



## Rural Community Energy Fund

# Crediton Community Renewable Energy Feasibility Study

June 2015



# Sustainable Crediton: Crediton Community Energy Feasibility Study

## EXECUTIVE SUMMARY

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*Please note:*

- 1. This feasibility study was prepared to meet the final date for its submission to WRAP. At the date of submission, it was possible that a community-owned solar PV project would be feasible, if certain key conditions were met. The most fundamental of these is consent to proceed from the owner of the principal site, Queen Elizabeth Community College. The feasibility study reflects this position.*
- 2. The consultants wish to assist Sustainable Crediton to realise this opportunity, despite the end of the study. For this reason, the study includes, as appendices, a draft business plan and set of rules for “Crediton Community Energy”, and a process flowchart which can be used as a guide to follow the steps to project commissioning. Furthermore, the consultants will provide some additional assistance without charge, including attending a meeting with Queen Elizabeth Community College governors.*
- 3. All figures in this feasibility study, and the draft business plan which forms Appendix 4, can at this stage be indicative only. The financial forecasts on which they are based will change, perhaps radically. For more information, read the draft business plan, and in particular the risks and sensitivities described in it, and note also that the final portfolio of sites has not yet been confirmed.*

This feasibility study is the principal output of a commission from Sustainable Crediton, financed by RCEF, to assess the opportunity for a community-owned renewable energy organisation to deliver a first portfolio of roof mounted solar PV installations. The community involved is that of Crediton and Newton St Cyres, and encompasses everyone living or working in the EX17 postcode area or the Newton St Cyres civil parish.

The study recommends that the community forms a community benefit society “Crediton Community Energy”, because this is the only structure which currently permits a community share issue without the regulatory burden associated with other public share offers. The key players for the new society will be drawn from the community, through a community engagement process building on the work done before and during the project.

The principal technology explored is roof mounted solar PV, though as required by the commission, the study also provides an overview of the opportunity for wind power and anaerobic digestion.

The consultants and members of Sustainable Crediton have engaged in a long and, at times, difficult process to identify suitable sites. Much resource was expended at Lords Meadow Industrial Estate, the principal site seen as having potential before the study began (and so required by the commission to be examined in detail). This work was ultimately unsuccessful. A wide range of other sites were considered, until a positive response was secured from the community college and a number of primary schools. These sites have now been surveyed.

The results show that the community college is essential to any portfolio, and can provide enough potential generation capacity on its own to form a project. Preliminary, unofficial guidance from the DNO indicates that it will permit connection (without charge) of at least enough generation capacity to make such a project financially feasible, if there is sufficient local

use. Some of the primary school sites may perhaps be of sufficient size to be included. This can be investigated further once the governors of the community college have confirmed their interest.

The study's conclusions can be summarised as follows:

1. There is an opportunity to create a solar PV portfolio within the project area, comprising installations on roofs of Queen Elizabeth Community College, provided that a range of conditions are met. Roof mounted solar PV is suited to the proposed locations and installation.
2. There is potential for additional installations at:
  - a. Coplestone Primary School
  - b. Sandford Old Primary School (two roofs)
  - c. Cheriton Fitzpaine Primary School
  - d. Newton St Cyres new Primary School (being built).
3. There is also potential for a 48kW installation at Crediton Hospital, but this is dependent on approval by the North Devon Healthcare NHS Trust, or any successor.
4. There is no clear opportunity for wind power in the project area and it would be inappropriate to investigate use of this technology further at present. Once CCE has completed its first project, it could review whether public opinion and other factors then make it appropriate to identify interested landowners, and assess wind speeds at elevated locations on their properties.
5. There is no opportunity for community-owned anaerobic digestion within the project area, and the risks involved in pursuing this option in future appear to outweigh any benefit.
6. There is strong community support, and no discernible opposition, to roof-mounted solar PV in principle. It is reasonable to conclude that support will increase once people are aware that the installations will be on school roofs.
7. The project will not require planning permission, nor any new connections to the grid.

The report's recommendations are that Sustainable Crediton:

1. Continues to engage with Queen Elizabeth Community College to secure firm participation in the project, and then roof leases and power purchase agreements.
2. Once college participation has been obtained, engage with the identified primary schools, together with their owner, Devon County Council, to agree roof leases and power purchase agreements.
3. Should North Devon Healthcare NHS Trust indicate, in August, that it wishes to proceed, then agree a roof lease and power purchase agreement with it. Alternatively, if the ownership of Crediton Hospital changes, engage with the new owner.
4. Use the flowchart in Appendix 3 as a guide as it develops the project.
5. Should a portfolio become a realistic possibility, use the process outlined in Appendix 3 to form a community benefit society as quickly as possible (because it will need to be in place to sign legal agreements).
6. Revise the business plan once the final sites and their maximum generation permitted by Western Power Distribution are known.
7. Continually review and amend the draft business plan as the project develops.