

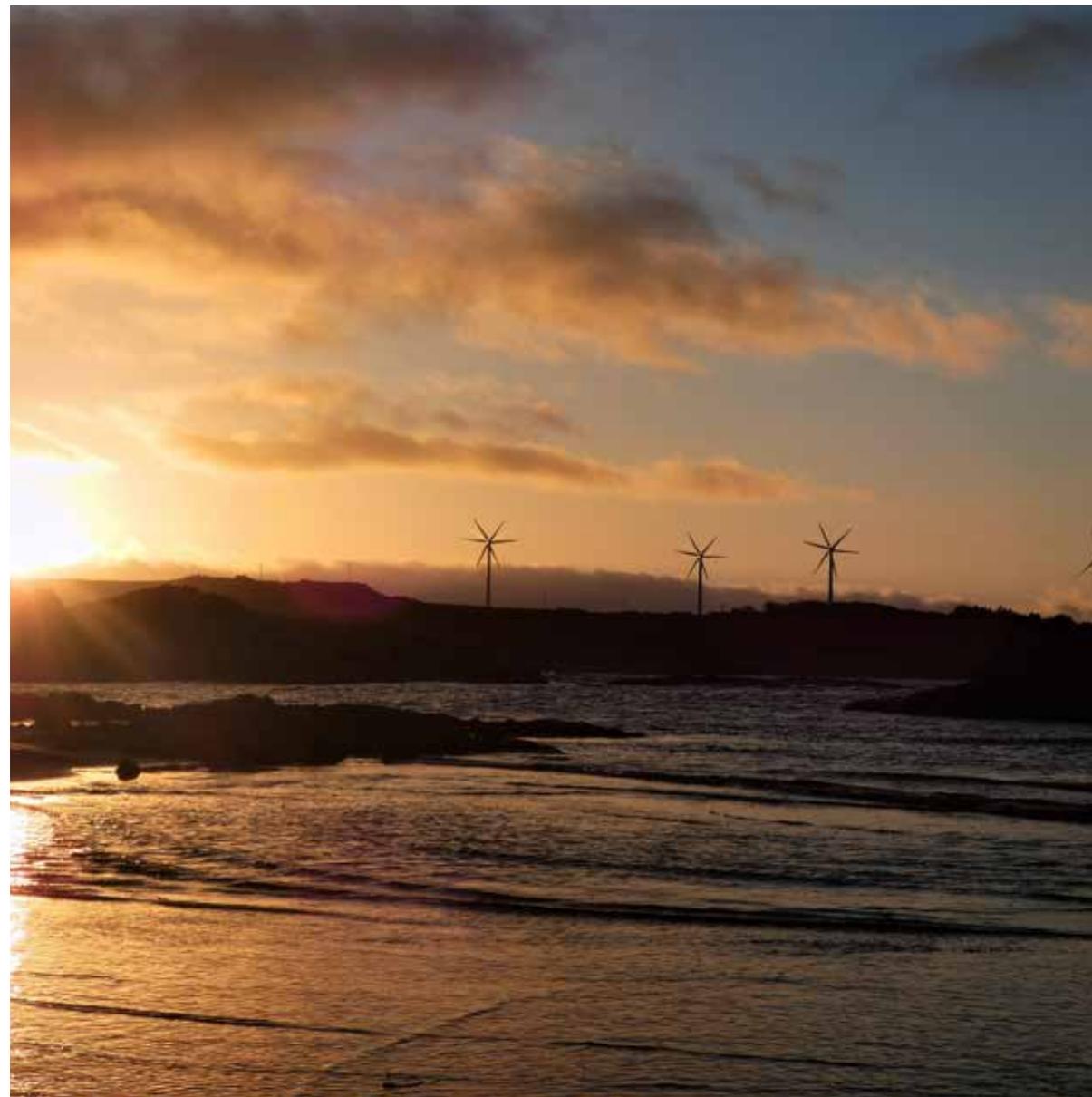
COMMUNITY LANDOWNERS AND THE CLIMATE EMERGENCY

The Benefits of Community-owned Renewable Energy

Isle of Gigha Heritage Trust

COMMUNITY*
LAND SCOTLAND

CASE STUDY



Introduction

Scotland has declared a climate emergency and committed to becoming carbon-neutral by 2045. The community landowning sector is contributing towards this goal.

Community Land Scotland has commissioned research to document action that the sector is taking to address climate change. Alongside a report which looks at climate initiatives across the sector, six case studies have been produced.

