



power to
change

business in
community
hands

Next Generation case study: Gloucestershire Community Energy Co-op May 2021



About Gloucestershire Community Energy Co-op:

The aims of the Gloucestershire Community Energy Co-op (GCEC) are to enable local communities and individuals to take part in exciting renewable energy schemes across the county, and to encourage energy saving initiatives. By installing solar panels on community buildings, and developing suitable sites for wind and hydro schemes, we aim to give everyone in Gloucestershire a chance to benefit from low carbon, locally generated electricity and renewable heating.

The Next Generation project is focused on enabling the installation of heat pumps and solar panels with battery storage in council-owned homes.

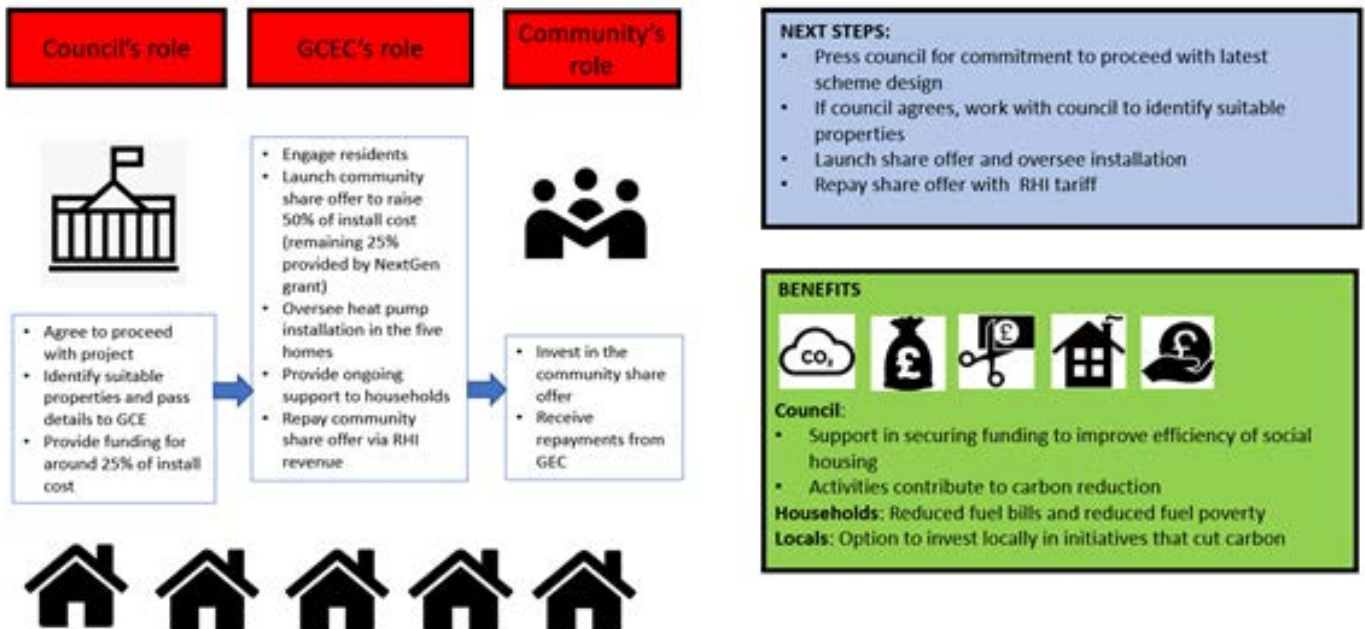
Key points for Community Energy groups:

- Senior council support is absolutely critical for any project that is reliant on council involvement. An enthusiastic and supportive officer may struggle to get commitment from the rest of the organisation unless there is already senior-level buy in; and a letter of support does not constitute a firm commitment to proceed.
- Covid -19 has taken up a lot of council resource delaying progress on other initiatives.
- Covid-19 has also made installing any measures in the homes of vulnerable people very challenging (such as sheltered housing, which was the initial focus for this project).
- There have also been changes to the Renewable Heat Incentive (RHI); initially the RHI for both domestic and non-domestic properties was due to end in March 2021, but the domestic scheme has been extended to March 2022.

Overview of the project

The current proposal is summarised in the diagram below.

Gloucestershire Community Energy Co-op (GCEC)



GCE CE innovation model diagram v2, Apr 2021



The scheme has been through a number of iterations.

- Our initial proposal, as submitted in the Next Generation application, was to install PVs and batteries in council-owned sheltered housing.
- Once we started doing more detailed research, we found that this would not be economically viable. However, by adding in a shared-loop ground-source heat pump, we could create a financially attractive proposition. This would utilise the non-domestic RHI which generates income for 20 years.
- However, Covid has diverted a lot of the council's resources and this scheme has subsequently slipped down their priority list. Moreover, installing anything in sheltered housing during the pandemic is challenging as their residents are extremely vulnerable. As a result, time has passed without any firm decision to proceed. Unfortunately, the non-domestic RHI in its current form ceased from March 2021. There was no longer sufficient time to install these heat pumps within that timeframe.
- So instead, we have redesigned the scheme to install air source heat pumps in the sheltered housing making use of the domestic RHI (which will continue until March 2022). Air source heat pumps have lower install costs, but the domestic RHI tariff is paid over seven years, rather than 20 years which was the timeframe for the non-domestic RHI. This makes it more challenging to make the business model stack-up. However, we believe we have managed to design a financially viable scheme and have put a proposition to the council on this basis. This is based on:
 - Around 25% of the heat pump installation cost being funded by the Next Generation grant;
 - The council putting forward about 25% of the heat pump installation cost;
 - GCEC engaging with the households to obtain their consent for the air source heat pump solar panel, and battery systems;
 - GCEC launching a share offer to secure the balance of the installation costs;
 - GCEC project managing the install and paying back the share offer through RHI payments, export electricity income, balancing market income from the batteries, and payments from the council for the energy services to tenants;
 - GCEC and the council providing ongoing support to the households as needed.

Our learning so far:

Working with councils

A key learning point is that relying on local authorities to supply properties and/or funding can present challenges. With hindsight, it would have been good to have relationships with more than one council to give us a wider range of options.

Private householders

We have considered going out to owner occupiers to try to secure installations in that sector instead of social housing. However, we do not feel we are operating at a large enough scale to undertake the type of aggressive marketing that would be needed to overcome the barriers of cost of installation plus likely reticence around adopting new technologies. Marketing in a rural area, where households are very spread out, is more challenging than marketing in a city.

Government funding

Government funding streams are subject to change so there is a need to act quickly to be able to take advantage of available funding. However, councils are not always able to make swift decisions, particularly when they have other priorities such as Covid to deal with.

What we're doing next:

- In December 2020, Stroud Council approved the project on the basis of making use of the non-domestic RHI. However, this scheme ended in March 2021 and so we have now reworked the scheme to make use of the domestic RHI instead. The difference is that the domestic RHI has a payback period of just 7 years, versus 20 years for the non-domestic RHI. However, we believe that the scheme is still viable.
- We will then look to develop a detailed plan for householder engagement and launching a community share offer.
- Subject to council agreement to proceed, we hope to be able to install the units in summer 2021.

If you want to know more:

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