

NEW INITIATIVE (B)

Project title: Carey's Gully wind turbines feasibility study

Background: this initiative was considered by the committee as part of the climate change paper in December 2007. The initiative aims to assess the feasibility of allowing and establishing micro- wind turbines at Carey's Gully.

It is recommended that the initiative be included in the draft annual plan.

1. The Proposal

It is proposed to carry out a feasibility study to determine the technical, commercial, planning and legal viability of establishing a commercially viable wind farm within Carey's Gully footprint.

This project was endorsed by the Council in December 2007 as part of the Draft Climate Change Action Plan.

2. Proposal Costs

Project Component	Operating expenses \$000									
	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16	16/17	17/18
<i>Feasibility study</i>	50	-	-	-	-	-	-	-	-	-
<i>Total</i>	50	-	-	-	-	-	-	-	-	-

Beyond 2008/09, costs and revenues will depend on the scale and type of commercial model that is to be adopted by the Council.

3. Project Outline

The development of renewable energy alternatives has become a central and local government priority. Wind energy technology has matured significantly in recent years, and is now recognised as a major source of sustainable energy. Carey's Gully has potential in this regard which needs to be explored.

This is because:

- The Gully has a similar wind profile as the successful Brooklyn wind turbine.

- Transmission infrastructure is nearby due to the landfill gas initiative.
- The land is owned by the Council.
- There is private sector interest in wind generation at the site.
- The political and commercial landscapes are now receptive to the idea of wind power.
- Micro generation is now relatively inexpensive.
- There are potential commercial and financial benefits under the emissions trading scheme.

The confluence of technology, policy and private sector interest means that wind energy may be able to make a cost-competitive contribution to Council's strategic and policy outcomes. The initiative aims to leverage of this environment to:

- Undertake analysis to determine the nature and structure of an appropriate commercial model.
- Through a competitive process, formulate an agreement with a private sector energy entity to undertake feasibility and wind performance tests. If the tests prove that the project is commercially viable for the Council then;
- Explore resource consent and designation issues to determine any impediment and mitigation.

The intention is to progress and manage this initiative using existing staff who have been developing the concept and supplement this with technical and legal advice.

4. Conclusion

Micro generation is an increasingly feasible activity and the application of this at the Council owned Carey's Gully site presents an opportunity that could result in long-term significant economic, reputational and environmental benefits for the city.