

CARES

PROGRESS AND IMPACT



COMMUNITY AND RENEWABLE ENERGY SCHEME – SUPPORTING LOCAL ENERGY

CONTENTS

Foreword	3
CARES input on policy	4
Project development support.....	6
CARES funding and finance	8
CARES support for grid connection	10
Local Energy Scotland and the energy systems approach	12
CARES contribution to shared ownership.....	16
Working with others	18

WHO WE ARE



Local Energy Scotland delivers the Scottish Government's Community and Renewable Energy Scheme (CARES).

Local Energy Scotland is a consortium made up of the Energy Saving Trust, Changeworks, The Energy Agency, SCARF and The Wise Group. Set up in 2013, Local Energy Scotland is fully funded by the Scottish Government.

With staff based throughout the Local Energy Scotland partner organisations, together we make up the CARES team, dedicated to delivering the service across the country.



This document is available at
www.localenergyscotland.org/supportinglocalenergy

FOREWORD

The Community and Renewable Energy Scheme (CARES) is the Scottish Government's programme to support local involvement in renewable energy.

A lot has changed in the three years since Local Energy Scotland began delivery of the scheme, supporting progress towards the Scottish target of 500 megawatts (MW) of community and locally owned energy. That target has now been surpassed and the range and scope of community energy has blossomed. Scotland now has the UK's largest community-owned onshore wind farm with the 9 MW Point and Sandwick project in the Western Isles; we have cutting-edge projects such as the Levenmouth Community Energy Project – the first dual-fuel hydrogen bin lorries in the world and we have leading political aspirations for 50% shared ownership of renewable energy projects.

It has been an exciting three years and the future is bright. As the Scottish Government prepares to publish an energy strategy for secure, sustainable and clean energy for the whole country, we can be sure that there will be challenges, opportunities and uncertainty in the times ahead. Local energy, whether led by community groups, passionate individuals, rural businesses, local charities or any other local stakeholders has proved that we can and must transform the traditional delivery model of energy to provide sustainable heat and electricity which benefits and supports communities.

This document showcases the successes and journeys of the CARES programme over the past three years, as Local Energy Scotland has supported communities to realise their potential. The changes in UK policy, alongside other external factors

such as grid connection and availability of finance have forced innovation in the sector. We are now increasingly seeing share offers as a common way of raising finance and local energy supply arrangements explored. Heat provision and the alleviation of fuel poverty have increased in focus since the start of Local Energy Scotland's CARES delivery in 2013. We have developed practical tools, honed our expertise and collaborated with fantastic partners across the sector to provide the best service possible in a fast-changing environment.

Throughout this update, we cover the highlights, achievements and impacts of CARES. Recognised across Europe as a flagship scheme, the Scottish Government programme is transformational and has enabled communities and local people to deliver amazing results. So much has been achieved to date and we look forward to continuing our support to a passionate and forward-looking sector.



Chris Morris
 Local Energy Scotland Manager

CARES INPUT ON POLICY

The Scottish Government’s target of generating 500 MW of energy from community and locally owned energy schemes by 2020 was surpassed five years early; a significant and fantastic achievement for the sector. A supportive and stable policy environment has stimulated increased involvement of communities in renewables projects and has been critical to achieving the target early. Now, the passion and drive of many communities has been harnessed and as ambition continues to grow we will see further support through Scotland’s forthcoming energy strategy.

Recent and significant shifts in UK Government energy policy (most notably in relation to pre-accreditation and a reduction in Feed-in Tariffs (FiTs)) have resulted in greater sectoral uncertainty. However, we are delighted to see that this has not stifled Scottish political ambition; the SNP’s 2016 Manifesto highlighted a new aim to generate 1 gigawatt (GW) of energy from community and locally owned schemes by 2020 and 2 GW by 2030.

"The Scottish Government has driven activity in the sector with the community and locally owned renewables target, which has led to real and tangible change on the ground, driven by what is important to local people. We have welcomed the opportunity to work very closely with the Scottish Government and also to provide learning and experience to other devolved Governments in the UK to maximise the impact and benefit from the CARES programme. The CARES team has a genuine belief in what we are doing and it's great to be able to see the link with the policy that underpins the sector."

Jennifer Ramsay, Challenge Fund Project Manager, Local Energy Scotland

Community benefit

Raising the bar at an operational level has been a priority for the CARES team and the Good Practice Principles, created with input from cross-sectoral working groups, are now in place for community benefit (onshore and offshore wind). For onshore wind projects, developers are requested to pay “community benefits” of at least the equivalent of £5,000 per installed MW per year to local communities for the project lifetime. While not legislated, this is now expected as good practice. While the Good Practice Principles have been successful in realising more substantial and sustained community benefit income streams for communities, there is still a need to manage funds effectively. Start-up grants from Local Energy Scotland support early capacity building and can fund groups to consult and plan. Further comprehensive support is provided via a community benefit guidance package as well as from CARES development officers.

Local Energy Scotland also developed the Community Benefit Register which lists the community benefit funds received by community groups across Scotland in an open and accessible way.

