4 2ND VISIT DEMONSTRATION FARM

NFUScotland

Marshill Farm Wind Turbines

Blackwood,
Lesmahagow,
Lanark,
ML11 9PW

Farmer – Andrew Stewart
Date of farm visit – 21st May 2015

The project consists of a single Enercon E-82 (2.3MW) and two Enercon E48 (800kw) turbines, with a total capacity of 3.9MW, at a cost of £7.6 million.

Background

Marshill Farm is a 700 acre livestock farm with approximately 400 Holstein Friesian dairy cows. The farm grows around 150 acres of spring barley, while grass is grown on the remaining acreage for cattle grazing and silage production.

Andrew Stewart became aware of the wind turbine development opportunity when he was approached by a wind developer but was not keen to lease the land to a developer due to the poor rates being offered.

Having secured planning and grid connection for the Draffan and South Field turbines (E-48's) he decided to make use of the CARES loan to undertake the Marshill turbine (E-82) project.

Key changes since 1st visit on the 14th February 2014:

- Radar issue resolved at a cost of £40,000
- Financing has been secured through REIF and Santander
- Construction has begun with Enercon
- Detailed wind analysis showed higher wind speeds than previously estimated
- Capital cost increased to £7.6 million from £6.2 million
- Cost of grid connection confirmed as £1.25 million

The Scheme

Stewart's Capital Expenditure on Project	£6 million
Community Group's Capital Expenditure	£1.63 million
Annual Energy Generation	8,600 MWh
FIT and Export Payments	£1.4 million
Estimated Annual Running and Maintenance Costs	£135,000
Approximate Payback	8 years

The site consists of three turbines; two Enercon E-48 (800kW) and one Enercon E-82 (2.3MW). Enercons were chosen as at the time of making the planning application they were easier to finance.

Construction of the project is currently in the final stages with the construction crews being on site for approximately five months for turbine work and three months for grid concetion work. The proposed date for the connection to be made is August.

As the Stewarts were developing a new dairy unit at the farm in parallel with the turbine development, they felt that they could not afford to risk the large amount of money required to get the larger E-82 turbine through planning. To avoid this risk they chose to use the Community Renewables Energy Scheme (CARES) loan as it has a 90% write-off facility (this has now been raised to 95%) if the project is unsuccessful.

The Scottish Government
The European Agricultural Fund for Rural Development: Europe investing in rural areas
savills

CARES Funding

- Andrew was awarded a £149,000 CARES loan for pre-development costs for an Enercon E-82 turbine
- The CARES Loan requires £10,000 per MW be paid to a local community group
- The CARES Development Officer provided support for the project through the pre-development stage, and established a community benefit agreement
- CARES also supported community investment/shared ownership aspects of the project after planning was awarded
- Funding was made available to help for Lesmahagow Development Trust to appoint legal and financial teams in order to secure loan finance to invest in the Marshill project.
- During planning for the largest turbine there was one serious objection from the UK Civil Aviation Authority. In order to 'blank out' the area where the turbines are on their radar cost £40,000, this was covered by the CARES scheme.

"Key aspects were the excellent community engagement at all times by Andrew and the decision to offer the community an investment share when funding could have secured from other sources."

CARES Local Development Officer, Pete Mills

Santander Funding

Having secured planning and a grid connection, the next major hurdle for the project was securing funding. Traditionally this is done through a financing partner. In the case of this project, it was Santander.

Santander construction project finance facilitated an 11 year total commitment on a £6m senior loan. A senior loan gives Santander priority of payment over other lending parties. A £500,000 VAT facility was also agreed. This allows an extra £500,000 to be borrowed on the understanding that it will be paid back immediately through reclaiming VAT. In order to secure financing from the bank, they insisted on detailed and extensive due diligence being carried out to make sure that every risk has been addressed. Usually, this covers the following:

- Mandate/Policy; the overall project fits with the bank's criteria for lending in the sector.
- Technical Due Diligence; proof of wind source and energy yield, evidence of suitable location for turbine, assurance on turbine quality and performance.
- Financial; the various financial models must be accurate, audited and show that the project can repay the bank and return cash to the investors
- Customer/Counterparty; all the sponsors and investors have to pass the bank's 'know your customers' (KYC) processes. All contractors involved have to show that they are experienced in the sector and robust/solvent enough to ensure completion of works.
- Insurances; the project needs to have all necessary insurances in place – and the bank needs this to be independently audited.
- Contracts; there are many involved, covering power purchase (PPA), grid connection, balance of plant, maintenance, land rentals and share agreements. All have to be checked and verified
- Legals; banking facility documents and also evidencing that all of the above fit together within the overall project.

Santander is not the only external funder. The project has also secured a Scottish government loan of £1.63m via their Renewable Energy Investment Fund (REIF).

REIF Funding

Andrew has close ties with the Lesmahagow community, having been born and brought up in the area. From inception, Andrew planned to gift Lesmahagow Development Trust (LDT) a small stake in his wind farm project. However, the Scottish Government's Renewable Energy Investment Fund (REIF) gave LDT access to loan capital, which they were able to use to secure a much larger stake (25%).

LDT's 25% share in the project will be invested in the local community over the next 25 years. It is anticipated that for every pound generated by the turbine the community can match fund this with the lottery fund to make two pounds with further match funding available with these two pounds to make four pounds. LDT will use their dividends arising from their shares in this project to invest in improving the Lesmahagow community. The projects which LDT plans to support are wide ranging in nature and include:

- Purchase of community owned assets such as sport and play park facilities, developing an outlet for locally owned crafts or creating a community childcare facility.
- Invest in community revenue generation projects i.e. renovation of unused buildings.
- Funding for community groups and local business for training and education purposes.

REIF

REIF funding is available to communities who wish to buy a stake in renewable energy projects. More information is available from; http://www.scottish-enterprise.com/services/attract-investment/renewable-energy-investment-fund/overview

"For us to have to same turnover from 3 wind turbines we would have to either increase our milking cows to 1,200, grow 4,000 acres of wheat or sell 23,000 lambs a year. This would require substantially far more land than the 3 acres the wind turbines use. For the development trust to get to this turnover they would need to face-paint every single child in Scotland at least 4 times a year."

Andrew Stewart, May 2015