



HOW CAN A STROUD-BASED ACTION GROUP ON COMMUNITY ENERGY ADD MOST VALUE TO EXISTING INITIATIVES?

A Transition Stroud Discussion Paper

1 Introduction

This paper builds on discussion at the workshop, 'Community Renewable Energy – Ways Forward in Stroud and the Five Valleys?' (organised by Transition Stroud (TS) and supported by Gloucestershire Climate Action Network (GlosCan)). The paper is intended to inform further discussion at a follow-up meeting of interested parties.

The paper covers:

- Existing initiatives
- Ideas for projects in Stroud
- Ways of organising and developing projects
- Proposed way forward for a TS Action Group on community energy

The context for discussion includes:

- Community energy is in transition as a result of the end of the Feed In Tariff regime (in March 2019). This has prompted a focus on: projects that can be completed by that date; potentially viable subsidy-free projects; and innovative new projects and business models.
- Government is under pressure to develop firmer policies and programmes so that it has a more realistic prospect for achieving current and future carbon reduction targets. This could ultimately lead to further measures to enable increased investment in renewables.
- GFirst, the Local Enterprise Partnership, has commissioned the preparation of a new Gloucestershire Energy Strategy, which is likely to focus on near-term actions to push forward with decarbonisation. This might impact positively on opportunities for community energy.

2 Existing Initiatives

The workshop heard presentations about the activities of Gloucestershire Community Energy Cooperative (GCEC) and Nailsworth Climate Action Town (NCAT):

- GCEC is a Community Benefit Society which seeks to develop and manage the supply of renewable energy for the benefit of the community. It has developed and operates a 44

kWp solar PV system on the Gloucestershire Resource Centre (GRC), and is actively seeking to move forward with new projects, including rooftop PV on schools, and an Energy Local Club¹ to supply local residents with electricity from its GRC installation. It is currently looking for new Board members and keen to work with any group with shared aspirations.

- NCAT seeks to increase awareness of the climate change challenge in Nailsworth and to engage in and support practical measures to reduce the Town's carbon footprint. It has an Energy Sub-Group which is working to develop a number of community PV projects, including at Minchinhampton School and a potential 1.2MW ground-mounted PV installation on local farmland. NCAT is currently reviewing the options for the types of social enterprise that could develop and own these projects. NCAT is keen to collaborate with other local groups.

Any Stroud-based action group on community energy would need to develop an appropriate working relationship with GCEC and NCAT (and any social enterprise that the latter established). See further discussion below under 'options for ways of organising and developing projects'.

3 Ideas for Projects in Stroud

A range of potential projects came up in discussion at the workshop. These included:

a) Rooftop PV

- Schools – including liaising with GCEC and/or following the approach being taken by NCAT at Minchinhampton school².
- St Laurence Church – a PV project might be possible when the church roof is refurbished.
- Supermarkets – including the new Aldi and Lidl stores.

b) Ground-mounted PV

- Farmland – a local landowner expressed an interest in hosting a community project³.

c) PV and Storage

- Existing or new PV schemes – are there possibilities of adding storage to any existing PV installations, or for any new PV + storage installs⁴.

¹ An Energy Local Club involves residents local to a community renewable project signing up to receive cheaper electricity on tariffs linked to the output of the project. All members of the club sign up to the same supplier – in GCEC's case this would be Coop Energy - which provides smart meters and appropriate tariffs. See <http://www.energylocal.co.uk/>.

² It is not clear whether school rooftop installs will be viable after the FIT ends in March 2019. A point was also raised at the workshop about the potential impact on a schools programme of Gloucestershire County Council's commitment to take electricity generated by the new incinerator. ***This needs checking.***

³ Note that a new digital platform, PowerPaired, is being piloted to match up community energy groups with willing asset owners. This will provide a curated database of viable land and buildings and willing owners for community energy groups to search.

d) Energy Local Clubs

- Dudbridge hydro – might the Energy Local Club model be applicable, potentially enabling the Canal Trust to increase income from the scheme?
- Are there other local renewable schemes that might be suitable?

e) P2P energy trading⁵

- Is there potential for a P2P project in the area?

f) Heat Projects⁶

- Stratford Park outside swimming pool – a group of local stakeholders have been meeting with the agreement of Stroud District Council to help decide the best way to restore the outdoor pool, including heating the water to attract more users⁷.
- St Laurence Church – there might be interest in some form of renewable heat project in the future.

The bullet points above give a good indication of the potential range of community energy projects that might ultimately be possible in some shape or form. Others could probably be identified through further discussion.

4 Ways of Organising and Developing Projects

How should a Stroud-based action group on community energy seek to move such projects forward?

