



## COMMUNITY CASE STUDY

# Bath and West Community Energy (BWCE)

### Bear Flat, Bath

#### Background

BWCE is an early pioneer of community-owned energy generation. The group is volunteer led, with two paid staff members, and it has 18 sub-100kW solar arrays (totalling 472kW), five ground-mounted solar arrays (totalling 11.84MW), and 13.5kW of hydro. BWCE's assets generate sufficient electricity over a whole year to power 4,000 typical homes in the area.

#### What is the challenge?

To understand the extent to which a community approach can help reduce costs and carbon emissions by shifting and reducing electricity demand during peak times. There is an opportunity for residents to integrate solar PV and battery storage into their homes, and in combination with the uptake of this technology, manage their use of energy with the help of a 'Time of Use' tariff to help reduce fuel bills as a result. Will people, other than experts and enthusiasts in this area, be interested in doing this both for themselves and as part of a local community? This project aims to find out.

#### What is the proposed solution and how is OpenLV enabling it?

BWCE aims to engage local residents in testing a local, sustainable community energy ownership model. The project will use a web app that provides different ways of visualising the data provided by the OpenLV project. BWCE will display this data in a public place such as at

the local pub in order to raise awareness of electricity consumption and electricity flow patterns.

At the same time, BWCE is developing a domestic PV and battery energy storage solution for residents in the trial area. The OpenLV web app will be used to encourage homeowners to adapt their energy use (reducing demand at peak times) and encourage take up of the domestic solar PV and battery storage offer. Householders who take up the offer will have more control over their energy consumption patterns – they will be able to generate their own electricity and use batteries to store it.

Data from the project will be used by BWCE to evaluate if aggregated flexibility services can be offered to WPD and explore the potential for introducing time of use tariffs.



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