£10,303,750
in community benefit funds
has been paid this year. For
recent projects the average
payment has been £6,140
per MW per year.

CASE STUDY 1

WAT IF? AND MUIRHALL ENERGY



WAT IF? Community Trust covers Woolfords, Auchengray, Tarbrax and all villages within a 5 kilometre radius of Stallashaw Moss in South Lanarkshire. The group receives over £50,000 in community benefit per year (£8,088 per installed MW) from Muirhall Wind Farm which also contributes £2,500 per MW per year to the South Lanarkshire Council Renewable Energy Fund (REF). The REF benefits communities in the wider local authority area.

The community benefit was used to implement a Community Action Plan (CAP), created following a community consultation, which prioritised a range of activities to benefit and support the rural community.

Projects underway include energy efficiency, pathway development, rural transport solutions, improving broadband connectivity and community defibrillators. An added bonus has been the ability to use community benefits to leverage in additional funding and fast-track small grant requests from the local community. In the words of Jemma Black, WAT IF? Development Officer, "As a rural community with limited resources, the income we receive enables us to support the community in areas that are identified by local people. We are extremely fortunate to be able to rely on this annual income to make a real difference."

Peter Marshall, Muirhall Energy, gave his perspective, "as a developer we have benefited from an ongoing relationship with Local Energy Scotland. We sat on the steering group for the Good Practice Principles and we have followed those recommendations when developing our relationship with WAT IF?. As we are part of the community surrounding the windfarm, that relationship has been built directly and over time. It is a great benefit for us to have an open dialogue with the community and to have WAT IF? administering the fund ensuring that decisions on spend are being made by local people for the most worthwhile initiatives."

CARES APPROACH

Local Energy Scotland has a key role in informing, responding to and adapting policy. Our credibility stems from the range of complementary expertise within the team and our impartiality and distance from commercial interest. We recognise the importance of working with different stakeholders and understanding their views, as demonstrated through our Good Practice Principles which highlight the need for solutions to meet both communities’ and developers’ needs. We have also worked across the sector when developing a consultation response to the FiTs review, ensuring a range of stakeholders were informed and represented.

While changes in policy have led to uncertainty, the CARES team has worked tirelessly with other sectoral stakeholders to identify and progress solutions that make ongoing community and locally owned projects viable. Learnings passed to the Scottish Government will help inform the future energy strategy due for launch in late 2016. In particular, Local Energy Challenge Fund projects have provided invaluable insights into what a future, more holistic energy systems approach to energy policy and strategy might look like.

PROJECT DEVELOPMENT SUPPORT

The CARES team provides essential support to communities and rural businesses and makes the complex process of developing a renewable energy project simpler and smoother.

CARES DEVELOPMENT OFFICERS

The CARES team is an experienced network of knowledgeable and committed development officers offering advice and support on a regional level. Supporting communities and others, the team is heavily involved with projects from the start all the way to completion. They offer expert support and guidance and are responsible for helping to assess the viability of renewable energy projects and identifying and overcoming any challenges encountered during project development. The team also signposts groups to specialist legal, financial and project management services.

Reductions in FiTs, restricted timelines and grid connection issues have presented varied challenges for many communities and rural businesses. However, our dedicated and expert development officers support groups to discover innovative ways to drive projects to completion.

"We are approachable, flexible and committed. We have the funding, resources and expertise to really help these projects deliver."

Iona Hodge, CARES Development Officer, Local Energy Scotland

CARES TOOLKIT AND FINANCIAL MODEL

The CARES toolkit is an easy-to-use online resource available on the Local Energy Scotland website, providing comprehensive and expert support. Developed with Ricardo Energy & Environment at the beginning of the Local Energy Scotland CARES contract, the toolkit is updated regularly to ensure information is accurate. It offers technology-specific and general advice on developing renewable energy projects and covers a range of topics such as: establishing a community group, grid connections, securing a site, FiTs, the Renewable Heat Incentive (RHI), procurement and planning. Our CARES financial model is an online tool to help communities and rural businesses assess the financial viability of their renewable energy projects.

"The tools, the toolkit and the investment ready process have all helped communities understand what the requirements are in developing their projects and then helped them in delivering that project as quickly and as effectively as possible."

Simon Morris, Senior Technical Consultant, Ricardo Energy & Environment

When developing these tools and resources, we incorporated input from a number of stakeholders, including CARES development officers, private financial companies and several community members. Feedback has been very positive, with communities finding the tools easy to understand and use, particularly the CARES financial model.

CASE STUDY 1

THE CORRIEMULZIE HYDRO SCHEME



The Corriemulzie Hydro Scheme project is located four miles from Braemar. Run by Braemar Community Hydro, it generates low carbon, clean electricity from the Corriemulzie Burn and its tributaries.

The project has received support from CARES since 2011 through both CARES development officer guidance and a £102,885 CARES pre-planning loan, which was paid back by the Braemar Community Hydro in October 2015. Three development officers were involved in this project, offering their advice on topics such as financial modelling and managing the CARES loan.

