SHARED OWNERSHIP IN SCOTLAND
OPENING UP CITIZEN PARTICIPATION IN RENEWABLE ENERGY
Shared ownership of renewable energy embodies many of the principles which the Scottish Government wishes to support. Few other sectors are able to so clearly demonstrate a holistic and inclusive approach, supporting community development, low carbon energy generation and the wider economy. Community empowerment is a key priority for the Scottish Government, and the opportunity that shared ownership projects brings to a community results in far more than benefits in the form of a financial reward – the rewards include improved community capacity, cohesion and activity. As demonstrated through our newly launched draft Energy Strategy, the Scottish Government is committed to a clean, green energy supply, to provide a sustainable, stable energy future for Scotland.

Our rich natural resources offer us huge potential, and as we look towards technological advancements and repowering, we are confident we are just at the beginning of the renewable energy story. Shared ownership offers a great opportunity for the Scottish renewable energy industry to be recognised as being both progressive and welcoming. By supporting and streamlining the models available, we believe shared ownership can be delivered in close and meaningful partnership between Scotland’s communities and industry – providing mutual benefit.

To date there are 43MW of equivalent community-owned renewable energy projects in shared ownership, in Scotland and the ‘in development’ shared ownership projects make up a further 181MW. The shared ownership sector has grown steadily organically over the past decade, and we have worked hard to harness this drive and to deliver schemes across the country, supported through our flagship community renewable energy support scheme, CARES (Community And Renewable Energy Scheme). CARES, has directly supported many of the case studies shown in this report, and we are committed to continuing our support for the sector. Financial and developmental support is available through Local Energy Scotland to both communities and developers. We recognise that there are complexities in the sector, and the timelines and challenges outlined in this report outline some of these. While the pathfinding work to date has been hugely successful, we must now work together to mainstream these projects to overcome the remaining barriers.

That is why the Scottish Government is committed to at least half of newly consented renewable energy projects having an element of shared ownership by 2020. We believe this can and will happen with the right support throughout the project timeline, right from concept to operation and beyond to repowering. We are exploring how best to support projects through planning, through financial incentives for shared ownership developments, and through standardisation of models, tools and resources.

This report is a celebration of the work achieved in the field to date – the Scottish Government thanks and congratulates all those involved in each of the schemes mentioned. We hope these projects will inspire communities and developers to undertake and deliver shared ownership projects and encourage more communities, individual and businesses to participate in Scotland’s energy transition thereby delivers a key element of our draft Energy Strategy for Scotland.

Paul Wheelhouse MSP
Minster for Business, Innovation and Energy
BACKGROUND
This case study report showcases 12 renewable energy partnerships between Scottish community energy groups and other entities such as commercial developers. It follows a previous case study report titled ‘Community Power: from remote island grids to urban solar co-operatives’ published by Friends of the Earth Scotland on behalf of the Scottish Community Energy Coalition in 2014.

PEOPLE’S PARTICIPATION IN THE SCOTTISH ENERGY TRANSITION
People’s ownership of renewable energy and active participation in the transition to 100% renewable energy is imperative. It ensures that benefits of renewable resources support local economies and community development. It also fosters greater awareness of the environmental and social impacts of our wider energy system. Consequently people’s ownership of renewable energy leads to greater support for renewable infrastructure developments and the transition to 100% renewables, which we need to urgently achieve in the context of climate change.

The Scottish Government recognizes the role of communities as drivers and beneficiaries of local energy transitions. It set a unique target of 500MW ‘community and locally owned’ renewable energy by 2020, which is part of a wider ambition to achieve the equivalent of 100% demand for electricity from renewable
generation by the same date. To help deliver the community and wider renewable energy transition, the Scottish Government has made available a number of financial support mechanisms. This includes the Renewable Energy Infrastructure Fund, the Local Energy Investment Fund, a £20 million (€23.3 million) Local Energy Challenge Fund and the Community and Renewable Energy Scheme (CARES). Through CARES, communities can access finance as well as regionally based advisors to help them develop schemes.

The initial 500MW target was met five years ahead of schedule in October 2015 and the Scottish Government has subsequently pledged more ambition. It is planning for a 1GW target by 2020 and a new 2GW target by 2030, despite a hostile policy context for renewables at UK level.

**SHARED OWNERSHIP OF RENEWABLE ENERGY**

While it is paramount that communities participate in the transition to renewables, not all communities who wish to do so are able to deliver 100% community-owned initiatives. Here, partnerships between community groups and wind farm developers, for example, can enable communities to participate in renewable energy initiatives for the first time. These partnerships are referred to as ‘shared ownership.’

As outlined by the ‘Scottish Government Good Practice Principles for Shared Ownership of Onshore Renewable Energy Developments’ distinctions are made between ‘revenue share’, ‘split ownership’ and ‘joint venture agreements.’ Revenue share describes developments where the community does not own a share of the asset but buys a share in the revenue generated by a project. Split ownership is used to describe projects where the asset ownership of a development is split into separate entities, one owned by the community and the other by the developer. When a development is jointly owned by the developer and a community group, this is referred to as a joint venture.

**SHARED OWNERSHIP AS A STANDARD FOR ONSHORE RENEWABLES**

The Scottish Government believe that shared ownership should become the standard, and are committed to working with industry, community groups and other stakeholders to ensure this becomes a reality. There are opportunities for all new commercial onshore wind and hydro projects to include the community as a meaningful financial partner. The Scottish Government have 2020 targets for 50% of all new renewable energy projects to include an element of shared ownership in addition to the 1GW target for community and locally owned energy.

Local Energy Scotland (LES), who administrate the CARES programme, will continue to provide dedicated shared ownership support to communities and developers. According to LES the shared ownership pipeline currently includes 181MW of community ownership and, in the coming years, repowering of existing wind farms will also provide an opportunity for shared ownership partnerships.

