

Proposed Bay of Plenty Regional Policy Statement Section 32 report Infrastructure and energy



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Section 32 Report

Energy and Infrastructure

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1 Introduction

This report presents the Section 32 evaluation in accordance with the Resource Management Act 1991 (RMA), “Consideration of alternatives benefits and costs” for the proposed Regional Policy Statement (RPS) on the topic of energy and infrastructure. Section 32 states:

32 *Consideration of alternatives, benefits, and costs*

(1) *In achieving the purpose of this Act, before a proposed plan, proposed policy statement, change, or variation is publicly notified, a national policy statement or New Zealand coastal policy statement is notified under section 48, or a regulation is made, an evaluation must be carried out by—*

.....

(c) *the local authority, for a policy statement or a plan (except for plan changes that have been requested and the request accepted under clause 25(2)(b) of Part 2 of Schedule 1); or*

(3) *An evaluation must examine—*

(a) *the extent to which each objective is the most appropriate way to achieve the purpose of this Act; and*

(b) *whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods are the most appropriate for achieving the objectives.*

.....

(4) *For the purposes of [[the examinations referred to in subsections (3) and (3A)], an evaluation must take into account—*

(a) *the benefits and costs of policies, rules, or other methods; and*

(b) *the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.*

(5) *The person required to carry out an evaluation under subsection (1) must prepare a report summarising the evaluation and giving reasons for that evaluation.*

(6) *The report must be available for public inspection at the same time as the document to which the report relates is publicly notified or the regulation is made.*

1.1 Structure of this report

Section 2 of this report outlines the regionally significant issues identified and the process of identification. Section 3 outlines the appropriateness of each objective in accordance with the purpose of the RMA (Resource Management Act).

Sections 4 and 5 then evaluate the most appropriate policy and method options to achieve each objective. When evaluating the policy and method options, the range of options available is outlined first and then each option is evaluated. There are four types of options discussed in each instance.

These are:

- (a) Broad direction to district and/or regional plans, and/or the Regional Land Transport Strategy.

This is where a policy directs that a change is to be made to a district and/or regional plan and/or the Regional Land Transport Strategy. The method then sets out when this change is to be undertaken.

- (b) Specific direction on matters to be given particular regard to in resource management decision making.

This is where a policy sets out a series of matters that are to be given “particular regard” when making resource management decisions. The method sets out when these matters are to be considered. This may include resource consent decisions, decisions on notices of requirements or when making decisions about changes to district or regional plans.

- (c) Guiding actions.

This is where a policy and a method (or methods) outlines the non-regulatory actions that need to be put in place. These include:

- Information and guidance
- Integrating management
- Identification and investigation

- (d) Doing Nothing

This will occur where no intervention, either regulatory or non-regulatory will occur.

Determining the most appropriate policies and methods is based on an assessment of the effectiveness and efficiency of the policy and method options and the risks of acting or not acting when there is uncertain or insufficient information.

Effectiveness is a measure of how much influence a resource management intervention has or how successful it is in addressing the issues, in terms of achieving the desired environmental outcome. Effectiveness is a cumulative value, derived from the range of types and scope of influences or impacts of an intervention, towards achieving intended results and environmental outcomes. The effectiveness of an option is not able to be assessed as an absolute value. Rather, options are appraised as to whether they exhibit the qualities which contribute to ‘effectiveness’ and to what degree and a determination is made as to the cumulative effect of the pertinent attributes in terms of high, medium or low “effectiveness”.

When evaluating the efficiency of the policy and method options both the benefits (social, economic and environmental) and costs (social, economic and environmental) are outlined. Each option is then deemed to be either efficient or inefficient. The following diagram outlines how this assessment is undertaken.

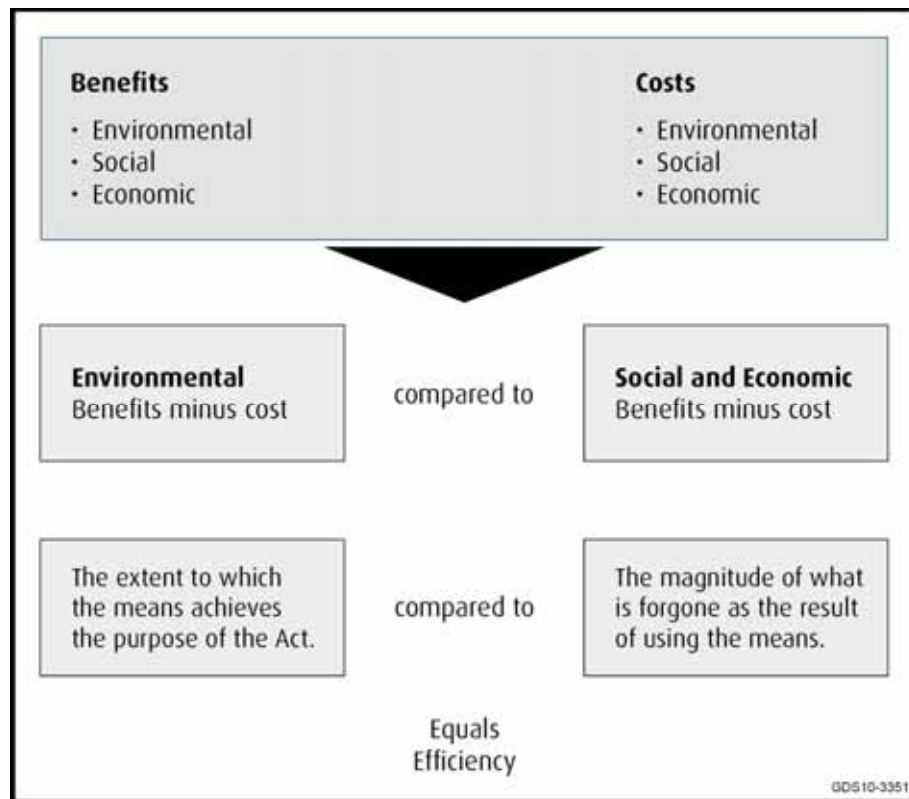


Figure 1 Deriving efficiency from benefits and costs.

The evaluation of ‘efficiency’ will result in either a positive or negative result in terms of efficiency. Alternatively, if efficiency is expressed as a cost/benefit ratio, it will be either greater than or less than 1. In the event the ratio is considered to be less than 1, the option can be considered efficient, in that the sum of the benefits outweigh the sum of the costs. In the event the ratio is deemed to be greater than 1, the option can be considered to be inefficient, in that the sum of the costs outweigh the sum of the benefits. It is important to note that in this evaluation of ‘efficiency’, absolute values for each of the variables considered pertinent (i.e. identified as either a cost or a benefit within the evaluation of the options) are not available. Rather, the analysis has endeavoured to present an accurate appraisal of the relative costs and benefits between the options, in order to determine which are efficient and which are not. A simple yes or no is used to differentiate the options as efficient or inefficient.

2 Regionally significant issues

As part of the review of the Bay of Plenty Regional Policy Statement 1999, the Energy and infrastructure issues were evaluated and reviewed using:

- Criteria to ensure the issues were regionally significant (refer Appendix 1 for a copy of the criteria)
- Bay Trends (2004) – Report on the state of the Bay of Plenty environment
- Bay of Plenty Community Outcomes Report (2008)
- Stakeholder written comments/submissions on the Draft Regional Policy Statement
- The Next Bay of Plenty Regional Policy Statement: Issues and Options (2008)
- Monitoring and Evaluation of the Operative Bay of Plenty Regional Policy Statement (2008)
- Draft Regional Energy Strategy for the Bay of Plenty (2010)

The resulting issues recommended for inclusion in the proposed Regional Policy Statement on Energy and Infrastructure are:

Issue 1: Reverse sensitivity effects on infrastructure

Subdivision, use and development can result in reverse sensitivity effects on existing or planned infrastructure, as well as the maintenance and upgrade of infrastructure necessary to support the sustainable growth of the region.

