

Annual Activity Report 2024-25

Foreword

2025 is ALIenergy's 25th anniversary, and we've reached new milestones in all our areas of work.

Our Affordable Warmth Service helps vulnerable households struggling with fuel poverty. We've been supporting households in Argyll and Bute for many years, but we've recently extended our service to cover the whole of the Highlands as well – a big increase in area covered and population served. We're now supporting several thousand of our most vulnerable households each year and achieving annual total client gains of well over one million pounds, directly to those who need it most.

Our Education Programme is a local economic development project encouraging young people to seek local careers in the renewable energy sector. In 2024 we were able to significantly expand the programme. We now provide teaching resources for all primary schools, and classroom workshops and careers events for all the main secondary schools across Argyll and Bute.

Over the years we've been involved in various community energy projects including wind, biomass, hydro and solar installations. We've been partners in a series of European community energy projects. And we've helped to develop and test innovative technologies which aim to help smooth electrical supply and demand, and overcome local grid constraints. Our latest local renewable energy installation is a solar PV array built in February 2025. During 2024 we also started some exciting work on shared ownership options with larger renewable energy developers.

So this year we celebrate 25 years of achievement: making a difference, helping individuals, families, communities, and the environment. We'd like to thank all our funders, partners and supporters, without whom none of this would have been possible. However, there is so much more to do. We will continue working towards our vision – a world where everyone lives sustainably, carbon emissions have been cut to safe levels, and everyone has access to clean, safe and affordable energy.



Lynda Mitchell, ALIenergy CEO

Introduction

Argyll, Lomond and the Islands Energy Agency (ALIenergy) is a sustainable energy charity based in Oban, on the west coast of Scotland, and operating across the regions of Argyll & Bute and Highland. ALIenergy currently has a staff team of 16, working on a range of projects in Affordable Warmth/Alleviation of Fuel Poverty; Education and Skills Development; and Local Energy.

ALlenergy's aims are:

- To help people with fuel poverty and energy efficiency issues
- To encourage community renewables and local energy economy
- To reduce carbon emissions and mitigate climate change.

ALIenergy's Affordable Warmth Service



ALIenergy has a long history of working to alleviate fuel poverty. In recent years, fuel poverty levels have increased significantly due to the energy price crisis.

Our beneficiary households are vulnerable/disadvantaged for reasons such as low income, poor health, disability, unemployment, single parenting and old age. We assist those who cannot afford to heat their homes. They are often living in cold, damp rooms. They frequently must choose between eating and heating. Fuel poverty is associated with multiple deprivations: poor physical and mental health, loneliness and isolation, poor educational outcomes, low employability and debt, and ultimately, shockingly, loss of life through excess winter deaths, due to cold and damp living conditions.

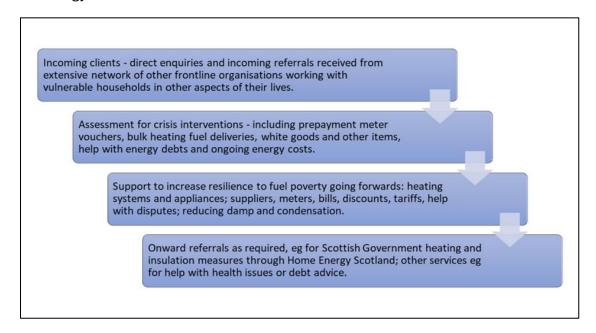
We provide intensive support to guide our most vulnerable households towards greater energy security, often working with each client over a period of several months, with multiple advice sessions. Our work consists of a combination of home visits, telephone advice calls and associated follow-up work. The value of client gain that we achieve, directly to the most vulnerable households in greatest need, is well over one million pounds per year. This is a combination of immediate crisis interventions and estimated cost savings going forward.

We assist people directly and also take referrals from a range of other organisations including food banks, housing associations, citizens advice bureaux and health professionals. We assist with accessing available heating and insulation grants (in partnership with Home Energy Scotland), advise on energy saving behaviours; help understanding heating, appliances, bills, meters, suppliers and tariffs; assist with complaints and metering / billing issues; help people to access fuel vouchers, free white goods, debt relief and help with ongoing costs from various sources.

We are currently in a crisis of fuel poverty. The latest fuel poverty statistics from the Scottish House Condition Survey and Scottish Government (2023) show that whilst overall fuel poverty in Scotland is 34%, up from 31% in 2022, we see that for social tenants it is 61%; for prepayment customers it is 57%; for electric heating it is 52%. The majority of our clients are in these categories. There are reasons why fuel poverty levels are particularly high in our area: it is a mostly remote rural area with dispersed population and poor infrastructure. The area is mostly off the gas grid, so people are forced to use more expensive heating options. Electric heating can be up to 4 times as expensive as gas heating. We also have elderly demographics, low income, poorly insulated housing, and bad weather. The rising cost of food and energy prices has been catastrophic, with many people now unable to afford to use their heating.

