Scottish Government
Riaghaltas na h-Alba

Carbon Neutral Islands Project Progress Report 2023 – 2024

Contents

1. Acronyms

CARES	Community and Renewable Energy Scheme
CDO	Community Development Officer
CES	Community Energy Scotland
CNI	Carbon Neutral Island
COP26	2021 United Nations Climate Change Conference
EES:ABS	Energy Efficiency Scotland: Area-Based Scheme
GHG	Greenhouse Gas
HES	Home Energy Scotland
LULUCF	Land Use, Land Use Change and Forestry
RDT	Raasay Development Trust
RSPB	Royal Society for the Protection of Birds
SRIP	Scottish Rural and Islands Parliament

2. Ministerial Foreword

Scotland's island communities lie at the sharp end of climate change and biodiversity loss. Sea level rise and coastal erosion pose visible and direct threats to our islands' resilience, economies and heritage.

The need to reduce carbon emissions and accelerate adaptation is critical throughout Scotland. However, our islands have the greatest sense of urgency, and inaction is simply not an option.

Despite these challenges, island communities continue to display remarkable resilience and, drawing from their spirit of innovation and resourcefulness, are developing new solutions that put them at the forefront of Scotland's journey to net zero.

The Scottish Government is determined to work alongside communities to support their efforts and maximise their proven capacity for positive change.

To this end, in 2021 we established the Carbon Neutral Islands project. Working with the islands of Barra and Vatersay, Great Cumbrae, Hoy and Walls, Islay, Raasay and Yell, we have jointly developed place-based actions to pursue the ambitious goal of reaching net zero emissions by 2040.

As this progress report shows, the diverse range of initiatives underway on these islands is inspiring.

From community-owned green energy developments to energy efficiency improvements in community buildings, the Carbon Neutral Islands project has seen tangible changes occur at pace and in a way that speaks to the specific needs of the communities involved. It takes a hands-on approach to cutting emissions, using local knowledge and reflecting on local priorities.

By sharing the best practice and considerable expertise that the project has already generated, we are determined to ensure that communities on other islands – and indeed in other parts of Scotland – can benefit.

Through its focus on building local resilience, lowering emissions and mitigating fuel poverty, the project has encouraged wide-ranging improvements across the four key missions identified by the First Minister – tackling the climate emergency, eradicating child poverty, improving public services and growing the economy.

I look forward to continuing to work in close collaboration with our Carbon Neutral Island communities as they proceed with their ambitious journeys towards net zero.

Jim Fairlie
Minister for Agriculture and Connectivity

3. Introduction

3.1 Scotland's Islands and the Climate Emergency

The Scottish Government has declared a climate emergency and stepped up its climate action and commitments through Scotland's 2019 Climate Change Act. We remain steadfast in our statutory commitments in calling for net zero greenhouse gas emissions by 2045.

We know that island communities are among those most vulnerable to the impacts of climate change globally. Scotland is no exception to this and many of our islands are particularly exposed to the risk of rising sea levels and coastal erosion. The potential damage and even loss of habitats will impact heavily on their rich natural diversity.

At the same time, the transition to net zero offers an opportunity to support the sustainability of island communities and their economies in the long term. In order to ensure this happens in line with the Just Transition principles, the CNI project is working to address the particular challenges that islands face - be that higher costs of living, fuel poverty, connectivity or community resilience.

To support climate action going forward in an island context, the CNI project is facilitating community-led efforts to ensure that islanders can actively patricipate in the drive to net zero in decarbonisation. The learning from the project will inform the journey to net zero across all Scottish islands and potentially mainland rural areas too.

Scotland's climate change legislation also ensures we prepare and adapt to the impacts which we are already seeing, including rising sea levels and more extreme weather.

3.2 CNI Project Background

Since its inception under the 'A Fairer, Greener Scotland: Programme for Government 2021-22, the project has worked closely with communities and built capacity to support decarbonisation activity across the six islands. This report summarises activity which took place in financial year 2023/2024.

The project's key principles remain:

Alignment: The project aims to align with existing island-based climate change efforts and to avoid duplication.

Justice and fairness: The project will support islands to become carbon neutral in a just and fair way. Fairness will be promoted through an effective bottom-up participatory process driven by the six island communities.

Replicability: All Scottish islands will benefit from the project through the sharing of good practices coming from the implementation of the project. Effectively the six islands will act as catalysts for net zero action across Scotland.

The CNI project's core goals link closely with Scotland's National Planning Framework's overarching spatial principles, namely the following:

- **Just transition:** We will empower people to shape their places and ensure the transition to net zero is fair and inclusive.
- **Conserving and recycling assets:** We will make productive use of existing buildings, places, infrastructure and services, locking in carbon, minimising waste, and building a circular economy.
- **Local living:** We will support local liveability and improve community health and wellbeing by ensuring people can easily access services, greenspace, learning, work and leisure locally.
- **Rebalanced development:** We will target development to create opportunities for communities and investment in areas of past decline, and manage development sustainably in areas of high demand.
- **Rural revitalisation:** We will encourage sustainable development in rural areas, recognising the need to grow and support urban and rural communities together.

