

“Tilley”

Tiree’s Community Turbine

WELCOME

Tiree Renewable Energy Company Ltd (TREL) is wholly owned by the Tiree Community Development Trust and was formed in 2005 to take forward the community wind turbine project. Details of the TREL and Trust directors and staff are at the back of this leaflet. We’d like to thank all of them for their contributions. It has been a long and at times frustrating journey to reach today but finally TREL and the Trust are delighted to be able to welcome you to the official opening of Tilley, Tiree’s community turbine.

Most people will be aware of at least some of the delays and setbacks this project has faced. Weather has intervened, ferries been cancelled, problems found with equipment and 54 documents had to be signed just to agree the funding and supply agreements. It is a testament to the determination, commitment and spirit of the TREL directors in particular that we are here today.

TILLEY

Tilley is an Enercon E-44 model and specially designed for areas with high winds. She stands 75m to the tip of her blades and 55m to the nacelle. The blades start turning when wind speeds reach 2 m/s (approximately 4 mph) and turn between 12 – 34 rpm. In high winds, the storm control cuts in between 28 -34 m/s (63 - 75 mph) to slow the blades down to a smooth stop. We can expect to see the turbine standing still some days in the next few months while the final tests are being carried out and in the future when routine maintenance is undertaken or there are grid issues on the mainland. This is to be expected. Insurances and maintenance reserves are in place to cover unexpected downtime. Tilly should generate an income for the Tiree Community for more than 20 years.

COSTS

The total cost of the project since it was first discussed has increased considerably. The UK pound has decreased in value against the euro (Enercon price its turbines in euros). The cost of some of the grid connection equipment also depended on the pound dollar exchange rate, which has also dropped substantially. The final cost is in the region of £2.1m. TREL is funded by a loan from the Trust and funding from the Co-operative Bank. The 12 year loan from the Bank is on fixed terms at a competitive rate designed for community projects. There is a formal loan agreement between the Trust and TREL, again on commercial terms.

OUTPUT

The data from the wind mast on Ruaig Sliabh from November 2006 to October 2007 predicted a load factor of 43.5% for the turbine. This means that the annual output should be significantly over 3,000,000 kWh a year. However as we all know from this winter’s calm weather, we cannot guarantee what output we will actually get. We do have the benefit of over 40 years Met Office Data for Tiree which supports the expected results over the medium term.

WESTRAY AND BENBECULA

An Enercon E-44 machine has been generating on Benbecula for over 18 months and last year was Enercon’s second best performing turbine of this type in Europe (the best is in Greece). We’re hopeful that our turbine will be as successful. Westray, in Orkney, also has an E-44 Enercon turbine which started production in October 2009. Both machines faced running in issues in the first few months of operation. However they are now both running well. The directors of Westray Renewable Energy and Charlie Robb on Benbecula have given us a lot of practical help and tips and we’d like to thank them for their support.

ELECTRICITY & INCOME

TREL is earning income by being paid for the power which the turbine generates. Although costs have increased, the amount paid for power generated by renewable sources has also increased substantially. The turbine will not affect how or what you pay for the electricity you use on Tiree. Unfortunately the current grid system does not allow us to use the turbine to power Tiree when there is a power cut. The Island will still have to rely on the diesel generators when this happens.

THE FUTURE

TREL will pay the Trust a mix of loan interest and capital repayments and will also gift aid its surplus income to the Trust. The surplus amount each year will depend mainly on how windy it has been. As with any new business which has start up costs, there will not be much surplus in 2010 but this will increase in 2011 onwards. We still expect to be able to transfer approximately £1,000,000 in the next 10 years. Once the bank loan has been repaid there will be significantly more money available to transfer.

TIREE WINDFALL FUND

The Trust would like to know your thoughts on how this money should be used for the benefit of the community on Tiree. Should it go towards a large project or on smaller grants, or a mix of both? What type of projects? They'd like to hear your ideas. The Trust will be holding a further meeting to explain more about how the Fund might be operated and to hear your views.

DIRECTORS, STAFF AND SUPPORT

The Board of TREL comprises Bruce Kemp (Chair), Ian Tainsh (Secretary), Mark Beese, John Bowler, Roger Jarvis, Ann Kirby, Danny Lapsley, Iain MacDonald, Steve Thomson and Mark Vale.

The Trust board is made up of Tish MacKinnon (Chair), John Bowler (Vice-chair), Roseleen Campbell (Secretary), Sam Bouchnak Kate MacAllum, Roger Jarvis, Ann Kirby, Trudy MacKenzie, Ross McLennan, Fiona Munn and Mark Vale.

Lloyd Gudgeon and Liz Lapsley are Development Managers for the Trust and Trish Proud is the Trust's finance officer.

The BIG Lottery Fund through its Growing Community Assets programme awarded the Trust £886,259 revenue and capital funding to take forward a turbine project for the benefit of the Community. The Trust gratefully acknowledges this support.

We are grateful to the Trustees of the Argyll Estates and its staff for the assistance with land issues and granting TREL a lease for the site.

The Co-operative Bank has been supportive throughout and has provided TREL with the additional loan finance to undertake the project.

Thanks also to all those people and agencies too numerous to mention both on and off Tiree who have supported the project.

Tiree Renewable Energy Company Ltd

Tiree Community Development Trust

