

BIG SOLAR CO-OP

Year 2 Annual Report
July 2021



Summary

The Big Solar Co-op is a new approach to community solar.

We're working across the UK to:

- Make solar viable on a huge range of sites – without subsidy
- Empower and support volunteers to work together to get it built
- Fight the climate crisis through large-scale, grassroots community action

The Big Solar Co-op project is delivered by Sharenergy and underpinned by our extensive experience and track record of helping to secure over £25 million in community finance for community energy projects.

Year 2 of the project has seen steady growth in all the key activities of the project, as detailed in this report. Despite the challenging times we have succeeded in building a UK-

wide network of volunteers and in bringing forward some of the solar sites that they have found and developed.

The project is supported by Joseph Rowntree Charitable Trust, Esmée Fairbairn Foundation and MCS Charitable Foundation. Additional resource is provided by Sharenergy. As the project continues, an ever-greater proportion of its work is carried out by volunteers.

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Volunteers

Volunteers are absolutely key to the Big Solar Co-op vision. Our underlying idea is that with training and support, volunteers can work to get new solar built almost anywhere. There has been a fantastic response to our project to date:

- 42 volunteers were onboarded to our systems
- 196 people attended a training webinar
- 128 views of our recorded webinars

Many of these volunteer activists are focused on their locality, but we also have a number of volunteers who work across the whole UK.

Nodes

During the last year we have developed the concept of Big Solar Co-op nodes. The idea is to create clusters of solar activists in one region who continue to work as part of the Big Solar Co-op as a whole but focus on local delivery of new

solar. A Big Solar Co-op node is hosted by a local organization. For example, an existing community energy group can host a node of the Big Solar Co-op, giving them a ready-made way to deliver solar locally to sit alongside their other local activities.

The node concept is designed to

- Revitalise community energy groups by giving them a new reason to recruit new members and approach local sites
- Provide the tools, training and business model to get solar built quickly
- Create paid local roles which can match or catalyse other work

We are continuing to develop the node concept, especially in our work with Community Energy Birmingham, who are the first group to formally host a Big Solar Co-op node.

Tools and training

Volunteers work primarily through our Slack workspace. Slack is a hybrid chat and forum system used widely in the tech industry. It allows us to easily set up a place to discuss specific solar sites or other issues, to share links and files, and to co-ordinate fluid teams.

We make daily use of Google Sheets shared spreadsheets and ClickUp task management software to collaborate on project development.

Development work continues on a more bespoke web-based CRM and project management tool. This will allow both our paid staff and our wider team to report new sites, work on site development, and keep track of the projects they are involved in. This system is based on open-source frameworks Drupal and CiviCRM and is being developed with input from Northbridge Digital, Agile Coop and Webarchitects Coop.

For initial solar design we use OpenSolar - a free but

sophisticated solar design tool. To date we have trained 42 people in the use of the tool and they have created over 250 initial solar designs. To our knowledge this is the first time community solar activists have had access to software and training of this sort.

Over the year, the Big Solar Co-op team has worked on a variety of other tools and approaches. One promising avenue is the use of open-source GIS tools to help to find and assess solar sites. This is an area where we are actively seeking funding and collaboration to make new tools available.

Our training program takes place primarily through webinars addressing key skills for community solar volunteers. To date we have run webinars on:

- Finding solar sites
- Solar design (using OpenSolar to create initial solar designs)

- Approaching potential host sites
- Lightweight legal agreements

These webinars are delivered by members of the staff team or external experts. They are recorded and publicly available on Sharenergy's [Vimeo channel](#).

Pioneer Programme

During the first year of the project we quickly realized that we were not going to be able to build all the systems needed by the project before getting stuck in to actual project development. We needed to work on real projects, both in order to hone our approach and to motivate volunteers. Our experience is that as soon as people understand the Big Solar Co-op model they want to get started straight away!

The practical outcome was our Pioneer Programme. The stated goal was to engage with 5 local community groups in 5

locations and work to develop 5 new solar installations in each of those locations. This development will be done under the Big Solar Co-op banner and as far as possible using the new methodologies we are developing. This approach is challenging because we are making the tools as we go along, but it means that we are working with real potential solar sites every day.

As it has turned out, the pioneer project has been a bit more complex than that. Many of our most promising leads have come from volunteers working outside a local group, or through direct approaches to the Big Solar Co-op. Nevertheless, we have continued with the underlying logic of the Pioneer Programme which is to develop real sites as we go.

Host sites

We refer to sites which may be suitable for our solar arrays

as 'host sites'. To date over 300 sites have been assessed. 279 initial solar designs have been created, representing nearly 100 MW of potential solar installations.



The map of sites illustrates our focus on making community solar work outside the southern part of England although we are also working on sites on the south coast and in Wales. There is a very wide range in the type of sites assessed, from small community centres and schools to large manufacturing facilities, by way of care homes, data centres and utility sites.