Problems are exacerbated by issues associated with slow smart meter rollout and around the forthcoming end of the radio teleswitch signal, which controls the functionality of electric storage heaters in many homes. If this signal ends before all homes have access to mitigating technology or alternative control system, it is likely to cause significant disruption to heating and may also have severe cost implications.

ALIenergy Affordable Warmth Service - Process



ALIenergy's Affordable Warmth Advice Service is supported by multiple funders. We have been expanding our long-established Argyll and Bute service into the Highland area over the past four years, first into Lochaber and then to all Highland Council tenants. We were delighted to be able to roll out the full service in 2024 to offer assistance to anyone of any tenure across the whole Highland area. Funders for our Affordable Warmth Service during the year 2024-25 have included Energy Redress Scheme, Argyll & Bute Council, Highland Council, Robertson Trust, Bank of Scotland, Big Energy Saving Network, SGN Safe and Warm Fund, Smart Energy GB, Scottish Government's Investing in Communities Fund, Drax Foundation, and SSE Renewables.



ALIenergy receiving £100,000 funding from Drax Foundation, June 2024.

Fuel Poverty in Europe

CEES (Community Energy for Energy Solidarity) Project

Funded by Horizon 2020, Jun21-Aug24

Working with 10 partners from Portugal, France, Belgium, Croatia and UK, this European project was completed in August 2024. It identified and analysed a range of successful community energy initiatives to tackle fuel poverty.

Work included creating an Energy Solidarity Toolkit, designed to assist the setup of new affordable warmth services across the UK and Europe. The project website contains a wealth of information, including the Energy Solidarity Toolkit: www.energysolidarity.eu/solidarity-toolkit/

There is also an evaluation report by University of Birmingham on ALIenergy's work with Highland Council Tenants and our associated strategy for expanding service to a new area: www.energysolidarity.eu/evaluation/

This project has also facilitated a valuable focus on funding diversification.



CEES partners visiting ALIenergy headquarters at Dunstaffnage, with the west coast of Scotland demonstrating one of its main drivers for fuel poverty: cold, wet, windy weather.

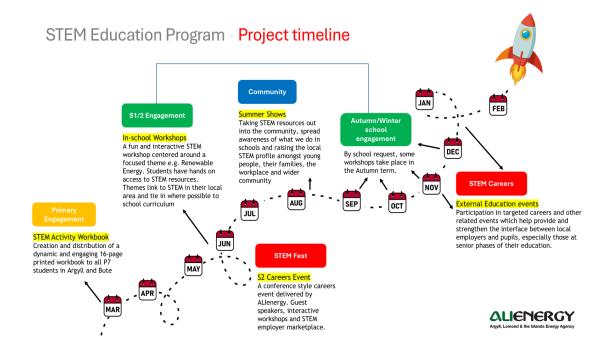
ALlenergy's Education Programme

ALIenergy's Education Programme is funded by ScottishPower Renewables Beinn an Tuirc 2 windfarm Community Benefit Fund 'Regional Tranche' in Mid Argyll and Kintyre, and Drax Foundation in the rest of Argyll and Bute from September 2024.

This project encourages and facilitates young people to seek careers in STEM subjects and the renewable energy sector, providing classroom workshops and careers events. Thanks to new funding from the Drax Foundation we have successfully rolled out the programme, which was previously running for many years but restricted to a limited area of Mid Argyll and Kintyre, to cover the whole of Argyll and Bute, enabling us to provide resources to all primary schools, and classroom workshops and careers events for all secondary schools – engaging with three year groups totalling around 2,500 pupils in the course of a year.

The programme focusses on ages P7-S2. This is the period leading up to subject choices when pupils choose STEM subjects at school - or drop them altogether. This is the window of opportunity to instil excitement and enthusiasm in STEM subjects, to nurture ambitions and raise awareness of multiple opportunities.

Each cohort of pupils is provided with a programme of STEM-related activities and events designed to follow through, from P7 primary school-leavers, through transition to secondary schools, through S1 and leading up to subject choices in S2. The programme covers STEM subjects generally alongside a focus on energy efficiency, renewable and sustainable energy, and climate change.



P7/Transition: Towards the end of P7, pupils are provided with a colourful and dynamic STEM workbook full of fun-packed activities and information. Then, ALIenergy education officers provide activity stands at transition events and summer community events, where young people can interact with our officers, try some fun hands-on STEM related activities, learn, and be inspired.