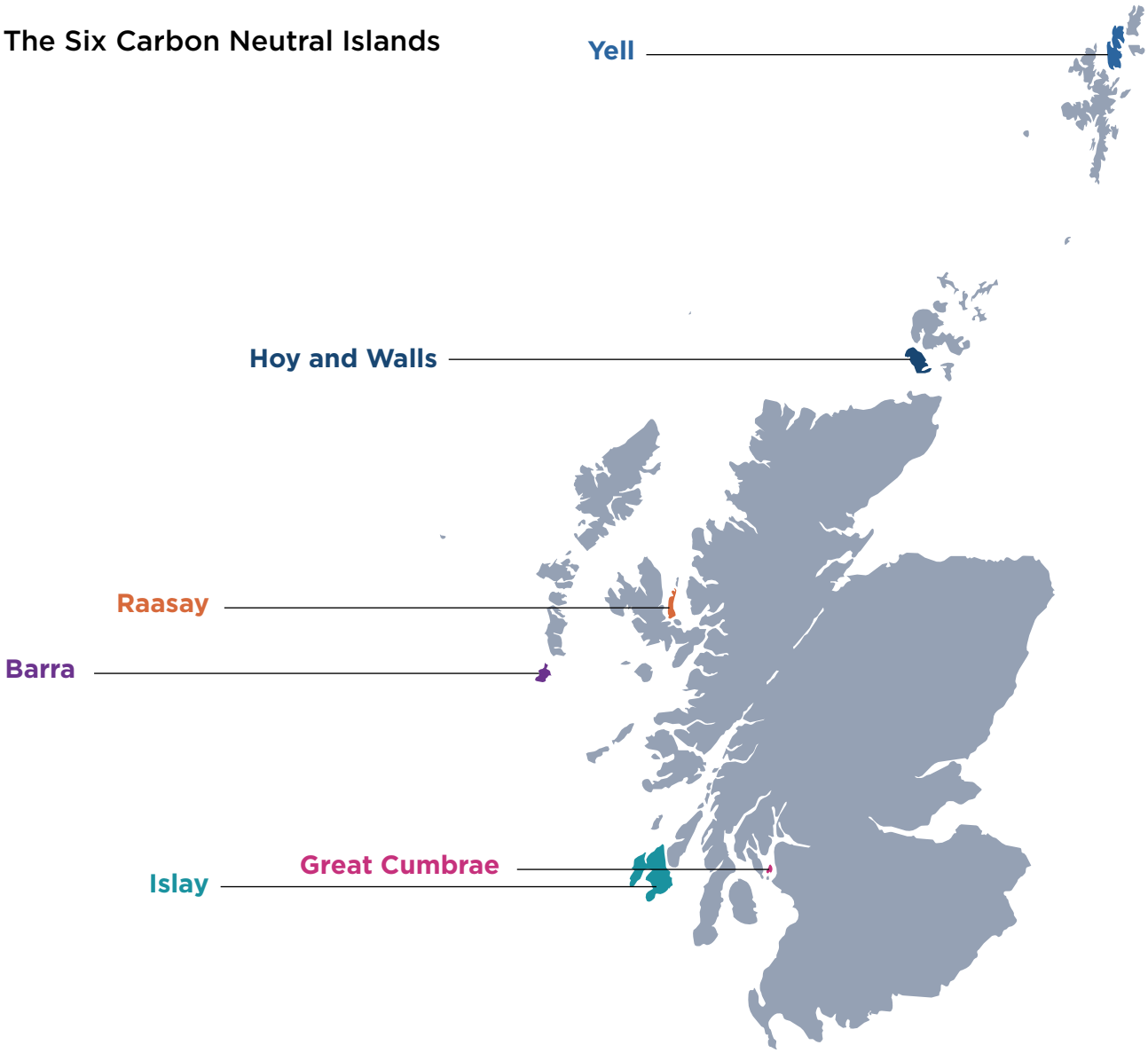
As highlighted in section 4, many of the capital funded projects that have been developed during the project to date align with several of these principles bringing greater value to rural communities and supporting a just transition to net zero.

3.3 Delivery Partners

A key aim of the project is to ensure that island voices drive their own decarbonisation journeys and are empowered to take action that works in their own local context. To allow the project to be embedded in communities, the Scottish Government provide funding to six local anchor organisations which each employ Community Development Officers (CDO). The CDOs are a driving force behind the CNI project and have worked closely with us and their communities to make substantial progress.

Community Energy Scotland (CES) has been a key partner in the Scottish Government's Carbon Neutral Islands project. CES has provided project coordination, technical expertise, resources, and tools to support the successful implementation of low-carbon activities that benefit local communities across Scotland's islands. Throughout the project Local Authorities, Highlands and Islands Enterprise, and the Scottish Futures Trust have also supported the islands in moving towards their decarbonisation goals.