The following pages explore shared ownership initiatives across Scotland. Case studies include information about how partnerships operate, financial models,’ as well as key challenges and benefits.

* Please note that Euro conversions are based on January 2017 figures and have fluctuated following the UK’s vote to leave the European Union.
WHAT IS THE PROJECT AND HOW DID IT COME ABOUT?
The community of Fintry is known for hosting the first shared ownership wind development in Scotland. In 2003 Fintry residents started to explore options for local renewable energy installations. The idea for ‘virtual ownership’ of a wind turbine emerged following a community council meeting in which a commercial developer announced their intention of building Earlsburn Wind Farm nearby. Initially, the developer wanted to erect fourteen 2.5MW turbines. However, local residents made a compelling case for an additional ‘community wind turbine’ leading to a total of 15 turbines with a combined generating capacity of 37.5MW. The community owns 1/15 of the overall wind farm and profits generated, or the equivalent of a ‘virtual turbine.’ As Gordon Cowtan of the Fintry Development Trust explains, “We can point to one of the turbines on the hills and say that one is there because of the efforts we put in ... at the same time we are not completely dependent on that turbine for the income generated.”

HOW DOES THE PARTNERSHIP WORK?
Local residents set up Fintry Renewable Energy Enterprise Limited (FREE) to be able to enter a joint venture agreement with Falck Renewables, the first partnership of its kind in the UK. For the purpose of deciding what to do with the income generated, the community set up Fintry Development Trust (FDT), a membership organisation with charitable status, which is governed by a board of local residents. FREE is a trading subsidiary of FDT, which means the latter can legally control how profits should be spent.

* The terms ‘virtual ownership’ or ‘virtual turbine’ describe the fact that a community have bought into a larger commercial project but do not own a specific turbine in that project.


![Image: Earlsburn Wind Farm]

**Location** Hart Hill, Fintry
**Type** Wind farm
**Development status** Operational
**Share size** 1/15 of 37.5MW
**More information** www.fintrydt.org.uk
There are two staff members, a senior energy advisor and a manager, who are key in delivering local initiatives. They are supported by eight board members from the local community. Alongside their day job staff spend time sharing their experience and advice with other communities who have similar ambitions. They also welcome visits from university students on environmental courses and have hosted delegations from Indonesia, Brazil and Estonia.

HOW WAS THE PROJECT FINANCED AND WHAT HAPPENS WITH THE PROFITS? 
FDT secured a grant from the Scottish Community and Householder Renewables Initiative and used this to commission a feasibility study that illustrated the financial viability for the initiative.

After having explored different financing options, the community decided to take Falck Renewables up on their unique offer to provide up-front capital for the 15th turbine. Over the first 15 years of the project, FREE pays back the loan while generating an annual income of £30,000 - £50,000 (€35,000 - €58,000) to the local community. Once loan payments have been made, income is expected to rise to £400,000 (€470,000). This is significantly more income than the £35,000 (€41,000) of annual community benefit payments which are shared between three other communities nearby.

An initial project funded through the income generated by the turbine was used to survey household electricity consumption and offer free roof and cavity wall insulations to local homes. The result was an estimated £90,000 (€105,000) reduction of household energy bills across Fintry, a community with 338 homes. Every local home is offered a £500 (€580) grant to install carbon reduction measures such as double-glazing or insulation.

Twice the amount is available to households living in fuel poverty (where a household spends more than 10% of income on fuel).

Another initiative provides grants to students in further education to help them manage costs related to reducing their impact on the environment. The money may be spent on goods or services such as the purchase of a bicycle, second hand books or public transport passes.

As such, the majority of income from the turbine goes straight back to the community via grants though larger initiatives may also receive funds from other sources.

KEY CHALLENGES
• Pioneering a new approach
• Trying to turn Fintry into a zero carbon, zero waste and sustainable community

KEY BENEFITS
• Increased fuel efficiency and reduction of fuel poverty
• Carbon reduction
• Environmental awareness in the local population
• Sharing experience with other communities and educational programmes

TIMELINE

2003 FREE is established
Winter 2006 Falck and FREE sign agreement; construction starts
2007 Fintry Development Trust is set up
Aug 2007 Power generation starts
Dec 2007 Wind farm fully operational
April 2008 FREE receives first income
We can point to one of the turbines on the hills and say that one is there because of the efforts we put in ... at the same time we are not completely dependent on that turbine for the income generated.

Gordan Cowtan - Fintry Development Trust
MARSHILL WIND FARM
KEEPING OWNERSHIP LOCAL

WHAT IS THE PROJECT AND HOW DID IT COME ABOUT?
Reluctant to lease land to a commercial developer, farmer Andrew Stewart decided to develop a wind farm for himself and the benefit of the local community. Initially he had approached Lesmahagow Development Trust (LDT) about paying the organisation community benefit payments but as the project developed the potential for the community to buy into the development emerged: “I am a passionate believer in renewable energy and the benefits projects like ours can bring to our area if 100% of the ownership is kept local.”


HOW DOES THE PARTNERSHIP WORK?
The development consists of two 800KW and one 2.3MW turbines with a total generating capacity of 3.9MW. The project is owned by Stewart Energy which is comprised of the Stewart family and Lesmahagow Limited. The latter is a subsidiary of LDT and owns 25% of the project. According to Liz Montgomery, who volunteers on LDT management team and also represents LDT on the board of directors of Stewart Energy: “It’s been really, really good that we’ve all been pulling in the same direction.” The positive relationship between the partners has helped overcome unexpected barriers.

Potential risk was a big concern for LDT. Therefore, the project was set up in a way that in the unlikely event this was necessary, only Stewart Energy could be liquidated, taking the burden off Lesmahagow Limited.

"I am a passionate believer in renewable energy and the benefits projects like ours can bring to our area if 100% of the ownership is kept local.