Alastair Hubbard, one of the Directors at Braemar Community Hydro, found the handover between the development officers smooth and remarked that their presence added to the skill set in their team and increased confidence. He stated that the development officers *"know the industry and can point you in the right direction and guide you through the process. Their work is invaluable."*

"Huntly and District Development Trust has for some years been pursuing the ambition to have a community owned wind turbine to provide future funds for investment in our area. We have now reached the point of financial closure and the work has started on site. Throughout our journey we have enjoyed the support of Local Energy Scotland – both practical and morale boosting when we felt that the odds were against us. Through their advocacy on our behalf with the Scottish Government they got us through a last-minute, near project-killer and can take much credit for the eventual success of our project."

Richard Hammock, Chair, Huntly and District Development Trust

CARES FUNDING AND FINANCE

CARES FINANCIAL SUPPORT

Financial support at key stages is essential to enabling projects to develop, helping them to become investment ready and secure funding from commercial lenders. A suite of complementary finance support mechanisms is available:

- **Start-up grants** up to £10,000 available to community groups to develop (non-capital) aspects of a project, including feasibility studies and community consultation.
- **Pre-planning loans** up to £150,000 that cover up to 95% of (non-capital) costs, including environmental impact assessments (EIA) and technical feasibility studies. No security is required and they can be written-off if projects become unviable prior to financial close.
- **Post-consent loans** up to £100,000 as a bridging loan available when other loans are not suitable, where either costs increase over the development of the project or accelerated project expenditure is required to reach financial close.
- **Infrastructure and Innovation Fund (IIF) grants** up to £70,000 for communities to investigate and develop projects linking local energy generation with local energy use or projects developing innovative distribution and storage solutions.
- **Renewable Energy Investment Fund (REIF) loans** available for CARES projects that have advanced to the delivery stage but still have challenging funding gaps (see box overleaf).

Large scale projects or those with novel applications of technology can also apply for the **Local Energy Challenge Fund** which provides funds up to £6 million.

"CARES loan funding has been a tremendous initiative of the Scottish Government which I very much hope will continue."

Hugh Wallace, Director, Rumbling Bridge Community Hydro Scheme

"The toolkit is probably the best resource you can get on developing a project ... a major addition to what CARES does ... it has professionalised the aspect of finance within community projects."

Andrew Morton, CARES South Regional Manager, Local Energy Scotland

ADDRESSING THE CHALLENGES

To support community groups who may have limited financial management experience, the CARES team has worked with Ricardo Energy & Environment to produce investment ready and project finance model tools within the CARES toolkit (available to download on our website). These tools provide vital support to communities to secure funding from commercial lenders and make best use of public funds by progressing projects to a planned programme and budget. They also create transparency in project viability and increased awareness of the impact of variables. Where communities need further expert support, we have also established a framework of financial advisors, project managers and legal advisors.

INNOVATION AND RELATIONSHIP DEVELOPMENT

As projects face unforeseen challenges, the CARES team works closely with groups to develop innovative technical and financial solutions to allow their projects to progress. This includes using IIF grant support to explore local solutions where grid constraints exist. We have also developed strong working relationships with many Scottish banks active in community energy projects and are working with others to become engaged in the sector.

Norrie Cruickshank, Scottish Relationship Manager with Triodos Bank, the senior lender on multiple CARES community projects, said that CARES and Triodos *"work as a team, it's all about transparency and having an honest, open working relationship ... CARES is a really good conduit between a funder and a developer."*

CASE STUDY 1



Photos credit: Sunart Media

Sunart Community Renewables was set up to deliver a community hydroelectric scheme on the Allt nan Cailleach burn near Strontian, the main village in the Sunart area of Lochaber. The scheme creates revenue for the local community by exporting all electricity generated to the national grid and receives additional income from FITs.

The project benefitted from several funding sources including CARES loans to finance a feasibility study, the purchase of a disused dam and the process of applying

for permissions. Additional funding was secured from the Renewable Energy Investment Fund (REIF) and Scottish and Southern Electric. A community share offer raised most of the capital funding – £753,300 in five months. In October 2015, the scheme became operational.

Dale Meegan, Project Manager, said that *"the CARES team was excellent ... helpful, flexible and responsive at each stage. We couldn't have got there without their financial support."*

CASE STUDY 2



Developed by Point and Sandwick Power, a subsidiary of the Point and Sandwick Development Trust, Beinn Ghrideag Community Wind Farm on the Isle of Lewis is a three turbine, 9 MW scheme and the UK's largest community-owned wind farm.

Funding provided by CARES, via a start-up grant and a pre-planning loan, allowed the project to be developed from an initial idea into a project capable of securing finance from other sources.

This finance included a grant from the Big Lottery Fund and loans from the Social Investment Bank (who provided a Renewable Energy Investment Fund (REIF) loan) and Santander bank. In total, £14.6 million of additional funding was secured.

