

# Attachment 1

## Greater Wellington's Energy Involvement

### 1. Introduction

- 1.1 Energy is a key component of sustainable development – the production, transmission and end uses of energy have economic, environmental and social consequences. The strategic role of energy management has been identified through a number of government strategies (e.g. the National Energy Efficiency and Conservation Strategy, Sustainable Development for NZ - Programme of Action, in which energy is one of 4 key issues) and energy-related protocols (e.g. climate change –Kyoto Protocol). Consideration of renewable energy and climate change are now also statutory matters to be given regard to in Part II of the Resource Management Act.
- 1.2 The importance of energy management has also been recognised in several Greater Wellington policy documents and decisions:
- 1.3 the Regional Policy Statement has relevant provisions for the Region and the Regional Council;
- 1.4 Greater Wellington signed up as an Energy Wise Council with the Energy Efficiency and Conservation Authority (EECA) in 2003;
- 1.5 Energy is one of the 4 key resources identified in Greater Wellingtons branding; and the LTCCP contains specific statements and targets about energy use, renewable energy production and management of greenhouse gas emissions.
- 1.6 **Energy management is also of significance because it relates closely to important policy areas of Council work**, notably transport policy, air quality management and hazard management associated with the effects of climate change.
- 1.7 The following sections specifically identify energy and energy management policies, actions, and initiatives taken or being taken by Greater Wellington.

### 2. LTCCP

- 2.1 The LTCCP is a high order statement of Greater Wellington policy and intended action, and energy management has a recognised role in the LTCCP. Energy is identified as a linkage in 4 of the 6 work areas (Environment Management, Regional Transport, Regional Water Supply, Parks and Forests, and in terms of the related area of climate change impacts, is arguably important for the other two areas of Land Management and Flood Protection also).
- 2.2 The LTCCP has targets for renewable energy production, improved energy efficiency, reducing the Council's "carbon footprint" (a way of calculating the amount of greenhouse/carbon equivalent arising from our energy use – see section 6 later in this report), increasing the use of transport modes that are less fossil-fuel intensive (cycling, walking, buses and trains) and limiting the amounts of fossil-fuel energy used for transport purposes.

### **3. Regional Policy Statement Policy Context**

- 3.1 The Regional Policy Statement has a chapter on sustainable energy management. It contains broad objectives for moderating energy demand, improving energy efficiency, encouraging a move to greater use of renewable energy sources and dealing with adverse effects of energy production, transmission and end use. There are 8 Methods in this chapter (as well as related policies and methods in the chapters on air quality, waste management, natural hazards and the built environment and transportation), several of which identify the Regional Council as having a role to play.
- 3.2 Recent amendments to the Resource Management Act have enabled councils to have a clearer mandate to consider renewable energy and the effects of climate change. The review of the RPS and its next version present an opportunity to assess how well we have done and to propose how sustainable energy management might be more effectively achieved.

### **4. EECA/Energy Wise Councils**

- 4.1 Greater Wellington joined EECA's Energy Wise Councils programme in May 2003, having previously been an Energy Wise Company under a similar programme from the late 1990s.
- 4.2 Membership does not have any formal requirements, but one responsibility is to prepare an annual report on achievements and performance. An annual report was prepared for 2003-4, and the findings published in EECA's Energy Wise Councils Report.

### **5. Greater Wellington's energy use**

- 5.1 A paper was prepared on Greater Wellington's consumption of energy for the financial year ended June 30<sup>th</sup> 2004. The analysis sought to determine:
- Where energy was being used, and in what forms;
  - What proportion of consumption is not being closely managed (and thus might have potential for energy efficiency improvement); and
  - Whether there were accounts with energy providers that needed clarification (and possibly, some changed arrangement).
- 5.2 The two main sources of energy used are electricity (most substantially for bulk water production and supply) and transport fuels. In general terms, the Council is not doing too badly in energy use for its buildings and water supply infrastructure. Several minor adjustments have been made to the air conditioning and lighting of the Regional Council Centre, which along with separate floor metering and re-negotiated tariffs have led to a respectable energy cost per unit of floor space.