Andrew Stewart - Stewart Energy Ltd"
HOW WAS THE PROJECT FINANCED AND WHAT HAPPENS WITH THE PROFITS?
The project had to raise a total of £8.13 million (€9.49 million) to develop, including a £0.5 million (€0.58 million) VAT facility which was reimbursed later. The financing included CARES funding for one of the turbines, a £1.63 million (€1.9 million) loan from the Scottish Enterprise Renewable Energy Investment Fund (REIF) and a £6 million (€7 million) loan from Santander Corporate and Commercial. With the help of a CARES loan of £119,000 (€139,000), the project also managed to overcome radar interference, an issue raised by the UK Civil Aviation Authority and which cost £40,000 (€47,000) to resolve.

Over its 25 year lifespan the project generates income through sale of electricity to the grid and Feed-in Tariff subsidy payments. LDT’s share in the wind farm will make significant amounts of income available for the local community. LDT is exploring a number of different options on how to spend the money. In the first instance Liz Montgomery is keen to use the income to employ a community development officer and so increase the capacity of the trust. With 15% youth unemployment (nearly twice the Scottish average), training and job creation are also high on the agenda. One idea is to buy old properties and, in the process of renovating, provide training for unemployed people. Importantly, the legal structure of Lesmahagow Limited provides the possibility of setting up social enterprises, for example a local farm shop, that the charitable status of LDT forbids.

In addition the project pays £15,000 (€17,500) of community benefit payments annually. Not-for-profit entities in Lesmahagow and surrounding communities can benefit from this and the first round of payments was divided into £300 (€350) grants.

KEY CHALLENGES
• Securing grid connection
• Radar interference raised by the UK Civil Aviation Authority, which required additional costs and prolonged planning by a year
• Access issues during construction which required road widening
• Setting up a structure that minimises risk to the community

KEY BENEFITS
• Income to combat youth unemployment and support local initiatives
• Strengthening the community which is currently disjointed and experiences high social inequalities
• Income to the community without additional cost to the developer
• Securing the future of the Stewart farm

TIMELINE
- Autumn 2011 Andrew Stewart approaches LDT about community benefit payments
- July 2012 LDT sends letter of support for the planning application
- Dec 2013 Planning is consented and grid connection secured
- Dec 2013 LDT get involved to develop shared ownership model
- Jan 2015 Signing REIF loan agreement
- Feb 2015 Construction begins
- Sep 2015 Wind farm is fully operational
- June 2016 First grant applications to benefit from community benefit payments
- Sep 2016 LDT receives first dividend
- 2017 Construction of fourth wind turbine, which has planning consent
WHAT IS THE PROJECT AND HOW DID IT COME ABOUT?
Developer Muirhall Energy have planning consent to erect a 15 turbine wind farm near the towns of Langholm and Lockerbie in the southern region of Scotland. With a combined generating capacity of 48MW it is estimated to generate enough electricity to power 28,400 homes.

Muirhall Energy understand that local people should benefit: “We strongly believe that shared ownership is an important element in the success of this project.”


Therefore, offering a 10% ownership stake to surrounding communities is a key strategy for this sizeable development.

HOW DOES THE PARTNERSHIP WORK?
The Muirhall Energy team should be commended for taking a proactive stance on shared ownership and approaching local communities with the offer of a 10% ownership stake. Nick Jennings from the Upper Eskdale Development Group (UEDG) says, “communication with Muirhall Energy so far has been nothing but excellent.”

We strongly believe that shared ownership is an important element in the success of this project

Alastair Yule - Muirhall Energy
a number of community groups who have expressed interest, including UEDG. The exact partnership structure that will emerge has yet to be decided. An initial memorandum of understanding between interested community organisations and the developer is currently being developed.

**HOW WILL THE PROJECT BE FINANCED AND WHAT WILL HAPPEN WITH THE PROFITS?**

The cost for the scheme is expected to be in the region of £63.2 million (€73.8 million). Since receiving planning consent in May 2016, the developer now has to decide on a financing package. Equally, local community groups have to develop joint plans for financing their stake in the scheme. UEDG have received a CARES grant and commissioned Edinburgh based SCENE Consulting to carry out a feasibility study, local capacity building and a community consultation.

UEDG have also submitted a bid to the CARES Innovation and Infrastructure Fund to explore the option of supplying the electricity which their share will generate through an alternative energy provider. The linking up of power generation and supply remains underdeveloped in Scotland.

Nick Jennings has high aspirations for the benefits shared ownership could deliver. This includes providing services, such as home care for elderly people, that are difficult to sustain economically in rural areas with a small and dispersed population.

In addition to a 10% ownership stake, the project will make community benefit payments of £5,000 (€5,800) per installed MW or a total of £240,000 (€280,000) to the local communities. Over the 25 year lifespan of the project, this will amount to £6 million (€7 million).

**KEY CHALLENGES**
- Lack of capacity in terms of knowledge, development expertise etc.

**KEY BENEFITS**
- Income from the project to sustain vital but expensive services
- Potential to link up electricity generation and supply

**TIMELINE**

- **2008** People in Upper Eskdale start to be interested in exploiting local renewables potential
- **May 2015** Planning application submitted
- **Jan 2016** Addendum to the Environmental Statement
- **May 2016** Receives planning consent
- **Aug 2015** Receives offer of CARES grant and appoints SCENE Consulting as project managers and to carry out community consultation and capacity building
- **March 2017** Deadline for CARES grant deliverables (extended from March 2016)
- **July 2016** Infrastructure and Innovation Fund application submitted
WHAT IS THE PROJECT AND HOW DID IT COME ABOUT?

Donich Hydro is a 1.35MW installation on the Donich Water in the Scottish Highlands. The scheme is supported by Forestry Commission Scotland (FCS), who aim to install 2GW of renewable generating capacity on the National Forest Estate by 2020. In doing so FCS hopes to contribute to the Scottish Government’s target of 100% renewable electricity, generate sustainable income to manage the estate and provide benefits to local communities.