Calum MacDonald, the project's Development Manager, stated that support from the CARES team was critical in getting started because, *"unless you've got someone ready to lend to you it's pretty impossible to get any other source of cash"*.

Community shares

Funding for community energy projects usually comes from multiple funders, typically a bespoke combination of senior/principal lender, one or more junior lenders and community shares. Community shares are an important financial mechanism where community members invest their own money into projects with the promise of a financial return (see case study 1). This promotes community engagement, ensures financial benefits are kept locally and enables communities to secure competitive interest rates which they may otherwise struggle to access. The CARES team supports community groups to develop community share schemes by funding activities such as developing and marketing the offer.

Renewable Energy Investment Fund (REIF)

REIF offers financial support to projects that have advanced to the delivery stage and gained planning permission but still have challenging funding gaps. It is a flexible service where loans are tailored to individual projects and is designed to build on the early stage support provided by the CARES scheme. REIF is delivered by the Scottish Investment Bank (part of Scottish Enterprise) on behalf of the Scottish Government. The CARES team can guide communities through the REIF application procedures and provide support to ensure projects are ready for the application stage.

CARES SUPPORT FOR GRID CONNECTION

ADDRESSING THE CHALLENGES

On a daily basis, the CARES team works with communities and local businesses wishing to connect renewable technologies to the National Grid. This is a challenging process as securing a grid connection is often costly and time-consuming. The National Grid was not designed with localised renewable schemes in mind and connection challenges can result in projects ending up in 'grid queues', being reduced in size or even cancelled if funding or tariff deadlines are missed.

To address these challenges, the CARES team has developed excellent working relationships with the two Distribution Network Operators (DNOs), Scottish and Southern Energy Power Distribution (SSEPD) and Scottish Power Energy Networks, who manage the grid in different parts of Scotland. Working with the DNOs, we simplified the connection processes and made it more understandable for community groups. For example, we supported SSEPD to create a guide for community groups on connecting to the electricity network, 'Community Connections'. Kirsty Stephen, Lead Connections Engagement Strategy Manager at SSEPD stated that Local Energy Scotland's input to the guide had been "invaluable", helping it to become "a more user-friendly resource".

By working with DNOs, the CARES team also encouraged them to provide early notification of available grid capacity to community groups, provide more prompt feedback on grid connection applications and wherever possible, to manage projects in the queue (see case study 1).

To help maximise existing grid capacity, the CARES team also supported establishment of a consortia register. This register enables projects that have been constrained by infrastructure capacity to share reinforcement costs with others and improve their position in the grid queue. To drive further innovation, the team developed and administered an Infrastructure and Innovation Fund (IIF), see box below.

"Funding from CARES and support from network operators has allowed innovative ideas to establish connections to the grid for community renewable projects to be tested. Once these ideas have been tested and shown to work, precedents are set. Then other projects can benefit from the ideas because they have been shown to work somewhere else."

Iona Hodge, CARES Development Officer, Local Energy Scotland

Infrastructure and Innovation Fund (IIF)

The IIF provides grant funding for communities to investigate and develop projects that link local energy generation with local energy use or wish to develop innovative distribution and storage solutions. Priority areas for the funds include:

- Overcoming barriers relating to grid capacity issues.
- Energy storage and active network management.
- Delivering renewable heat and electricity to local consumers.
- Addressing barriers that communities face in areas of constrained electricity networks.

Projects that have utilised this funding include a small hydro system in Kingussie, where electricity is exported to a local golf club via a private wire system and Fetlar Green Energy (see case study 2).

CASE STUDY 1

FYNE FUTURES



Photo credit: Amec Foster Wheeler

In 2012, Fyne Futures applied for permission to install three wind turbines with a combined output of 6.9 MW in Barr Glen on the Kintyre Peninsula. Planning permission delays and unanticipated requirements caused the project to miss its original grid connection timeframe and the project was added to the back of the grid queue, risking it becoming unviable.

Following advice from the CARES team, Fyne Futures was able to secure a 2017 connection date, swapping places in the queue with another delayed project. An intertrip

(a device that automatically constrains grid input from a generation site where there is insufficient grid capacity) was installed, allowing both projects to connect to the grid at the same time while grid capacity is being increased.

Colin Renfrew, Company Secretary of Fyne Futures, said, "The assistance we've had from CARES has been invaluable, not just from a financial perspective... they've been very approachable."

CASE STUDY 2

FETLAR GREEN ENERGY



Shetland-based project Fetlar Green Energy established a community-owned microgrid, developed by Fetlar Developments Ltd. This microgrid is supplied with electricity from two 25 kW wind turbines, owned by partner company Fetlar Wind Ltd, and serves three properties including the local primary school and a private house, charges the island's electric community minibus and exports to the grid.

The microgrid project was supported by various CARES grants. An Infrastructure and Innovation Fund (IIF) grant was used to pay for an initial feasibility study, which allowed the planned capacity of the wind turbines to increase from 40 kW to 50 kW and enabled the limited revenue-generating export of electricity to the grid via an

11 kW, G83 grid connection.

