

Fund report

Unlock our Future Fund

Year 5, 1 October 2022 to 30 September 2023

VATTENFALL 



The Year at a Glance

- 67 grants (£656k) awarded since Fund launch
- 16 projects (£174k) supported in Year 5
- 95% of monies available for distribution awarded.
- Fund oversubscribed - 29 applications (£490k) received
- Major research works on battery storage & community resilience completed
- 5-year Fund evaluation commissioned

Highlights

Year 5 of the Unlock Our Future Fund has supported 16 diverse projects across Aberdeen City and Aberdeenshire with awards totalling £174,000 to deliver community led climate action.

Aberdeen Offshore Wind Farm Limited, a subsidiary of Vattenfall, contributes around £150,000 per year to the Unlock Our Future Fund. The money supports local projects throughout the northeast, with 10%

ringfenced for the community of Blackdog. The Fund is administered by independent grant-making charity, Foundation Scotland.

In the fifth year of grant-making, a diverse range of projects was funded, benefitting community groups in both urban and rural areas. Projects addressed several key climate themes – energy efficiency in community buildings, decarbonising transport and supporting local food growing and waste minimisation schemes.

The scale of project also varied considerably from a small grant to provide energy efficient seed propagators to much larger awards for major building upgrades involving insulation, glazing, solar panels, battery storage and renewable heating. Awards ranged from £1,567 to £30,000.

A summary of all awards and more detailed case studies can be found in this report.

Awards were made throughout the Fund area, though grantees are still underrepresented in northern Aberdeenshire where additional promotional and support activity could be targeted in the next round.

The Fund supports relevant research in the sector, working with University staff and students to address issues pertinent to the Fund (recently battery storage and community resilience – more details in the section below).

To mark the completion of the first five years of grant making, an external evaluation will be commissioned to review Fund impact to date and help direct Fund strategy going forward. This work will soon go out to tender and findings will be available in Spring 2024.

Making a Difference

The Unlock Our Future Fund continues to support projects with a strong climate focus and which also create a significant legacy of community benefit. A summary of year five awards is presented further on in the report.

The following two case studies provide information on previous awards which are now completed, to illustrate the impact of this

funding. The projects selected demonstrate the range of activity supported by the Fund, from innovative research to more conventional projects improving energy efficiency in community buildings.

Further Fund case studies are available on Foundation Scotland's [website](https://www.foundationscotland.org.uk).

Powering Research with the University of Aberdeen

Innovative microgeneration research to develop a vertical axis wind turbine

In 2021 the University of Aberdeen received a small grant of £1,872 from the Unlock Our Future Fund for a feasibility study to explore the potential of improving efficiency of micro power generation from Vertical Axis Wind

Turbines (VAWT). The project has a longer term aim of retrofitting the improved VAWTs into existing publicly owned sites and infrastructure, such as streetlights, to generate power locally.

The University of Aberdeen is one of the oldest universities in Scotland. It is ranked in the top 20 universities in the UK, with 75% of its research classified as 'world leading'. Teaching is organised across 12 schools encompassing a broad range of disciplines. Multidisciplinary research institutes and centres bring together experts in their fields to work with colleagues across the UK and beyond. This project was led by the Business Department and delivered in partnership with staff and students from the School of Engineering.

Small scale Vertical Axis Wind Turbines (VAWT) are available commercially from multiple suppliers at relatively low cost, depending on the specification. The feasibility study involved purchasing an existing VAWT and reverse engineering it to increase its generation capacity, improve its longevity and develop a prototype which could then be mass produced in Scotland. The project also funded a 3D printer which has been used to develop more effective turbine blades.

The design devised through the project research has created a dual turbine which has significantly improved the efficiency of generation and the capacity to withstand higher wind speeds, as well as the lifespan of the equipment.

With blades printed from recycled plastic, which can easily be replaced as required, the aim is to work with local companies in the northeast to transition to manufacture the new design and ultimately scale up to mass production.

Although costs increased and further funding had to be secured, the project was successful and there is now a working prototype and the machinery is available to continue the research.



Turbine prototype

The project has been shared with students at high schools, university and local businesses and a case study is being developed to increase knowledge transfer to local companies and students. Furthermore the prototype will aid in attracting the next round of funding which will be required to start manufacture of turbine.

University staff see great potential for this and are now looking for manufacturing partners in the northeast and in Scotland generally. VAWTs are easy to install and relatively cheap. The researchers estimate that every home in Scotland could be powered with less than 50% of streetlights and telegraph poles wired up to VAWTs.

Mr Adam Smith, Director of Resources and Senior Lecturer – Entrepreneurship said:

"Small grants such as these provide students and academics with the funding required to convert theory in practice and ideas in prototypes. Scotland's universities are the foundation of our countries entrepreneurial activity and grants accelerate innovation and drive our economic future prosperity."