According to Peter Clarke, energy project leader for the Lochgoil Community Development Trust: “This is a great opportunity for a small community to invest in a renewable project to develop the financial sustainability of the community and area. It also gives us the chance to contribute to an environmentally sustainable future not just for our small corner of Argyll, but for the planet.”

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Peter Clarke - Lochgoil Community Trust

HOW DOES THE PARTNERSHIP WORK?
Donich Hydro is one of three initial schemes taken forward on the National Forest Estate by consortium Broadland Properties and Gilkes Energy. This particular scheme was developed by Broadland Energy (Donich) Limited, a subsidiary of Broadland Properties. Lochgoil Energy Limited (LEL), a subsidiary of Lochgoil Development Trust, was set up to enable the community to invest and share in the profit generation of the Donich hydro scheme. LEL has secured a 20% stake in the scheme.

HOW WAS THE PROJECT FINANCED AND WHAT HAPPENS WITH THE PROFITS?
The community secured a £33,300 (€38,900) grant from CARES and a £740,000 (€864,000) loan from the Scottish Government’s Renewable Energy Investment Fund (REIF). The loan was made to Broadlands Energy Ltd on behalf of LEL. Associated shares, income and dividends are made out to LEL under the agreement.

Fergus Ewing, Scottish Cabinet Secretary for Rural Economy and Connectivity, commented: “I am delighted that the Scottish Government is contributing to the funding of the Donich scheme - the first Forest Enterprise Scotland shared ownership project to secure REIF funding. This is great news for the community and the local rural economy.”

Annual income will slowly go up from around £10,000 (€11,700) to £33,000 (€38,900) in year 15, at which point the REIF loan is repaid. During the next five years annual income will increase from £79,000 (€92,000) in year 16 to £108,000 (€126,000), after which it is set to decline in line with debt structuring. Overall, the community is expected to earn £1.26 million (€1.47 million) over the 40 year lifespan of the project, a significant amount of money for a community of about 400 people.

KEY CHALLENGES
• Securing finance
• Concerns about impact on the landscape and local walking trails

KEY BENEFITS
• Sustainable source of income for the local community

TIMELINE
- May 2013 Planning permission is submitted
- Dec 2013 Broadlands Energy (Donich) Limited is incorporated
- Sep 2014 Planning permission is granted; Lochgoil Energy Limited is incorporated
- June 2016 REIF funding is secured
- Sep 2016 Project is operational in line with FIT pre-accreditation timeline
- June 2031 REIF loan is repaid
- Sep 2056 Expected end of life of the project

This is a great opportunity for a small community to invest in a renewable project to develop the financial sustainability of the community and area. It also gives us the chance to contribute to an environmentally sustainable future not just for our small corner of Argyll, but for the planet.

Peter Clarke - Lochgoil Community Trust
WHAT IS THE PROJECT AND HOW DID IT COME ABOUT?
Ben Aketil is a 27.6MW wind farm located 7km east of Dunvegan on the Isle of Skye. It is the first wind co-operative in the Scottish Highlands and based on a similar project on Boyndie Airfield in Aberdeenshire.

Ben Aketil was constructed in two phases, ten initial 2.3MW turbines that started to generate electricity in late 2007 and a further two turbines that were constructed by the end of 2010. The wind farm produces energy to power the equivalent of 21,000 homes.

Location Dunvegan, Isle of Skye
Type Wind farm
Development status Operational
Share size 2.8% revenue share of 27.6MW
More information www.skye.coop

Image: Falck Renewables
In addition, the local community receives an annual £32,200 (€37,600) in community benefits payments. This is distributed for local development initiatives through the Dunvegan Community Trust.

**KEY CHALLENGES**
- Introducing a new way of doing business
- Engaging local people in what is a developer-led scheme

**KEY BENEFITS**
- Pioneered citizen participation in developer-led renewable energy schemes in the Scottish Highlands
- Gives local people the opportunity to take action on climate change
- Ensure financial income stream from local renewable resources

**TIMELINE**
- **Sep 2005** Planning permission granted
- **2006** Construction begins and turbines are erected in late 2007
- **Nov 2007** First power generated
- **Jan 2008** Isle of Skye Renewables Co-operative buys share in Ben Aketil Wind Farm from Falck
- **Jan 2010** Co-operative purchases a stake in two additional wind farms
- **Dec 2010** Second phase is complete

**HOW DOES THE PARTNERSHIP WORK?**
The wind farm is owned by Ben Aketil Wind Energy Limited (BAWEL), which is part of the Falck Renewables Group.

Under an agreement with Falck, Energy4All was tasked to create energy co-operatives for Falck’s wind farm sites in the Scottish Highlands to allow citizens to invest and benefit from local schemes. Energy4All was set up in 2002 by members of Baywind, the oldest wind energy co-operative in the UK, to support other communities to develop energy co-operatives.

Energy4All worked with the local community to set up the Isle of Skye Renewables Co-operative Ltd to purchase a stake in the Ben Aketil Wind Farm. The co-operative has currently 584 members who all have equal decision-making power according to the one-member-one-vote co-operative principle.

**HOW WAS THE PROJECT FINANCED AND WHAT HAPPENS WITH THE PROFITS?**
Falck invited the co-operative to invest up to £1.16 million (€1.35 million), which would equate to a 4% revenue share in the wind farm. The co-operative managed to raise £812,137 (€947,917) from a share offer and bought a stake in the first phase of Ben Aketil in 2008. This enabled ordinary people to invest in the scheme and so become members of the co-operative. Individual investments ranged from £250 (€290) to £20,000 (€23,000). In 2010, a so-called ‘rights issue’ letter provided existing members of the co-operative with the opportunity to invest in the two-turbine extension of the scheme.

Members can expect a minimum of 6.5% and average 10% return on investment over the 20 year lifetime of the project.
WHAT IS THE PROJECT AND HOW DID IT COME ABOUT?
The Millennium Wind Farm is located north of Invergarry in the Scottish Highlands. The wind farm is comprised of 26 turbines with a combined generating capacity of 65MW. It produces power equivalent to meet the needs of 36,000 households.

