination of applications to use and develop natural resources. In this manner, the policy may provide a non-financial incentive to utilise local sources of renewable energy.

The policy reflects the desire of the Energy Focus Group to provide incentives for the preferential uptake of local renewable energy resources. The group identified that one means to achieve the objective was to ensure that decision makers consider the use of those resources as part of the decision making process.

Methods of implementation

The current focus of the MRPS, MSRMP and WARMP is on promoting energy efficiency. The most significant change in the methods of implementation from the current MRPS and the two resource management plans is the commitment to implementing the various means of promoting and encouraging the use and development of renewable energy resources.

The focus on identifying the potential sources of renewable energy is retained from the MRPS, as is the method on advocating to central government. These existing methods are supplemented by additional methods on the provision of information and incentives. In summary, the methods of the MEP put greater emphasis on assisting the community to make informed decisions about the use and development of renewable energy sources. The aim is to increase the preferential uptake of renewable energy sources.

Other options considered to achieve Objective 18.1

Four other options were considered by the Council to achieve Objective 18.1. They were:

1. Status quo in terms of the existing provisions of the MRSP, MSRMP and WARMP

The MRPS contains an objective (7.5.2) and a policy (7.5.3(b)) that seek to promote the efficient production and use of renewable energy resources. Both provisions recognise that this could also have adverse effects on the environment that should be avoided, remedied or mitigated. The provisions of the MEP contain similar provisions, although there is greater guidance on the nature of those adverse effects. There is also recognition that the use and/or production of renewable energy resources could result in positive effects. This is important to ensure that all effects of renewable energy generation are considered as part of any decision making process under the RMA and that the consideration is balanced.

The MEP places particular emphasis on promoting and encouraging solar energy given Marlborough's sunny climate. There was widespread public support for this and the increased uptake of this locally plentiful energy resource will assist in achieving the objective.

2. Identification of renewable energy resources.

Specific renewable energy resources could be identified within the notified provisions as a means of providing for the development of those resources. The resource over which there is certainty in terms of availability and reliability is solar energy. The notified provisions specifically recognise the potential to develop solar energy.

The study undertaken by the Council and the Energy Conservation and Efficiency Authority also identified potential hydro, wave and ethanol (from woody biomass) resources in addition to solar potential. However, this study was explicitly a preliminary assessment only and the report contained recommendations for more detailed investigations. That recommendation has been carried through into the notified provisions. It is expected that the results of future investigations will enable the identification of renewable resources in the medium to long-term.

3. Prioritising the benefits of proposals to develop renewable energy resources over the adverse effects.

As highlighted during the Council's consultation process, the development of renewable energy resources can involve both benefits and costs at a national and local level. One option that the Council considered in this respect was to prioritise the benefits that accrue from renewable energy developments.

More permissive controls than those in the MSRMP and WARMP were an option considered to optimise the use of Marlborough's energy resources. Avoiding the need for resource consent to develop energy resources would lower the costs of any such development and may therefore encourage the use of renewable energy resources. The methods in the chapter reflect that the development of resources for micro-renewable energy development is enabled through the use of permitted activity rules. In these circumstances, the risk of adverse effects on the surrounding environment is less than those of larger scale renewable energy developments.

Larger scale renewable energy developments create the potential for the adverse effects identified in Policy 18.1.3. It is appropriate that the objectives and policies in the MEP be applied to the consideration of those adverse effects to determine whether the development of the energy resource is sustainable. Although avoiding the need for resource consent for larger scale developments would assist to achieve Objective 18.1, it may also result in other objectives of the MEP not being met.

The Council also took into account the five specific policies to guide decision makers included in the NPSREG. These policies can only be applied to energy proposals if resource consent is required.