Issue 2: Ineffective integration of land use and transportation networks

Ineffective integration between land use and the region's transport network can potentially result in development patterns that increase the need for travel and reliance on motor vehicles. This in turn, increases road congestion, emissions and energy use (particularly from non-renewable sources), makes infrastructure provision inefficient and expensive and limits the opportunities for more sustainable modes of transport.

Issue 3: Improving security of electricity supply

The Bay of Plenty region's electricity transmission and distribution network is at risk from supply disruptions and energy shortages. This can impact on communities' ability to provide for their social, economic and cultural wellbeing.

Issue 4: Limited use of renewable energy sources and energy conservation and efficiency

Energy conservation and efficiency is not widely practised and the use of renewable energy sources across the region is minimal.

These issues were identified by using the criteria outlined in Appendix 1. This criteria outlines the tests for each issue that were used to determine if they were resource management issues of regional significance.

3 Extent to which the objectives are the most appropriate

The proposed energy and infrastructure objectives are:

Objective 5: Provide for energy efficiency and conservation and promote the use and development of renewable energy sources

Objective 6: Provide for the social, economic, cultural and environmental benefits of regionally significant infrastructure and renewable energy.

Following is an assessment outlining the extent to which the energy and infrastructure objectives are the most appropriate way to achieve the purpose of the RMA.

3.1 Objective 5

Provide for energy efficiency and conservation and promote the use and development of renewable energy sources

- The pressure on energy resources to be more sustainable:** The objective addresses issues identified in the Monitoring and Evaluation of Bay of Plenty Regional Policy Statement Report 2008. The report identified that regional councils have a strengthened ability through the RMAA 2004 to provide policy direction on renewable energy and efficiency of the end use of energy, however it also limits regional council's role in controlling industrial and greenhouse gas emissions. The Resource Management Amendment Act 2005 (RMAA 2005) also provides regional councils with the ability to provide for the integration of infrastructure with land use through objectives, policies and methods. As a result, the report identified the Regional Policy Statement should not refer to reducing the reliance on fossil fuels (objective 14.3.2(a) in operative Regional Policy Statement) and that it be limited to increasing the use of renewable energy. For similar reasons it also advised the objective relating to adverse effects from energy production (objective 14.3.3(a) in operative Regional Policy Statement) be removed from the next Regional Policy Statement. The report identified objectives should be less repetitive of the RMA and provide further direction in the context of the Bay of Plenty region for energy provisions by promoting energy efficiency through regional and district plans.
- Geothermal energy use:** The Bay Trends 2004 Report on the state of the Bay of Plenty Environment identified that the geothermal resource in the region is commonly used for domestic and commercial heating purposes and for industrial power generation. The Resource Management (Energy and Climate Change) Amendment Act 2004 (RMAA 2004) defined geothermal as a renewable energy resource. Therefore, in promoting the development of renewable energy sources this objective is achieving the purpose of the RMA.

The objective partly addresses the issue of ineffective integration of land use and transportation networks. To achieve this objective more efficient forms of transport are required. This will be done by more effective integration of land use and transportation networks so that more efficient modes of transport are promoted and so that people can live closer to where they work and have better access to amenities. This will reduce the need for long distance travel and the reliance on the motor vehicle.

The objective partly addresses improving the security of electricity supply. This is because diversifying energy sources through the promotion of renewable sources and reducing the reliance on fossil fuels supports security of electricity supply.

The objective addresses the issue of limited use of renewable energy sources and energy conservation and efficiency that is occurring in the region. It does this by promoting renewable energy sources for energy generation and providing for energy efficiency and conservation. This would achieve progress toward gaining the benefits to be derived from the use and development of renewable energy, including a reduction in the amount of greenhouse gases emitted and a reduction on the reliance of fossil fuels, which in turn address the effects of climate change.

- **RMA mandate for local authorities to manage energy resources:** Relevant sub sections to Section 30 “Function of regional councils” for Objective 5 include:

30(1)(a) – the establishment, implementation and review of objectives, policies and methods to achieve integrated management of the natural and physical resources of the region

30(1)(b) – the preparation of objectives and policies in relation to any actual or potential effects of the use, development, or protection of land which are of regional significance

- **Central government direction:** The following policies of the New Zealand Coastal Policy Statement 1994 are relevant to Objective 5:

Policy 3.2.1 - Policy statements and plans should define what form of subdivision, use and development would be appropriate in the coastal environment, and where it would be appropriate.

Objective 5 also supports the directions of the New Zealand Energy Strategy 2007, the New Zealand Energy and Efficiency and Conservation Strategy 2007 and the New Zealand Transport Strategy, which set the national vision and direction for energy and climate change.

Objective 5 provides for energy efficiency and conservation and promotes the use and development of renewable energy sources and by doing this achieves the purpose of the RMA by:

- (a) encouraging agencies and decision makers to reduce the rates of energy consumption through energy efficiency, conservation and the use of renewable energy sources, to sustain natural and physical resources to meet the energy needs of future generations:
- (b) encouraging the reduction of greenhouse gases generated by the use of fossil fuels through the provision of energy efficiency and conservation and promoting renewable forms of energy to safeguard the life-supporting capacity of air, water, soil and ecosystems; and
- (c) improving the security of electricity supply by diversifying and maximising the use of renewable energy sources and reducing the dependency on fossil fuels in order to avoid, remedy or mitigate adverse social, economic and environmental effects on people and communities that can result from disruptions and shortages to supply.

- **Other Matters:** Particular sub-sections from Part II of the RMA that are relevant to Objective 5 include:

7(b) – the efficient use and development of natural and physical resources.

7(ba) – the efficiency of the end use of energy.

7(g) – any finite characteristics of natural and physical resources.

7(i) – the effects of climate change.

7(j) – the benefits to be derived from the use and development of renewable energy.

- **Purpose of the RMA:** Objective 5 achieves the purpose of the Act by;
 - (a) enabling people to sustain energy sources to meet the reasonably foreseeable needs of future generations through the provision of efficient and conservative methods of using energy and promoting the use of renewable sources; and
 - (b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems by providing for more efficient and sustainable methods of energy use; and
 - (c) avoiding, remedying, or mitigating any adverse effects of activities on the environment by providing for alternatives to energy use that have a reduced level of adverse effects than traditional methods.

On this basis, Objective 5 is the most appropriate objective to promote the purpose of the Act and to address the regionally significant energy and infrastructure resource management issues.

3.2 Objective 6

Provide for the social, economic, cultural and environmental benefits of regionally significant infrastructure and renewable energy.

- **The pressure on regionally significant infrastructure and renewable energy to provide for social, economic, cultural and environmental benefits:** The objective addresses issues identified in the Monitoring and Evaluation of Bay of Plenty Regional Policy Statement Report 2008. The report identified that the RMAA 2004 provides the regional council with the ability to focus on energy efficiency and renewable energy and that the RMAA 2005 provides for making policy on the integration of infrastructure and land use. Therefore, providing for recognising and protecting the benefits of regionally significant infrastructure and renewable energy is further encouraged in the Regional Policy Statement. As a result, the report recommended provisions for “trade offs” between localised effects and the benefits of renewable energy be addressed and that the integration of infrastructure and land use be provided for more effectively.
- **Integration of land use and infrastructure and reverse sensitivity:** In addressing the requirements of section 30(1)(gb) of the RMA, the report acknowledged that an integrated management framework for infrastructure and land use does exist in the operative Regional Policy Statement in the built environment chapter, however it is too broad. This is because it contains one objective covering the built environment and physical resources and as a result, recommends a separate objective be made to provide for regionally significant infrastructure. It mentions that Change 2 (Growth Management) to the operative Regional Policy Statement addresses section 30(1)(gb), however only relates to the western Bay of Plenty sub-region. Therefore, new provisions are required to address the whole region in regard to this matter.