The wind farm is another developer-led project, based on the developer’s previous experience of creating a revenue share opportunity for local people. The project was installed in two phases, an initial 16 turbines in 2009 followed by an extension of a further ten turbines in 2011.

HOW DOES THE PARTNERSHIP WORK?
The Millennium Wind Farm is owned and managed by Millennium Energy Ltd, a subsidiary of Falck Renewables. Energy4All, a not-for-profit organisation that helps communities set up energy co-operatives, was asked to help set up a co-operative that would enable community buy-in for the project.

The two organisations have collaborated on a series of projects and so helped popularise the idea of shared ownership in Scotland. According to Willie Heller, managing director of Falck Renewables: “From day one we were determined to encourage communities to have a stake in their local wind farm and we...
have devised a number of different models to deliver this. Scotland really has led the way on community involvement and ownership in wind farms and we are proud to have played a role.”

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Willie Heller - Managing Director, Falck Renewables

The Great Glen Energy Co-operative was established in 2008 to buy into the Millennium Wind Farm. The co-operative has 673 members who have equal decision-making powers according to the one-member-one-vote principle.

KEY CHALLENGES
• Initial objection to second extension due to cumulative impact on landscape
• Engaging people in developer-led scheme

KEY BENEFITS
• People’s participation in a developer-led scheme and possibility to take action on climate change
• Revenue for local communities
• Substantial return on investment

TIMELINE
- Aug 2003 Millennium Wind Farm Limited is incorporated
- June 2006 Planning permission granted
- 2008 Great Glen Energy Co-operative is established
- 2009 Phase one completed
- 2009 Planning permission for phase two granted
- 2011 Phase two complete

HOW WAS THE PROJECT FINANCED AND WHAT HAPPENS WITH THE PROFITS?
The Great Glen Energy Co-operative raised nearly £1.3 million (€1.5 million) from a share offer. Individuals became members of the co-operative by investing between £250 (€290) and £20,000 (€23,000) each. This enabled the co-operative to buy into the profit generation of the Millennium Wind Farm.
WHAT IS THE PROJECT AND HOW DID IT COME ABOUT?
The Kilbraur Wind Farm is located 10km north-west of Golspie village in the northern Highlands. The project was installed in two phases, an initial 19 turbines followed by an extension of a further eight machines. The wind farm has a total generating capacity of 67.5MW. This is enough to produce renewable power for the equivalent of 37,400 homes.

The scheme is developer-led and based on the developer’s previous experience of creating revenue share for local communities.

HOW DOES THE PARTNERSHIP WORK?
The project is owned and operated by Kilbraur Wind Energy Limited (KWEL), a subsidiary of the Falck Renewables Group. Energy4All, a not-for-profit organisation that helps communities set up energy co-operatives, was asked to help set up a co-operative that would enable community buy-in. This led to the establishment of the Kilbraur Wind Energy Co-operative, which invested in the Kilbraur Wind Farm to buy a share in the profit generation of the wind farm. The setup is similar to that of the Ben Aketil and Earlsburn wind farms.
HOW WAS THE PROJECT FINANCED AND WHAT HAPPENS WITH THE PROFITS?
The Kilbraur Wind Energy Co-operative raised over £1 million (€1.2 million) to invest in the scheme through a community share offer. Individuals invested between £250 (€290) and £20,000 (€23,000) and so also became members of the co-operative. The one-member-one-vote principle applies, regardless of the size of the investment someone has made. In the summer of 2011, members of the co-operative were given the opportunity to invest in the eight turbine extension of the scheme. Members receive a projected average return of 10.25% on their investment.

KWEL established the Kilbraur Windfarm Community Benefit Trust. The charity manages £140,000 (€160,000) of annual community benefit payments to support local development initiatives in the communities of Brora, Golspie and Rogart.

According to Ken Hardie, a spokesperson for Falck Renewables: “It’s great to see the funds from the wind farm being used to benefit the surrounding communities.”

KEY CHALLENGES
• Share of community benefit payments perceived as unfair by one local community
• Potential archaeological interest on the site of the wind farm extension
• Engaging local people in this developer-led scheme

KEY BENEFITS
• Enabling local participation in renewable development
• Multiplier effect of keeping revenue in the local economy

“\[It’s great to see the funds from the wind farm being used to benefit the surrounding communities.\]
Ken Hardie - Falck Renewables”

TIMELINE
- Aug 2003 Kilbraur Wind Energy Limited is incorporated
- March 2006 Wind farm receives planning permission
- Dec 2007 Construction of substation complete
- 2008 Phase one of the wind farm complete
- Nov 2008 Kilbraur Wind Energy Co-operative buys share in Kilbraur Wind Farm; wind farm becomes operational
- 2011 Phase two of the wind farm complete
- July 2011 Members of the co-operative are given opportunity to purchase stake in extension

WHAT IS THE PROJECT AND HOW DID IT COME ABOUT?
Sharenergy has worked with communities across the UK to set up over 30 successful energy co-operatives. Talking to people up and down the country, they found that many communities are frustrated with the fact that they can only feed electricity their schemes generate into the grid but not supply it back to their members. This has led to a new venture - the Small Wind Co-op - that manages to link local generation and supply within this restrictive context. The co-operative will initially develop two farm scale turbines in Scotland and one in Wales.

Sharenergy co-founder and director of the Small Wind Co-op Jon Hallé says: “We are always being asked whether we can find a way for people to use the electricity generated by their co-operative in their own home. UK regulations make this really hard to achieve but the Small Wind Co-op is an important step forward. By working with Co-operative Energy we can offer linked generation and supply, both completely mutually owned. We’re slowly prising bits of the UK energy infrastructure out of the hands of the corporations and into the control of ordinary people where it belongs.”

