# Proposal for Sustainable Community Enterprise

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## 1. INTRODUCTION

Otago Polytechnic aims to be a leader in creating a sustainable community. The Sustainable Community Enterprise project lifts this to a new level. The project develops a model of collaboration and innovation in our relationships with communities. This model is used to foster relationships with a wide spectrum of communities. By integrating education and community leadership, this project will deliver real change. It transforms learning, brings new revenues, and delivers on strategic social good and sustainability goals. It is win:win:win.

Granted funding in 2012 we are piloting this win:win:win approach with three case studies (Alternative Energy Community Facilitation, Community Development, and eWaste as a resource).

**Alternative energy community facilitation.** In short, the creation of a network of Otago people interested in small scale alternative energies. This will involve the building of a low cost vertical axis wind turbine (VAWT) to be mounted on an Otago Polytechnic building as demonstration of the potential of these kinds of systems. The plan is to develop a new programme for the Polytechnic to provide an ongoing educational and financial model. The development of the recycled VAWT will be in conjunction with other projects developing commercial applications.

**Port Chalmers Community Development.** There have many attempts to revitalise the economic status of Port Chalmers. This current initiative makes use of an under-utilised resource – cruise ship passengers and crew. Most of these people either drive through the town on buses or don't get off the ship. By working with students and the community to provide a free wireless internet access to the ship and the main street, more people will be drawn into the community. The service will also make money for the community and Polytechnic.

**eWaste.** The amount of electronic waste accumulated by institutions such as Otago Polytechnic is being managed in a largely unsustainable manner. By actively managing this stream, the Polytechnic can save money, support students, support the community and behave in a more sustainable manner. We have been piloting this project since the start of 2012, unofficially managing the disposal of a large portion of the eWaste generated by the polytechnic. This project plans to formalise this arrangement and to move the institution to seeing the eWaste as a resource.

Note that although we intend delivering on these case studies, the point is that any one of them could theoretically be swapped out for another project where the challenge is to deliver on the three aspects of educational opportunity, sustainable community building, and positive operational outcomes. We are seeking to demonstrate a new way of working rather than merely these case studies *per se*.

The Sustainable Community Enterprise project pulls together education, operations and community, but also in the linkages between them. The case studies (Alternative Energy Community, Post Chalmers Community, eWaste) all three exemplify the win:win:win approach. For example, the wind turbine will be created by people from the community (enrolled in an EFTS bearing course) using recycled material such as neodymium magnets harvested from Otago Polytechnic's eWaste stream. All three aspects also offer learning opportunities for other students and staff in the BIT, BAM, BEngTech, Design. All three have potential Iwi involvement and this dialogue has begun. All three will result in ongoing enterprise activity.

The project is all about community engagement. Following the radical transparency paradigm used in the BIT projects, the entire project will be as open as possible. This will include a blog and ongoing analysis and marketing. We intend writing an open Education resource book describing this overall Sustainable Community Enterprise project. We believe it will become the blueprint for institutional community engagement.

We believe that the institution needs a transformation to an approach that combines educational opportunity, sustainable community building, and positive operational outcomes (ie sustainable operations and revenue generation). We seek to develop and prove this win:win:win approach. We are developing a set of guiding principles for engagement: everything is a learning opportunity, everything is an opportunity for communication.



Figure 1: A vertical axis turbine proposed for the roof of the computing block at Otago Polytechnic will be the vehicle for a community capability initiative.