Big Solar Co-op is the only community energy group which is signed up to the Church of England's solar procurement system and we are seeing a steady stream of church-owned potential sites coming through.

Viability

Big Solar Co-op has developed an in-house viability tool which enables us to quickly check if a site is financially viable. Our approach is to model risks as part of the financial model – so that we put a cost on the likelihood of a building owner needing to repair their roof, reducing their energy use or

even going out of business. At the same time, our low-cost site development approach and long-term perspective mean that we are able to make attractive offers to many of the sites we assessed.

Nearly everybody we speak to wants to decarbonize and understands this can also save them money in the long term. Very few have the capital or time to spare to invest in their own panels. This gives us confidence that the Big Solar Co-op is filling the niche we identified and will result in new solar that would not otherwise be built.

Legals

During the year Big Solar Co-op developed its own solar lease document with support from Sonya Bedford of Stephens Scown, a well-known expert in the community energy sector. This document is based on existing tried and tested solar leases but is significantly more lightweight in terms of restrictions on host sites. We have also developed

materials that explain the lease in simple terms, and an exclusivity agreement that we sign with host sites while we complete detailed designs and liaise with the grid operators.

To date three exclusivity agreements have been signed and work is ongoing to secure leases on those sites.

We have also been working with Co-operatives UK and Mark Simmonds at Co-op Culture on the registration of Big Solar Co-op as an independent entity. This has taken longer than expected but we need a somewhat novel structure to match our new model and it is important we get this right. In the interim all agreements are signed with Sharenergy as the holder and incubator of the Big Solar Co-op project.

Outreach

Our project website at www.bigsolar.coop has been live since August 2019. It has had several rewrites since then and

this is an ongoing process as we improve our model and communications.

We have a mailing list which has over 300 subscribers. We also maintain a growing presence on social media (Twitter, Facebook and LinkedIn).



In-person events have been very restricted due to Covid. We have been able to carry out site visits and a relatively small

number of strategic meetings face to face but everything else has happened online over telephone or Zoom calls.

Planning is now underway for our first large event, the Big Solar Gathering, to be held in Birmingham on 18 October 2021. This will bring together 100 community solar enthusiasts from across the UK for inspiration, practical learning, and to get to know each other better.

Challenges

Covid-19 has been the most obvious challenge during the year - not being able to easily travel to meet local groups or see sites has held us back along with childcare issues for staff and wider team members and the direct impact of illness in some cases.

An important theme in the wider solar industry has been sourcing solar panels which are made using sustainable

energy and which are free from the use of forced labour at any stage in the process. We have been following this issue very closely and in particular the work from [Sheffield Hallam University](#) which suggests that the links to forced labour are much more widely spread than we and others realized. This is a significant challenge to our project and one which we take very seriously. At present we are still in the process of determining how we can source ethical solar panels and how best to contribute to the movement to make sure this practice is completely eradicated from the industry.

The lack of joined-up thinking on carbon and energy at Government policy level continues to be a significant challenge for the project. Big Solar Co-op is designed to make progress even during this period of no support for onshore renewables, but we would be able to achieve far more within a coherent long-term UK decarbonisation policy.

Next steps

As the Big Solar Co-op project moves into its third year we are working on several fronts at once.

Delivering our pioneer projects. Our first solar projects are gearing up to be built over the next year. Despite Shareenergy's experience with community energy we learn so much by doing. At the same time building our first projects will bring us our first trading income and begin the process of moving away from grant dependency – although we still anticipate that we will be seeking grant funding wherever required to build our model.

Building our core systems. There is a lot more work to do to make sure we have robust systems which scale. This applies to everything from our task management software to our financial models, governance systems and fundraising methodology.

Cementing the movement. Our most important daily task is to support our volunteers. This cannot all be done by the current core team, so we are training volunteers to support each other, and creating new part-time paid roles within our nodes to recruit and support local activists.

Our core team

Noël Lambert - National Coordinator



Noël is the main point of contact for the Big Solar Co-op network across the UK. She has a background in community building, online systems configuration, digital strategy and technical communication.

Chris Rigby - Solar Projects Lead



Chris holds a degree in renewable energy and his background is in solar PV and electrical building services engineering, with over 10 years of experience building rooftop solar. He is responsible for the development, delivery and ongoing maintenance of all Big Solar Co-op host site installations.

Jon Hallé – Sharenergy CEO



Jon is a co-founder of Sharenergy. In his role as CEO, he has a wide remit from detailed support of individual projects to a nationwide strategic involvement with public, private and third sector bodies.

Jon was a pioneer of community-owned solar in the UK and is a previous recipient of the Community Energy Champion Award.

The project also receives support from Dave Green, Sharenergy's Development Manager and other staff within Sharenergy, on strategy, financial modelling and administration. We worked with 2 paid interns from Keele University in 2020. We're pleased to say that Aaron Yule has now moved on to a prestigious job in engineering and credited his time with the Big Solar Co-op as key to landing the role.

