

Intro:

Community groups and projects connect people through a common cause, allow skill sharing, and strengthen communities. In an age of increasing environmental awareness, many of these groups would like to operate in more sustainable ways, and harnessing renewable sources of energy to power electronic devices and appliances is one route to achieving this. However, since many such groups are volunteer-led, they are unlikely to have the expertise needed to spec, design, and instal a renewable energy generation facility. This is the knowledge gap which this project looks to begin addressing, through the creation of a Renewable Energy Guide for Community Groups. Read more about our exciting journey to creating this, as well as a case study example, on this page.

The Project Brief:

Two engineering undergraduate students at Cardiff University, Haseenah Booley and Harmony Hewlett, will work alongside their supervisor, Dr John McCrory, to spec, design and instal a renewable energy generation facility at the Riverside Community Gardens, in Cardiff. They will convert their learnings along the way into an open access guide, which will allow other groups to spec and design their own renewable installations, as well as inform them of funding options to help them acquire the equipment needed.

Riverside Community Gardens:

Whilst it could be a benefit to any group, having access to renewable energy generation would be particularly useful to off-grid community projects, such as agricultural or allotment-based groups. As such, we decided to partner with the Riverside Community Gardens, in Cardiff, for this project (website: www.pontcannapaa.com). The Riverside Community Gardens is a large allotment site with hundreds of plots and users. The site is off-grid, but users desire access to electrical power for lighting; to recharge their power tools; and to power water heating facilities, so that they can have a warm drink on colder days. One source of power for these uses could be a petrol or diesel generator, however, renewable generation offers a much more environmentally friendly option. One of the lead coordinators at the allotment, Tony Allsop, kindly agreed to work with us, and let us use their site as a test bed for our renewable generation ideas.