## **6. Greater Wellington's carbon footprint**

- 6.1 Arising from the energy use analysis, it is possible to calculate the Council's carbon footprint. The LTCCP has a target to reduce the footprint by 10% per annum. The figure is intended as a direction for improvement rather than an absolute figure to be achieved year after year. The ability to achieve a reduction is very strongly influenced by the energy consumption of Greater Wellington's highest user, bulk water, and in turn, this is influenced by water demand and supply – a dry summer means lots more pumping and energy used.
- 6.2 Nonetheless, the carbon footprint is a good “indicator” of our energy use and of one of the significant effects of that use. To get the footprint figure, the energy use data is fed into a model called EBEX 21. The Council has an annual subscription to use this model, and it may be accessed at any time to run “what if” scenarios as well as producing a report on our annual footprint.
- 6.3 The carbon figure for 2003-4 is approximately 4750 tonnes, compared to the figure for the previous (base) year of 5000 tonnes. Given the limitations of consistent data supply, time series comparability and the methodology, these figures should not be seen as precise totals, but rather as indicators of a slight improvement.

## **7. Greater Wellington's renewable energy initiative**

- 7.1 The project is examining the potential for wind farm development on land owned or managed by Greater Wellington. There has been a number of reports on the progress of this project.

## **8. Climate change/ICLEI**

- 8.1 Climate change has been described as the most significant environmental issue that faces the world. There is now substantial evidence of a relationship between the increased quantities of carbon (and other greenhouse gas emissions) in the atmosphere and global warming.
- 8.2 The issues for Greater Wellington are partly about managing greenhouse emissions (particularly from transport) but more significantly about adapting to the likely range of meteorological effects (increased storm incidence, wider temperature range, droughts and intense rainfall). The effects are likely to influence decisions across almost every sector of the economy and many of Greater Wellington's roles – in managing land for production, in developing suitable policy advice for the coastal environment, in hazard management (especially in flood protection) and water supply.
- 8.3 Officers from Greater Wellington have, over several years, worked with officers from the Climate Change Office (and prior to that, officers at MfE) on various aspects of climate change. This work has included providing input to papers, peer review, and attending/contributing national workshops. The input has been a mix of greenhouse gas reduction measures and adaptation to the effects of climate change.

- 8.4 Greater Wellington has been approached about becoming part of the International Council for Local Environmental Initiatives (ICLEI) programme, Communities for Climate Protection-NZ. ICLEI hope to “achieve tangible improvements in global sustainability through cumulative local actions”, and the philosophy behind the Communities for Climate Protection programme is “what is good for the climate is good for our city and community”. In other words, the programme seeks to find win-win-win solutions across energy management, greenhouse gas reduction, waste minimisation and enhanced local amenity.

## **9. Transport/RLTS related policies**

- 9.1 Transport behaviour has huge potential to influence energy use in the Region. In terms of the related field of greenhouse gas emissions, transport is the fastest growing source of such emissions. In terms of potential impact on emissions, Greater Wellington as a transport planning body are seen by the public (and numerous agencies and authorities) as the organisation expected to “do something”. The LTCCP has a target to reduce the quantity of vehicle fuel used from its current figure of 442 million litres per year to less than 400 million litres of petrol and diesel.
- 9.2 The RLTS is the principal “vehicle” for “doing something”, not just about greenhouse gas emissions but because of influencing fuel use. There are great expectations of moving towards the achievement of both desirable outcomes by way of the recent funding and anticipated investment in the regional transport infrastructure in the next few years.

## **10. Energy Data/State of the Environment Report**

- 10.1 While Greater Wellington has been developing internal systems for measuring energy use, the picture for the Region (and indeed, the country) is considerably less clear.
- 10.2 The State of the Environment Report (SER) is examining progress towards the various Objectives and Policies contained in the RPS, including those for energy. One of the major obstacles to analysis – nationally and regionally – is the absence of relevant, consistent, time-series data. This shortfall has been identified by other parties too (EECA, Ministry for Economic Development). Officers are liaising with both these organisations to see if, and how, there might be some improvement in monitoring energy to more accurately gauge regional change and to see if the National Energy Efficiency and Conservation Strategy (NEECS) is meeting targets.