The Six Carbon Neutral Islands



Island	Local Anchor Organisation	Community Development Officer
Yell	North Yell Development Council	Alice Mathewson, Hannah Eynon
Great Cumbrae	Cumbrae Community Development Company	Scott Watson, Dianne Smith
Islay	Islay Energy Trust	Ina Glover, Tom Skinner
Raasay	Raasay Development Trust	Tom Lusink, Rosie Macinnes
Barra and Vatersay	Voluntary Action Barra and Vatersay	Shona Macleod, Euan Scott
Hoy and Walls	Island of Hoy Development Trust	Aisling Phillips

Carbon Auditing
Overview

It is crucial to gain an understanding of the greenhouse gas emissions for each island to inform plans on how to decarbonise. Baseline greenhouse gas (GHG) audits have been produced for each island, which consider the main emission sources and sinks. These inventories consider the key sectors of Energy, Transport, Waste, Agriculture, and Land Use, Land Use Change and Forestry (LULUCF). The audits follow the Global Protocol for Community-Scale Greenhouse Gas Inventories and IPCC Guidelines for National Greenhouse Gas Inventories.

The Scottish Blue Carbon Forum is also working to include 'blue carbon' – or carbon deriving from marine habitats – in the UK Greenhouse Gas Inventory. A 'Habitat Suitability Study' is in development within the CNI project framework to estimate blue carbon potential for the islands.

The CNI GHG audits provide a tool for community engagement to inform action towards decarbonisation. The audits play a significant role in GHG management, providing baseline emissions estimates for each island, allowing local communities to target areas where interventions can be made to reduce emissions. By updating the inventory after a given period, the community can monitor their progress towards emissions reduction goals. The process of accounting for all emissions generated on an island-wide basis is clearly quite challenging and complex. Uncertainties and gaps in the data are inevitable, and confidence levels vary across sectors. The audits do, however, offer the most up-to-date information currently available. The climate emergency calls for immediate action, and the data we have to hand is reliable enough to allow us to track developments.

Summary of Findings

The findings and full reports from the audit process are published on the CNI website. A brief summary of the findings is given below:

Energy

- The most significant emissions come from oil burning for household, commercial, and industrial heat production.
- Emissions from imported electricity vary depending on the level of renewables.
- Robust commercial sector data is not generally available.

Transport

- Ferries typically emit the most emissions in the transport sector.
- Personal vehicles are the greatest source of emissions from on-road transport.
- It is difficult to distinguish between on- and off-island road transport.

Waste

- There is little variation across most islands in terms of size and population.
- Waste from business, industry and manufacturing could be more significant than from households.
- It is anticipated that there are unaccounted waste emissions from transportation.

Agriculture

- The primary source of methane emissions is enteric fermentation, which occurs when ruminant livestock digest food.
- Agriculture is a major source of emissions on several islands.
- Manure management is also significant.

Land use, land use change, and forestry

- Local activity data is limited and uncertain.
- It is anticipated that emissions from damaged peatlands will be the biggest emitter.
- Forestry is the largest major carbon sink, with two islands being net carbon sinks in this sector.

Next Steps

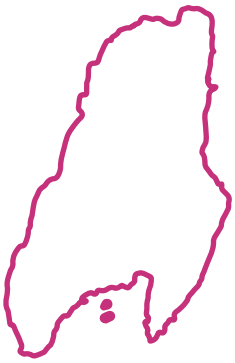
Having completed the initial GHG audits, the emissions inventories are now undergoing a process of 'ground-truthing' and further data collection to fill gaps in existing knowledge. This will allow more accurate benchmarking. The audits showed significant uncertainty in the land use sector and so efforts are underway to help us better understand emissions and explore solutions to reduce them and, in some cases, sequester carbon.

In addition to this process, the CNI project is working to build local capacity and skills to take on the work to refine and revise the GHG inventories going forwards and develop effective GHG management plans.

3.4 Community Climate Change Action Plans

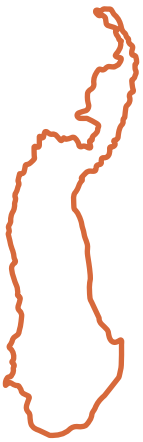
The CNI project is supporting Scotland's islands to move towards carbon neutrality according to their own decarbonisation priorities and at a pace that considers their community needs whilst recognising the urgency of taking action. To do so, the six islands received support towards developing community Climate Change Action Plans that respond to the interests of the island stakeholders and community. Each community was engaged to explore what the key priorities are for each island and how best to tackle these in order to make real and lasting change. This will ensure that the voice of island communities will truly drive the decarbonisation and resilience-building process, delivering on the fairness driver of the Project. Please follow the links below to visit each action plan.

Yell



Great Cumbrae

Islay



Raasay

Barra and Vatersay

Hoy and Walls

4. 2023/24 Project Implementation

To support early implementation of the Community Climate Change Action Plans, the Scottish Government provided £1 million of capital investment split equally between the six islands. This has led to a wide range of projects some of which have pulled in additional funding from elsewhere to increase their impact. These sit across a number of themes relating to reducing emissions and enhancing community resilience in the face of climate change.

