

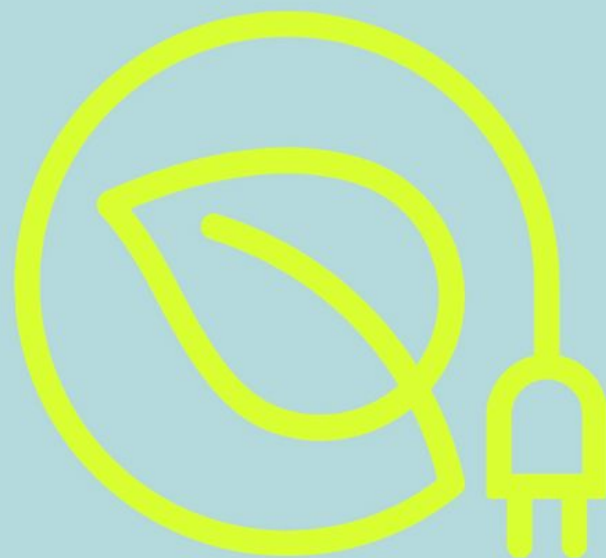


# Arran Community **RENEWABLES**

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PROPOSAL FOR  
SOLAR PV ARRAY  
ON A LOCAL  
ARRAN BUSINESS

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Founded in 2020 to enable the Arran community to own renewable energy, [Arran Community Renewables](#) is a not-for-profit Community Benefit Society. Starting as a steering group working together as volunteers with the registered charity [Arran Eco Savvy](#).

## The Team

The five founding Directors who form the steering group have over 50 years of combined experience delivering renewable energy projects. Covering a breadth of projects in renewable technologies from an engineering background and managing community projects that have received consecutive years of successful funding from the Scottish Government focusing on carbon reduction. Supported by the trustee board of Arran Eco Savvy, two of the directors are also trustees of the registered charity.



### The aim -

- To reduce Arran's carbon emissions by increasing the renewable energy generated on the island.
- To create a green community fund that will enable more environmental projects that benefit Arran.

### The purpose of installing solar panels on local buildings is to:

- showcase low carbon technologies within the community
- provide an opportunity for local residents to own a stake in the provision of renewable energy
- provide discounted renewable electricity to the owners of the buildings.

You can find our society rules at  
<https://www.arranrenewables.com/rules>





## Our Directors



**Donald McNicol**

Donald has over 25 years' experience in conventional and renewable generation in the feasibility, design and technical due diligence of power plants in the UK, US, Hong Kong, Mozambique, Italy, Ireland and the UK. He was the head of the engineering consultancy group for ScottishPower Technology and subsequently worked for Atkins plc for 10 years setting up their generation group in Glasgow and latterly became the Director of Due Diligence for SgurrEnergy which was founded in 2002 and became the largest wind energy consultancy in the UK and the second largest solar consultancy and had offices in 12 countries. Donald is a mechanical engineer and is a Fellow of the Institution of Mechanical Engineers. A long, long time ago he attended Kilmory Primary School.



**Esther Brown**

Esther is an Arran Eco Savvy founder Trustee since 2013. One of the original group who felt Arran needed a green voice. Esther has been involved with many community groups, in all office bearing roles. A part of the team who opened the shop in 2014, helping to secure charitable status in 2015, she has been behind 4 yrs of successful Scottish Government funded 'Climate Challenge Fund' projects. Esther continues to work closely on Eco's developments. After a career in the media industry, living in her home town of Glasgow & travelling extensively, she moved to Arran in 2005 with her young family. Esther has worked for the local Arran Art Gallery since 2006 & is also involved in the vibrant community of arts on Arran.



**Chris Grainger**

Chris is a Chartered Engineer with 10 years experience developing low carbon energy projects. Having initially developed a number of wind farm projects across the UK, Chris joined engineering consultants Buro Happold to lead their district heating and energy strategy work. He has developed Climate Actions Plans for cities including London and New York as well as leading the decentralised energy modelling for National Grid's Future Energy Scenarios. Chris now works for the UK Government's Energy Hub initiative, supporting public and third sector investment in local energy projects.



**Gavin Steven**

Gavin retired in 2014 after working for BT for 41 years. He was educated in Rutherglen and has a degree in Electrical and Electronic Engineering. Working in BT, he gained experience in Field Work, Sales / Technical Support, Corporate Governance and ending up in a senior role in IT Project Management in charge of global billing projects. He has always taken a keen interest in participation in sports and while living in US, gained a Black Belt in Tae Kwon Do. Interested in dinghy sailing and hillwalking from the age of 15, he stills finds time to take a wander in the Scottish hills along with a group of his friends from his long past school days. Gavin also volunteers at C.O.A.S.T. on Arran.