Further innovation grants were used to optimise self-consumption through the purchase and installation of micro-generating management equipment, heat storage tanks (to provide hot water to wet heating systems) and supporting infrastructure. It is estimated that annually the scheme will generate 197 MWh of energy and save 84.7 tonnes of CO₂.

Robert Thomson, a development worker on the project, commented that, "with CARES it went very well ... they did everything they could do to help".

LOOKING FORWARD

The CARES team will continue to work closely with DNOs to produce guidance for community projects seeking to connect to the grid. This includes involvement in a series of workshops for community groups to look at alternative types of grid connections where there are particular issues such as high costs. We sit on SSEPD's Customer Connections steering panel which will enable us to provide strategic input and represent communities' perspectives on connection issues. We are also keen to continue to identify any spare grid connection capacity on existing renewable projects which other groups can use.

LOCAL ENERGY SCOTLAND AND THE ENERGY SYSTEMS APPROACH

THE CHALLENGE

Over the past few years, there has been a shift in the community sector from grid-connected revenue-generation projects, to an 'energy systems' approach. Communities now seek to maximise added value by developing opportunities to use the energy at a local level and to integrate multiple technologies. This has been driven in part by the reduction in subsidy levels requiring an innovative approach to project finances and partly by the grid constraints faced by many projects (see 'CARES support for grid connection' section). As interest and activity in the sector has increased, the Scottish Government has been very keen to support and incubate such innovation.

OUR APPROACH

The CARES team actively promotes and supports the development of pioneering local energy economies using innovative ideas and technologies, such as energy storage. This enables local energy generation and local demand to be matched, reducing fuel bills and increasing the output and consumption of locally owned renewables.

To accelerate development in this area, we developed the Local Energy Challenge Fund for the Scottish Government, as part of the draft Community Energy Policy Statement published in August 2014. This built on and continues to progress the ideas of the smaller Infrastructure and Innovation Fund (IIF) which exists alongside the Challenge Fund.



The Challenge Fund gives financial support and guidance to collaborative partnerships with an innovative large-scale low carbon energy system project that will add and retain value in the local economy. The aim of the Challenge Fund is that these large demonstrator projects share their ideas and experiences with other communities who can replicate projects across the country.

"Community Energy Scotland saw the potential for localised energy systems to address a number of challenges relating to grid constraints, reduced subsidy support and communities' appetite for more direct engagement and benefits. We worked closely with Highlands and Islands Enterprise and the Scottish Government in the early development of the local energy economy concept and are delighted to have seen the progress that has been made with Local Energy Scotland under the Local Energy Challenge Fund. With involvement on a number of the Challenge Fund projects (including 'ACCESS' and 'Orkney Surf 'n' Turf'), we see the challenges of innovative multi-partner projects but also the direct and indirect benefits these projects have for their local area and beyond. In our experience there is no better way of bringing forward the business models that Scotland needs to keep communities benefiting from and engaging in renewable energy development, than the practical and ambitious approach that the Challenge Fund represents."

Felix Wight, Head of Development, Community Energy Scotland

OVERCOMING CHALLENGES

A dedicated contact within the CARES team provides step-by-step support to Challenge Fund groups. We actively encourage partnership projects, as this collaborative approach brings a wealth of shared expertise and knowledge. We liaise closely with the individual applicants and with the Scottish Government to ensure that lessons learnt from projects are shared with other communities and that the impact of projects is monitored. We also worked with the Scottish Government to extend the funding period to two years to give groups a longer period to develop projects.

"The projects that we support have the very real potential to be world class demonstrators of future energy systems. Through the dissemination of findings, we expect the demonstrator projects to kick-start a roll-out of similar innovative approaches which will help Scotland fulfil its low carbon ambitions."

Laura Campbell, Challenge Fund Project Manager, Local Energy Scotland

CASE STUDY 1

LEVENMOUTH COMMUNITY ENERGY PROJECT (Challenge Fund Round 1)



Levenmouth Community Energy Project was awarded £4.4 million through the Local Energy Challenge Fund. This innovative project uses an existing wind turbine and new solar photovoltaics (PV) to supply electricity to a local business park and produce hydrogen fuel for a fleet of zero-emission vehicles. The collaborative working group driving the project is led by Bright Green Hydrogen and includes Fife Council and Toshiba. The project will sell electricity to the business park at a price higher than that achievable through an export tariff but cheaper

for the businesses compared to their current tariff. The system will be fitted with a Smart Grid function so that when the renewables are generating excess electricity, the power can be redirected to create hydrogen fuel. This will be used either as transport fuel or in a fuel cell to produce electricity for the business park when generation is low. A proportion of the project profit will go towards a community benefit fund. The project has an extensive dissemination plan, including guided tours of the site and a school education programme.

"The financial support made the project happen but [Local Energy Scotland] has also supported us in negotiations with our major project partners ... They have been extremely helpful and supportive all along; there has always been someone I could talk things through with, which has been an invaluable resource."