4.1 Transport

Transport was identified as a priority action across the six islands. Projects in this area range from the promotion of active travel through E-bikes and footpath development, bolstering community transport through low carbon vehicles and research into better understanding vehicle use and demand in regards to tourism.

4.1.1 Hoy and Walls - E-bikes Purchase and Deployment

The Island of Hoy Development Trust's e-bike Project includes the purchase of 10 e-bikes and the refurbishment of an existing bike shed in a prime community location. This project gives the community and visitors access to zero carbon transport on the island.

Outcomes:

- Decreased vehicle traffic.
- Promotes active lifestyles.
- Provides a case for additional bike infrastructure.

4.1.2 Raasay - Path Development

An active travel path is being developed on a section of road between the community hall and school. This path means that those travelling between these two locations – especially children leaving or arriving at the school - can avoid walking directly on the road.

Outcomes:

- Reduced traffic and improved road safety.

4.1.3 Cumbrae - Vehicle Traffic Study

An ongoing two-part study is in the process of being undertaken to learn more about vehicular activity at the island's slipway across peak and off-peak times. This will help build understanding of traffic levels and the reasons individuals drive on Cumbrae with an aim of reducing vehicular traffic in the future.

Outcomes:

- Understanding of vehicle activities on the island.

4.1.4 Barra - Community Use Electric Vehicles

CNI Barra and Vatersay have purchased two Vauxhall Vivaro-e Life vehicles. This will both enhance the availability and reliability of community transport (especially beneficial for disabled and vulnerable islanders) and reduce emissions generated from transporting island residents.

Outcomes:

- Promoting active travel.
- Reduction in vehicle emissions.

4.1.5 Barra - Pilot E-bike Project

CNI Barra and Vatersay have purchased six Giant Explore +1 e-bikes through Oban Cycles. These bikes are to be used as a pilot e-bike scheme for the island which will help reduce the number of vehicles on the road and promote active travel amongst residents and tourists.

Outcomes:

- Reduced emissions from vehicle travel.
- Improved community transport.

4.2 Local Food Production and Gardening

All of the islands involved in the CNI project have seen initiatives to produce fruit and vegetables locally. Given the challenges and emissions inherent in transporting produce to these islands, this local production provides a means of limiting these emissions whilst enhancing community social spaces and activities through growing programmes.

4.2.1 Hoy and Walls - Community Garden Polycrub Project

A polycrub has been installed in the newly formed Hoy and Walls Community Garden. This will offer a new space for the community to gather and socialise and will also allow islanders to more effectively grow fruit and vegetables, promoting local food production and offering a potential new revenue stream.

Outcomes:

- Lower emissions from food production.
- Move towards a circular economy.

4.2.2 Hoy and Walls - Carbon Neutral Islands Gardening Project

All Islanders have been offered a 100% recycled water butt and 'Green Johanna' hot composter free of charge. 53 households have taken up the offer of a water butt, hot composter or both. This has encouraged home composting, rainwater collection and ultimately will encourage islanders to take part in local food production.

Outcomes:

- Lower emissions from food production.
- Move towards a circular economy.

4.2.3 Raasay - Glasshouse Restoration

Work is being undertaken to restore and improve a nineteenth-century glasshouse in the grounds of Raasay House that has fallen into disrepair in recent years.

This work consists of groundworks and connecting the walled garden to the electrical grid. In addition, a series of growing classes that provide equipment and mentorship through the growing season from propagating to harvest are being undertaken. Collectively the restoration work, alongside these classes will highlight the potential for local food production to the community in addition to developing a new social space.

Outcomes:

- Local production of food.
- Move towards zero waste/a circular economy.

4.2.4 Cumbrae - Improvements to Community and School Outdoor Gardens

Several initiatives have been implemented to develop community gardens, which were established through a collaborative project between the community and school.

Works include the installation of a rainwater harvesting system, a weather station at the school outdoor garden and the acquisition of a portable solar-powered renewable power station replacing a diesel system in the community garden.

Similarly to other examples, improvements to these gardens will build community engagement in local food production.

Outcomes:

- Move towards zero waste and a circular economy.
- Increased knowledge and engagement of climate change impacts on the weather.

4.2.5 Barra and Vatersay - Community Growing Research and Classes

A feasibility study on behalf of CNI Barra and Vatersay was undertaken to research the demand for allotments or shared space to grow food on Barra and on Vatersay, as well as the demand for locally grown food.

Outcomes:

- Local production of food.

4.2.6 Yell - Polycrubs and Growing Areas

Plans have been developed to create five growing areas to be used by the community for local food production. Each of these will have a polycrub installed on site. The first of these has received planning permission and others are in the process of development. Once complete, these polycrubs will provide a number of new spaces to facilitate and promote local food growth across Yell.

Outcomes:

- Local production of food.
- Move towards a circular economy.