Each of the case studies looks in depth at one asset-owning community organisation and how it is contributing to a particular climate action theme. The themes are: renewable energy generation; managing 'carbon sinks' like woodlands and peatlands; helping people to adapt to the effects of climate change, and; reducing emissions related to food, transport and domestic energy use.

Each case study also looks at the wider work of the community owner in relation to the climate emergency, and the diverse benefits that they are providing.

This case study features the Isle of Gigha Heritage Trust (IGHT).

IGHT is the community organisation which has owned the island since 2002. In addition to owning land, it owns domestic properties and other built assets.

The focus of the case study is the development of renewable energy on Gigha.

The case study also looks at how renewable energy generation is supporting the wider development of the community and the island.

KEY MESSAGES

Community landowners:

- ✓ create and run renewable energy schemes, such as the community-owned wind farm on Gigha. Such schemes are helping to reduce Scotland's reliance on fossil fuels.
- ✓ invest income from electricity generation in a broad range of community-benefit projects and facilities.
- ✓ involve local people in decisions, integrate climate action with local needs and priorities, and help to deliver a Just Transition to net zero.
- ✓ set an example locally by undertaking innovative and ambitious climate initiatives. This helps to bring about behaviour change.



Since 2002, the Isle of Gigha Heritage Trust (IGHT) has owned and managed the island on behalf of its residents. Profits from its renewable energy scheme have been re-invested to help build new homes, increase the population and school role, and attract new businesses to the island.

www.gigha.org.uk



The community-owned island of Gigha and its wind farm. Photos: IGHT.

Community-owned Renewable Energy

Renewable energy generation is a key to reducing our reliance on fossil fuels and making Scotland a net zero society by 2045.

In the national Climate Change Plan, the Scottish Government has recognised the contribution that community-owned renewables are already making to achieving national targets. It has committed to increasing the amount of community and locally-owned renewable energy capacity in Scotland.

The Isle of Gigha Heritage Trust (IGHT) developed the first community-owned, grid-connected wind farm in Scotland. It was commissioned in 2005, and initially developed using three second-hand Vestas V27 wind turbines bought using a commercial bank loan. Subsequently, a fourth turbine was added (an Enercon E33).

The combined capacity of these turbines is over 1.1MW, slightly greater than the capacity of the subsea cable connecting the island to the mainland.

All of the energy that is produced is sold to the national grid, via the intermediary Good Energy. This returns an income to the Trust through the government Feed-In Tariff (FIT) scheme.

The primary motivation for developing the wind farm was a financial one, to provide a means of ensuring the long-term economic viability of the Trust. The gross annual income generated through Gigha's renewables is in the region of £335,000.

A portion of this income is used to service loans. The remaining amount is invested in the regeneration of the island and in the various development activities of the Trust. IGHT consider that these activities would not have been possible were it not for the turbines.

The income has been put into renovating houses, developing facilities for locals and tourists, and promoting economic activity on the island.

The biggest impact of this inward investment has been on the island's housing.

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“One of the things that sometimes we're criticised about is concentrating so much on the finance. But ... you can have all the good ideas, the ethical ideas, if it doesn't actually work financially, it wouldn't sustain long term. You cannot expect just to sit back forever and be subsidised. So if we can have a good financial base, then that gives us the finance to do these things.”

Ian Wilson, Trustee, Isle of Gigha Heritage Trust

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“Being community-owned opens so many doors as you can do stuff on your land that you don't need the permissions that maybe other areas do Having that ownership really makes a difference We're hoping that a lot of what we're doing is to show other islands and other communities that you can do these things.”

Jane Millar, Business Development Officer, Isle of Gigha Heritage Trust

At the time of the community buyout in 2002, the vast majority of the houses belonged to the estate and all but one of them were “below tolerable standard” and in need of significant renovations.

While some houses have since been sold, IGHT has sought to retain and refurbish as many as possible. This is so that the Trust can continue to provide affordable rented housing for long-term tenants and attract new people to the island. Rents have increased modestly since 2002, but they remain below those of comparable housing associations.

The wind farm has been successful as a core part of IGHT’s strategy for the sustainable development of Gigha and its community, but the Trust is conscious of the need to continue to innovate.

The three original turbines are now beyond their working life and may soon need to be decommissioned. IGHT is exploring alternatives, but there are a number of challenges to overcome.

Solar panels are one of the options but, while they may help to maintain supply

when the wind isn’t blowing, their smaller generation potential may render them unviable. FIT payments have been reduced, which has made it more difficult to develop and sustain smaller-scale renewable schemes.

Large-scale renewable electricity developments are constrained by the infrastructure on the island, as well as the capacity of the subsea connector to the mainland.

