

 Report
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Committee Policy, Finance and Strategy Committee
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## **Energy Management Update**

### 1. Purpose

To update the Committee on the range of energy management-related work undertaken by Greater Wellington and to enable the Committee to decide whether the Council join the Communities for Climate Protection NZ (CCP-NZ) programme lead by the International Council for Local Environmental Initiatives (ICLEI).

## 2. Significance of Decision

The matters 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

Energy management is a topic that has been very much in focus for Greater Wellington over the last few months.

Councillors will be aware of the progress and implications of the Renewable Energy project. Energy is one of the 4 resources identified in Greater Wellington's brand and there are energy-related targets in the Council's current Long Term Council Community Plan (LTCCP). As part of the process for considering the next LTCCP, a presentation was recently made on international and national energy issues and how they might affect the Wellington Region.

Underpinning the Wellington Regional Strategy is a set of assumptions about the security and type of energy supply that the Region might expect for the next few decades. Energy availability and pricing has fundamental consequences for transport, manufacturing, commerce and quality of life.

Councillors have also received a number of reports and presentations over recent years on the related matters of climate change and air quality.

This report and attachment provide contextual information for energy management decisions with which the Council is, or may become, involved.

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Against this contextual background, the report assesses the potential benefits of joining the ICLEI Communities for Climate Protection-NZ programme.

#### 4. Discussion

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 and energy-related protocols, for example, the National Energy Efficiency and Conservation Strategy, the Sustainable Development for New Zealand - Programme of Action (in which energy is one of 4 key issues) and the Kyoto Protocol on climate change.

Consideration of renewable energy and climate change are also statutory matters to be given regard to in the Resource Management Act.

The importance of energy management has been recognised in several Greater Wellington policy documents and decisions – the Regional Policy Statement has relevant provisions for the Region and the Regional Council and in 2003, Greater Wellington signed up as an Energy Wise Council with the Energy Efficiency and Conservation Authority (EECA). Targets in the current LTCCP for energy use, renewable energy production and management of greenhouse gas emissions have been alluded to earlier.

Attachment 1 to this Report provides information about ways that energy management is being addressed by Greater Wellington. Some are concerned with how Greater Wellington, as a responsible organisation, is addressing its energy use (and marked as GW in the list below), while others have more applicability to energy management by the regional community and within the economy (R). In summary these different ways are:

- A connected series of related policies and implementation actions for energy, transport, built environment, air quality and waste management in the Regional Policy Statement (R);
- Membership of the Energy Wise Councils programme, with annual reporting of energy performance (GW, R);
- Rationalising and organising cross-Council energy use data within Greater Wellington accounting systems (GW);
- From the above data collection, calculating Greater Wellington's "carbon footprint" each year (GW);
- "Walking the talk" on sustainable energy management by examining the potential for renewable energy production on land owned or managed by Greater Wellington (GW);

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- Managing the water supply function to optimise the mix of energy, treatment chemical and waste costs while taking a conservative approach to meeting our resource consent conditions and the level of service agreed with our customers (GW);
- Promoting modes of transport (Regional Land Transport Strategy, Be the Difference) that collectively reduce (and possibly reverse) the growth in vehicle fuel use (R);
- Participation in workshops and peer review of documentation and other material prepared by the Climate Change Office, both for reducing greenhouse gas emissions and for adaptation to climate change effects (R)

In relation to this last point, we have been approached by ICLEI and invited to join in the CCP-NZ programme.

## 5. Membership of CCP-NZ

Some councillors will have already attended presentations and/or received background material on the Programme encouraging the Regional Council to become a member. This report offers the opportunity for councillors to formally consider whether there are sufficient benefits to Greater Wellington from participating.

A copy of the CCP-NZ promotional brochure is provided with this report for information. The brochure sets out why it is important to take action on climate change, some of the reasons for local government involvement in climate action, what membership of the Programme entails and the benefits of that membership.

The brochure explains that participants of the Programme "must adopt a resolution that commits the council to progressing through the milestone framework", which involves:

- Establishing an (emissions) inventory and (making) a forecast for key sources of greenhouse emissions in the council and the community;
- Setting an emissions reduction goal (for the council and the community);
- Developing and adopting a local greenhouse action plan to achieve those reductions;
- Implementing the local greenhouse action plan; and
- Monitoring and reporting on greenhouse emissions and the implementation and quantification of actions.