4.3 Domestic Energy Emissions Reduction

Heating - both domesic and non-domestic is one of the biggest sources of emissions Scotland-wide. The CNIs have taken a range of approaches to reducing these emissions, shaped by the distinct local context of each island – from ambitious programmes of large-scale retrofit to pilots of new technologies to inform further development.

4.3.1 Hoy and Walls - Energy Efficiency Technology Pilot

This pilot aims to quantify, measure and record the energy efficiency gains that can realistically be achieved in island properties through the application of energy storage devices, domestic load and prioritisation controls, automatic energy logging equipment and air source heat pumps. This pilot will test these technologies though equipment installations in three properties across the two housing developments - St Colms in Longhope and French Road at Lyness. The knowledge gained from this project will be invaluable in informing the direction of decarbonisation efforts on the island.

Outcomes:

- Installation of zero-emission energy technologies.
- Implementation of energy-efficiency measures.

4.3.2 Raasay - Property Purchase and Retrofit

Raasay Development Trust (RDT) has partnered with CNI, the Scottish Government's More Homes divisions, Scottish Land Fund, and Lochalsh and Skye Housing Association to retrofit a two-bed terraced property in Inverarish and add it to their affordable housing portfolio. The project is seeking to expand to purchase two further properties. Retrofitting these homes will provide much needed high-quality affordable housing, which is extremely limited on the island.

Outcomes:

- Increased affordable housing stock.
- Installation of energy efficiency measures.
- Reduced fuel poverty.

4.3.3 Raasay - Domestic Energy Efficiency

CNI Raasay, alongside project partners are organising a collective retrofit approach to improving housing efficiency on Raasay. They are working with the Highland Council's Climate Change and Energy Team and Home Energy Scotland (HES) to submit a Special Project application under the Scottish Government's Energy Efficient Scotland: Area-Based Scheme (EES:ABS) to deliver grant funded energy efficiency improvements and whole house retrofits to eligible Raasay properties. This project aims to improve the efficiency of a significant proportion of Raasay's housing stock hugely reducing emissions across the island. A case study of this project is available at this link.

Outcomes:

- Installation of energy efficiency measures.
- Impacts on fuel poverty.

4.3.4 Cumbrae - Rooftop Solar Survey and Proposal

A study into currently installed rooftop solar PV on Cumbrae is underway, along with a proposal for wider scale rollout outwith the existing conservation area for up to 130 properties. This will reduce emissions across the islands building stock whilst lowering energy bills for residents and businesses.

Outcomes:

- Zero emission energy technology installation.

4.3.5 Cumbrae - In-Home Energy Monitors

In-home energy monitors have been purchased and an installation programme is in progress for buildings across the island. This will build engagement amongst local residents allowing them to monitor and understand their energy usage given that the smart meter rollout has been limited on the island to date.

Outcomes:

- Increased engagement with energy use.

4.3.6 Cumbrae - Distribution of Low Energy Lightbulbs

600 low-energy light bulbs were supplied to the community, incentivising individuals to reduce their emissions and serving as a great engagement touch point to increase understanding of how individuals can take simple steps to reduce their emissions.

Outcomes:

- Installation of energy efficiency measures.
- Increased engagement with energy use.

4.4 Non-Domestic Energy Emissions Reduction

It is crucial that steps are taken to reduce emissions across business and community spaces on each island to ensure that the journey to net zero is as holistic as possible. The projects across this theme range, from focused fabric improvements to enhance the resilience of community spaces, to initiatives to bring local businesses along on the net zero journey.

4.4.1 Raasay - Energy Improvements to Community Hall

A number of energy efficiency improvements have been made to Raasay's Community Hall, part funded by the CNI project, including:

- Repairs to the ground source heat pump.
- Leaking doors and windows have been replaced with efficient commercial grade doors.
- A solar photovoltaic installation is planned, which has been designed and funded and is awaiting a grid connection.

Outcomes:

- Energy efficiency improvements to a community hub.
- Improvements to a multi-use social space.

4.4.2 Cumbrae - Non-Domestic Energy Performance Certificates

Commercial energy performance certificates have been produced for 16 businesses to aid them in understanding and sustainably reducing their energy use.

Outcomes:

- Increased engagement amongst businesses with their energy use.

4.4.3 Cumbrae - Energy and Heating Efficiency and Insulations Measures

Energy efficiency measures and zero carbon heating systems have been installed at four public buildings on the island. These include Millport Bowling Club, Cumbrae Parish Church, Millport Golf Club and the chapel building of Our Lady of Perpetual Succour. Improvements include battery storage, solar PV and insultation. The extensive works on these buildings serve as a model for other public buildings seeking to decarbonise – both on the island and further afield. The installer, Green Home Systems, won the Small-Scale Project of the Year award at the Scotland Energy Efficiency Awards for this work.

Outcomes:

- Energy efficiency improvements to a community hub.

4.4.4 Barra - Community Building Energy Efficiency Project

Work has begun to produce investment/development plans to assess the feasibility of energy efficiency and zero carbon technology improvements to three community buildings. This includes installing a small wind turbine, battery storage, and solar installations. These improvements will both reduce emissions from these buildings but also make them warmer and more robust for the benefit of the whole community.