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Jon Hallé - Director of the Small Wind Co-op, Sharenergy
HOW DOES THE PARTNERSHIP WORK?

People become members through investing in The Small Wind Co-operative Limited. The co-operative follows the one-member-one-vote principle, which means members have an equal say in decisions regardless of the size of their investment.

In addition, members are able to consume the energy their wind turbines generate. To bypass the restrictive policy environment of the UK, the Small Wind Co-op has linked up with Co-operative Energy, an established renewable energy supplier. Co-operative Energy will buy all the electricity generated by the scheme. If Small Wind Co-op members then sign up with Co-operative Energy, they can ask for their energy to be sourced from their wind turbines. They will in effect receive a special green electricity tariff only available to members of the Small Wind Co-op.

HOW WAS THE PROJECT FINANCED AND WHAT HAPPENS WITH THE PROFITS?

Finance for the project comes from ordinary people buying shares from a minimum of £100 (€117) to a maximum of £100,000 (€120,000). The share offer initially raised over £1 million (€1.2 million), providing an estimated return on investment of up to 6.5%. According to Stuart McMillan MSP: “One million pounds is a fantastic achievement and I’m delighted that work can now go ahead on the Kellybank turbines, supporting initiatives that improve employment prospects and grow a further sense of community in Inverclyde.” A second tranche looks to raise a further £550,000 (€642,000).

For both sites, the scheme also makes a limited number of bonds available for people who want to support the project but who prefer a shorter-term investment. Six-year bonds will pay 4.5% of annual interest.

The development benefits from Feed-in Tariffs, which are included in the financial projections. However, the turbines have to be operational by April 2017 to guarantee the pre-accredited tariff.

Over the 20 year lifespan of the project both sites will generate income to local community funds of at least £3,000 (€3,500) each per year, while members will be able to receive affordable electricity from local renewable sources.

KEY CHALLENGES
- Developing a new model
- Retaining local benefits in a cross-border co-operative
- Working in the changing UK policy context

KEY BENEFITS
- Co-operative ownership of energy
- Connecting generation and supply
- Local community funds
- Supporting marginal upland farms

TIMELINE
- Jan 2014: Registered with the Financial Conduct Authority
- 2015: Planning permission granted on both sites
- June 2016: Launch of first share and bond offer
- August 2016: First share and bond offer closes with over £1 million (€1.2 million) raised
- October 2016: Second share offer launches; turbines on order for both sites
- April 2017: Turbines are expected to be operational in line with FIT pre-accreditation timeline
- April 2037: Expected end of turbine life
WHAT IS THE PROJECT AND HOW DID IT COME ABOUT?

The Allt Dearg Community Wind Farm is a 10MW wind farm in Mid Argyll on the west coast of Scotland, 9km south of Ardrishaig. Initially there was a proposal of a much larger commercial development by RWE Npower Renewables, which was not popular and was ultimately turned down at planning stage after Scottish Natural Heritage raised a statutory objection on landscape grounds. In response, local landowners set out to create a smaller scheme that emphasizes building resilience of an economically disadvantaged rural community. According to James Lithgow of Ormsary estate: “Where land ownership is solely focused on the wealth preservation of the landowner it’s always going to be open to criticism from the landless and their political sponsors. [Instead] we focused our efforts on wealth creation with the assets that we had.”

Allt Dearg is a particularly windy site and ideally suited for renewable energy infrastructure. The wind farm has a capacity factor of around 45% compared with a 25% UK average. The annual capacity factor in the first three years of operation has been around 50%, making it one of the best performing wind farms in Europe.

HOW DOES THE PARTNERSHIP WORK?

The wind farm is owned by Allt Dearg Wind Farmers LLP (ADWF), which consists of six partners. Ormsary and Stronachullin Estates who own the land, secured planning consent and grid connection.

The local community is represented through ARE Ltd, which is a subsidiary of Ardrishaig Community Trust and owns the equivalent of one of the twelve wind turbines that make up the wind farm. The Ardrishaig Community Council had been opposed to the previous large-scale proposal but was key in ensuring active participation of the community in the new scheme.
During the development and construction of the project an estimated £3 million (€3.5 million) was spent in the regional economy using local supply chains. In the first three years of operation over £5 million (€5.8 million) of wind farm revenue has been reinvested into the local economy through the landowning and community partners.

**KEY CHALLENGES**
- Managing landscape concerns
- Turbine transport was delayed due to poor road infrastructure

**KEY BENEFITS**
- Long-term sustainable income for an economically vulnerable area
- Pioneered new shared ownership model between landowners and local communities
- Creation of local jobs
- Local ownership and control

**HOW WAS THE PROJECT FINANCED AND WHAT HAPPENS WITH THE PROFITS?**

The capital cost for the wind farm was in the region of £15 million (€17.5 million). The project was financed with loans from the Co-operative Bank and approximately 20% combined investment from various partners. Ventus Investment Funds invested cash in the project and structured agreements with the Co-operative Bank. ARE Ltd’s share in the wind farm consists of a £300,000 (€350,000) investment on behalf of the community. Critically this investment was funded by a loan to ARE Ltd from ADWF. The community ownership was entirely funded by private money. Uniquely the cost of the community investment was based upon the “construction cost” of the project, not the “market value” of the project. This substantial discount, provided by the landowners, allows for the immediate and strong cash flow into the community. This has been the stand out feature of this joint ownership model. The profits generated from this are donated to the Ardrishaig Community Trust (ACT). Conditions made by the Co-operative Bank require ARE Ltd and the local trust to demonstrate that funds are being spent to benefit local people.

ADWF together with a more recent sister project owned by Sròndoire Wind Farmers, contribute around £50,000 (€58,000) annually to the Allt Dearg Educational Trust, set up by the landowner-developers to support local young people in further education.

The project deliberately stayed under a 10MW grid connection to avoid the additional costs of a “Grid Code” compliant connection.