Powering the Community at Aberchirder Village Hall

Generating and storing energy for new carbon saving heating system

Aberchirder Village Hall was awarded £15,000 in 2022 to part fund air source heat pumps, solar PV and battery storage to improve the energy efficiency of the village hall, as part of an overall renovation project aiming to reach net zero for the community building.

The Hall was built in 1898 and serves as a focal point for the local community of Aberchirder, near Huntly. The former Kirk Hall was purchased by the community from the Church of Scotland in 2020. The facility consists of the main hall, two smaller meeting rooms, and large basement room, along with kitchen and toilet facilities. The hall had been

well used by several local groups prior to the community takeover, but was in need of renovation, modernisation and particularly, energy efficiency improvements. The committee aimed to improve the facilities and attract new visitors and community groups to use the hall on a regular basis.

Some initial work was carried out to install insulation in the roof space within the main hall and the flat roof of the rear extension.



Claus Neilsen at Aberchirder Hall

Single glazed windows were replaced with modern efficient triple and double-glazed units. The kitchen area had the ceiling lowered by 500mm to allow for the installation of rock wool insulation. These improvements made the hall more comfortable but did not reduce heating bills. The infrared heating remained expensive and difficult to regulate the temperature to hall users' needs, so AVH wanted to investigate further potential improvements.

The committee arranged for an energy efficiency assessment to be carried out by Zero Waste Scotland in September 2021. This identified two main recommendations: the replacement of the current mix of infrared heat lamps, electric night storage and electric panel heaters with air source heat pumps, and the installation of a photovoltaic array linked to a battery system. The assessment report estimated that these two recommendations had the potential to save 10.7 tonnes of CO2 per year, with significant associated cost savings. Electricity costs, which are mainly for heating, reached a high of £900 for the month of March 2022 and electricity prices have continued to rise since then.

AVH sought advice and support from [CARES](#) and applied for funding through their [Let's Do Net Zero Community Buildings Fund](#). CARES is the Scottish Government's Community and Renewable Energy Scheme which supports communities with technical information and grants for renewable energy projects. With funding in place from CARES and Unlock Our Future, AVH were able to install their system of solar panels, battery storage and air source heat pumps in May 2023. They are already finding the new system to be more effective

as the warm air from the heat pumps heats the space quickly and efficiently. It is easy to control and they have made a point of explaining how it works to all regular hall user groups. They will have a clearer picture of cost saving after the winter months but expect to have made considerable savings in their energy bills.

As well as the high-tech aspect of the energy generation and storage, they recommend simple measures such as draft proofing for a quick and impactful improvement. They wanted to retain the original wooden door of the hall and have found that installing draft proofing strips and brushes have made it a much more effective barrier to heat loss.

Committee member, Claus Nielsen, said:

"The whole process has been very time consuming and at times stressful. It's not easy to make a 125-year-old building a "Net Zero-Energy (NZE) building" - meaning the total amount of energy used by the building on an annual basis is equal to the amount of renewable energy created on the site. But thanks to Vattenfall and CARES we managed to add insulation, double/triple glazed windows, draft proof doors, new heating system combined with solar panels and battery storage see our village hall well on the way to achieve this. On a normal day with a mix of clouds and sunshine our PV system manage to create more than 10kwh and only 131w was imported from the grid 😊"

Research Projects

Results have been published on the Fund webpage for two research projects initiated and supported by the Fund.

The first project provided a review of literature and relevant case studies to assess the role of batteries in the optimisation of energy systems in community buildings in Northeast Scotland. This research is intended to help future Fund applicants who are considering battery storage as part of their energy efficiency plans. The report was produced by students and staff at the University of Aberdeen.

The other project focussed on community resilience and was also delivered in partnership with the University of Aberdeen. Research on the topic of “Community Resilience in Rural Aberdeenshire in the Face of Severe Weather and Climate Change” was carried out by master’s student, Meredith DiIoia. The aim was to understand what the current and future of community resilience looks like in Aberdeenshire in relation to internal and external forces.

Reports available [Vattenfall Unlock Our Future Fund | Foundation Scotland](#)

Award Celebration Event

An award event was held on 28th September 2023 at the Garioch Heritage Centre, which generated further press coverage and publicity. This was attended by 35 representatives from projects supported by the Fund, as well as panel members and Vattenfall representatives. Organisations gave presentations about their projects and had a chance to network with fellow awardees.

There were also short presentations from support groups including NESCAN and Aberdeenshire Voluntary Action to promote their services. A pre-recorded presentation was also given on the community resilience study from MSc student Meredith Diloia who has since returned to the USA.



