

Co+operate for growth

Growing Scotland's renewable energy sector



Why co-operate?

The Scottish Government's Climate Change Delivery Plan and associated Renewables Action Plan act as strong drivers for the development of the renewable energy sector in Scotland.¹ The challenge is to achieve critical mass in Scotland's renewable energy industries. Encouraging collaboration throughout the renewables supply chain is a key objective for Scottish Government, Scottish Enterprise and Highlands & Islands Enterprise.

Co-operative business models have an important role to play by enabling renewable energy operators to achieve scale, manage risk and raise capital. The benefits from renewable energy co-operatives can then be retained in the local community rather than lost to large externally-owned corporations.

Co-operative business models allow renewable energy operators and their suppliers to:

- + Develop and control assets locally
- + Reduce development risks
- + Raise investment
- + Win contracts
- + Develop new products and services

What are co-operatives?

Co-operative businesses are owned and controlled by their members, who can be employees, businesses or consumers. They are set up to meet shared needs and are run on a democratic basis. Employee ownership is a particular form of co-operative working in which the employees own some or all of the company's shares and influence the running of the business.

Fact:

Fuelling the future

Co-operative businesses are already operating a number of renewable energy technologies, including:

Wind power

Bioenergy

Hydro

District heating

“ It is noticeable that those countries which have been most successful in embracing renewable energy are those that have encouraged people to become involved. Co-operative ownership of renewable energy projects is common in many countries in Europe. ”

Energy4All

Are co-operatives an effective way of working?

A combination of shared ownership and employee participation delivers superior business performance and sustainability. Decisions are taken in the long-term interests of the members, rather than external stakeholders. Agreeing formal processes/systems at the outset minimises governance requirements. Employee owned businesses usually have traditional management structures, complemented by enhanced levels of employee engagement through employee-elected directors and forums.

Proven business models

Co-operative models are flexible and can be adapted to suit any business. Those with most relevance to the renewable energy sector are:

Consumer and community co-operatives – are owned by their customers or members to provide the goods and services that they need. For example, renewable energy co-operatives allow collective investment in and ownership of renewable energy assets such as wind farms that supply the local community, with excess supply routed into the national grid.

Co-operative consortium – a collaboration of businesses who want to buy, produce and sell more effectively, while retaining their individual brands, independence and control. Often the consortium model is used to reduce costs, share risks, access new opportunities or introduce new processes requiring scale. For example, farmers can reduce costs and generate income by processing waste collectively. Also, engineering businesses can come together to win substantial contracts as major suppliers to the energy industry.

Employee owned businesses – are businesses in which the employees, rather than external shareholders, hold the majority of the shares and control. Employee buyouts allow exiting business owners to receive a fair price while securing the future of the business and its employees. The business is usually acquired on behalf of the employees by an employee benefits trust. A special category of employee ownership is the **Worker co-operative** that operates on a democratic basis, often with an emphasis on sharing information and strong ethical standards. An interest in the environment and sustainable development is a common feature.

Co-operative opportunities

Research² commissioned by CDS highlights opportunities for the formation of new renewable energy co-operatives in five key areas:

Onshore wind – promoting further growth of community-owned wind farms, and promoting new co-operative models which can attract public and private finance while mitigating against key development risks.

Bioenergy – by forming consortium co-operatives, wood producers can achieve scale and collectively produce, market and distribute wood chips/pellets to major users such as large biomass boilers and power stations.

Energy from waste – waste producers such as farmers or food producers can establish consortia to collectively supply their waste to their own or a third party anaerobic digester is a process where micro-organisms break down food and animal waste to produce biogas, heat and fertiliser.

Hydro – setting up co-operatives to develop small-scale hydro power developments which use river power to produce electricity.

District heating – customer-owned co-operatives providing local hot water and heat from a communal distribution network using a centralised boiler.