**Jude King**

Jude is the Arran Eco Savvy project manager, from 2017 leading projects in waste, energy efficiency, water efficiency, food, travel and climate literacy. Meeting ambitious carbon reduction targets & bringing wider benefits through initiatives such as Food Share, home renewables and eBike schemes. Jude studied in Edinburgh and worked in the renewables sphere in a graduate position. Having previously lived in (and loved) Hong Kong, Canada and the US, transitioning from city life to island life was an interesting journey for Jude but a great and fulfilling one! Additionally Jude is on the board of VisitArran and feels strongly about the opportunity Arran has to build on existing environmental initiatives and community will-exciting times lie ahead!



## The Project

The first project will be a solar photovoltaic (PV) array that could be ground mounted or on the roof of a local business. The Society proposes to build and run the scheme with a generating capacity to be determined, but exceeding a minimum of 125 kWp. The optimum size will be determined during the technical assessment. The majority or entirety of renewable electricity is expected to be used within the site complex.

The Society will, by the date of delivery obtain all the relevant permissions to build and operate the scheme. The technical group would engage personnel to pursue both outline and detailed design, financial and commercial assessments and a legal review. Planning Permission and a Building Warrant from North Ayrshire Council (NAC) are expected to take 8-12 weeks from application. The technical group will also manage the G99 application to SSE Networks for the grid connection.

Depending on panel output and site consumption an export connection may be necessary and a Smart Export Guarantee (SEG) will be agreed and the necessary metering installed. The team will liaise with the Fire and Rescue Service and ensure that any issues surrounding installation will be addressed and communicated.

Our target is to have the installation working by summer 2021.

In 2018 we started our search for the best project to kickstart Arran Community Renewables. We considered a host of sites and technologies, speaking to the community, landowners and the local electricity operator alike. We learnt two main things:

**Keep it simple.** Great things come from humble beginnings. Keeping the first project technically simple to focus our efforts on eliminating risk and building confidence in the project partners and community share offer concept. Solar PV systems are well proven, have a developed supply chain, good product warranties and carry minimal planning risk compared to other options. The future may bring larger, more complex projects, but for now we know exactly what we're getting and can take these learnings forward.

**Keep as much power as possible on site.** This is crucial. Since the removal of Government incentives for renewable generation we are exposed to unsubsidised market prices and risk. Although a remote site can be a good use of land, revenues from selling electricity to the local grid can be less than half that of selling to a local energy user directly. Directly selling power also avoids expensive grid reinforcement costs and reduces the cost of energy for the offtaker.





## Community Benefit Fund

The fund will be green and support the continuation and progression of the environmental work on Arran.

One of the primary objectives of this scheme is to create a community benefit fund (CBF) to support Arran's environmental ambitions. The transition to net zero is urgent and will require many different actions. This model of project can help Arran progress its environmental aims and fund future projects. The aim is to stop Climate Change by enabling investment in renewable energy. We can't all have solar panels on our roofs, but supporting community projects will continue further work towards stopping climate change. By setting up a Community Benefit Society we will keep all investment in the local community, allowing the benefits to flow back to a CBF green fund for important environmental island projects.

CBF will be available annually to support both Arran Eco Savvy and other local community projects that meet with the society's objectives. Arran Eco Savvy (AES) is a long established environmental charity based on the island and the aim of Arran Community Renewables (ACR), is to support the continuation of this charitable work. The intention is to use these funds to support AES and other local groups in line with ACR's 'Objectives' and AES's charitable "Purposes". Both of which are the accomplishment of environmental projects that reduce carbon and benefit the community of Arran.

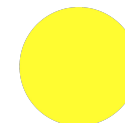
Continuation of these projects will be directly reducing Arran's carbon and giving practical support to the residents to engage in successful environmentally sustainable lifestyles.

Applications will be assessed by ACR in line with its Rules of governance, the objectives supporting low carbon and environmentally focused projects. Prior to each AGM the Directors will determine the funds available for the CBF.

Most recent projects undertaken by AES have been:

- ★ Food Share, saving over £135,000 worth of food from landfill.
- ★ Enabling around 25% of Arran homes to receive Energy Efficiency Audits supporting over 50 installs of renewable energy systems.
- ★ Eco Savvy's volunteer run shop that saw 1.1 tons saved from landfill in Jan/Feb 2019 alone.
- ★ Ebike loans have replaced more than 13179 miles of car travel with ebike miles.