**TIMELINE**
- Aug 2003 Lomond Energy Ltd incorporated
- Dec 2007 Original Npower planning application turned down
- June 2008 Npower surrendered lease and site returned to local landowner control. Landowners engage Lomond Energy Ltd
- April-Dec 2009 Environmental Assessment
- May 2009 Allt Dearg Wind Farmers LLP is incorporated
- July 2010 Planning consented
- Sep 2011 Construction starts
- Dec 2011 Project funding secured and ACT becomes member in ADWF
- Dec 2012 Wind farm is commissioned
- April 2013 ARE Ltd receives its first cash payment
SRÒNDOIRE COMMUNITY WIND FARM MAKING LOCAL RESOURCES GO FURTHER

WHAT IS THE PROJECT AND HOW DID IT COME ABOUT?
The Sròndoire Community Wind Farm is situated adjacent to Allt Dearg Wind Farm and consists of three wind turbines with a combined generating capacity of 6MW.

During the development of the sister project Allt Dearg, the two neighbouring communities of Kilfinan (Tighnabruaich) and Tarbert approached the land owning developers of wind farm. However, at this stage shared ownership was already agreed with the community of Ardrishaig. It was therefore agreed that should there be further developments, community buy-in for those that missed out on the Allt Dearg project would be prioritised.

HOW DOES THE PARTNERSHIP WORK?
The Sròndoire Wind Farm is owned by Sròndoire Wind Farmers Ltd, which is comprised of seven partners. This includes Ormsary and Stronachullin Estates who own the land, secured grid connection and planning consent. Two local communities are represented through Tighnabruaich District Community Renewables Ltd and Tarbert & Skipness Renewables Ltd who are trading subsidiaries of Tighnabruaich District Development Trust and Tarbet & Skipness Community Trust respectively. Lomond Energy who helped to get this and the sister project Allt Dearg off the ground. The Lithgow family who owns Ormsary Estate is further
represented through two private businesses called Inver Renewables Limited and Wet & Windy Energy Limited. The latter provides commercial management services for the project.

**HOW WAS THE PROJECT FINANCED AND WHAT HAPPENS WITH THE PROFITS?**
The cost for the Sròndoire Community Wind Farm was in the region of £9.5 million (€11 million). An £8 million (€9 million) loan was provided by a non-bank lending platform managed by Temporis Capital LLP.* Partners made up the difference. Wet & Windy Energy Limited and Inver Renewables Limited, for example, invested directly in the scheme. The community trusts (via their trading subsidiaries) received financial and technical assistance through the Scottish Government’s CARES scheme and secured long-term loans through the Renewable Energy Investment Fund. For the trusts this has secured a 1/12th share in the project each. According to Ronnie Irvine, Chairman of the Tighnabruaich & District Development Trust: “Support offered by CARES and professional advisers was invaluable” to deliver the community stake of the project.

**KEY CHALLENGES**
- Managing landscape concerns
- Limited technical and financial capabilities in the community

**KEY BENEFITS**
- Long-term financial income for two local communities that enables long-term, ambitious planning and is reflected in a ‘community plan’
- Local ownership and control
- Supports local supply chains

**TIMELINE**
- Oct 2011- Dec 2012 Environmental Assessment
- Oct 2013 Wind farm receives planning consent
- Feb 2014 Tarbert & Skipness Renewables Limited is incorporated
- March 2014 Tighnabruaich District Community Renewables Limited is incorporated
- May 2014 Sròndoire Wind Farmers Limited is incorporated
- June 2014 Construction work starts
- July 2014 Amendment to increase tower size from 70m to 80m consented
- Feb 2015 Tighnabruaich Community Renewables Ltd and Tarbert & Skipness Renewables Ltd invest in wind farm through REIF
- Nov 2015 Wind farm is operational

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* Temporis Capital LLP also manages the Ventus Funds that invested in and facilitated finance for the Allt Dearg Wind Farm.
WHAT IS THE PROJECT AND HOW DID IT COME ABOUT?
The Hoprigshiels Windfarm is located near the village of Cockburnspath in the Scottish Borders. The scheme consists of three wind turbines with a combined generating capacity of 7.5MW. It will produce enough electricity for the equivalent of at least 5,900 homes. The project was driven by the need to generate sustainable income for the two organisations involved.

HOW DOES THE PARTNERSHIP WORK?
The project is a partnership between Community Energy Scotland (CES), one of the leading Scottish organisations working on community energy, and Berwickshire Housing Association (BHA). The link between the two organisations was made by Alan Hobbett, who used to serve on the boards of BHA and CES. Berwickshire Community Renewables was set up as a joint venture to develop the project. CES has a one third share in the project and BHA owns the remaining two.

According to BHA, the project is the first time a housing association in the UK has been involved in the development of a wind project.

HOW WAS THE PROJECT FINANCED AND WHAT HAPPENS WITH THE PROFITS?
The development cost £11.6 million (€13.5 million), the bulk of which came from a loan made available by Triodos Bank. The
remaining 15% was covered through a loan from the Scottish Investment Bank’s Renewable Energy Investment Fund (REIF). According to project director Alan Hobbett: “REIF’s role was fundamental, we couldn’t have gone ahead without their investment. We knew from the start that the project was a viable proposition, but couldn’t secure 100% funding from the private sector.... REIF’s involvement helped lend weight and credibility to the scheme, which was essential when we started looking for private finance backing.”

Alan Hobbett - Project Director, Berwickshire Community Renewables

Communities closest to the development will also receive annual community benefit payments of £37,500 (€43,800) or £5,000 (€5,800) per installed MW. This is to be spent on the development needs identified by the communities.