Development, installation and repair of new technologies – using co-operatives to build, develop and maintain new energy infrastructure. Consortium co-operatives, for example, can bring together specialist skills in this area. Worker co-operatives and employee owned businesses also operate in this field.

² CDS: Size and Scale of Opportunity for Co-operative Development Scotland, Ekosgen, January 2010

“ It (anaerobic digestion) will happen here, we’re simply in the early stages of what is a new industry to the UK. ”

James Graham,
SAOS Chief Executive

Fact:

In Denmark, 150,000 families are members of wind energy co-operatives, owning over 3,000 turbines which provide 23% of Denmark’s energy.³

CASE STUDY: Consumer Co-operative

Boyndie

Boyndie Wind Farm Co-operative was set up in 2005 to allow the community in Banffshire to own a share in the first wind farm co-operative in Scotland. Based at a former WW2 airfield, the wind farm has seven turbines generating enough electricity when fully operational to supply 8,500 homes. The 716 members have shareholdings ranging from £250 to £20,000 and receive annual interest on their shares. The share issue was managed by Energy4All Ltd, which supports co-operative wind farm projects around the UK.

CASE STUDY: Consumer Co-operative

Torrs Hydro

Torrs Hydro is a community owned and community funded co-operative, producing 250,000 kWh of electricity over a typical year. This is equivalent to the annual electricity consumption of 50 homes and saves 150 tonnes of CO₂ emissions compared to conventional electricity generation. Benefits include a modest return on shareholding and meeting set objectives for funding of a community grants scheme and an environmental educational programme.

CASE STUDY: Employee Ownership

eaga

Newcastle-based renewable energy supplier eaga, was set up in 1990 and is 37% owned by its 4,500 employees/partners. “We can prove that employee ownership drives employee engagement and delivers increased profitability.” **Dave Routledge, Executive Director, eaga**

CASE STUDY: Consumer Co-operative

Edinburgh Community Energy Co-operative

Edinburgh Community Energy Co-operative was formed at the end of 2007 with support from CDS. It is a non-profit, member owned organisation, which was set up to give Edinburgh residents a vehicle to promote and develop renewable and low-carbon energy in the city.

INTERNATIONAL CASE STUDY: Consortium

Naturbränsle

Naturbränsle is a Swedish wood fuel co-operative. It is owned by forest owners, private sawmills and Setra, one of Sweden’s largest wood products companies. The co-operative collects forest chips and sawmill byproducts to supply around 3.5 billion kWh of wood fuel annually. This is equivalent to approximately 0.6% of Sweden’s total energy requirement. Around 60% of the material Naturbränsle supplies comes from the forest and 40% from sawmills. The co-operative has 16 permanent employees and handles around 50,000 deliveries a year.

IN THE NEWS:

The Offshore Wind Opportunity

With planned investment of £100 billion over the next 10 years, offshore wind is a major opportunity for Scottish suppliers. Faced with strict financial and operational requirements, smaller suppliers are likely to find themselves excluded from procurement opportunities. The consortium business model is a potential solution to this challenge of scale, enabling Scottish suppliers to compete for major contracts.

³ CDS: A comparative analysis of co-operative sectors in Scotland, Finland, Sweden and Switzerland, Johnston Birchall, November 2009

How can we help?

CDS's role is to provide specialist advice to new and growing co-operative and employee owned businesses to complement the mainstream support provided by Scottish Enterprise, Highlands & Islands Enterprise and the Business Gateway. CDS support includes:

- + Exploring the options
- + Structuring the company
- + Financing the business
- + Developing member participation

Co+operative Development Scotland operates across Scotland and is a subsidiary of Scottish Enterprise. CDS works in collaboration with SAOS, Scotland's development organisation for farmers' co-operatives.

Contact us today on 0141 951 3055

or e-mail info@cdscotland.co.uk

You can also visit us online at www.cdscotland.co.uk

Co+operative Development Scotland, Spectrum House, 1a North Avenue, Clydebank Business Park, Glasgow G81 2DR.



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