Supporting staff and over 100 volunteers to deliver these projects has reduced Arran's carbon footprint by over 555t CO<sub>2</sub>e, a lifetime saving of over 2,277t CO<sub>2</sub>e.







## Funding

The project would be financed by a combination of The Scottish Government [Community and Renewable Energy Scheme \(CARES\)](#) which is administered by Local Energy Scotland and by the community through a Share Offer.

An offer of a capital grant of up to £71,185 has been received for our first project from The Scottish Government through CARES. This funding award is dependent on the successful completion of the Enablement grant and all breakpoints being met.

ACR has been awarded an Enablement grant of £24k from CARES to complete the necessary technical, financial, legal and feasibility work.

The owners of the chosen site will not be required to invest as this scheme will be fully funded, but they may choose to purchase shares when the Share Offer is launched.

## Share Offer

Working with [Community Shares Scotland](#), we have developed a Share Offer which will be launched with the aim of raising sufficient funds to build the scheme. This will also provide cash flow to the Society for its first year of operation. After that, the scheme will be self-financing and will produce, after payment of share interest and running costs, a small surplus which will be used to provide income to a Community Benefit Fund (CBF).

- The interest payable on shares is proposed to be around 3-4% per annum after the second year of operation but this will be dependent on the performance of the scheme.
- Arran Community Renewables Ltd will have the legal ownership of the solar project assets.
- The income from selling electricity to the site will then be used to pay the interest to the members, to provide community benefit and give sufficient working capital.
- The Share Offer is proposed to have a limit of £50 minimum and £5,000 maximum investment.

The intention is to enable and encourage the local community on Arran to invest but the offer will not be restricted to island residents, any supporters aged 16 or over, or businesses can hold shares. The society directors will have discretion of acceptance of share offers and do intend to ensure all local applications have priority.



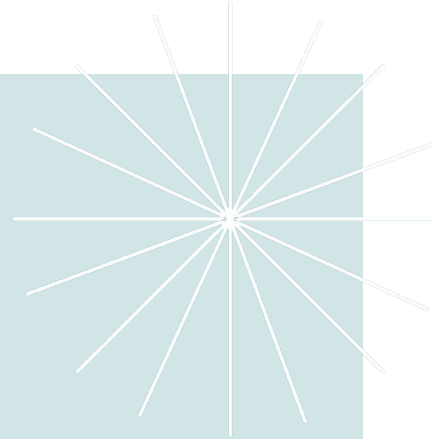
## Benefit to the organisation

In addition to carbon saving and community outreach benefits we would look to offer a discount of between 10 and 20% for every unit of solar electricity used by the organisation, for at least 20 years. This amount would be confirmed following an assessment of the site and the details of your existing energy contract.

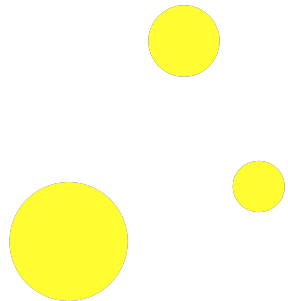
A power purchase agreement (PPA) between parties would set out and secure mutual agreements on aspects such as future pricing and our responsibilities and liabilities throughout this term.

We have legal heads of terms and a draft share offer developed for a project of this nature on the island and so are also able to move quickly where needed to ensure that a project could be delivered this side of the main 2021 solar generation season. This also allows us to target construction ahead of a post covid return to normal, minimising any disruption.

In the absence of the Government's Feed-In-Tariff, we are still able to offer a unit price saving of between 10 and 20% as a result of the CARES grant funding we have been awarded - this is limited to the first project we take forward on the island.