KEY CHALLENGES
- Securing finance, including announcement of UK Government Renewable Obligation Certificate (ROC) coming to an end
- Getting the project through planning in an area adverse to wind developments
- Staffing changes at BHA board
- Connecting to the grid

KEY BENEFITS
- Potential for 500 new affordable homes
- Demonstration of community energy partnership between a national charity and a housing association
- Income to deliver objectives of national community energy charity

TIMELINE
- May 2011 Berwickshire Community Renewables LLP is incorporated; planning application submitted
- May 2015 ROCs agreement
- June 2015 Planning permission granted
- Dec 2015 Grid connection agreement made with new connection route
- Jan 2016 Construction started
- Jan 2017 Operational
- Mar 2017 ROC extension deadline

WHAT IS THE PROJECT AND HOW DID IT COME ABOUT?
Spurness Wind Farm is a 10MW development on the island of Sanday in the Orkney Islands. The project was originally developed as a three-turbine installation with a generating capacity of 2.75MW each. When the site was ‘repowered’ in 2012 the community was able to purchase a stake. The original turbines were replaced with five 2MW turbines that have a combined generating capacity of 10MW. The project generates power for the equivalent of 12,000 homes.

* The term repowering is used to describe a process whereby old wind installations (and other power stations) are replaced with newer ones that have greater capacity or more efficiency.

HOW DOES THE PARTNERSHIP WORK?
Following in the footsteps of other Scottish islands, the local community set up the Sanday Development Trust (SDT). The charity aims “create an economically prosperous, sustainable community that is connected to the wider world, but to remain a safe, unspoilt environment where people are proud to live, able to work, to bring up and educate their children, to fulfil their own hopes and ambitions, and to grow old gracefully, enjoying the quality of life that is second to none.”

Via its trading subsidiary Sanday Renewables Community Interest Community (SRCIC), SDT has entered a co-venturing agreement with Scottish and Southern Energy (SSE). This has enabled the community to own a 10% stake in the Spurness Wind Farm.

**HOW WAS THE PROJECT FINANCED AND WHAT HAPPENS WITH THE PROFITS?**

SSE, a major energy company in the UK, provided finance for the project including a loan to the community for their stake. SDT’s Sandra Towrie sums this up: “We have a 10% share of the whole wind farm and it works very well because Scottish and Southern did all the building work, they found the money for doing it [and] our loan is with them.”***

SDT also secured finance from Highlands and Islands Enterprise for a community development officer and an administration officer who, on behalf of the community, took the shared ownership project forward.

In addition SSE makes available community benefit payments which are distributed through the Sanday Community Council in the form of grants, which range in size up to £10,000 (€11,700).

**KEY CHALLENGES**
- Logistical challenge of repowering the site

**KEY BENEFITS**
- Use of local supply chain in development of the project
- Long-term income for local projects including wages
- Income from wind farm helps to secure additional finance for local development

**TIMELINE**
- **Feb 2004** Sanday Development Trust is incorporated
- **Jan 2005** Commissioning of original wind farm
- **Aug 2010** SRCIC is incorporated
- **Dec 2012** Commissioning of repowered site
- **2013** First community income generated from stake in wind farm

**We have a 10% share of the whole wind farm and it works very well because Scottish and Southern did all the building work, they found the money for doing it [and] our loan is with them**

Sandra Towrie - Sanday Development Trust

Income from the wind farm provides core funding for SDT’s work and associated development projects in the community.

WHAT IS NEXT FOR SHARED OWNERSHIP IN SCOTLAND?

The case studies demonstrate that shared ownership has been established as a key feature of the Scottish renewables transition. This mechanism enables people to take action on climate change as well as participate in and benefit from local developments that they might otherwise be excluded from.

Given that Scotland is estimated to have 25% of European wind potential, it is not surprising that Scottish shared ownership is almost synonymous with wind farms. However, constraints imposed on community participation in the wider energy market by UK government policy limits shared ownership to having a stake in the generating capacity of schemes instead of the whole system of generation, distribution and supply.

The future of shared ownership in Scotland needs to be more integrated. Energy transitions, including people’s participation therein, need to be viewed much more holistically to deliver a truly circular energy system. They need to integrate different energy sectors (e.g. power, heating and transport) and generation, distribution and supply. The future of shared ownership in Scotland needs to reflect this. The Small Wind Co-op case study, though not a shared ownership project in the conventional sense, provides one example of what sharing in the wider Scottish power system might look like by linking energy generation and supply.

The need to extend shared ownership guidance to off-shore renewables

At present guidance for shared ownership is limited to on-shore renewables as outlined by the “Scottish Government Good Practice Principles for Shared Ownership of Onshore Renewable Energy Developments.” However, vast amounts of Scottish renewables potential and future generating capacity are based off-shore. Here, we can learn from our Danish neighbours across the North Sea to find precedent for shared ownership (and indeed 100% community ownership) of off-shore renewables. Just outside of Copenhagen, lies Middlegrunden, a 20 turbine, 40MW development, which was the world’s largest off-shore wind farm when it started to generate power in December 2000. Half of Middlegrunden is owned by a local co-operative, that has enabled citizens to invest and participate in the scheme.

In Scotland, the combination of community ownership and community funds has helped to ensure a more equitable distribution of the benefits of renewable developments as illustrated by many case studies in this report. Off-shore developments would likely benefit from this same combination.

Local authority targets for community and locally owned energy

Local authorities have played a key role in helping communities develop renewable energy schemes. The Scottish Government has pledged more ambition for community energy. Local targets for community energy generation will help local authorities maximise the benefits of attracting central government support for both 100% community-owned and shared ownership schemes.

By working with community groups, local authorities can help facilitate access to land or other spaces needed to develop projects (e.g. rooftops of publicly-owned buildings) while ensuring equitable distribution of benefits.

Guidance does exist for community benefit payments as outlined by the ‘Scottish Government Good Practice Principles For Community Benefits From Offshore Renewable Energy Developments’.
This is a Friends of the Earth Scotland publication on behalf of members of Scottish Community Energy Coalition. For more information visit www.communitypower.scot

SCOTTISH COMMUNITY ENERGY COALITION MEMBERS

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