S1: ALlenergy education officers visit secondary schools to provide practical classroom workshops designed to widen perspectives around STEM subjects with a focus on energy efficiency, renewables and sustainable energy. This year we have upgraded our equipment to provide new hands-on renewable energy technology demonstration kits and have developed new teaching materials to highlight some of the challenges around the different methods of renewable energy generation.

S2: ALIenergy organises a major STEMFEST careers event specifically targeting S2s, designed to assist with subject choices and to inspire the next generation of STEM employees. Pupils meet with a wide variety of local companies whose operations need employees with STEM skills, qualifications and training. The day is designed around a mini-conference approach with workshops and marketplace - giving young delegates the chance to meet employers and find out first-hand about different learning and career paths that lead to green skills and jobs in the renewable sector. Through this type of engagement STEM related companies can reach out to young people, as part of the process of addressing future skills requirements in these important areas. In addition, ALIenergy attends and contributes to a variety of other careers events organised by schools and others.



Innovative Technologies and Grid Balancing

Background

Some years ago, ALIenergy, as a stakeholder in the community owned Garmony Hydro Scheme on Mull, attended an event about the ACCESS Project, which aimed to virtually link the output the community-owned hydro scheme, to local electrical heating demand in local homes and businesses.

ALIenergy saw the potential for using various kinds of transactive loads (processes which use electricity, but which are flexible about time of use) for grid balancing, thereby removing the grid constraints which were preventing many potential community energy generating projects from going ahead.

ALIenergy teamed up with V-Charge, a technical partner in ACCESS, and other partners to devise a series of multi-award winning collaborative projects where excess electricity from community generators could be diverted to a manufacturing process (growing algal products in photobioreactors using submerged LED lighting) to use up excess generated energy, balancing electrical supply and demand whilst also creating a valuable end product in the local circular economy.

The UK part of V-Charge later became Connected Response Ltd, now part of Warmworks – focussing on electric storage heaters as a grid balancing resource already installed in hundreds of thousands of homes. Connected Response's Heat Sage technology also allows householders to customise their heating, considering the temperature inside and outside, and using cheaper tariff periods throughout the day or night to charge the heating and hot water. This system helps people use and pay for only the energy they need – optimising energy use and typically resulting in a significant reduction in bills. ALlenergy is now working with Connected Response to install Heat Sage technology in homes with storage heaters in Oban.

Oban Consumer Comfort Choice - Funded by Scottish Government CARES, Centrica's Energy for Tomorrow Fund and Connected Response

Across much of rural Scotland, mains gas is unavailable, and many households use electric storage heaters, which can be difficult to control and very expensive to run – contributing to very high levels of fuel poverty.

This project focusses on affordable warmth, through installing Heat Sage smart controls into households with storage heaters - whilst also acknowledging that the resulting flexible load could potentially be aligned with local renewable generation, could reduce future grid constraints, and could become part of a future smart local energy system.

The Smart Load Control Switch, developed by Connected Response, offers householders flexibility to heat their home when they need warmth. The Smart Heating Controls allow the storage heaters to receive a charge at multiple times in a 24-hour period (not just at night) to ensure that heaters never run out of charge and no heat is wasted. The Smart Load Control Switch communicates with a Temperature Sensor and the Connected Response Data Centre to charge storage heaters exactly as required.

This model can be replicated across rural Scotland, improving the storage heater experience and energy costs for individual households, whilst also creating a flexible domestic heat load - and superseding the need for radio teleswitch controls.

SAMS PV – Funded by Scottish Government CARES – installing new locally owned renewable energy generation

SAMS PV is a partnership project between ALIenergy and our neighbours the Scottish Association for Marine Science (SAMS). The original plan for a large PV array on the main south facing SAMS roof was unfortunately ruled out due to grid constraints – a significant barrier to locally owned renewable energy developments in our area.

The project was amended to install a smaller array of 25kW on the roof of the Ocean Explorer Centre. This was installed in February 2025. A live display board inside the Centre will show energy generation and corresponding carbon savings.



Solar panels being installed on the roof of the Ocean Explorer Centre, February 2025

Shared Ownership of Commercial Renewable Energy Developments

The Scottish Government's Climate Change Plan suggests community involvement in generating electricity, whether fully community-owned projects or part community ownership of larger commercial projects, can help achieve our goals of decarbonising the power sector with 2GW of community and locally owned energy by 2030.

There are various potential wind farms currently in the early stages of seeking planning permission, around Oban and in other parts of Argyll & Bute and the Highlands. ALIenergy is ideally placed to explore and take forward shared ownership opportunities in collaboration with its local communities.

During 2024 we held a series of public meetings in Oban, co-hosted by ALIenergy and the Resource Collective, which returned unanimous support for the exploration of future opportunities regarding community shared ownership of renewables.