The objective addresses the potential for reverse sensitivity effects on infrastructure. Providing for the social, economic, cultural and environmental benefits of infrastructure will provide for less conflict between subdivision, use and development that often hinder major infrastructure projects. The objective of recognising the benefits of regionally significant infrastructure will be achieved by requiring integration of this principle into Regional and District Plans and by requiring consideration by decision makers in determining resource management outcomes. Once in place, this shall require better integration of infrastructure and land use to ensure that reverse sensitivity effects on infrastructure from subdivision, use and development are more effectively planned for and more readily avoided.

The objective addresses in part, the ineffective integration of land use and transportation networks outlined in Issue 2. Providing for the benefits of regionally significant infrastructure (which includes the regional strategic roading network) will efficiently provide for people and goods to move to, from and around the region with minimal congestion.

The objective addresses in part the improvement of security of electricity supply outlined in Issue 3. By providing for the benefits of renewable energy, renewable energy sources shall be recognised as a source of power generation, therefore become more feasible for use. This should result in a diversification of energy sources being developed and promote less reliance on fossil fuels. Therefore, disruptions and shortages to supply will be reduced, improving security of supply.

- **RMA mandate for local authorities to manage energy and infrastructure resources:** Relevant sub sections to Section 30 “Function of regional councils” for Objective 6 include:

30(1)(a) – the establishment, implementation and review of objectives, policies and methods to achieve integrated management of the natural and physical resources of the region.

30(1)(b) – the preparation of objectives and policies in relation to any actual or potential effects of the use, development, or protection of land which are of regional significance.

30(1)(gb) – the strategic integration of infrastructure with land use through objectives, policies and methods.

- **Central government direction:** The following policies of the New Zealand Coastal Policy Statement 1994 are relevant to Objective 6:

Policy 3.2.1 - Policy statements and plans should define what form of subdivision, use and development would be appropriate in the coastal environment and where it would be appropriate.

The following policy in the National Policy Statement on Electricity Transmission is relevant to Objective 6:

Policy 1 - In achieving the purpose of the Act, decision-makers must recognise and provide for the national, regional and local benefits of sustainable, secure and efficient electricity transmission. The benefits relevant to any particular project or development of the electricity transmission network may include:

- (i) maintained or improved security of supply of electricity; or*
- (ii) efficient transfer of energy through a reduction of transmission losses; or*
- (iii) the facilitation of the use and development of new electricity generation, including renewable generation which assists in the management of the effects of climate change; or*
- (iv) enhanced supply of electricity through the removal of points of congestion.*

The above list of benefits is not intended to be exhaustive and a particular policy, plan, project or development may have or recognise other benefits.

Policy 2 - In achieving the purpose of the Act, decision-makers must recognise and provide for the effective operation, maintenance, upgrading and development of the electricity transmission network.

Policy 10 - In achieving the purpose of the Act, decision-makers must to the extent reasonably possible, manage activities to avoid reverse sensitivity effects on the electricity transmission network and to ensure that operation, maintenance, upgrading and development of the electricity transmission network is not compromised.

The following policy in the Proposed National Policy Statement for Renewable Electricity Generation is relevant to Objective 6:

Policy 1 - The benefits of renewable electricity generation activities, at any scale, are of national significance. Decision-makers must have particular regard to the national, regional and local benefits relevant to renewable electricity generation activities. These benefits may include, but are not limited to:

- (i) *maintaining or increasing electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions*
- (ii) *maintaining or increasing security of electricity supply at local, regional and national levels by diversifying the type and/or location of electricity generation.*

Policy 3 – When considering proposals to develop new renewable electricity generation activities, decision-makers must have particular regard to the relative degree of reversibility of the adverse environmental effects associated with proposed generation technologies.

Objective 6 also supports the directions of the New Zealand Energy Strategy 2007, the New Zealand Energy and Efficiency and Conservation Strategy 2007 and the New Zealand Transport Strategy that set the national vision and direction for energy and climate change

- **Other Matters: Particular sub sections from Part II of the RMA that are relevant to Objective 6 include:**

7(b) – the efficient use and development of natural and physical resources

7(ba) – the efficiency of the end use of energy

7(g) – any finite characteristics of natural and physical resources

7(i) – the effects of climate change

7(j) – the benefits to be derived from the use and development of renewable energy.

- **Purpose of the RMA: Objective 6 provides for the social, economic, cultural and environmental benefits of regionally significant infrastructure and renewable energy and by doing this achieves the purpose of the RMA by:**

- Encouraging the benefits of integrated management of infrastructure and land use and renewable energy to sustain natural and physical resources to meet the energy and infrastructure needs of future generations;
- Encouraging the benefits of integrated management of infrastructure and land use and renewable energy to reduce emissions of greenhouse gases to safeguard the life-supporting capacity of air, water, soil and ecosystems; and
- Improving the security of electricity supply by encouraging the benefits of integrated management of infrastructure and land use and renewable energy in order to avoid, remedy or mitigate adverse social, economic and environmental effects on people and communities that can result from disruptions and shortages to supply.

On this basis, Objective 6 is the most appropriate objective to promote the purpose of the Act and to address the regionally significant energy and infrastructure resource management issues.

3.3 Analysis of which are the most appropriate objectives

Table 1 assesses the appropriateness of Objectives 5 and 6 for achieving the purpose of the RMA.

Table 1: Analysis of the appropriateness of energy and infrastructure objectives of the Proposed Regional Policy Statement

Final chosen objective	Other alternatives?	Why not the most appropriate to achieve the Resource Management Act
Objective 5 Provide for energy efficiency and conservation and promote the use and development of renewable energy sources.	Alternative 1 No objective in the Regional Policy Statement. Energy efficiency and conservation and promotion of renewable energy sources is left to be managed by the existing Regional Plan provisions and territorial authorities.	The Regional Policy Statement can contribute in a resource management context and address a range of issues in the region related to energy efficiency and conservation and promotion of renewable energy sources. Addressing this in the Regional Policy Statement provides direction to Regional Plans and territorial authorities on these issues. Alternative 1 is therefore not appropriate as it does not utilise these mechanisms under the RMA.
	Alternative 2 Retain objectives in the Operative Regional Policy Statement which seek that: <i>Objective 14.3.1(a): The efficient use of energy.</i> <i>Objective 14.3.2(a): Reduced reliance on fossil fuels and increasing use of renewable energy.</i>	In regards to achieving the objectives in the Operative Regional Policy Statement, the Monitoring and Evaluation of Bay of Plenty Regional Policy Statement Report 2008 showed the following: <ul style="list-style-type: none"> ▪ That there had been poor performance towards achieving the efficient use of energy. This is because it is not changing the end users energy use behaviour. ▪ That there had not been a reduction in the reliance on fossil fuels. This is because the rates of vehicle ownership remain high, particularly in the western Bay of Plenty sub-region. ▪ While not measured, the regional council has made a good contribution to increase the use of renewable energy sources by investment in hydro and geothermal energy sources. ▪ That adverse effects on the environment associated with the development of energy resources and the production, distribution and use of energy are avoided, remedied or mitigated has not been achieved. This is because the matter is difficult to address at regional level and is more an issue for central government to address. It is therefore more appropriate to address the benefits of renewable energy, than avoid, remedy or mitigate the adverse effects of energy production.