Unlock Our Future Award Event 2023

Fund Distribution

Year Five Award Summary

Applying Organisation	Project Summary	Award
Meldrum Amenities Improvement Group	To fund seed propagators to grow flowers for community displays.	£1,576.50
SEAchange- Slains Environmental Action for change SCIO	To install a water supply and create raised beds and an access gate for a community garden area.	£2,000.00
Beannachar Ltd (operates as Beannachar Camphill Community)	To fund repairs to greenhouse and polytunnel to increase food growing, and to purchase electric mower and cargo bike to reduce carbon and facilitate work experience for trainees.	£14,709.00
Grey Street Aberdeen Allotment Association	To fund a compost toilet, shed and solar panels with battery for the benefit of allotment users to improve facilities, save water and reduce need to travel.	£4,593.00
Aberdeen University Student's Association	To support sustainable food and active travel initiatives for three years for students and the wider community.	£13,000.00
Inverurie Environmental Improvement Group	To part fund an electric van to be used for local horticultural projects.	£15,000.00
Aberdeen Mosque and Islamic Centre SCIO	To fund two water fountains at Aberdeen Mosque	£1,700.00
The Boddam Hub	To insulate the Hub and install solar panels to improve comfort and energy efficiency of the community building.	£9,460.00
Granite City Taekwondo	To upgrade Tillydrone Community Centre with improvements to insulation, heating and lighting to reduce carbon, save money and create a better facility for users.	£15,000.00
Culter and District Men's Shed	To install solar panels and air source heating for the Men's Shed to reduce carbon and bills and make the group more sustainable.	£15,000.00
Glass Community Association	To install insulation, ventilation and contribute to cost of solar panels to reduce costs and improve comfort for users of the community hall.	£15,000.00
Crathes Public Hall Trust (SCIO)	To upgrade all single glazing in the community building as part of wider refurbishment works to improve energy efficiency.	£7,500.00

Fraserburgh Football Club	To contribute to costs of installing LED floodlights at the football stadium.	£10,000.00
King George V Memorial Hall	To contribute to costs of insulation and solar panels to save energy and fuel bills to make the facility more sustainable.	£12,200.00
Camphill Rudolf Steiner Schools Ltd (operating as Camphill School Aberdeen)	To contribute to costs of retrofitting a disused building into a zero waste shop, including costs of insulation, LED lighting, triple-glazed windows and air-source heat pump.	£6,926.00
Blackdog Residents Association	To construct a bridge to improve access to the beach from Blackdog village.	£30,000.00

Year Five Applications

Small grant applications (for £2,000 and under) were considered separately to large grant applications (over £2,000).

Three applications for small grants were received, for a total combined request of £5,532.34 (compared to four applications in the previous year).

Of the small grant applications in year five, two were funded, totalling £3,576.50, a conversion rate of 67% (by number of applications).

Large project applications were assessed using a two-stage process. Initially, applications were shortlisted based on the projects' likely contribution to the Fund priorities. At this stage, 10 applications were rejected. The remaining 15 projects underwent a detailed assessment.

25 applications for large grants were received for a total combined request of £458,426.02. Of these, 13 were funded, totalling £140,088.00, a conversion rate of 52% (by number of applications).

There was one application to the Blackdog subfund with one award made of £30,000 to the Blackdog Residents Association.

Fund Year	No. applications	Applications £
Year 5	29	£490k
Year 4	27	£406k
Year 3	42	£555k
Year 2	24	£314k
Year 1	33	£415k

The locations of successful applicant organisations in years one to five, based on the post code of the main contact, are shown in figure 1.

Northern Aberdeenshire remains relatively underrepresented in successful applications and this could be addressed with some targeted promotion and support work in the coming year.

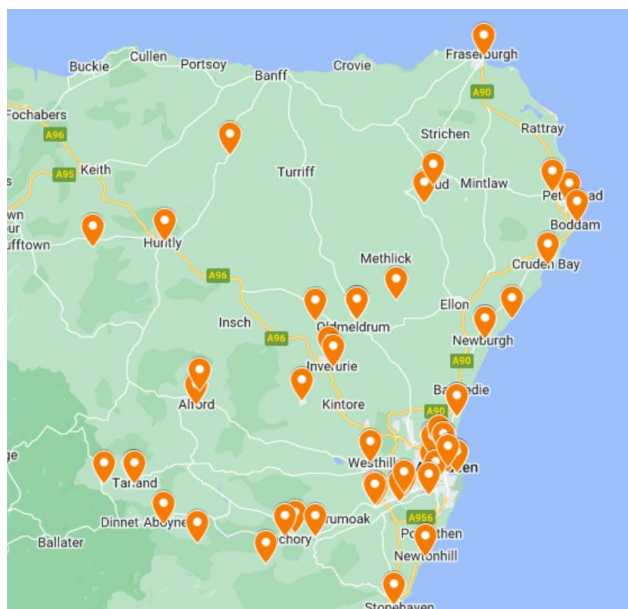


Figure 1 Location of awards (years 1 - 5)

Unlock our Future Community Champions Panel

The Unlock our Future Community Champions Panel is recruited locally to make decisions on how the Fund is spent, reviewing the Fund strategy on an annual basis and recommending grant awards, as well as helping to promote the Fund to local groups.