There are also financial barriers to IGHT bringing forward new initiatives, including the costs of consultancies and feasibility studies.

One possible route through these challenges and barriers is to sell community-owned energy directly to local homes and businesses, instead of feeding it into the national grid. Local businesses are already investigating the feasibility of this option.

As well as providing a new income stream for IGHT, the direct delivery of electricity to residents and businesses may act to cement the connection between local



Plans by Collective Architecture for new affordable housing in Gigha. Image: IGHT.

people and community-led climate action.

Looking beyond electricity, IGHT is exploring the possibility of district heating from air-source heat pumps. This could reduce the need for individual tenants to heat their homes through expensive and polluting carbon-based fuels. A district heating scheme could be incorporated into both new and existing domestic properties, increasing their value while reducing carbon emissions and the risk of fuel poverty.

The Trust is also assessing the feasibility of producing hydrogen from renewable

energy. If this is found to be a viable option, it would allow energy to be stored and not just used immediately, sold or lost. It would reduce the need for importing energy, even when production is not meeting demand. There are even early conversations about using hydrogen to power a new fleet of ferries connecting Gigha to the mainland. If feasible, hydrogen storage could make it possible for all energy used on the island to be produced on the island.

Gigha could potentially lead the way in showing how to achieve local energy independence.

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“People would be much more engaged with the turbines if they knew it was that green energy coming to their door instead of going into the grid.”

Jane Millar, Business Development Officer, Isle of Gigha Heritage Trust



Community-owned turbine. Photo: IGHT.



Through beach cleans and other environmental activities IGHT has engaged local residents. Photo: IGHT.

Gigha's community-owned renewables have had a wide impact through the example they have set within the community and by providing IGHT with the income and confidence to pursue other climate-related initiatives.

Through the Gateway to Gigha (GtG) programme, IGHT is developing **paths and walkways** around the island, providing camping and **active travel facilities**, highlighting sites of natural and cultural importance, and creating tourism-related business opportunities.

IGHT aims to reduce the need for tourists to bring their cars to the island, and to enable tourists and locals alike to connect more deeply with Gigha's natural and cultural heritage.

Over £900,000 has been invested in 8km of **paths**. A fleet of **e-bikes** – including some adapted for those with additional needs – are available for hire.

The reduction in cars has resulted in safer roads and improved access for cyclists, walkers, wheelchairs and prams.

Educational activities and the employment of a Countryside Ranger have promoted **active travel** and **recycling** and helped to build local interest in environmental issues, for example through guided walks and beach cleans.

Activities like these have helped to create a sense of ownership, responsibility and self-reliance, with people taking more personal action to ensure the future sustainability of the island.

Since Gigha came into community ownership, the approach to land management has changed.

The land owned by the community includes peatland, rough grazing and

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“I think people are much more willing to get involved in making a change They really care about their island and protecting it and making sure it's a nice place to visit.”

Jane Millar, Business Development Officer, Isle of Gigha Heritage Trust

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“My experience of community ownership is there is so much more opportunity There's so many barriers when you live on the mainland because ... everything has to go through a body in order to achieve what you want to do It is possible on an island which is community owned because these ideas can be brought forward. And allowing that to flourish I think is what breeds success.”

Casey-Jo Zammit, Countryside Ranger, Isle of Gigha Heritage Trust

184 hectares of woodland. IGHT is actively **managing the woodland to sustain its ability to capture carbon** and to enhance biodiversity. Care is taken to **preserve and restore peatland to prevent the release of carbon** into the atmosphere.

Wildlife and habitat conservation initiatives have received strong local support.

Sustainable farming practices are being investigated, in order to reduce methane emissions and the use of artificial fertilisers.

IGHT is assessing the feasibility of developing an anaerobic digester in collaboration with a local fisheries company. If feasible, this would convert food and organic waste into natural gas or fertiliser, and reduce the need for waste to be taken off the island.

Community control of the land is felt

to have been essential for improving community engagement in the conservation and development of the island.

It has also led to decisions being taken in a more holistic way which takes into account the needs of residents and visitors as well as the environment.

Community ownership has also been important in enabling the community to trial and implement new ideas.

IGHT's approach – which is one of engaging local people in decision-making, being open to their ideas and enabling them to take responsibility for their environment – has driven collective climate action and individual behaviour change on Gigha. And this has worked both ways, with environmentally-conscious residents driving the Trust to operate in a sustainable manner and to pursue ambitious climate initiatives.



Tree planting. Photo: IGHT.

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Project supported by:



Front cover: Community-owned wind farm on Gigha. Photo: Isle of Gigha Heritage Trust.
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