



EARTH DOCTORS LTD: RENEWABLE ENERGY OPTIONS FEASIBILITY STUDY

OVERVIEW

An appraisal of a possible small hydro site was undertaken by a local engineer some years ago which indicated that the project was viable, but the group was unable to secure funding at the time. Whilst the community welcomed the idea of community renewables, few people had the knowledge or time to actually develop the concepts. This time, the group was keen to identify smaller, less controversial and more financially achievable options for the area. This would be a first step towards community buy-in and allow for progress to the next stage of making the plans a reality, including securing the evidence required to submit a funding bid to the WRAP Rural Community Energy Fund (RCEF).

SOLUTION

The study investigated the use of micro-hydro using mine water discharge into the River Tyne and solar PV on roofs in the Parish. It looked in particular at bulk purchase of panels for domestic roofs and identified any larger (farm or business) premises which might be suitable for a larger project. It also looked into ground mounted solar photovoltaic arrays, possibilities for clusters of biomass heating unit to clusters of houses/community buildings and small scale anaerobic digestion.

OUTCOMES

The consultation for the study helped the group and the wider community understand the pros and cons of various renewable technology options in the local area, and identified which technologies were worth pursuing further. It also identified which options could be discounted due to inability to identify suitable land or partners.

- Solar PV and energy from wind were identified in the report as possible options, but the recent Government changes to the renewable energy support framework has altered their viability and therefore they have since been discounted by Earth Doctors.
- The study outlined a clear argument for progressing a biogas renewable energy production facility. This was articulated to all interested parties including Wylam and Heddon parish councils, and local residents who offered their support for a feasibility study grant application to the RCEF for funding. It is biochar production by a pyrolysis process using an organic matter feedstock, which results in the release of gas which can then be used to generate heat. There is no bacterial action or digestion in the process. The evidence within the study has been used to strengthen the application's case for support.

OBJECTIVES

To commission a feasibility study that evaluates the potential for renewable energy schemes across Wylam, to generate electricity, and provide a source of income which could be invested back into the local community.

MORE DETAILS

Project title:	Renewable energy options feasibility study
Group name:	Earth Doctors Ltd
Theme:	Generating Energy
Area of benefit:	Wylam and Heddon parishes, Northumberland
Date:	Dec 2014-Dec 2015
Contact info:	www.earthdoctors.co.uk

A PIECE OF ADVICE

It is important to be clear about the intended next steps prior to the study so that its outputs can support them. An initial informal review of the technologies suggested for appraisal was useful to narrow down the number of technologies to be investigated. However, Earth Doctors found that the study still required a considerable time input from a local representative to get the best use of the consultant's time.

Discussions with landowners about renewable energy options on their land provided a clearer understanding of both those that were willing to consider renewables, and which technologies appealed. It was challenging to identify individuals, and engage them with the idea of a renewable energy project. However, Earth Doctors was fortunate to be able to identify some as project partners for the next stage of the project, and is hoping for a positive outcome from its RCEF bid