



Report 09.70
Date 16 February 2009
File ENV/22/04/10

Committee Regional Sustainability Committee
Author Bruce Geden, Special Projects Coordinator

Sustainable Energy Projects

1. Purpose

To determine the most sustainable long term energy outcomes for the Wellington Region and to define what role Greater Wellington could take in achieving these outcomes and ascertain what other parties should be involved.

2. Significance of the decision

The matters for decision in this report do not trigger the significance policy of the Council or otherwise trigger section 76(3)(b) of the Local Government Act 2002.

3. Background

The purpose of Greater Wellington's involvement in energy issues is to determine how the region can best manage its energy demand, and to improve its energy resilience through a mix (both in scale and type) of energy generation.

To this end, a Sustainable Energy workshop was held in Masterton on 19 November 2008 following the Regional Sustainability Committee meeting. This discussed the concept of the Value-Effort grid and the applicability of that to help identify 'solutions' related to energy issues, and the associated benefits to manage the impacts and effects of climate change. The issues of energy efficiency and use have many areas of complementary benefits to Greater Wellington's Communities for Climate Protection Programme (CCP).

Councillors agreed that in preference to an 'Energy Strategy' as initially explored, maximum benefit would be gained from the identification of a set of targeted energy work programme areas. This work needs to focus on the characteristics of the Wellington Region such as its geography, human settlement, infrastructure and current energy status, and opportunities where change could enhance the region's long term energy resilience. This work is intended to complement, and not duplicate other areas where energy issues are being addressed, albeit indirectly, through areas such as the Wellington Regional Land Transport Strategy.

The Masterton workshop also agreed that a number of energy work programme areas identified in the Value-Effort grid, needed to be further tested in the context of how they specifically relate to the Wellington Region. These included:

- Solar (PV & SHW) - investigation
- Local distribution generation - investigation
- EV's (testing at this stage) - collaboration
- Insulation (linking in with existing schemes) – collaboration
- Smart meters – investigation/collaboration

A number of other energy related areas were also tested using the grid such as large scale (non-local distribution) renewable generation, and waste to energy schemes. Energy initiatives with significant co-benefits such as: employment, improvements in health, or cost savings, were generally given favourable consideration.

4. Comment

The Value-Effort grid process provided an initial indication of the type of projects that should be considered for further assessment based on issues such as behaviour change, building on existing technologies, adaptation, mitigation, time, resources and relationships.

Summarising this, the region's approach towards energy can be addressed by:

- Mitigation – lessening the impact of effects of fossil fuel consumption
- Adaptation – changing the way we use energy & where the energy that we use is derived from
- Or, a mix of both.

Work to this point in time in assessing energy issues for the region, including outcomes of the value-effort exercise, indicate that the greatest area of strength for this region are in further exploring:

- Energy demand management
- Utilising and developing alternative energy sources
- Renewable energy generation developments.

Appendix 1 has been prepared to focus discussion on areas where Greater Wellington could further develop energy initiatives in the region. To this end, assessment table (Appendix 1) is based principally on current technologies and practices and will therefore change over time. For example, it is expected that Central Government may announce a household insulation assistance scheme in the near future. When (and if) it does, the scale and form of any scheme will

need to be taken into account in making any decisions on how we may wish to approach this issue regionally.

The right-hand column of the table (“Energy Priority Ranking within Wellington Region”) assesses the potential energy ‘contribution’ that could occur once the proposed measures are enacted in areas such as energy savings or energy generation.

As an example, the table shows that domestic (household) insulation and air tightness could potentially involve a reasonable level of Greater Wellington involvement through advocacy, facilitation or even investment resulting in significant energy outcomes. Plug-in electric vehicles, along with wind and marine energy potential also show potential medium term benefits for the region.

By way of added benefit, the proposed sustainable energy actions are also consistent with improving the region’s resilience in the event of a major emergency, and have clear co-benefits with our commitment as a member of the CCP programme.

5. Communication

No further communication is required at this time. Ongoing discussions with key parties can be given publicity when key outcomes are reached.

6. Recommendations

That the Committee:

- 1. Receives the report;*
- 2. Notes the content of the report; and*
- 3. Directs officers to facilitate a discussion between individuals and organisations in the region involved with sustainable energy initiatives to determine common objectives and possible areas for collaboration.*

Report prepared by:

Report approved by:

Bruce Geden
Special Projects Coordinator

Nigel Corry
Divisional Manager,
Environment Management

Attachment 1: Draft Assessment of Potential Regional Sustainable Energy Actions (table)