The Council also considered including policy to prioritise the benefits that accrue from renewable electricity generation over the costs. However, this option was not included as such prioritisation could result in other objectives of the MEP not being met, depending on the nature, scale and significance of the adverse effects. In reaching this decision, the Council took into account that the NPSREG sought to balance the competing values associated with the development of New Zealand's renewable energy resources. It also noted that Policies A, B, C1 and C2 of the NPSREG already require decision makers to have regard to specific benefits at the local, regional and national level in any decision making process with respect to development of renewable energy resources.

4. Greater regulatory controls to require the use of local renewable energy sources.

The Council considered the option of requiring the use of local renewable energy sources but did not pursue this option for a variety of reasons. The most significant factor was the existing physical, technological and financial constraints on the ability to access renewable energy sources. The regulatory provisions of the MEP do not have the ability to overcome these constraints, as they are beyond the influence of the RMA and the functions of the Council under the RMA. In this circumstance, the Council considered that additional regulatory controls to require the use of local renewable energy sources would be inappropriate. It is appropriate that people be able to exercise discretion over which energy source(s) they use. The provisions of the MEP focus on the provision of information so that people can make informed decisions. In the case of micro-generation, there is also the potential ability to develop the resource without the need for resource consent.

Appropriateness of Objective 18.2

Objective 18.2 – Increased efficiency in the use of energy.

Relevance

Section 7(ba) of the RMA requires the Council to have particular regard to the efficient end use of energy in exercising its functions. The objective reflects this requirement.

Increasing demand for energy in Marlborough has an impact on the resources needed to provide energy as well as infrastructure such as roads and generation schemes. A per capita reduction in the demand for energy as a result of more efficient use will reduce the overall demand on these resources. This will assist to safeguard those resources to meet the energy needs of future generations.

As significant proportions of household and business expenditure are spent on energy needs, improving the efficiency of energy use will result in reduced energy costs in the long term. Efficient use of energy can also result in secondary benefits for the community through improved health (for example, due to warmer homes), increased safety on the road and improved productivity in business.

For the reasons set out above, Objective 18.2 is considered to be relevant in achieving the purpose of the RMA and is clearly within the Council's functions.

Feasibility

The objective complements other existing objectives set at a national level. It recognises that there are actions that the Council can take in the exercise of its own functions to promote and encourage the efficient use of energy. There is uncertainty with respect to the extent to which the objective will be achieved, as there are many factors that influence behaviour in terms of adopting more efficient use of energy. However, that uncertainty is no reason not to seek more efficient use of energy. In fact, uncertainty provides greater emphasis on the need to provide appropriate information so that people can make informed decisions.

Acceptability

Objective 18.2 reflects the national priority placed on energy efficiency, especially via the New Zealand Energy Strategy and through the various initiatives of the Energy Efficiency and Conservation Authority. The approach is consistent with this national direction.

Through the feedback received during early consultation, there was support for a greater focus on energy efficiency and conservation and for the Council to take the lead in promoting this objective. Opportunities to influence both the form and layout of subdivisions and development within subdivisions were particularly identified. There was also a desire for a greater level of information to be provided on options for improving the efficient use of energy.

Assessment of provisions to achieve Objective 18.2

Policy 18.2.1

Policy 18.2.1 – Promote and encourage the efficient use of energy, having particular regard to:

- (a) energy requirements of subdivision location and patterns and land use activities;
- (b) the orientation, design and operation of buildings;
- (c) transport modes and patterns; and
- (d) the proximity of subdivision and development to existing towns and small settlements.

Benefits

The policy recognises that the subdivision and development of land provides an opportunity to promote and encourage the efficient use of energy. The matters identified in (a) to (d) are within the functions of the Council when managing the use and development of land. The implementation of regulatory and non-regulatory methods with respect to these matters will assist to create behavioural change. Any increase in the use of energy efficient methods will decrease the per capita consumption of energy.

The policy identifies four specific matters to which particular regard should be had. This has the benefit of enabling the prioritisation of resources with respect to the delivery of methods.

The work of the Council in exercising its own functions will complement the work of the Energy Efficiency and Conservation Authority at a national level as it implements the New Zealand Energy Strategy.

