



Northern Ireland
Assembly

Research and Information Service Briefing Note

Paper 126/14

5 June 2014

NIAR 310-14

Suzie Cave

Co-op Wind Farms in Northern Ireland

This paper provides information on the Drumlin's Cooperative which is the first co-operative (co-op) wind farm in Northern Ireland. It considers how the Co-op operates, the locations of the sites, the costs associated with its set up, its governance, generation and expected return for members, and any future proposals or plans.

1. Introduction

The following paper can be read in conjunction with research papers '*Wind Farm Community Benefits*' (NIAR-308-2014) and '*Co-operative Wind Farm Schemes in Scotland*' (NIAR-313-2014). The information was obtained through discussions with the members of the Drumlin's Co-operative, its website and by attending a *Funding Community Renewable Energy Projects* in Cookstown 7th May 2014, run by Action Renewables in association with the Ulster Community Investment Trust (UCIT).

As discussed in more detail in the above mentioned papers, co-operative schemes are a form of community benefit which gives local ownership of the development (or part) by local people or community based organisations. This is usually achieved by offering shares for sale, joint venture or majority ownership by a community based enterprise.

According to the Drumlin's Co-operative, a co-operative is:

An autonomous association of persons united voluntarily to meet their common economic, social & cultural needs & aspirations through a jointly owned & democratically controlled enterprise¹

Co-operative principles as an Industrial and Provident Society are:

- One member, one vote
- Local board elected by members
- Social ethics: responsibility, equality, fairness
- Supports environmental and social goals
- Co-op devotes % of profits to 'social' projects locally

2. The Drumlins Co-operative

Co-operative schemes have been in operation in England, Scotland, Wales and the Republic of Ireland for a number of years. However, this year began the operation of the first co-operatively run wind farm in Northern Ireland under the Drumlin's Co-operative.

The Drumlin Co-op, with assistance from Energy4All (which set up and facilitate renewable energy co-operative projects throughout the UK) and NRG Solutions (consultants in grid connection and project management of renewable energy projects in the UK and Ireland), constructs, owns and operates wind turbines at four separate sites around Northern Ireland, each with a single 250kw turbine.

It is worth noting that while the Drumlins call it a wind farm, it consists of four single turbines each located on a completely separate site, these are:

1. Aghafad in Pomeroy – began operating this year
2. Cavanoneill in Pomeroy – began operating this year
3. Ballyboley in Larne –under construction to start in June 2014; and
4. Parkgate in Kells – construction started for generation by August 2014.

The Co-operative first launched in June 2012, where Phase 1 raised 3.4 million through loans to build the four turbines above.

¹ Presented at the Funding Community Renewable Energy Projects Event 7th May Cookstown – in association with Action Renewables/ Ulster Community Investment Trust

2.2 Drumlin Stakeholders

Figure 1 shows the makeup of stakeholders and their responsibilities:

Figure 1: Drumlin Stakeholders



2.3 Costs

Drumlin Co-op was formed back in 2012 and supported by Energy4All who dealt with the shares aspect; it raised the required funds (£2.7 million) through a public share offer enabling local people in Northern Ireland and beyond to become members by purchasing shares. With no form of government subvention, the Co-op also secured a loan of £340,000 from Ulster Community Investment Trust to raise the required total of £3.1 million for the four separate wind turbines.

2.4 Governance

The Co-op is an industrial & provident society and its constitution is its 'Rules' which are approved by the Department of Energy Trade and Investment. These rules stipulate that all Members have one vote regardless of how many shares they hold and can hold no more than £20,000 of shares, with a minimum of £250 to make it accessible to as many people as possible.

The governance of the Co-op is vested in its Board which is made up of members and directors. The Board is voted by members of the Co-op each year and ensures that any issues/plans are put to the local community to decide.

² Slide from Drumlin presentation at the Action Renewables/UCIT event 7th May 2014