Final chosen objective	Other alternatives?	Why <u>not</u> the most appropriate to achieve the Resource Management Act
		<ul style="list-style-type: none"> ▪ As there has been generally poor performance towards achieving the existing objectives in the Operative Regional Policy Statement, Alternative 2 is not appropriate to achieve the purposes of the RMA.
	<p>Alternative 3</p> <p>The objective focuses on not only providing for energy efficiency and conservation and promoting the use and development of renewable energy sources at a regional level, but on a national level as well.</p>	<p>Under section 62(1)(a) of the RMA a Regional Policy Statement is required to address the significant resource management issues for a region. This RMA does not require a Regional Policy Statement to address issues for the nation. Therefore, Alternative 3 is not appropriate.</p>
<p>Objective 6</p> <p>Provide for the social, economic, cultural and environmental benefits of regionally significant infrastructure and renewable energy.</p>	<p>Alternative 1</p> <p>No objective in the Regional Policy Statement. Providing for the benefits of regionally significant infrastructure and renewable energy is left to be managed by the existing Regional Plan provisions and territorial authorities.</p>	<p>The Regional Policy Statement can contribute in a resource management context and address a range of issues in the region related to the social, economic, cultural and environmental benefits of regionally significant infrastructure and renewable energy. Addressing this in the Regional Policy Statement provides direction to Regional Plans and territorial authorities on these issues. Alternative 1 is therefore not appropriate as it does not utilise these mechanisms under the RMA.</p>
	<p>Alternative 2</p> <p>Retain objectives in the Operative Regional Policy Statement which seek that:</p> <p><i>Objective 13.3.(a) A built environment that enables efficient use, development and protection of natural and physical resources while avoiding, remedying and mitigating adverse effects on the environment.</i></p>	<p>In regards to achieving the objectives in the Operative Regional Policy Statement, the Monitoring and Evaluation of Bay of Plenty Regional Policy Statement Report 2008 indicated that this objective was ineffective. This was because the objective is too broad focus and that it did not promote an integrated approach. It was recommended that regionally significant infrastructure needed to be specifically provided for in the next Regional Policy Statement. As a result, Alternative 2 is not considered to appropriately achieve the purposes of the RMA.</p>
	<p>Alternative 3. The objective focuses on not only providing for regionally significant infrastructure, but all infrastructure, both regionally <u>and</u> nationally significant.</p>	<p>By referring to all infrastructure, the objective would not provide strategic integration. All infrastructure and its benefits are not of regional significance. No information is available that provides information about what is considered nationally significant infrastructure. This can not be determined by a regional council at a local level. Such information needs to be assessed and provided through a national assessment. Alternative 3, therefore, is not appropriate.</p>

4 Evaluation of policies and methods to achieve Objective 5

The appropriateness of the policies and methods to achieve Objective 5 are evaluated by looking at the effectiveness, the risks of acting or not acting and the efficiency of the policy and method options.

4.1 Range of policy and method options considered

Objective 5 seeks to provide for energy efficiency and conservation and promote the use and development of renewable energy sources.

In addressing this objective, the primary focus is determining the most appropriate way to achieve the objective. That is, whether it can be best achieved through providing regulatory direction to plans and the Regional Land Transport Strategy and in matters to be considered when making resource management decisions, or by doing nothing.

4.1.1 Specific direction on matters to be given particular regard to in resource management decision making

Option 1 - Direction to resource management decision making to identify and consider renewable energy and adverse effects on significant values.

This option directs local authorities to consider how they make decisions on renewable energy by considering the benefits of renewable energy, alongside significant values that may be adversely affected from development.

Option 2 - Direction to district and regional plans and resource management decision making to promote renewable energy sources.

This option requires local authorities to promote the use of renewable energy sources in resource management decisions and when changing or reviewing plans by enabling alternative energy use that is renewable and allowing the use, development and operation of renewable energy sources.

Option 3 – Direction to district and regional plans, resource management decision making and the Bay of Plenty Regional Land Transport Strategy to promote energy efficiency and energy conservation.

This option requires local authorities to promote energy efficiency and energy conservation in resource management decisions, when changing or reviewing plans by encouraging methods of design and layout in planning for all land use development that involves conservative and efficient energy use. Also in implementing the Bay of Plenty Regional Land Transport Strategy, it requires local authorities to provide easy access to a range of public transport services and everyday services (shops, work and community activities) by walking and cycling.

4.1.2 Do Nothing

Option 4 – No intervention

This option offers no intervention to provide for energy efficiency and conservation and promoting the use and development of renewable energy sources in the region.

4.2 Evaluation as to the effectiveness and efficiency of the policy and method options to achieve Objective 5

Table 2 assesses the effectiveness and efficiency of the policy and method options for achieving Objective 5 by considering their environmental, economic and social costs and benefits.

Table 2: Evaluation as to the effectiveness and efficiency of the policy and method options to achieve Objective 5 of the Proposed Regional Policy Statement.

Selected option	Analysis of effectiveness	Effectiveness rating	Benefits (social, economic and environmental)	COSTS (social, economic and environmental)	Efficient?
Specific direction on matters to be given particular regard to in resource management decision making					
<p>Option 1</p> <p>Direction to decision making to consider renewable energy and adverse effects on significant values.</p>	<p>Is effective because it sets out a regulatory direction on the significance of renewable energy generation for the region, both in intent and in terms of the parameters and significant values to be considered. However, the significant values are covered by other topic policies in the Regional Policy Statement and the direction in these policies could be undermined by this generic policy approach.</p> <p>Provides a consistent framework with regard to 'considerations' across the region.</p> <p>This may result in confusion about relevant policies across the Regional Policy Statement over which provision should take priority.</p> <p>Provides an ability to critique what is considered important and relevant within decision making processes, thus increasing the understanding of pertinent factors and intent involved with making this transparent.</p>	Low	<p><u>Social</u></p> <ul style="list-style-type: none"> Opportunity to consider a wider array of social effects from renewable energy use. <p><u>Economic</u></p> <ul style="list-style-type: none"> Provides for the consideration of economic effects on resources of significant value when deciding on renewable energy use. <p><u>Environmental</u></p> <ul style="list-style-type: none"> Provides for the consideration of environmental effects on resources of significant value when deciding on renewable energy use. 	<p><u>Economic</u></p> <ul style="list-style-type: none"> Costs will be borne by some proposals as a result of their activity status as an application for resource consent, and the matters around which discretion and/or control are reserved. Costs will be borne by councils as they must secure sufficient information required for the decision making process. <p><u>Social</u></p> <ul style="list-style-type: none"> While clarifying the matters for consideration, specifying the full extent of matters may not lead to simplicity or certainty. Rather, it may add to complexity causing delay. Lead to duplication or conflicting requirements when considering the policy alongside other policies on significant values within the Regional Policy Statement, resulting in lack of certainty for applicants and those affected. 	No