Costs

The main costs created by the implementation of the policy are associated with the provision of information to the community. The costs will depend upon the nature of the methods and the timing of implementation.

The decision as to whether the benefits of implementing energy efficiency systems outweigh the costs (or vice versa) is best made by the individual. The focus of the policy is to provide information so that people can make informed decisions in this regard.

Regulatory methods of implementation may involve an additional cost to the developer of the land or building. The magnitude of this cost is difficult to gauge as it will depend on the extent to which adjustments would need to be made to future proposals. However, by influencing decisions on the location and nature of subdivision and development and the means of transport within and between settlements, the policy will reduce costs to those living or undertaking business on newly-developed areas of land. The policy is also complemented by more specific policies in Chapter 12 - Urban

Environments, which provide more specific policy direction with respect to those matters listed in (a) to (d). These provisions are subject to a separate Section 32 evaluation.

The Council may need to undertake additional capital expenditure to implement energy efficiency measures in any initiative to lead by example. However, those costs would be recovered in the long term through energy savings.

Efficiency

The benefits derived from efficient use of energy are significantly greater at a local and national level than the cost of regulatory and non-regulatory methods of promoting and encouraging energy efficiency. There are also efficiencies gained by complementing the initiatives of the Energy Efficiency and Conservation Authority at a local level. The co-ordination of resources will ensure that the greatest gain can be achieved for the investment made.

Effectiveness

The effectiveness of the policy will be determined by the implementation of measures within the community to improve the efficient use of energy. Those decisions will be influenced by factors that are beyond the control of the Council, including the costs of efficiency measures relative to the costs of energy. The Council intends to monitor the uptake of energy efficient methods in the subdivision of land and construction of new buildings (as reflected in the Anticipated Environmental Results) to assess the effectiveness of the policy in the long term.

Methods of implementation

The most significant change in the methods of implementation from the current MRPS and the two resource management plans is a greater emphasis on the promoting energy efficiency through the provision of information. This recognises that information can be influential in bringing about behavioural change. There is also greater emphasis on working with central government and recognising the role of the Energy Efficiency and Conservation Authority in the delivery of national programmes. The greater emphasis on liaison and advocacy reflects that the Council, through the delivery of its own functions, can complement the actions of the Authority.

The other significant change is the recognition that the Council can lead by example by investigating and implementing energy efficiency in its own operations. This is important from a public perception perspective as it demonstrates a willingness to 'practice what you preach'.

Other options considered to achieve Objective 18.2

Two other options were considered by the Council to achieve Objective 18.2. They were:

1. Status quo in terms of the existing provisions of the MRSP, MSRMP and WARMP

The MRPS contains an objective (7.5.2) that seeks to promote the efficient use of energy resources. This objective is reflected in the urban environment and subdivision provisions of both MSRMP and WARMP. The focus of these provisions is on influencing the location, design and construction of urban subdivision and residential dwellings. The MEP provisions are very similar in this regard.

The Council now has the benefit of developing and implementing a strategy (referred to as "Growing Marlborough") to guide the growth of Marlborough. Through this process, the Council has been able to promote compact urban form in the established settlements by determining the appropriate location of future urban development. The provision for growth has included opportunities for infill and greenfield development on the immediate periphery of settlements. Through this direction, transportation needs have also been minimised. The areas identified for accommodating greenfield growth through Growing Marlborough are included in Volume 4 of the MEP.

There is also greater emphasis within the methods on the Council promoting energy efficiency through the provision of information, including in association with the Energy Efficiency and Conservation Authority. This recognises that information can be powerful in bringing about behavioural change. It also seeks to build on existing programmes delivered at a national level.