We are grateful to Local Energy Scotland for providing ongoing support and invaluable information on the topic of shared ownership as an emerging framework that offers communities the opportunity to become shareholders in renewable projects. Distinct from the better-known community benefit schemes which typically donate small grants to local community initiatives, shared ownership is a significant commercial undertaking - but with potential to reap significant rewards.

Argyll and Bute and Highland are both incredibly rich in natural renewable resources such as wind and water, and our local economies could benefit enormously from ownership of revenues arising from renewable energy generation from these resources.

It feels right that local communities and third sector organisations should have the opportunity to own and benefit as much as possible from the profits generated from our own natural resources, and that revenues generated from energy-related developments should help to alleviate local energy-related problems, such as fuel poverty. These developments offer the potential for significant long-term income streams.

Legal advice on Potential Shared Ownership Structures – funded by Scottish Government CARES

In February 2025 we took on a legal advisor, Gillian Harkness-McKinley from Anderson Strathearn, to provide an advice session and a report on potential legal structures.

Galileo's Corr Chnoc Wind Farm

Discussions are ongoing between ALIenergy and Galileo regarding shared ownership options for their proposed Corr Chnoc wind farm near Oban, consisting of 12 turbines (up to 84MW) alongside a 25MW battery energy storage system.

Galileo has signed a Memorandum of Understanding with ALIenergy.

ALIenergy is currently working towards the establishment of a community financial vehicle for shared ownership of Corr Chnoc and potentially also other local wind farms.

Stake in proposed Oban wind farm on offer

Renewable energy developer, Galileo, and Argyll, Lomond and the Islands Energy Agency (ALIenergy), are offering Oban and Lorn communities the opportunity to take a financial stake in Corr Chnoc Wind Farm, writes Owen Wild.

The proposed 12-turbine scheme is located on land at Dunach Estate.

Situated approximately 2km north-east of Kilmore and 5km east of the centre of Oban, Corr Chnoc Wind Farm will have a total generating capacity of up to 75 megawatts. It will be supported by a battery energy storage system, with a storage capacity of up to 30MW.

A Memorandum of Understanding (MoU) has now been signed between Galileo, and Oban-based charity ALIenergy, seeking to deliver a financial vehicle that will allow the community to gain shared ownership of the wind farm.

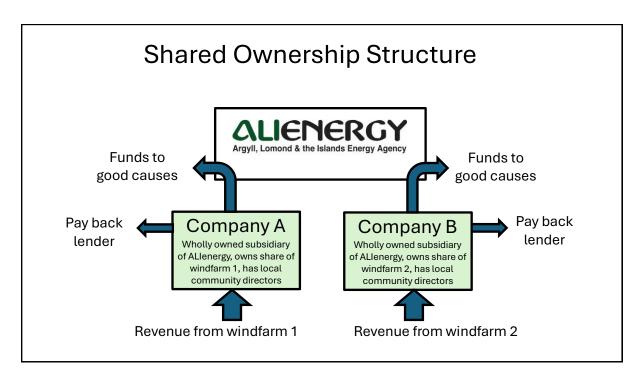
The MoU will see the charity spearhead the establishment of a community financial vehicle capable of investing in the wind farm and giving the community the opportunity to take up to a 10 per cent stake in it.

The signing came ahead of a meeting that was held on Monday September 16, at the Rockfield Centre in Oban, in which ALlenergy, The Resource Collective and Local Energy Scotland gave an update on local activities concerning community ownership of renewables and how Oban and Lorn could benefit.

Discussions have already been held with a number of community councils, including Kilmore and Kilbride and Taynuilt, which hosts the development, on the opportunities for shared ownership.

The opportunity for shared ownership is in addition to a community wealth fund, which will give the local communities up to £15 million over the lifetime of Corr Chnoc Wind Farm, including delivery of a Renewable Electricity Discount Scheme (REDS). This will see those in closest proximity to the wind farm receiving a discount on their electricity bills.

Article in Oban Times 19th September 2024



Potential legal structure for shared ownership of commercial development

Re_Store - New Venture with Local Charity Partners



A new charity shop (Re Store) in Oban is a partnership led by Hope Kitchen with ALIenergy, Oban Youth Café, Lorn & Oban Healthy Options and Atlantis Leisure, opened as a social enterprise to serve the community whilst also creating revenue.

The shop sells second hand and repurposed goods as well as redistributing surplus food. It also has a workshop space for a variety of classes and events including arts, crafts, sewing and mending, including making blankets and draught excluders to give out to those in need, and hosting drop-in advice sessions.

The shop opened in spring 2024, and after a first full year of trading the accounts are looking very positive. In November 2024, we were delighted that the venture won an Innovation Award at the ScottishPower Foundation Awards.



The Re_Store shop was recognised and visited by the First Minister John Swinney, MP Brendan O'Hara and Argyll and Bute Council Leader Jim Lynch in June 2024.