Selected option	Analysis of effectiveness	Effectiveness rating	Benefits (social, economic and environmental)	COSTS (social, economic and environmental)	Efficient?
<p>Option 2 Direction to district and regional plans and resource management decision making to promote renewable energy sources.</p>	<p>Is effective as it sets a regulatory policy framework direction across the region to establish a consistent resource management approach to promote the use of renewable energy sources. And it directs decision makers to have regard to the promotion of renewable energy sources when achieving the purposes of the RMA.</p> <p>The option addresses the issue of limited use of renewable energy sources in the region. This is achieved by promoting renewable energy resources, alternatives to fossil fuels and small scale energy generation. It also addresses the issue of the need for improve of security of electricity supply, which will be addressed by promoting alternative energy supplies which reduces the vulnerability of our electricity supply to shortages and disruptions.</p>	<p>High</p>	<p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ Reduction in long term investment in non-renewable energy sources. ▪ Reduced economic loss from shortages and outages of electricity. ▪ Economic benefits to households and businesses from distributed generation. <p><u>Social</u></p> <ul style="list-style-type: none"> ▪ Reduced social effects from shortages and outages of electricity. <p><u>Environmental</u></p> <ul style="list-style-type: none"> ▪ Reduction of grid loss grid through increased distributed generation. ▪ Cleaner forms of energy consumption reduce the amount of greenhouse gases produced from burning fossil fuels. ▪ Promotion of renewable resources replaces the need to use non-renewable resources, reducing adverse effects from finite resource extrapolation. 	<p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ Cost of establishing or upgrading renewable energy generation operations. ▪ Potential cost to household and businesses of installing small scale renewable energy generation. ▪ There will be on-going costs for councils for implementation into plans. ▪ Monitoring and enforcement action. ▪ Monitoring costs for the delivery and environmental outcomes of Option 1 to evaluate its effectiveness. <p><u>Environmental</u></p> <ul style="list-style-type: none"> ▪ Potential adverse environmental effects in the development, upgrade and operation of energy generation utilising renewable energy sources. 	<p>Yes</p>

Selected option	Analysis of effectiveness	Effectiveness rating	Benefits (social, economic and environmental)	COSTS (social, economic and environmental)	Efficient?
<p>Option 3 Direction to district and regional plans, resource management decision making and the Bay of Plenty Regional Land Transport Strategy to promote energy efficiency and energy conservation.</p>	<p>Sets a regulatory policy framework direction across the region to establish a consistent approach to promote energy efficiency and energy conservation in resource management, and in the Regional Land Transport Strategy.</p> <p>Directs decision makers to have regard to the promotion of energy efficiency and energy conservation when achieving the purposes of the RMA.</p> <p>The option addresses the issue of limited use of energy conservation and efficiency in the region. It does this through promoting energy conservation and efficiency concepts in the planning and design process to create sustainable building outcomes. It also achieves this on a broader scale in site layout, urban and industrial land development and in transport planning using best practice urban design principles, promoting public transport and sustainable energy use.</p>	<p>High</p>	<p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ Energy efficient building and site layout can result in economic benefits in businesses and homes by reducing energy cost. ▪ Promotion of energy efficiency and conservation principles via urban design principles and promoting public transport reduces reliance on motor vehicles. This can have economic benefits from reducing congestion and expenditure petrol that is ever increasing in price. <p><u>Social</u></p> <ul style="list-style-type: none"> ▪ Energy saving measures through urban design promotes walking and cycling which has a positive health and safety benefits for communities. <p><u>Environmental</u></p> <ul style="list-style-type: none"> ▪ Promotion of energy conservation and efficiency techniques reduces reliance on non-renewable resources such as fossil fuels reducing greenhouse gases. 	<p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ Potential additional cost to home owners and businesses to install energy efficiency mechanisms during building process. ▪ There will be on-going costs for councils for implementation into plans. ▪ Monitoring and enforcement action. ▪ Monitoring costs for the delivery and environmental outcomes of Option 1 to evaluate its effectiveness. <p><u>Social</u></p> <ul style="list-style-type: none"> ▪ Reduction of choice in building and layout design, as this is predetermined with requirements for energy optimisation when developing. 	<p>Yes</p>
Do Nothing					
<p>Option 4 No intervention.</p>	<p>This option is not effective as it does not address any energy and infrastructure issues that have been identified by the regional council, therefore they would remain unresolved. The RMA requires policies and methods to achieve the goals of objectives. Therefore, in not implementing any intervention to achieve the goals of</p>	<p>Low</p>	<p><u>Environmental</u></p> <ul style="list-style-type: none"> ▪ Local authorities may be able to work with the community to identify ways to provide for energy efficiency and conservation and how to promote the use and development of renewable 	<p><u>Environmental</u></p> <ul style="list-style-type: none"> ▪ The level of environmental effect associated with energy extrapolation and use remains constant, causing further environmental degradation from existing activities. 	<p>No</p>

Selected option	Analysis of effectiveness	Effectiveness rating	Benefits (social, economic and environmental)	COSTS (social, economic and environmental)	Efficient?
	Objective 5, the regional council would not be carrying out its duties under the RMA.		<p>resources on a case by case basis, outside the RMA framework to facilitate positive environmental outcomes that achieve Objective 5.</p> <p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ No expenditure to Council on addressing Objective 5. 	<p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ Cost of energy will continue to rise, possibly at an increased rate as less sustainable measures are used to meet supply. <p><u>Social</u></p> <ul style="list-style-type: none"> ▪ Reduced sense of social responsibility by maintaining less sustainable means to produce and use energy. 	

Table 3 summarises the effectiveness and efficiency of the policy and method options and outlines the selection of the most appropriate options to achieve Objective 5. The proposed policies and methods that reflect this selection are also listed.

Table 3 Results of evaluation as to the most appropriate policy and method options to achieve Objective 5.

Policy and method options	Effectiveness	Efficient?	Selected option(s)	Proposed policies and methods
Specific direction on matters to be given particular regard to in resource management decision making				
Option 1 Direction to decision making to consider renewable energy and adverse effects on significant values.	Low	No	X	N/A
Option 2 Direction to district and regional plans and resource management decision making to promote renewable energy sources.	High	Yes	✓	Policy EI 1B and method 3
Option 3 Direction to district and regional plans, resource management decision making and the Bay of Plenty Regional Land Transport Strategy to promote energy efficiency and energy conservation.	High	Yes	✓	Policy EI 2B and methods 3 and 4
Do nothing				
Option 4 No intervention.	Low	No	X	N/A

4.3 Discussion on selected options

As set out in Section 3, Part II of the RMA contains a number of matters relating to energy efficiency and the benefits of renewable energy use. The National Policy Statement on Electricity Transmission and the Proposed National Policy Statement on Renewable Electricity Generation also include provisions requiring efficient use of energy. Therefore, the efficient management of energy use is of high priority in resource management terms.

Option 1 is not considered appropriate to achieve Objective 5 and has been rejected. Option 1 directs decision makers to consider renewable energy and adverse effects on significant values. This option is not as effective as other policies in addressing the significant resource management issues. This is because the policy option duplicates other policy topics relating to significant values, such as the coastal environment, indigenous vegetation or landscape. This could create confusion in prioritising policies on interpretation of the Regional Policy Statement and provides less direction to decision making, which in turn makes the option inefficient and ineffective.

Options 2 is considered appropriate to achieve Objective 5 as it provides clear direction on the matters to be promoted in resource management terms. Option 2 directs district and regional plans and resource management decision makers to promote renewable energy sources. Promoting renewable energy sources may result in short term cost for energy providers and to local business and households in converting to the operation of large and small scale renewable energy generation. However, this will produce long term economic benefit, as renewable energy sources are more economically and

environmentally efficient than finite forms of energy generation. Overall, the option is considered efficient as the benefits of Option 2 outweigh the costs.

Option 3 is also considered appropriate to achieve Objective 5 because it provides clear direction on the matters to be promoted in resource management terms. Option 3 directs district and regional plans, resource management decision makers and the Bay of Plenty Regional Land Transport Strategy to promote energy efficiency and energy conservation. Similarly to Option 2 promoting energy efficiency and conservation may result in short term cost for energy providers, local business and households. Again, however, this will come with a long term economic gain, as energy efficiency and conservation initiatives will reduce the amount of energy consumed. Short term costs are also met with significant long term environmental benefits with the reduction of energy consumption and a move toward more sustainable energy use, reducing greenhouse gases to address the impacts of climate change. These are long term benefits that will also be achieved by Option 2. Option 3 will also promote alternative modes of transport in the community such as walking, cycling and increase the use of public transport, resulting in healthier, safer and more liveable communities. Overall, it is therefore considered that the costs of Option 3 outweigh the benefits and it is appropriate to achieve Objective 5.