David Hogg, Project Manager, Bright Green Hydrogen

CASE STUDY 2

EASTHEAT
(Challenge Fund Round 1)



The Edinburgh and Surrounding Towns Heat Energy Action through Thermal-Storage (EASTHEAT) project used solar PV panels and an innovative new technology, Sunamp Heat Batteries, to maximise the use of renewable and off-peak energy. The project, led by Sunamp, included Castle Rock Edinvar Housing Association, East Lothian Housing Association and Edison Energy as partners.

The heat batteries use a phase change material (PCM) to store heat energy. They charge during periods of surplus solar PV energy or by using off-peak tariffs to provide free or low cost heating and/or hot water on demand. Over 1,000 social housing properties will benefit from reduced fuel bills as a result of EASTHEAT.

"The Local Energy Challenge Fund two phase competition was really useful. The first phase gave us the opportunity to bottom out how the project would work and who the partners would be. The investment EASTHEAT received enabled us to create the largest domestic energy storage project in the UK; we couldn't have done this without Local Energy Scotland."

Andrew Bissell, Chief Executive Officer, Sunamp

The Local Energy Challenge Fund

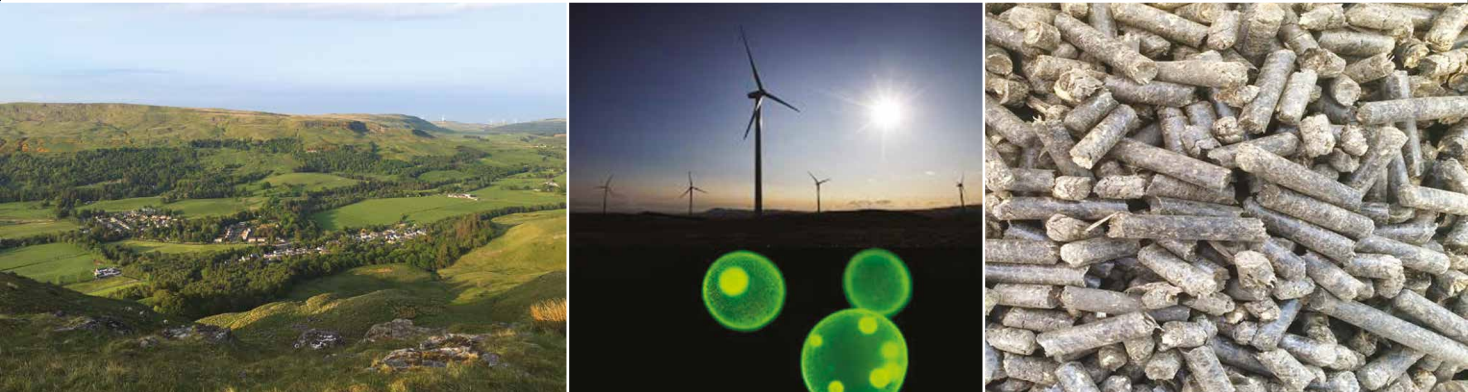
The Local Energy Challenge Fund supports large-scale low carbon demonstrator projects which show a local energy economy approach linking energy generation to energy use. This includes projects looking to develop innovative energy distribution and storage solutions that have an overall aim of creating more local value and benefit.

The two phase funding scheme includes the development phase: financial assistance and support for feasibility and development, with a view to developing project applications for the capital phase, which gives funding and support to deliver and demonstrate projects.

To date, there have been two rounds of funding. The second was delivered in partnership with the Low Carbon Infrastructure Transition Programme, a Scottish Government partnership offering a support package including project development advice and funding in order to accelerate projects and stimulate investment from other sources.

LOCAL ENERGY CHALLENGE FUND: ROUND 2, CAPITAL FUNDED PROJECTS

Project name	Project description
Montrose Local Energy Project	Processing and drying used animal bedding to create a new fuel source, feeding into local energy demand.
River Tay Heat Pump District Heating	Use of water source heat pumps to generate heat energy without damage to wildlife. Creating a district heating network supplying heat to Council buildings and residencies adjacent to the River Tay.
Large Scale Air Source Heat Pump District Heating	Multi-storey blocks at Newlands/Auldburn, Glasgow will benefit from heat produced by a large scale air source heat pump.
Fintry Development Trust Smart Meter	Aims to alleviate fuel poverty among residents through the virtual linkage of their electricity consumption with supply from a nearby anaerobic digestion plant.
Heat Smart Orkney	A smart control system will link the renewable energy generation from community owned wind turbines with the heating systems in local residents' homes.
Energise Galashiels Hydro	Using new technology to explore the hydro potential of waterways typical of the region which have not previously been used because of their relatively low head height.
Tower Power Dumbiedykes, Edinburgh	Creation of a community Local Energy Supply Company to source cheaper energy for the residents of high-rise flats.
Outer Hebrides Local Energy Hub	Aims to deliver a fully integrated local energy economy using the high calorific waste value from the Scottish Salmon Company.
Algal Solutions for Local Energy Economy	Use of renewable electricity to produce high value products from algae using low-value, surplus electricity.