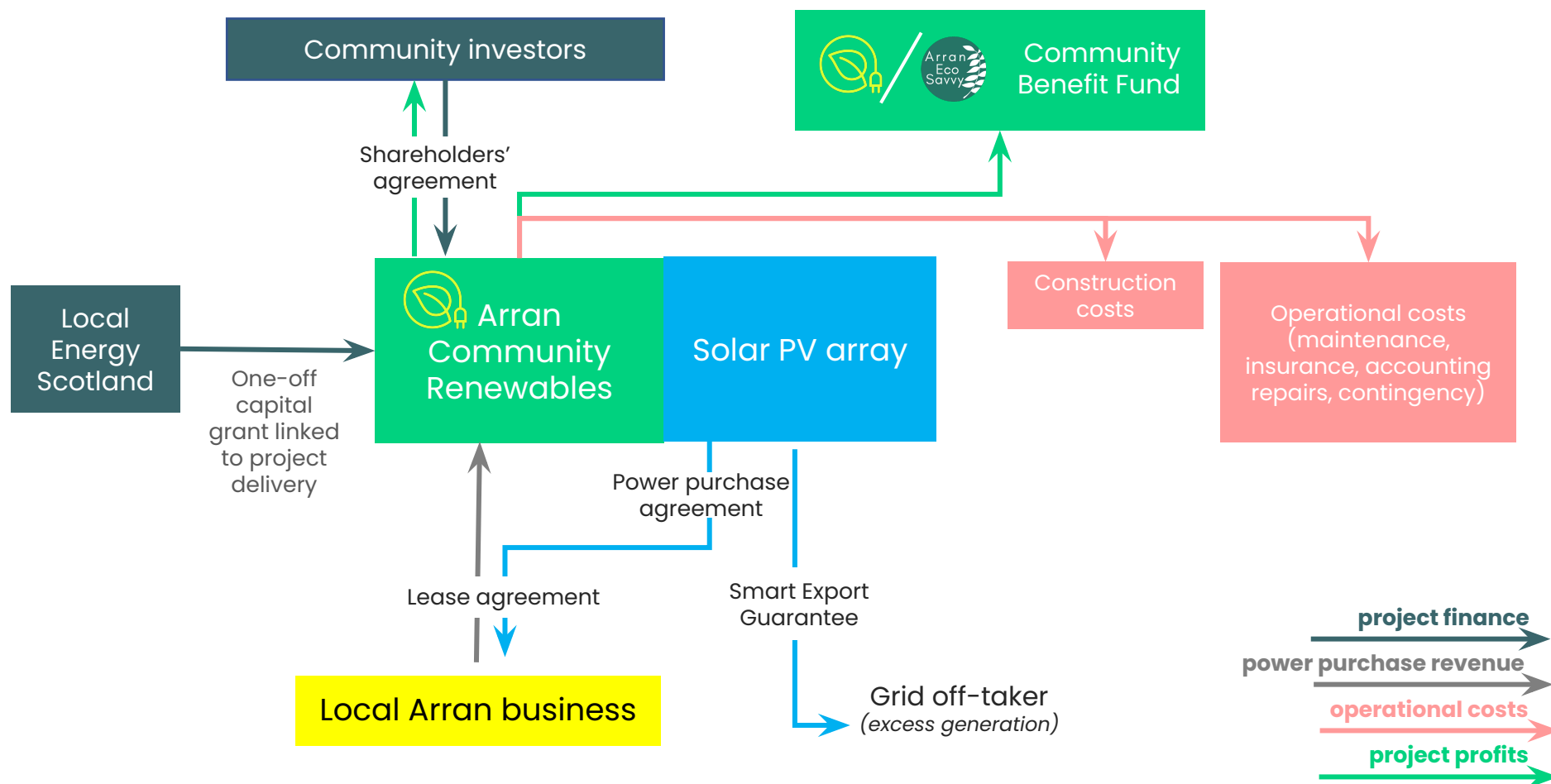
We are offering to design, obtain all consents for, procure and install a solar PV panel system at no cost to the owners of the building or site. It is important that we work with an organisation that is serious about carbon reduction and furthering benefits to the local community. We are in a unique position to offer this proposal which will give the first project we take on the benefit of this capital grant and time is of the essence.





## How the scheme will work

The delivery model would be structured as per the below diagram, with ACR owning, operating and taking full liability and performance risk for the scheme.







## Community Engagement

An engagement process has been undertaken to establish the support within the community.

Currently ACR has over 220 subscribers and followers and has held three community meetings and multiple surveys to guide decisions, answer questions and gain support.

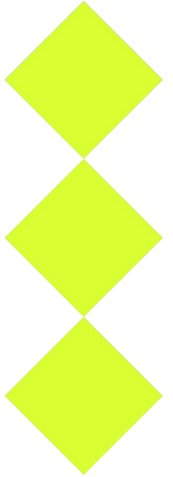
There has been increasing interest following the funding announcements and front page local media coverage with the Arran Banner.

The new website can be viewed here [arranrenewables.com](http://arranrenewables.com),

Our social media following is growing [facebook.com/arranrenewables](https://facebook.com/arranrenewables)

We have also commissioned a short film by [Positive Pictures](#) which is underway.

One of our presentations can be viewed here <https://www.canva.com/Arranrenewables>





## Next Steps

The original deadlines have moved due to the current lock down, however the grant offer is for this financial year. We intend to identify a suitable site that we can progress immediately to avoid the loss of this funding.