2.5 Generation and Income

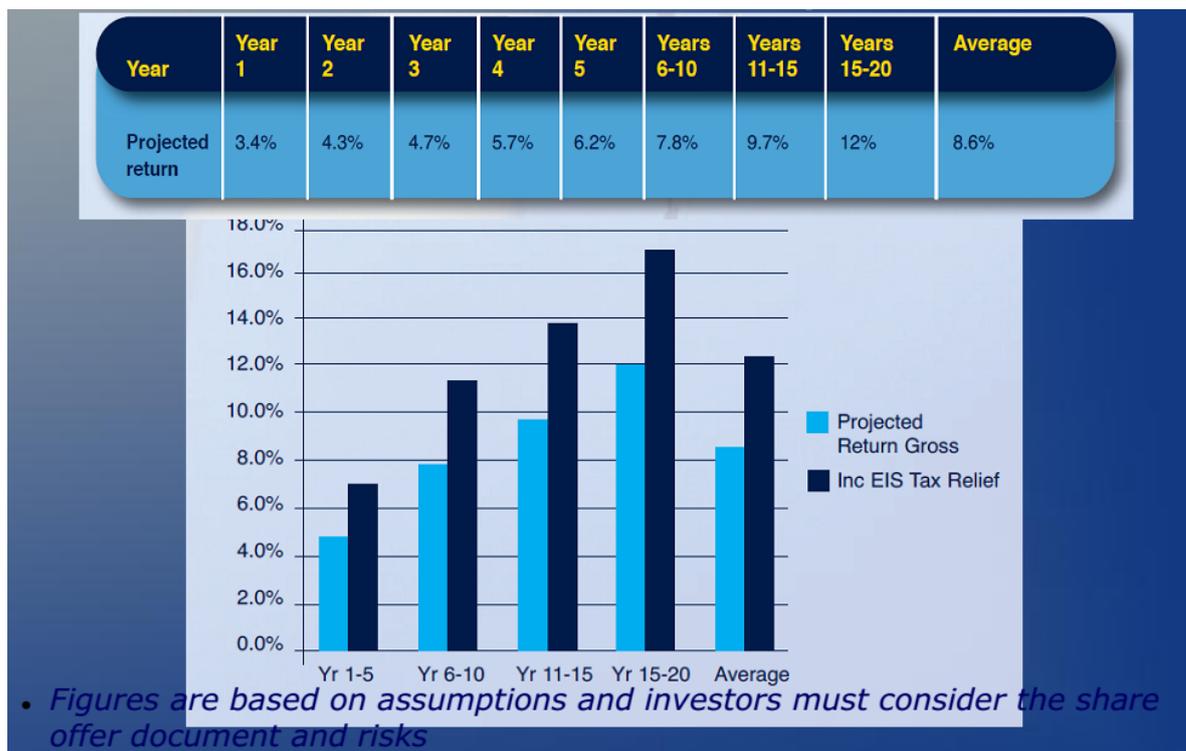
Once the turbines are operational, all the electricity generated is sold to the electricity markets through a Power Purchase Agreement (a contract between the wind farm and those wishing to buy the electricity generated) and the co-op will also receive income through the Renewable Obligation system³. The actual level of income will depend on the level of wind at each site and the operational efficiency of the wind turbines.

After payment of operating costs such as maintenance, rent, insurance and administration costs, the surplus profits will be available to distribute as a share interest payment to members of the co-op.

From year four the Co-op intends to repay a portion of share capital each year. It is expected all member's original investment will be paid in full by year 21. The projected return for individuals are shown in Figure 2, illustrating that investors can expect a 3.4% after year 1, and 12% return from years 15-20. The EIS Tax Relief is known as the Enterprise Investment Scheme Tax Relief which the project qualifies for.

There will also be a Community Fund available to support local community initiatives local to each wind turbine, starting at £2,000 per site.

