

Renewable Energy

The Renewable Energy sub-group has been working to the Renewable Energy Plan developed last year. The aspiration is the generation, by 2012, of as much energy from community-owned renewable sources as we in Westray use from all sources. This is undoubtedly an ambitious target but it is achievable, and we are tackling it from several angles.

Energy production from community owned projects is potentially a source of revenue. The aim, initially, is to reach a level that pays the running costs of the Westray Development Trust and then as it develops to be able to put money into other schemes for community benefit.

Renewable Energy worker

We have recently been awarded a grant from The Energy Savings Trust to employ a Renewable Energy worker for two years to take this work forward. The Renewable Energy scene is of major importance nationally and as a group we cannot, at present, take up all the opportunities that are regularly presenting themselves. This new post will enable us to do far more. This post is now advertised. The successful applicant is expected to bring into Westray the grants and investment needed to develop our plans and so start generating electricity and therefore the cash from it.

Renewables and Tourists

The Renewables projects here in Westray are one of the reasons for tourists to chose Westray as the North Isle they visit and, as we know from research, once they have been here, a significant number both tell their friends and keep coming back themselves. If we are successful with the electric car bid, we believe it will be particularly effective in attracting people.

Grid Connection

If the energy produced is in the form of electricity we have to either sell to the grid or use it on site for a business that needs a lot of energy.

We did an initial enquiry with Scottish and Southern Electricity ("the hydro") to see what the grid in Westray and Papa Westray could take, without needing to export electricity into the North Isles ring.

We have now applied for grid connections and will find out soon if and when this will be possible and the cost for a connection.

Electric Car

The Electric Car and Windmill project will shortly be going in as an application. Thank you to all those who have contributed both verbally and via the sheets in the shops. The feedback has mostly been very positive with lots of good suggestions that we will incorporate in the application. We are, of course, in competition with other community groups for this £50k grant.

I am very pleased to discuss the concept and how it could work for us here, especially with anyone with doubts or concerns.

Sub-group members: Iain MacDonald, Colin Risbridger, Steven Bain, Jonathan McEwen, Jimmy Stout, Kevin Rorie, Willie McEwen.

Anaerobic Digestion.

This project would digest slurry, fish waste, paper and cardboard etc and produce methane gas. Electricity generators would run on the methane. The project is about to go forward to apply for ERDF funding. It would be the first of its kind in Orkney. We would like to combine the project with Plastic Recycling, which is an energy demanding process, so we can sell energy from one part of the business to the other and get a better price than the grid pays. Plastic Recycling is environmentally very desirable, much better than dumping, burning or shipping it all the way to South West Scotland. However it is not an easy business to develop anywhere. A large quantity of UK plastic waste is shipped to China for recycling every year.

Geothermal

Within Orkney, Westray has led the way in demonstrating the effectiveness and value of heat pumps. As a direct result of seeing what has worked here, other places are now convinced by the technology and are specifying it. The Care Centre heating will be based on heat pumps, with solar panels to aid the hot water provision and a windmill to provide some of the electrical load.

Alternative fuels

The biodiesel project has demonstrated that we can produce diesel fuel that works from used cooking oil, and that we would be able to sell this environmentally very friendly product a little cheaper than regular diesel. We are now in the process of setting up a small company to do this commercially. Its size is limited meantime by the quantity of used oil available. We are also working with the Agronomy Institute at Orkney College towards growing both oil crops to press for raw oil and sugar beet crops for bioethanol production.

Wind

In world terms, we have very high average wind speeds and this is the deciding factor for successful generation. Wind energy is working reliably and making good financial returns in places with far less wind than here. Windmills are the simplest way to tackle our generation target and most important start earning cash.