Outcomes:

- Lowered non-domestic building emissions.
- Improved resilience of community spaces.

4.4.5 Barra - Business and Community Building Energy Monitoring

Twelve Smappee Energy Monitors and one Profile Portable Energy Recorder have been purchased for installation. These monitors will allow the local anchor organisation to generate a load profile for each of the buildings participating in the initiative which can provide a baseline for further improvements. This data gathering is invaluable in informing the next steps of the project as the island aims to further decarbonise over the coming years.

Outcomes:

- Increased understanding of energy usage.

4.4.6 Yell - Energy Efficiency Improvements to Cullivoe Galley Shed

Funding was provided to bring a community building – Cullivoe Galley Shed – up to a high standard of insulation. This building provides a comfortable space for the construction of the galley for the island's Up Helle Ah festival – a long standing Shetland festival which culminates in the burning of galleys across the islands in January.

Outcomes:

- Reduced carbon emissions.
- Improvements to a community space.

4.5 Community Renewable Generation

There are numerous options for local renewable generation on the CNIs. This theme ranges from small-scale micro-generation to ambitious projects utilising renewable energy resources to feed into the grid, consequently providing revenue generation to fund further community projects.

4.5.1 Cumbrae - Energy Infrastructure and Renewables Study

A comprehensive Energy Infrastructure and Renewables Study was conducted for Cumbrae by Community Energy Scotland following a proposal for a significant solar PV array and associated battery storage system on the island which recieved approval upon appeal despite significant local opposition.

This study presents the options, challenges, and barriers to future community renewable energy projects on the island, considering viability from technical, legislative, planning and community benefit perspectives.

4.5.2 Islay - Castlehill Community Solar Array

A proposal was developed to spend the majority of the island's CNI 'capital' budget on a solar project of up to 135kW, utilising existing grid connection for an on-island community-owned wind turbine. The scale of the project, alongside planning challenges and a number of other factors mean that the build is due to begin in late 2024.

When completed, the solar array will produce additional clean energy, which is currently lacking on the island. Revenue will pay into the existing community benefit fund, administered by Islay Energy Community Benefit Society. This fund provides grants for local energy and energy efficiency improvements and general community benefit. Stakeholders are seeking to further understand whether the rehabilitation of the former peat extraction site can lead to wider benefits such as increasing biodiversity.

Outcomes:

- Renewable energy generated on the island.
- Community benefit funds.
- Habitat restoration.
- Study the local co-benefits of solar and peatland restoration.

4.5.3 Raasay - Wood Fuel Processor

CNI Raasay has helped fund a wood processor for the Raasay Development Trust to alleviate workload and improve safety in preparing local wood resources.

Outcomes:

- Safer production of biomass.
- Lower carbon energy compared to other solid fuels.

4.6 Adaptation and Resilience

Scotland's islands are particularly vulnerable to the impacts of climate change. As a result, the CNI project has provided funding for locally-based projects to enhance community resilience in the face of a more variable climate.

4.6.1 Cumbrae - Non-Coastal Flooding Review and Community Flood Defences

A review of responses to past flooding and resilience to future flooding events has been undertaken. Parts of Millport (Cumbrae's main centre of population) are prone to flooding as seen in December 2023 and, as future flooding events are expected to occur more frequently and severely, this review will highlight areas of potential improvement and help mitigate damage from further events.

Investment was made in reusable flood defence equipment that will remain on the island and be accessible to the local community and emergency services.

Outcomes:

- Increased flooding resilience.

4.6.2 Yell - Resilience Hubs

Seven resilience hubs have been stocked across the island containing essential equipment in the event of a power outage or ferry cancellations – in line with the project's goal of supporting communities to develop adaptation measures to prevent disruption from the possible impacts of climate change.

Outcomes:

- Community resilience and adaptation.

4.7 Biodiversity and Land Use

It has been long established that island ecosystems are particularly vulnerable to environmental changes. The CNI project has sought to fund initiatives that protect these environments, restore or build biodiversity and increase understanding of each island's ecosystem and the local marine environment.

4.7.1 Hoy and Walls - Community Tree Planting Scheme

Trees and planting accessories were purchased and provided to several island residents, organisations and businesses. In turn, these individuals or groups will establish small-scale pockets of woodland in their gardens or on privately-owned land. A total of 4,500 trees were distributed to participants across the island.

Outcomes:

- Improving biodiversity and reforestation.

4.7.2 Raasay - Invasive Species Management

This project is aimed at the control of invasive species on Raasay. Aerial drone mapping has been undertaken. This will be followed up by the development of an Invasive Species Management Plan and subsequently the removal of the species, starting in high priority areas. Taking action to remove these invasive species will protect biodiversity on the island.

In addition, CNI Raasay has provided match funding to Raasay House Community Company for the removal of Rhododendron Ponticum, an invasive species, on its land.

Outcomes:

- Protecting biodiversity.
- Improved GHG sequestering.