Panel members are expected to serve up to four years. There were no new members in year five, with Morag McCorkindale taking on the role of chair. The panel met four times during the year, with one round of award making.

Members for the year:

Morag McCorkindale (Chair)
Jean Morrison (Aberdeen Renewable Energy Group representative)
Rob Clunas
Amy Gray
Lyndsey Leiper
Roederer Rose Lyne
David Nicolson
Guy Haslam

Fund Promotion and Support to Applicants

The bulk of Fund promotion work is carried out when the Fund opens to applicants which this year was 15th February.

A wide range of publicity channels are used to maximise awareness of the Fund and potential uptake, including:

- Press releases
- Social media
- Bulletins and websites of third sector support organisations
- Foundation Scotland's website
- Presentations at events.

Along with the Fund opening, support sessions for applicants were promoted which were a mixture of online and face to face, with

an online seminar delivered on 2nd March and one to one, bookable information sessions available on 15th and 16th March in Banchory, Aberdeen and Huntly as well as online throughout that month.

The Fund adviser encourages applicants to get in touch and discuss project plans before applying which hopefully improves application quality and helps to manage applicant expectations.

Financial Statements

1 October 2021 to 30 September 2023

Opening Balance	£229,157.51
Income	
Year 5 Vattenfall	£191,024.73
Vattenfall Event Costs	£436.50
Interest	£902.43
Total income	£192,363.66
Expenditure	
Grants paid	£127,375.68
Grants to be released	£160,842.82
Fund expenses	£450.80
Transfer to Blackdog subfund	£75,468.41*
Contribution to Foundation Scotland	£22,922.97
Total Expenditure	£387,060.68
Total funds available at 30 September 2023	£34,460.49

*During 2023, a separate sub fund was set up for Blackdog to enhance financial reporting and distinguish funds set aside for that area. Blackdog Fund will now be reported on separately as below:

1 October 2022 to 30 September 2023

Opening Balance	£0.00
Income	
Funds transferred from main Fund (years 1 to 4)	£58,568
Vattenfall Year 5	£16,810.17
Interest	£90.24
Total income	£75,468.41
Expenditure	
Grants to be released	£30,000
Total Expenditure	£30,000
Total funds available at 30 September 2023	£45,468.41

96% of funds available for the area outwith Blackdog have been awarded in the first three years of the Fund's operation.

Contact

For further information about the Unlock our Future Fund go to

<https://www.foundationscotland.org.uk/apply-for-funding/funding-available/unlock-our-future>

Or contact:

Marion McDonald

Community Fund Adviser

Foundation Scotland

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Appendix One

Background to the Fund

The Unlock our Future Fund is a community benefit Fund provided by the European Offshore Wind Deployment Centre, which is owned and operated by Aberdeen Offshore Wind Farm Limited, a subsidiary of Vattenfall.

The Fund benefits projects focused on environmental sustainability and taking place within the local authority areas of Aberdeenshire and /or the City of Aberdeen.

Decisions on grant award and overall Fund strategy are made by a panel of local representatives. The Fund is administered by independent grant-making charity, Foundation Scotland.

Vattenfall contributes £150,000 per year to the Fund (as at 2019), tracking the Retail Price Index, for the life of the wind farm, which is expected to be at least 20 years. This sum is inclusive of contributions to the Fund administrator's costs.

The Fund makes grants of up to £15,000 for activity in any one year, with the added possibility of grants up to £30,000 for projects taking place over three years.

The overall purpose of the Fund is to support charitable activity that addresses the following priorities:

- contribute to a **climate smarter world** with sustainability at its core
- invest in **community facilities and activities** that are fit for the future and are environmentally sustainable, especially community spaces and transport
- support **creative solutions**
- ensure a **legacy** (lasting impact) which brings clear benefit to the local community

Grant applications must meet at least three of these priorities.

The priorities were informed by an independent consultation which took place in 2017. In addition, several other criteria are taken into account by the panel when deciding which applications to support.

These are:

- **Energy hierarchy**
- **Making best use of other funding sources**
- **Sharing knowledge and experience**
- **Community impacts**
- **Organisational impacts**

The Fund strategy (available from the Foundation Scotland [website](#)) provides a fuller description of the Fund priorities and additional criteria and is reviewed on an annual basis.

10% of the annual donation from Vattenfall to the Fund (starting at £15,000 in year one) is set aside for project activity in Blackdog, the community hosting the substation for the wind farm.