Figure 2: Co-op Financial Projections



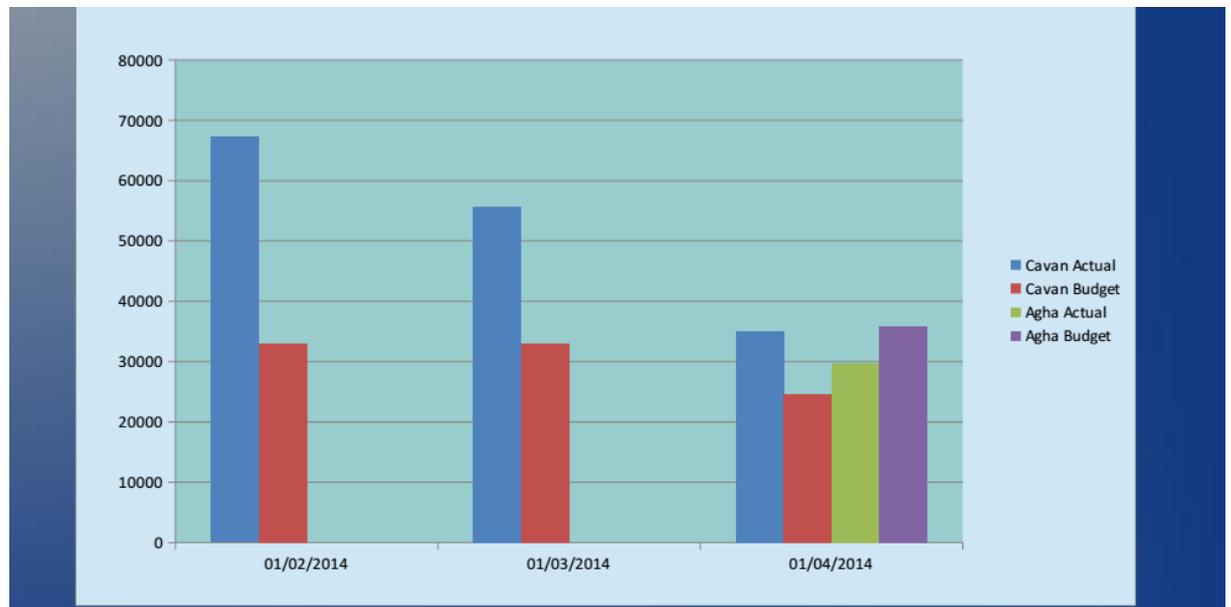
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³ Under the Renewable Obligation system, Renewables Obligation Certificates (ROCs) are green certificates issued to operators of accredited renewable generating stations for the renewable electricity they generate. Operators can trade ROCs with other parties. For more information see ofgem <https://www.ofgem.gov.uk/environmental-programmes/renewables-obligation-ro>

⁴ Slide from Drumlin presentation at Renewable/UCIT event 7th May 2014

Figure 3 gives information on the first quarter production figures for two of the operating sites: Cavanoniell and Aghafad. It shows the change in production cost compared to the budget over the first three months of operation.

Figure 3: First Quarter Production Figures



2.6 Future projects

Energy4All is a not for profit organisation and it operates by taking a percentage from the Co-op for administration of the shares and uses this to fund their next initiative.

The Drumlin Co-op recently launched Phase II - a second share offer (which closed 30 April 2014) to raise up to £1.2 million for two further sites at Ballyrobert, Co. Antrim and Cavanakill, Co. Armagh each with a 250kW turbine.

For more information refer to the Drumlin's Co-op website

<http://www.drumlin.coop/home.asp>

3. Grass Roots Renewables CIC

Grass Roots Renewables CIC is a community interest company set up to generate funds for community organisations in Carntogher Area of Derry/Londonderry.

Its proposal is to set up a 225KW wind turbine at Tirkane in Maghera, where proceeds will be split between four local community organisations:

- Carntogher Community Association
- Sleacht Néill GAC
- Naíscóil Charn Tóhair
- Naíscóil Mhachaire Rátha

3.1 Process to date – planning and grid connection

- March 2008 - Planning Consent Applied for
- March 2009 - Initial NIE connection enquiry
- Nov 2009 - Planning Approved
- Dec 2009 - NIE Connection application
- March 2011- NIE Connection offer
- June 2011- Paid down payment on Connection Application
- Feb 2014- NIE advised that all wayleaves, Leases etc. had been sorted out & requested final payment.
- March 2014- Paid Connection fee
- July 2014- Connection due to be provided⁵

3.2 Capital Costs

- Planning & Surveys (incl. Wind)- £ 35,000
- NIE - £138,000
- Legals - £ 10,000
- Turbine - £435,000
- Civils & Commissioning - £ 42,000
- Financing Capital Costs - £ 20,000
- Contingency - £ 10,000
- **Overall Costs - £690,000⁶**

3.3 Costs

Funding:

Funding was achieved through community loans (190,000), UCIT (£500,000) and capital and interest over 15 years.

Operational:

Estimated Gross Income is £130,000 p.a. (ROCS & Electricity). This is less:

- Insurance, Rent, Maintenance, Rates etc. £ 20,000
- Capital & Interest repayments - £65,000
- Estimate of Community Return - £ 45,000

⁵ Information from presentation at UCIT/Action Renewables event 7th May 2014

⁶ *ibid*

Grass Roots Renewables made the following conclusions:

- Potentially great source of income for Community Sector -one single turbine could provide as much as an entire community fund from a wind farm.
- It will always take much more time to deliver a project than you initially estimate due to Planning, NIE and procuring a turbine.
- NIE Connection is the most critical element in the entire process – both in costs and in terms of timing.
- Could get planning but connection may not be available at viable costs
- Could take many months and even years to get way-leaves agreed.
- Need to lobby Government to retain ROCS for Community Sector projects – currently it's the private sector that benefits most. This could unlock major benefits for the community sector.⁷

⁷ ibid