The “do nothing” option is not considered appropriate as it would not achieve Objective 5. The Bay of Plenty region is dependent on externally generated electricity of renewable and non-renewable energy sources, therefore is vulnerable to shortages and disruptions. There is a limited use of renewable energy sources in the region, yet there have been renewable energy sources identified in the Bay of Plenty. Doing nothing would not be working towards utilising these renewable sources to address the regionally significant energy and infrastructure issues that have been identified in the region.

4.4 Risk of acting or not acting if information is uncertain or insufficient

Section 32(4)(b) of the Resource Management Act requires the evaluation of appropriateness to take into account the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies or methods.

With regard to the subject matter of the options for addressing Objective 5, there is mainly broad information about energy efficiency and conservation and development of renewable energy sources in the region. It is a subject that is difficult to measure accurately. There is some uncertainty or insufficient information around matters like climate change and greenhouse gas emissions and on how the state of the region’s environment relates to these issues, rather more general trends. Observations have been made in the monitoring and reviewing the Operative Regional Policy Statement providing some guidance on how the region is placed in regard to these issues. However, despite the broad level of information, it is considered that there are risks of not acting.

Information shows car ownership rates have remained steady in the region, meaning the number of vehicles on our roads are increasing alongside population growth in the region. There are many social, economic and environmental costs associated with high rates of vehicle use rates. Information also shows there are very high numbers of low occupancy vehicles at peak times and that public transport is not meeting the demands of commuters in the region. There is evidence that the Regional Council is investing in renewable energy sources, however, there is a need for policy to promote this in households and business region wide. There is a national push towards more sustainable energy generation using renewable sources and momentum is gathering towards promoting more efficient and conservative energy methods in land use development and transport. The risk of not acting is that the regional council would not be carrying out its regional functions under national directions to promote renewable energy and energy conservation and efficiency. Further to this, the status quo would risk maintaining trends that may result in less sustainable forms of energy use that would result in adverse social, economic and environmental effects.

5 Evaluation of policies and methods to achieve Objective 6

The appropriateness of the policies and methods to achieve Objective 6 are evaluated by looking at the effectiveness, the risks or acting or not acting and the efficiency of the policy and method options.

5.1 Range of policy and method options considered

Objective 6 seeks to provide for the social, economic, cultural and environmental benefits of regionally significant infrastructure and renewable energy.

In addressing this objective, the primary focus is determining the most appropriate way to achieve the objective. That is, whether it can be best achieved through providing regulatory direction to plans and the Regional Land Transport Strategy and in matters to be considered when making resource management decisions, through non-regulatory options or by doing nothing.

5.1.1 Specific direction on matters to be given particular regard to in resource management decision making.

Option 1 - Direction to district and regional plans and resource management decision making to recognise the benefits of regionally significant infrastructure and renewable energy.

This option requires local authorities to recognise the social, economic, cultural and environmental benefits of regionally significant infrastructure and renewable energy in resource management decisions and when changing or reviewing plans.

Option 2 - Direction to district and regional plans, resource management decision making and the Bay of Plenty Regional Land Transport Strategy to protect regionally significant infrastructure.

This option requires local authorities to protect regionally significant infrastructure from incompatible development that may affect its maintenance, upgrade or operation in resource management decisions, when changing or reviewing plans and in implementation of the Bay of Plenty Regional Land Transport Strategy.

Option 3 – Direction to district and regional plans and resource management decision making, to give priority to avoid adverse effects of regionally significant infrastructure concerning matters of national importance.

This option requires local authorities to ensure that priority is given toward avoiding adverse effects on natural and physical resources, that are protected as matters of national importance in resource management decisions, regarding regionally significant infrastructure and when changing or reviewing plans.

Option 4 - Direction to district plans to identify and manage potential effects on infrastructure corridors.

This option requires local authorities to identify infrastructure corridors and make provisions in plans accordingly to manage potential effects on the long term planning of their maintenance, operation and upgrade.

5.1.2 Guiding options

Option 5 – Information about regionally significant infrastructure

This option involves preparing information about regionally significant infrastructure.

5.1.3 Do nothing

Option 6 – No intervention

This option offers no intervention to ensure the social, economic, cultural and environmental benefits of regionally significant infrastructure and renewable energy are recognised and protected.

Table 4 assesses the effectiveness and efficiency of the policy and method options for achieving Objective 6 by considering their environmental, economic and social costs and benefits.

Table 4: Evaluation as to the effectiveness and efficiency of the policy and method options to achieve Objective 6 of the Proposed Regional Policy Statement

Selected option	Analysis of effectiveness	Effectiveness rating	Benefits (social, economic and environmental)	Costs (social, economic and environmental)	Efficient?
Specific direction on matters to be given particular regard to in resource management decision making					
<p>Option 1 Direction to district and regional plans and resource management decision making to recognise the benefits of regionally significant infrastructure and renewable energy.</p>	<p>Sets a regulatory policy framework direction across the region to establish a consistent resource management approach to recognise the benefits of regionally significant infrastructure and renewable energy.</p> <p>Directs decision makers to have regard to recognising the benefits of regionally significant infrastructure and renewable energy when achieving the purposes of the RMA.</p> <p>This option addresses the issue of reverse sensitivity from subdivision, use and development effecting regionally significant infrastructure by prioritising the benefits of regionally significant infrastructure. The option also addresses the ineffective integration of land use and transportation networks, as the benefits of regionally significant infrastructure, renewable energy and effective integration of land use and transport are similar. It addresses the issue of improving security of electricity supply as one of the benefits of renewable energy is better security of supply. And it addresses the issue of limited use of renewable energy in the region as recognising its benefits should promote its use.</p>	<p>High</p>	<p><u>Social</u></p> <ul style="list-style-type: none"> ▪ Increased reliability and efficiency of infrastructure will reduce reverse sensitivity effects from infrastructure in communities. This will result in safer, healthier communities that are more liveable. ▪ Improved security of supply will reduce the social costs associated with disruptions to the supply of electricity. <p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ Improved security of supply will reduce the economic costs associated with disruptions to the supply of electricity. ▪ Economic benefits gained to households and businesses from distributed generation. ▪ Economic gain from grid loss through increased distributed generation from renewable sources. <p><u>Environmental</u></p> <ul style="list-style-type: none"> ▪ Reduced grid loss, results in more efficient use of natural resources benefitting the environment. 	<p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ Cost of establishing or upgrading renewable energy generation operations. ▪ Potential cost to household and businesses of installing small scale renewable energy generation. ▪ Increased cost to community in regional infrastructure construction and upgrade. ▪ Costs to Councils in implementation of option into plans. ▪ Then costs in monitoring resource management decisions. ▪ Monitoring environmental outcomes being achieved from implementation of option into plans. <p><u>Environmental</u></p> <ul style="list-style-type: none"> ▪ Potential adverse environmental effects in the development, upgrade and operation of energy generation utilising renewable energy sources and regionally significant infrastructure. 	<p>Yes</p>