Find out more at
www.localenergyscotland.org/challenge

CARES CONTRIBUTION TO SHARED OWNERSHIP

THE CHALLENGE

The CARES team operates in a challenging and dynamic environment, with many community-scale projects struggling to stack up financially. To address this, Local Energy Scotland is encouraging and supporting groups to consider developing shared ownership projects, where they become a meaningful financial partner working with a commercial developer. With the community taking an active involvement with the project and the decision making process, the shared ownership model can be hugely beneficial to both the community and the developer, with benefits including:

- Increased community empowerment.
- Assurance that the scheme meets local needs.
- Enhanced relationships between community and investors creating a positive perception of renewables and the renewables industry.
- Local knowledge delivering a strengthened system.
- Demonstrated corporate responsibility for private organisations.
- Potential exclusion from business rates.
- A positive contribution towards the Scottish Government's locally owned renewables targets.

OUR APPROACH

Over the past decade shared ownership structures began to develop organically within some community renewables projects and we have since worked with these groups and many others to share and develop knowledge in the sector. To further promote the idea, we created the highly regarded Shared Ownership Good Practice Principles (with input from industry members) which highlight the strengths of the model.

The Scottish Government advocated shared ownership of renewable energy projects in the 2014-15 One Scotland Programme for Government. In addition, the planning framework has adapted to capture the benefits of shared ownership schemes with the Chief Planning Officer issuing a letter to local authorities to strengthen and reinforce this link, serving as a positive incentive for developers.

"For future projects to be successful they will need to make sure they have the right people on board, with local buy-in both financially and emotionally. Shared ownership projects offer communities the chance to participate, sharing their knowledge, expertise and enthusiasm. It gives developers the chance to work with local people who know and understand the detail of the landscape."

Laura Nicolson, Shared Ownership Development Manager, Local Energy Scotland

We offer tools, materials and funding to provide vital support to communities and developers wishing to form a shared ownership project. This includes:

- **Shared Ownership Good Practice Principles:** a guidance document setting out Scottish Government expectations.
- **The Partnership Portal:** an online platform which pairs investors with those seeking investment.
- **Development officers** who offer advice and support to projects.
- A **Shared Ownership Development Manager** supporting projects in the Highlands and Islands region.
- **CARES start-up grants:** £20,000 to fund preparatory financial and legal work for shared ownership investment.
- **CARES loans** with a write-off facility.
- **Partnership with Renewable Energy Investment Fund (REIF)** who deliver additional support and funding.

CASE STUDY 1

MARSHILL FARM



Marshall is a dairy farm situated in South Lanarkshire. The owner, Andrew Stewart, became interested in installing wind turbines after being approached by a developer. He rejected their proposal and decided to pursue the diversification project himself with the help of a CARES loan to fund the feasibility work. Whilst looking for investment, a CARES development officer suggested involving the local community through shared ownership. The community group Lesmahagow Development Trust became involved, receiving guidance and financial support

from Local Energy Scotland and other sources to fund their 25% share. Now in operation Mr Stewart shares his experiences from this project with other groups and contributed towards the Good Practice Principles.

"If I was to take on an investor from outside the area then none of the money would've come in ... This way we can make a massive difference to our community ... I couldn't see any downsides to it."

Andrew Stewart, Owner, Marshall Farm

CASE STUDY 2

MERK HYDRO PROJECT



The Merk Hydro Project is a 1 MW river hydro scheme located on the Merk Burn in Glen Fyne, Argyll. This pioneering shared ownership project began in 2006 as a project between the community group Here We Are and local developer CRF Hydro Power. The CARES team took a flexible approach providing a £29,000 loan in 2012, which enabled the continuation of the long drawn out development of the Merk by saving Here We Are from bankruptcy. This in turn secured the existence of the Merk LLP, as Our Hydro (owned by Here We Are) held the lease. The group latterly gained investment from two additional partners, MEG Renewables and Richard Grubb, forming a limited liability partnership each with equal shares in the hydro scheme.

Christina Noble, Project Director at Here We Are described the benefits of their close, shared ownership relationship with the scheme developers: *"[The hydro developers] really knew what they were doing on the hillside. We worked closely together over many years ... They are local and they are enthusiasts for both hydro and community involvement."*

OVERCOMING CHALLENGES

Over the past three years we have worked tirelessly to support the uptake of the shared ownership model and are working to develop it as a standard feature of renewable energy projects.

Our support packages offer essential guidance, making the process more streamlined for developers and easier for community groups, ensuring they are well prepared to take advantage of opportunities. We have further raised the profile of shared ownership by creating and promoting a catalogue of successful case studies and the Partnership Portal has already linked developers and community groups together.

"As a developer, the shared ownership model gives us a chance to partner with the community in which we are based. We see this as one of the ways we can help communities build capacity to provide a more sustainable future. Local Energy Scotland is absolutely critical in helping to facilitate these relationships."