2. *Financial contributions to fund greater Council involvement in the delivery of energy efficiency programmes*

During the review of the operative planning framework, the Council considered using financial contributions as a means of funding the delivery of energy efficiency programmes. This reflected feedback received during early consultation which sought greater Council involvement in such delivery. However, this option was not pursued, primarily as a result of the inability to use financial contributions in this manner (as they must relate to the adverse effects of an activity). Although it would have been an effective method for achieving Objective 18.2, the Council did not want to duplicate the initiatives currently delivered via the Energy Efficiency and Conservation Authority. A more efficient approach of complementing those initiatives has been incorporated into the notified MEP provisions.

Risk of acting or not acting

In terms of Section 32(2)(c) of the RMA, an assessment of the “*risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions*” is required.

There is uncertainty regarding the exact nature of local renewable energy resources and the ability to viably develop those resources. The Council does not consider that its role is to assess the viability of individual development proposals. However, it has committed to undertake further investigation of local sources of renewable energy through the notified provisions. This will assist to address the uncertainty identified. The MEP will also provide a framework to assess the effects of individual proposals.

There is uncertainty regarding the extent to which people in the community will more efficiently use energy, as many factors influence the adoption of energy efficiency measures. The decision as to whether the benefits of implementing energy efficiency systems outweigh the costs (or vice versa) is best made by the individual. The focus of the provisions is to provide information so that people can make informed decisions in this regard.

If energy efficiency was not promoted or encouraged at a local level, it could only be achieved through national initiatives, particularly via the Energy Efficiency and Conservation Authority. Complementing national initiatives through local information and action is considered to be more effective from both a local and national perspective.

Appendix A – Section 32 of the RMA

32 Requirements for preparing and publishing evaluation reports

- (1) An evaluation report required under this Act must—
 - (a) examine the extent to which the objectives of the proposal being evaluated are the most appropriate way to achieve the purpose of this Act; and
 - (b) examine whether the provisions in the proposal are the most appropriate way to achieve the objectives by—
 - (i) identifying other reasonably practicable options for achieving the objectives; and
 - (ii) assessing the efficiency and effectiveness of the provisions in achieving the objectives; and
 - (iii) summarising the reasons for deciding on the provisions; and
 - (c) contain a level of detail that corresponds to the scale and significance of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the proposal.

- (2) An assessment under subsection (1)(b)(ii) must—
 - (a) identify and assess the benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation of the provisions, including the opportunities for—
 - (i) economic growth that are anticipated to be provided or reduced; and
 - (ii) employment that are anticipated to be provided or reduced; and
 - (b) if practicable, quantify the benefits and costs referred to in paragraph (a); and
 - (c) assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions.

- (3) If the proposal (an **amending proposal**) will amend a standard, statement, regulation, plan, or change that is already proposed or that already exists (an **existing proposal**), the examination under subsection (1)(b) must relate to—
 - (a) the provisions and objectives of the amending proposal; and
 - (b) the objectives of the existing proposal to the extent that those objectives—
 - (i) are relevant to the objectives of the amending proposal; and
 - (ii) would remain if the amending proposal were to take effect.

- (4) If the proposal will impose a greater prohibition or restriction on an activity to which a national environmental standard applies than the existing prohibitions or restrictions in that standard, the evaluation report must examine whether the prohibition or restriction is justified in the circumstances of each region or district in which the prohibition or restriction would have effect.

- (5) The person who must have particular regard to the evaluation report must make the report available for public inspection—
 - (a) as soon as practicable after the proposal is made (in the case of a standard or regulation); or
 - (b) at the same time as the proposal is publicly notified.

(6) In this section,—

objectives means,—

- (a) for a proposal that contains or states objectives, those objectives:
- (b) for all other proposals, the purpose of the proposal

proposal means a proposed standard, statement, regulation, plan, or change for which an evaluation report must be prepared under this Act

provisions means,—

- (a) for a proposed plan or change, the policies, rules, or other methods that implement, or give effect to, the objectives of the proposed plan or change:
- (b) for all other proposals, the policies or provisions of the proposal that implement, or give effect to, the objectives of the proposal.

Appendix B – Bibliography

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