Selected option	Analysis of effectiveness	Effectiveness rating	Benefits (social, economic and environmental)	Costs (social, economic and environmental)	Efficient?
			<ul style="list-style-type: none"> ▪ Reduction in consumption of fossil fuels. ▪ Promotion of renewable resources replaces the need to use non-renewable resources, reducing adverse effects from finite resource extrapolation. 		
<p>Option 2 Direction to district and regional plans, resource management decision making and the Bay of Plenty Regional Land Transport Strategy to protect regionally significant infrastructure.</p>	<p>Sets a regulatory policy framework direction across the region to establish a consistent resource management approach to protect regionally significant infrastructure.</p> <p>Directs decision makers to have regard to protecting regionally significant infrastructure when achieving the purposes of the RMA.</p> <p>This option addresses the issue of reverse sensitivity from subdivision, use and development effecting regionally significant infrastructure by protecting it from these effects. The option also addresses the ineffective integration of land use and transportation networks. This is because protected roading infrastructure can be more effectively integrated with land use than unprotected roading infrastructure. It addresses the issue of improving security of electricity supply as protecting regionally significant energy infrastructure can potentially improve security of supply.</p>	High	<p><u>Social</u></p> <ul style="list-style-type: none"> ▪ Will increase the reliability and efficiency of infrastructure and will reduce reverse sensitivity effects from infrastructure in communities. This will result in safer, healthier communities that are more liveable. <p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ This will reduce the costs associated with the disruptions to the supply of electricity. ▪ Protecting transport infrastructure will result in promotion of diversity of transport modes and safer and more reliable transport. 	<p><u>Social</u></p> <ul style="list-style-type: none"> ▪ Protecting infrastructure of regional significance in the statutory framework may prioritise it over existing uses having social effects on land owners in areas where infrastructure is to be protected. <p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ Costs to councils in implementation of option into plans. ▪ Costs in monitoring resource management decisions. ▪ Monitoring environmental outcomes being achieved from implementation in plans. ▪ Land may devalue where infrastructure is protected. <p><u>Environmental</u></p> <ul style="list-style-type: none"> ▪ Potential adverse environmental effects in the development, upgrade and operation of regionally significant infrastructure. 	Yes

Selected option	Analysis of effectiveness	Effectiveness rating	Benefits (social, economic and environmental)	Costs (social, economic and environmental)	Efficient?
<p>Option 3</p> <p>Direction to district and regional plans and resource management decision making, to give priority to avoid adverse effects of regionally significant infrastructure concerning matters of national importance.</p>	<p>Effective as it sets a regulatory policy framework direction across the region to establish a consistent resource management approach to protect regionally significant infrastructure.</p> <p>Directs decision makers to have regard to protecting regionally significant infrastructure when achieving the purposes of the RMA.</p> <p>Is effective in providing for Part II matters under the RMA. It puts in place some barriers in the establishment of regionally significant infrastructure, in that it may restrict the location of infrastructure where significant values may be effected. However, it is a duty of the regional council to have regard to matters of national importance.</p>	<p>Medium</p>	<p><u>Social</u></p> <ul style="list-style-type: none"> ▪ Avoiding effects on matters of national importance will benefit the communities that rely on them for their social welfare. ▪ Avoiding infrastructure that affects matters of national importance will protect values of Maori and our historic heritage. <p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ Avoiding effects on matters of national importance will benefit the communities that rely on them for their economic welfare. <p><u>Environment</u></p> <ul style="list-style-type: none"> ▪ Avoiding infrastructure that affects matters of national importance will keep intact the natural character of coasts, lakes and rivers, protect outstanding natural features, protect areas of significant indigenous flora and fauna, maintain access to coasts, river and lakes. 	<p><u>Social</u></p> <ul style="list-style-type: none"> ▪ Social costs to communities where infrastructure is not located in an area due to matters of national importance preventing this. <p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ Costs of providing regionally significant infrastructure could escalate where matters of national significance present barriers to major projects progressing. ▪ Costs to Councils in implementation of option into plans. ▪ Then costs in monitoring resource management decisions. ▪ Monitoring environmental outcomes being achieved from implementation of option into plans. <p><u>Environmental</u></p> <ul style="list-style-type: none"> ▪ Potential environmental effects being displaced elsewhere when delivering an infrastructure need, as infrastructure may be re-located to avoid effects on matters of national importance. 	<p>Yes</p>

Selected option	Analysis of effectiveness	Effectiveness rating	Benefits (social, economic and environmental)	Costs (social, economic and environmental)	Efficient?
<p>Option 4</p> <p>Direction to district plans to identify and manage potential effects on infrastructure corridors.</p>	<p>This option requires territorial authorities to identify infrastructure corridors through the designation process as required by the RMA. It also requires management of the potential effects on the long term planning of the maintenance, operation and upgrade of infrastructure corridors identified across the region through the district plan regulatory framework.</p> <p>This option addresses the issue of reverse sensitivity on infrastructure and ineffective integration of land use and transportation networks. Having a regulatory framework in District Plans to manage infrastructure corridors will result in less conflict between subdivision, use and development and infrastructure because provisions can be included to guide decision makers to avoid this type of conflict.</p> <p>As a function of section 30(1)(gb) of the RMA there is a strategic function of regional councils to integrate infrastructure with land use through objectives, policies, and methods. This is implemented in the Regional Policy Statement and directs district plans to promote this principle within it. Therefore a District Plan framework in the region for managing infrastructure corridors should require integrated management of land use and transport.</p>	High	<p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ Infrastructure corridors could increase land value where a service is currently inadequate but has been earmarked for improved delivery via a designation. <p><u>Environmental</u></p> <ul style="list-style-type: none"> ▪ Avoiding the adverse effects of reverse sensitivity generated by infrastructure on subdivision, use and development though District Plan provisions will result in environmental benefits to the community. <p><u>Social</u></p> <ul style="list-style-type: none"> ▪ Effective integrated management of infrastructure corridors will have social benefits for communities through more efficient design, strategic planning and outcomes targeted promoting alternative modes of transport. 	<p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ Infrastructure corridors could reduce land values where adverse effects from infrastructure development are perceived. ▪ Costs to Councils in implementation of option into plans. ▪ Then costs in monitoring resource management decisions. ▪ Monitoring environmental outcomes being achieved from implementation of option into plans. <p><u>Environmental</u></p> <ul style="list-style-type: none"> ▪ Potential adverse effects on the environment from development within transport corridors. 	Yes
Guiding Options					
<p>Option 5</p> <p>Information about regionally significant infrastructure and renewable energy sources.</p>	<p>Actions may not get appropriately resourced.</p> <p>Sets out the information considered relevant and pertinent, and would provide guidance for interpretation and implementation of the policy framework. However, the response to this information is entirely discretionary and voluntary by the recipient, so there is considerable variance as to what it will mean in practice.</p>	Low	<p><u>Social</u></p> <ul style="list-style-type: none"> ▪ Improves understanding about the generic benefits associated with regionally significant infrastructure and renewable energy and about what exactly is regionally significant infrastructure and what are renewable energy sources. 	<p><u>Social</u></p> <ul style="list-style-type: none"> ▪ Could lead to protracted negotiations and potentially poor results, if there is continuing debate about the point of difference between regionally significant and nationally significant infrastructure. 	No

Selected option	Analysis of effectiveness	Effectiveness rating	Benefits (social, economic and environmental)	Costs (social, economic and environmental)	Efficient?
	<p>The information would have no statutory weight and would therefore be of little assistance in implementation, in comparison to a regulatory framework to be established under options 1, 2 and 3.</p>		<ul style="list-style-type: none"> ▪ Allows for flexibility of approach rather than imposition of regulatory policies. <p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ Economically efficient if the information provided is utilised effectively within regulatory processes 	<p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ Considerable cost to identify the actual benefits associated with specific regionally significant infrastructure and renewable energy sources for potentially limited benefit. <p><u>Environmental</u></p> <ul style="list-style-type: none"> ▪ Less certainty and requirement to act may result in adverse effects on the environment. This is from unsustainable energy sources being used and less direction on infrastructure development. 	
Do Nothing					
<p>Option 6 No intervention.</p>	<p>This option is not effective as it does not address any energy and infrastructure issues that have been identified by the regional council, therefore they would remain unresolved. The RMA requires policies and methods to achieve the goals of objectives. Therefore, in not implementing any intervention to achieve the goals of Objective 6, the regional council would not be carrying out its duties under the RMA.</p>	<p>Low</p>	<p><u>Environmental</u></p> <ul style="list-style-type: none"> ▪ Local authorities may be able to work with the community to identify ways to provide for energy efficiency and conservation and how to promote the use and development of renewable resources on a case by case basis, outside the RMA framework to facilitate positive environmental outcomes that achieve Objective 5. <p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ No expenditure to Council on addressing Objective 5. 	<p><u>Environmental</u></p> <ul style="list-style-type: none"> ▪ The level of environmental effect associated with energy extrapolation and use remains constant, causing further environmental degradation from existing activities. <p><u>Economic</u></p> <ul style="list-style-type: none"> ▪ Cost of energy will continue to rise, possibly at an increased rate as less sustainable measures are used to meet supply. <p><u>Social</u></p> <ul style="list-style-type: none"> ▪ Reduced sense of social responsibility by maintaining less sustainable means to produce and use energy. 	<p>No</p>