The "Programme strength lies in a number of factors — one of the most important being the milestone framework. This provides councils with a tangible framework that can accommodate varying levels of analysis, effort, and availability of data."

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To some extent, Greater Wellington has a "tangible framework" to measure its own energy (and by implication, its greenhouse gas emissions) performance through its membership of the Energy Wise Councils programme, and measurement of our energy use for the carbon-footprint exercise. In large part, we are already aware of the carbon consequences of our actions.

The major area of energy use (and greenhouse gas emissions) is the electricity used to produce and supply water to the Region. This service accounts for some 90% of Greater Wellington's energy use. Our ability to significantly influence energy use in this area of operations is very limited for two reasons.

First, numerous efficiency measures have been progressively introduced into the system over the last decade, especially the "optimiser" (software that constantly identifies and schedules the most efficient sources of production). Greater Wellington Water staff are required to consider energy efficiency in regard to all new projects as part of its Environmental Management System (accredited to ISO 14001 since June 2000).

While some additional energy saving could be made through greater use of our surface water plants (where distribution is gravity assisted), this action would increase our demand for treatment chemicals and the volume of waste for disposal; both of which have associated environmental impacts.

Secondly, the weather has a major influence on water demand, and the consequent requirements to extract and pump water around the Region. In a dry summer, for example, there could be considerable extra associated energy use.

As far as the wider community is concerned, our knowledge of energy use in the Region and our ability to influence and reduce emissions by way of any actions in the "local greenhouse action plan" are both very questionable. As the work for the State of the Environment Report (SER) is confirming, there continues to be a serious absence of data on energy use at all levels – nationally and locally. Accurately measuring current use and then monitoring the effect of any actions taken is currently impossible.

The energy end-use data recently produced by EECA is reasonable at a national scale, but at sub-national levels, it is a mathematical calculation. Nor is it comparable with sparse historical information. There is slightly more confidence in the vehicle fuel figures for the approximate region (provided for the monitoring of the Regional Land Transport Strategy), and this is one area of community energy use where Greater Wellington might potentially make a measurable difference through the RLTS and the transport package

In looking at the current participants in the CCP-NZ programme, there is a predominance of territorial authorities. This is likely to be because they have responsibility for the management of relatively high energy uses (e.g. street lighting, pool and leisure facilities). Currently, there are two regional councils in the Programme. Within the Wellington Region, four territorial authorities are participants in the CCP-NZ Programme.

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#### 6. Conclusion

From the literature, it seems that participants see that the Programme offers an opportunity to help "walk the talk" and provide a role model for businesses and households in their communities. The Programme has only been introduced to New Zealand over the last 18 months although it has been running for slightly longer in Australia. It is early days, and it is probably a little premature to be talking about the success or otherwise of the Programme in New Zealand, with New Zealand authorities and their particular mix of responsibilities.

Participation in the programme carries certain obligations but does not guarantee results. While there is no statutory requirement to develop a commitment and programme of action, there is some expectation that members of the Programme will follow through on the milestone framework to produce positive outcomes for themselves and their communities. Resources are needed for this commitment

For Greater Wellington, as noted earlier, several steps in the milestone framework are already being undertaken, albeit for largely disconnected reasons. While membership might unite and direct these steps, enhanced integration and direction could also be achieved by further commitment to the obligations we have as signatories to the Energy Wise Councils Programme.

Another consideration for Greater Wellington is that irrespective of the amount of greenhouse gas emissions produced by the Region (or NZ), the Region and the regional community are likely to see the effects of climate change brought about by greenhouse emissions from other countries. Understanding, and adapting to the effects of climate change on the range of natural hazards that face the Region is potentially an increasingly important task for Greater Wellington. Membership of the CCP-NZ does not directly address this aspect of climate change management, which is seen to be the parallel responsibility of the Government's Climate Change office.

There is clearly merit for many authorities in membership of the CCP-NZ programme. However, for Greater Wellington, formal participation in the programme may not produce any immediate advantages, given the range of energy and related greenhouse gas emissions initiatives and projects with which the council is currently involved. It may be worth reviewing this position when it has been possible to assess whether membership has produced real and measurable reductions in greenhouse gas emissions by other participating councils.

### 7. Communications

Officers will communicate the Council's decision to ICLEI.

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## 8. Recommendations

That the Committee recommend that Council:

- 1. **Receive** the report and
- 2. Note the contents of the report; and
- 3. **Resolve** not to join the Communities for Climate Protection Programme NZ at this time.

Report prepared by: Report approved by: Report approved by

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