4.7.3 Cumbrae and Hoy - Land Cover Emmissions Study

A comprehensive analysis of Land Use, Land Use Change and Forestry (LULUCF) on Cumbrae and Hoy has been conducted by Aquatera, using hi-res satellite imagery, mapping, and existing land use datasets - building on previous work by Aether in March 2023.

This tool aims to better inform future planning and development decisions. It will enable the calculation of carbon emission impacts resulting from land use change within a specified area, offering a vital tool for sustainable decision-making.

4.7.4 Cumbrae - Blue Carbon Habitat Suitability Study

A project has been undertaken to develop a baseline study for blue carbon in the waters surrounding Cumbrae. The local marine environment has a direct impact on the land ecosystem and carbon emissions of each island and so taking steps to understand this provides an invaluable opportunity to analyse each island's emissions holistically.

Outcomes:

- Protecting and improving biodiversity.

4.7.5 Barra - CNI Community Tree Planting Project

4,200 trees (80/20 split of Alder and Rowan) were purchased from Alba Trees and issued to 55 participants of the CNI Community Tree Planting Project

Outcomes:

- Improving biodiversity and reforestation.

4.8 The Circular Economy

Moving towards a circular economy is a key step in reducing emissions. This is especially true in the island context where options for disposal of goods/ products are often limited and challenging.

4.8.1 Yell - Purchase of Facilities for an On-Island Reuse Centre

Equipment and storage was purchased to facilitate the reuse and recycling of white goods on the island which is undertaken as part of the Men's Shed activity group. The benefits of this project are twofold: firstly, the men's group offers opportunities for men to socialise which has been widely praised on the island; secondly by repairing the white goods, the need to transport them off-island for scrappage is mitigated in addition to the reduced emissions from reusing these products.

Outcomes:

- Move towards a circular economy.
- Improvements to a social space and skills development.

5. Public Engagement Activities

The focus of the CNI project goes further than direct capital investment. Each Community Development Officer has undertaken an extensive programmme of engagement activities – both on - and off-island. This has significantly raised awareness of the project and built engagement with both those living on the islands and further afield.

5.1 On-Island Engagement

As we have highlighted, every island is unique and approaches to engagement within each community have varied to suit islanders' needs. For example, several islands undertook project work to boost this engagement (for example, in Cumbrae an art project has been undertaken with the local school).

The CDOs took a substantive role in building awareness of the CNI project's work on the respective island with an aim of using this to boost climate engagement overall.

In addition to being embedded within a local anchor organisation, each island also prioritises engagement with local stakeholders, in most cases a locally-based steering group, to determine the strategic direction of work on the project. These groups met on a regular basis to discuss issues related to the CNI.

The CDOs took advantage of community events across each island as an opportunity to build the local knowledge base and gain buy-in. These events allowed the CNI work to be presented within the context of other initiatives happening on the island to reach a broader audience that other, more targeted engagement may not.

Other approaches to engagement on each island across the CNIs include:

Surveys: It is essential that the perspectives of islanders are integrated into the CNI project. To ensure this, surveys were undertaken to gather the views of islanders on several of the CNIs to inform Climate Action Plans and the CNI work more generally.

Work with Schools: Young people have a key role to play in the journey to net zero – this is particularly true within our island communities. Several CNI islands have undertaken projects alongside local schools. Others have undertaken outreach events as a learning opportunity to build understanding of carbon reduction measures.

Citizen Science: Several of the island projecrs include citizen science components, allowing individuals to directly participate in research on their local environment, increasing engagement and widening the breadth of scientific activity on the islands.

Showcase Events: Showcase events on several of the islands were also held to directly highlight work being undertaken under the CNI and across related workstreams. These were often in collaboration with other groups involved in climate and environmental work to build collaboration between these bodies.

Support for Wider Energy Efficiency Measures: The CNIs have also supported uptake of energy efficiency measures through programmes such as the Area Based Schemes. Cumbrae for example, has seen a significant increase in uptake of these measures through these efforts.

CDO Upskilling: The project has prioritised the upskilling of CDOs whenever possible in order to share their knowledge and experience to benefit their wider island communities.

5.2 Off-Island Engagement

The ease of access to off-island events, particularly in the central belt, differs throughout the islands. Regardless each CDO was able to attend and frequently speak at a range of meetings, conferences and seminars across Scotland in order to raise awareness of the project and share their learning and experience as CDOs.

Key events attended by the CDOs are listed below:

- All-Energy and Dcarbonise Conference at SECC Glasgow, May 2023
  - This event brought together stakeholders from across the energy sector and gave the CDOs an excellent opportunity to expand their networks and spread awareness of the project.
- Local Energy Scotland CARES Conference in Glasgow, September 2023
  - The Scottish Government's Community and Renewable Energy Scheme (CARES) supports communities, including the CNIs, to engage, participate

and benefit in the energy transition to net zero. This conference provided a fantastic opportunity to share learnings with other communities throughout Scotland.