5.2 Results of evaluation as to the most appropriate policy and method options to achieve Objective 6

Table 5 summarises the effectiveness and efficiency of the policy and method options and outlines the selection of the most appropriate options to achieve Objective 6. The proposed policies and methods that reflect this selection are also listed.

Table 5: Results of evaluation as to the most appropriate policy and method options to achieve Objective 6

Policy and method options	Effectiveness	Efficient?	Selected options	Proposed policies and methods
Specific direction on matters to be given particular regard to in resource management decision making				
Option 1 Direction to district and regional plans and resource management decision making to recognise the benefits of regionally significant infrastructure and renewable energy	High	Yes	✓	Policy EI 4B and Method 3
Option 2 Direction to district and regional plans, resource management decision making and the Bay of Plenty Regional Land Transport Strategy to protect regionally significant infrastructure	High	Yes	✓	Policy EI 3B and Methods 3, 4 and 21
Option 3 Direction to district and regional plans and resource management decision making to give priority to avoid adverse effects of regionally significant infrastructure, concerning matters of national importance	Med	Yes	✓	Policy EI 5B and Method 3
Option 4 Direction to district plans to identify and manage potential effects on infrastructure corridors	High	Yes	✓	Method 21
Guiding options				
Option 5 Information about regionally significant infrastructure and renewable energy sources	Low	No	X	N/A
Do nothing				
Option 6 No intervention	Low	No	X	N/A

5.3 Discussion on selected options

Option 1 directs district and regional plans to consider the benefits of regionally significant infrastructure. Incorporating the benefits of regionally significant infrastructure into district and regional plans will assist local authorities on making an overall judgement in accordance with part II of the RMA. Under Option 2, protecting regionally significant infrastructure from incompatible new land uses or activities under, over, or adjacent is important to ensure that adverse effects on the operation, use and management of such infrastructure is appropriately considered and managed, which in turn will achieve the objective of recognising the benefits of this infrastructure on communities. Overall the benefits of Option 1 and 2 outweigh the costs, therefore they are considered appropriate to achieve Objective 6.

Option 3 provides some barriers to regionally significant infrastructure by ensuring its location avoids adverse effects on matters of national importance. However, it is a priority for regional council to consider these effects are avoided in achieving sustainable management. Developing a regulatory framework in the region so that regionally significant infrastructure can be planned to avoid adverse effects on matters of national importance, will ensure major infrastructure projects proceed with more certainty, as there will be less chance of them becoming fatally flawed during the assessment phase. Overall, the benefits of Option 3 outweigh the costs, therefore is considered appropriate to achieve Objective 6.

Option 4 is appropriate to achieve Objective 6. Identification of infrastructure corridors occurs through the designation process in District Plans. This is a function of the RMA, therefore providing this direction to territorial authorities in the Regional Policy Statement, will ensure this function is carried out. But further to identifying corridors Option 4 requires a regulatory framework to be developed in District Plans to manage these corridors. This means the benefits of regionally significant infrastructure can be provided for through the designation process.

Option 5 is not appropriate. In assessing the effectiveness and efficiency of implementing Options 1 to 4 it has been identified that a regulatory framework if necessary to clearly provide for the benefits of regionally significant infrastructure and renewable energy. Therefore, separate information, potentially derived independently of the required resource management processes and with no regulatory weight, is not considered appropriate.

Option 6 doing nothing is not considered appropriate. There is a shortage of provisions regarding regionally significant infrastructure and renewable energy in the Operative Regional Policy Statement. This has led to issues of reverse sensitivity on infrastructure, ineffective integration of land use and transport, an unreliable electricity supply and limited use of renewable energy in the region. Doing nothing will not achieve Objective 6, therefore will not address these issues, which will result in adverse effects on the environment.

5.4 Risk of acting or not acting if information is uncertain or insufficient

Section 32(4)(b) of the RMA requires the evaluation of appropriateness to take into account the risk of acting or not acting, if there is uncertain or insufficient information about the subject matter of the policies or methods.

With regard to the subject matter relating to infrastructure in the options considered, there is neither uncertain nor insufficient information by which to analyse the appropriateness of acting or not acting to address the issues. However, in deciding on the appropriate options to achieve Objective 6, it is important to ensure there is sufficient information available to describe 'regionally significant infrastructure'. This information needs to be determined at a regional level, as it would be difficult to make such a determination locally, on a case-by-case basis.

With regard to the subject matter relating to renewable energy in the options considered, there is some uncertain and insufficient information (which is outlined in Section 5.4 of this report). However, it is a subject that is difficult to measure accurately. Despite this, there is considered to be a risk in not acting based on this level of information to provide for the benefits of renewable energy sources in the region.

The risks of not providing for the benefits of renewable energy are the same as not promoting their use, which is also described in Section 5.4 of this report. Again, by not acting, there is the risk of the regional council not carrying out its functions under the RMA. Renewable energy is a matter to be considered in achieving the purpose of the Act, under Section 7 Other Matters, which states '*(j) the benefits to be derived from the use and development of renewable energy*'. Further to this, the status quo would risk maintaining limited levels of renewable energy use, potentially risking less sustainable forms of energy that would result in adverse social, economic and environmental effects.

Appendix 1 – Criteria used to determine regionally significant issues

The criteria used for determining whether an issue was a resource management issue of regional significance were:

- The issue was a natural or physical resource management problem.
- The issue was to be of regional significance (see further criteria below).
- The issue was about achieving the purpose of the Resource Management Act, 1991 (RMA).
- The issue did not “repeat” the RMA, the New Zealand Coastal Policy Statement, any other national policy, or another issue in the RPS.
- The issue was explained in the context of the Bay of Plenty region.

Regional significance was determined using the following criteria:

- The issue concerns a resource which is regionally significant and the issue requires integrated management at a regional level ; and
- There is a potential shortage of the resource and resultant allocation issues; or
- There is a significant level of conflict over the resource which is either occurring or is foreseeable over the next 10 years; or
- The resource is potentially subject to significant adverse effects at a regional level; or
- There are significant issues in terms of Part 2 of the RMA which are or are likely to arise at a regional scale (e.g. maintenance and enhancement of access along waterways); or
- The community has signalled that it regards a particular issue as being of regional significance; or
- The issue is one of national significance (e.g. preservation of natural character) and requires regional intervention; or
- The issue is one of district significance but requires regional intervention; or
- The matter is one which a National Policy Statement or National Water Conservation Order requires to be addressed.

Appendix 2: References

Bay Trends (2004) – Report on the state of the Bay of Plenty environment.

Stakeholder written comments/submissions on the Draft Regional Policy Statement for the Bay of Plenty Region 2009.

The Next Bay of Plenty Regional Policy Statement: Issues and Options (2008).

Monitoring and Evaluation of the Operative Bay of Plenty Regional Policy Statement (2008).