Fiona Milligan, Project Manager, Infinergy Ltd

WORKING WITH OTHERS

CARES APPROACH

Working with others is at the heart of our approach to delivering the CARES programme. Collaboration and joint working enable us to draw on a wealth of expertise, maximising the programme's outcomes.

We have formed many successful working partnerships with important stakeholders in the sector, produced tools to enable others (such as developers and communities) to form partnerships and hosted a number of successful networking and capacity building events.

"Highlands and Islands Enterprise has worked closely with Local Energy Scotland on a range of topics and tasks. We liaise with the relevant development officers to ensure integrated project support, we provide ad hoc advice and input to the CARES and Local Energy Challenge Fund panels and we have worked with the team collaboratively on delivering a shared ownership support service in the Highlands and Islands and a number of successful events. This partnership approach has been very successful and we enjoy working with the CARES team."

Melanie MacRae, Senior Development Manager, Community Energy, Highlands and Islands Enterprise

FRAMEWORKS

We have facilitated successful partnerships through our CARES frameworks that provide communities and rural businesses with contact details for tried and tested legal, financial and project management services, making it quicker and easier for them to put the right team together. We also developed the online Partnership Portal to help community groups find project partners.

"I find Local Energy Scotland to be very professional and easy to work with. They have a positive approach, always do what they say they will and together we have been able to discuss and overcome any challenges that have arisen with projects. We have a good working relationship."

Malcolm Crosby, Forestry Commission Scotland

Renewable Energy Investment Fund (REIF) is delivered by the Scottish Investment Bank on behalf of the Scottish Government and provides financial support for renewable energy projects. We work alongside REIF to ensure community renewables are more investable and to get more funders to invest in community renewables.

We are currently working with **Scottish Water** to work out whether local communities could sell energy to them. This would provide a real solution for those communities with generation capacity but facing grid connection issues.

The Scottish Community Energy Coalition (SCEC) is a group of stakeholders involved in community renewables in Scotland, championed by Friends of the Earth Scotland. Through their expertise and funding, we have extended our annual CARES conference to two days. One more day of debates, workshops and networking.

Scottish Renewables is the representative body for the renewable energy sector in Scotland. We worked closely with them to develop our Good Practice Principles for community benefits and shared ownership. Scottish Renewables also host a number of working groups to which industry members have contributed.

Local Energy Scotland represents the Scottish Government in the European **WISE Power project** (see box below). This has enabled us to present CARES' experience at a number of European conferences, sharing lessons with a European audience and learning from other projects.

Running from May 2014 to October 2016, the WISE Power project aims to improve local engagement and support for onshore wind developments. Led by Wind Europe, the project builds on best practice from 13 European countries and it has a strong focus on innovative financing such as community and cooperative funding. A key achievement has been the development of WE Engage, an online portal for onshore wind farm developers that supports effective local engagement. Scotland's renewable energy industry has carried out exemplary work on community benefits and shared ownership, for example through the creation of the Good Practice Principles developed by Local Energy Scotland.

"We highly and warmly recommend Local Energy Scotland for their professionalism, strong engagement and enthusiasm in every activity linked to their field of expertise."

Dorina Iuga, Senior Project Manager, Wind Europe

PARTNERSHIPS

SOME HIGHLIGHTS OF CARES PARTNERSHIP WORKING

We work very closely with the **Scottish Government**, for example supporting them through significant policy changes such as those to the FITs scheme.

We provide **developers** with valuable advice on how to work with communities on shared ownership projects and have facilitated successful working partnerships between developers and communities.

Our partnership with **Forestry Commission Scotland (FCS)** has led to the potential for development of new community-owned and shared ownership projects on FCS land. We work closely with FCS, for example by attending and contributing to each other's events and sharing our resources.



Our annual CARES conference is a key event in the community energy calendar. Bringing together a range of stakeholders including community members and funders, it is crucial in helping our projects to progress. We offer discussion workshops, plenary sessions and high-level debates to around 200 delegates, and for the past three years have welcomed the Energy Minister.

We also continue to deliver successful capacity building events for communities across Scotland, helping communities become attractive and ready for investment. These are run in partnership with Community Shares Scotland and Social Investment Scotland.

"Participating in Local Energy Scotland focus groups, attending conferences and being part of discussions on policy and guidance have all made a positive contribution to our understanding of the drivers and challenges facing the community energy sector, as well as the opportunities for future growth."

Niall Stuart, Chief Executive, Scottish Renewables

Produced by Changeworks on behalf of Local Energy Scotland:

Local Energy Scotland
Energy Saving Trust
Ocean Point 1
94 Ocean Drive
Edinburgh EH6 6JH

info@localenergyscotland.org
0808 808 2288

www.localenergyscotland.org

Copyright © 2016 Changeworks | www.changeworks.org.uk | Charity No SC015144

All images in this publication courtesy of Local Energy Scotland and CARES projects.

Front cover photo credits: Amec Foster Wheeler and Sunart Media

No part of this publication may be reproduced without prior permission except for purposes of review or referral.

This publication is available online at www.localenergyscotland.org and printed on 100% recycled paper.