### **To progress potential sites the steering group will require:**

- The owners to share electricity bills for the buildings, this should be with half hourly data if possible.
- Any available technical drawings of the buildings and site.
- A meeting with the board of the proposed company to address and identify concerns and answer questions for both parties.

### **Following this, a review and confirmation that the proposal could be viable and should be pursued:**

- A draft contract will be shared with the owners which, if agreed in principle, will lead to negotiation of a Power Price Agreement (PPA) detailing the cost of the electricity.
- Insurance quotes will be obtained to ensure there are no barriers.
- A site visit by the potential installer to conduct a technical survey.
- Planning permission and Building Warrants would be applied for.
- The G99 application to SSE Networks for the grid connection would be submitted.



## Our Story

*“ Arran is a vibrant, forward-thinking community that’s working hard to fight climate change. ”*

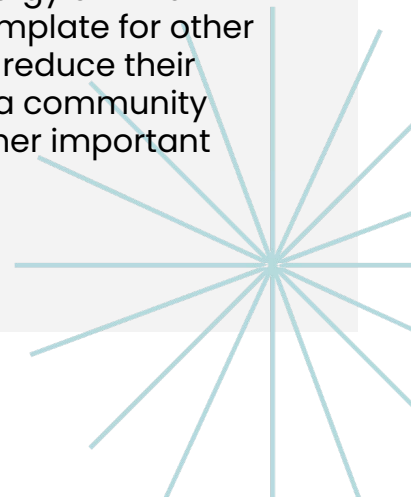
Arran Eco Savvy has been talking about and working towards a renewable energy project since its formation in 2013.

The steering group for Arran Community Renewables has been active since early 2018 and in February 2020 we began to work on this proposal for funding.

The steering group wrote a proposal to conduct an island wide assessment of what is possible across all technologies. We were not successful in finding funding for this due to the scope being so wide, but we have spent a considerable amount of volunteer time working through different options ourselves.

Following consultations in 2019 and further workshops in early 2020 we were pleased to see community owned renewable energy was the top of preferred future projects. We did intend to hold further workshop style events to progress the options that are viable but in spring 2020 that was clearly not possible due to Covid-19. Work did continue through lockdown to identify projects and a wide range of different schemes has been considered.

By working with our local partners and CARES we can finally progress what we would like to be the first of many projects. This will be the first community owned renewable energy on Arran and it has the potential to be a template for other high energy buildings on Arran to reduce their carbon emissions and help build a community benefit fund that can progress other important environmental work.





## Partners

This project would not be possible without the support of the following partner organisations. Special thanks go to the trustees of Arran Eco Savvy, Gemma Murray, Ruth Evans, Toby Sandison, Dave Hollings.



### Community Shares Scotland

Community Shares Scotland have supported us in setting up Arran Community Renewables. They have helped us turn our vision into a legally robust project through registration with the Financial Conduct Authority and the Community Shares Standard. This ensures we meet national standards of good practice. You can read more about the Community Shares Standard [here](#).



### Local Energy Scotland

Local Energy Scotland support has been through their Community and Renewable Energy Scheme (CARES). The Scottish Government has funded the enablement work needed to get us to where we are now, providing professional services support to match our dedicated team of volunteers. Topping that, they have provided a capital grant of over £70,000 to the project. Without this grant, this project would likely be a one off; with it, the Community Benefit Fund becomes possible and along with it a pipeline of future projects. This grant also de-risks the project substantially, providing cash flow for us to weather any storm.



### Arran Accountants

Arran Accountants are supporting our project with both Accounting and Financial assistance. Lorna is a qualified Chartered Accountant, living on the island, with over 20 years of experience in advising owner managed businesses of various sizes, across numerous sectors. Olivia joined Arran Accountants in February 2020, after attaining a first-class honours degree in Accountancy and Finance. Together, they aspire to support the local community with their extensive financial knowledge and expertise.

### Arran Eco Savvy

Arran Eco Savvy is where it all began! This project and those that follow all stem from years of hard work from Beverley, Sue, Barbara, Andrew and Esther towards an energy project for Eco Savvy and the community of Arran. We look forward to maintaining strong links with Eco Savvy as we develop our community benefit fund and associated activities.



## Project Support

Throughout the project development we have engaged with industry specialists to assess, guide and review the project.



**Technical review** to ensure the best possible scheme including grid connection arrangements, panel layouts, access and metering.



**Legal review** of ACR, the share offer and our power purchase and lease agreements



**Installation, operation and maintenance** of the scheme, following a competitive tender of reputable contractors.



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[arranrenewables@gmail.com](mailto:arranrenewables@gmail.com)



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