- Community Energy Scotland Annual Conference in and in Glasgow 2024
  - These events brought stakeholders together to discuss the role of communities in delivering fair and inclusive decarbonisation.
  - In 2024, CDOs presented on solar energy development and led a workshop on energy efficiency.
- Scottish Rural and Islands Parliament (SRIP), Fort William, November 2023
  - SRIP a grassroots democratic assembly, bringing together people who live and work in rural and island Scotland to debate the issues that matter most to them. It forms part of a process to help mobilise rural and island communities in Scotland and amplify their diverse voices. CNI members were able to attend to share their own experience of development in an island context.

These events gave each officer a chance to share knowledge of sustainable practices in an island context with stakeholders across the local development landscape – from other development officers in island, coastal and rural mainland communities to industry experts and academics. They also provided learning opportunities and the chance to build a network across island communities, strengthening the replicability strand of the project.

The Community Development Officers also met several times in person along with Scottish Government and key project partners including CES allowing them to build ties and share information and take an integral role in designing the project themselves.

5.3 Stakeholder Engagement

Each island conducted extensive stakeholder engagement with key businesses and third sector organisations with a presence on and/or an interest in, their island. This developed a network to support the work undertaken across the CNI project and highlighted linkages with the initiatives undertaken across related areas.

Key strands of this engagement across the islands included:

- On-island industry (for example the whisky industry on Islay).
- Environmentally focused groups (such as the RSPB, NatureScot).
- Energy network operators.
- Community development organisations.
- Local authorities.
- Installers of low carbon energy and energy efficiency measures.
- Advice and support bodies (such as Home Energy Scotland).
- Ferry providers.

5.4 Research

We have also undertaken research to support the project including work into skills building and shared learning across Scotland's islands.

The work into skills building was particularly insightful in informing both the development of the core islands in the project, but also the replicability strand that aims to extend these findings.

In order to help expand the scope of decarbonisation being undertaken across all of Scotland's islands, a handbook has been developed by CES on their journey to net zero which is available online.

6. Next Steps

6.1 2024/25 Funding Aims

Following the investment and activity set out above, we continue to work in partnership with the islands to support them in their net zero trajectories. This includes continued funding to support organisations including local anchor organisations, Community Energy Scotland, Highlands and Islands Enterprise and the Scottish Futures Trust.

The overarching objectives of the CNI fund for 2024/25 are to:

Objective 1: Continue to support the six islands to implement their Community Climate Change Action Plans (published in 2023/24) whilst supporting them to develop a pathway to enable them to reach net zero by 2040.

Objective 2: Gather, refine and share good practices from the CNI project to benefit other Scottish islands (those not already directly included).

Objective 3: Establish an overarching approach to the longer-term delivery and sustainability of the project.

6.2 Financing Strategies

The 2023 Progress Report highlighted that we would develop Investment Strategies in order to deliver on the Community Climate Change Action Plans. These will focus on developing different funding options in the future for the CNIs. We have partnered with Highlands and Islands Enterprise (HIE) on this workstream. The Scottish Government's commitment to these financing strategies was also reaffirmed in the 2024/2025 Programme for Government.

HIE are using their local expertise and extensive experience with development projects to help us define an approach to financing projects with a view to securing types of funding in the medium/long term. They are working in collaboration with each island to ensure that they are front and centre in the project. We will also consider how the project will operate within the wider net zero landscape.

6.3 Continued Capital Investment

In addition to the £1 million capital funding invested in 2023/24, we will provide a further £1.3 million this financial year to drive forward net zero initiatives across the six islands.

This includes our £1 million Carbon Neutral Islands Capital Fund administrated by the Scottish Futures Trust. Applications have been welcomed from Local Authorities working in partnership with communities.

The process has been carefully designed to ensure that CNIs can access the funding to take forward larger, more impactful projects when the time is right for them.

We will work with the islands in further developing and refining the pipeline of net zero projects to support them taking forward their net zero ambitions.

In addition, each island has access to £50,000 to build on their activites to date and continue to implement their Community Climate Change Action Plans.

6.4 Knowledge Exchange

A key aim of the project has always been to ensure that all Scottish islands will benefit through the sharing of good practices stemming from implementation. In order to achieve this aim Community Energy Scotland are taking forward a range of activity:

- Showcasing their Community Climate Action Handbook based on the learnings and good practice stemming from the project to date.
- Establishing two Communities of Practice, made up of 15 new islands total, through which CES can support them to deliver:
  - carbon audits;
  - action plan development;
  - feasibility studies; and
  - training (in areas such as auditing, or where there are skills gaps preventing islands from taking forward carbon reduction activity).
  - These islands are Tiree, Mull, Bressay, Colonsay, Lewis, Uist, Luing, Shapinsay, North Ronaldsay, Papa Westray, Westray, Sanday, Stronsay and Eday.
- Enhancing project communications and engagement with communities across the Carbon Neutral Islands Project (working with Community Development Officers (CDOs)) and maximising digital resources.
- Continuing to work with the CDOs across the six CNI islands providing technical support and enhancing communications and engagement.

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