⁴ **Energise Barnsley** a local authority and community energy rooftop solar PV and battery storage project in the UK, has installed PV on over 320 council owned homes. See <http://www.energisebarnsley.co.uk/>. See also <https://www.tyndall.ie/news/storenet-project-launched-at-international-energy-research-centre-workshop-at-tyndall/>. Others have found that the economics of the retrospective addition of storage batteries to existing PV installs does not currently add up, but is likely to when the costs of battery technology has reduced further – see the **Plymouth Community Energy study** in

<http://hub.communityenergyengland.org/resources/resource/256/democratic-local-energy-models/>.

⁵ P2P trading is a way of enabling small renewable generators – including households - to supply others in the local community using smart and blockchain technologies to manage transactions. See <http://www.the-blockchain.com/2018/03/22/uks-verv-announces-ito-for-p2p-energy-trading-platform/>. See also <https://www.oxfordmartin.ox.ac.uk/opinion/view/394>.

⁶ Reference was made at the workshop to a range of renewable heat case studies, including the experience in Denmark (https://communityenergyengland.org/files/document/153/1525248692_1522330055_ERIKCH1.pdf) and a UK perspective on district heating networks

(https://communityenergyengland.org/files/document/156/1525248900_1522330114_MartinCrane-DistrictHeatingaUKperspective.pdf).

For a case study of Easton Energy Group's innovative solar thermal collection and borehole storage project (in Bristol) see

<http://hub.communityenergyengland.org/resources/resource/256/democratic-local-energy-models/>.

⁷ The currently preferred option for heating the pool is to extend the gas-fired CHP scheme used to heat the Leisure Centre and indoor pool, see 'Stratford Park Lido Feasibility Study', November 2017, p89. Studies by South East London Community Energy found that in their case it is not currently possible to develop a viable business model for heating a local pool with biomass or air source heat pumps, see

<http://hub.communityenergyengland.org/resources/resource/256/democratic-local-energy-models/>.

One option might be to establish a new social enterprise (eg a Community Benefit Society or Community Interest Company) to develop, own and run such projects for the benefit of local communities. However, themes that emerged in the workshop included: not to be too ambitious; to look at the best ways of adding value to what already exists; and to make best use of volunteer effort and resource.

A better way forward might therefore be to adopt a ‘horses for courses’ approach, potentially undertaking initial discussions and preliminary investigations to identify potentially viable projects, and looking to find an appropriate ‘partner’ organisation that could develop, own and run the project (for example, GCEC, NCAT [or any social enterprise it establishes], or other appropriate community organisation or public body).

In other words, the action group could act as an identifier, initiator or enabler of potential projects that are ultimately developed by other appropriate community organisations.

In the process, the action group might also identify ‘intermediary’ organisations that could work with the appropriate partner organisation to do the ‘heavy lifting’ involved in developing the project. A range of ‘intermediary’ organisations exist offering various services and payment options⁸.

5 Proposed Way Forward for a TS Action Group on Community Energy

In the light of the discussion above, it is proposed that the workshop follow-up meeting of interested parties discuss and potentially endorse the following:

- a) That a TS action group on community energy be established to pursue a ‘horses for courses’ approach to project development, whereby the group would undertake initial discussions and preliminary investigations to identify potentially viable projects that would contribute meaningfully to decarbonisation and community benefit, and look to find an appropriate ‘partner’ organisation that could fully assess, develop, own and run the project (for example, GCEC, NCAT [and/or any social enterprise it establishes], or another appropriate community organisation or public body).
- b) That the TS action group develop and maintain effective liaison and working arrangements with GCEC and NCAT [and/or any social enterprise it establishes], potentially including action group representation on the GCEC Board and NCAT Energy Sub-Group, and/or GCEC and NCAT participation in the action group.
- c) That the TS action group seek to identify and recruit members with appropriate expertise and/or organisational links.

⁸ These include: Energy4All, which is a co-op of energy co-ops that provides a package of services for an annual fee (<https://energy4all.co.uk/about-us/services/>); Gen Community ventures (<http://www.gen-community.co.uk/projects/>); Mongoose Energy which works on a success fee basis only (<https://mongoose.energy/our-work/project-development/>); and Public Power Solutions which offers free initial feasibility studies (<https://www.publicpowersolutions.co.uk/power-solutions/>).

- d) That the TS action group review and seek to add to the list of ideas for projects in Stroud (section 3 above).
- e) That the TS action group seek to identify members to lead on initial discussions and preliminary investigations of potentially viable projects.
- f) That the TS action group seek to build capacity within the group to pursue the 'horses for courses' approach above, by sharing information, knowledge and experiences.

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