

## CARES CASE STUDY COMRIE CROFT



## **BACKGROUND**

Comrie Croft Ltd is an award-winning community and employee owned 'community of eco-enterprises' on the outskirts of Comrie, Perthshire, with 50 co-owners. Activities focus on ecotourism including a wedding venue, café, bike shop and trails, campsite, and organic-principles market garden. The business is also a registered farm, with pasture and woodland extending to around 94 hectares.

- Project owner:Comrie Croft Ltd
- ·Location: Comrie, Perthshire
- •Technology: 45kW solar PV and 15kW battery storage
- •CARES funding: £47k from CARES Rural Energy Challenge Fund for the supporting structure
- Date installed: April 2018

LOCALENERGY.SCOT 0808 808 2288





## PROJECT ACHIEVEMENTS

Comrie Croft was awarded £47k match funding from the CARES Rural Energy Challenge Fund in November 2017 towards a wooden frame to support a 50kW south facing PV installation. The system provides clean energy to power the buildings and four electric vehicle charging points. Three 15kW Tesla Power battery storage units have also been installed to store any excess electricity generated by the solar PV. The installation was completed in April 2018 and the centre has already saved money by using the green electricity produced by the PV panels and the stored electricity from the batteries. Office cloud based software makes sure that the vehicle charging and general usage does not exceed system capacity, but instead draws down the extra power required from the standard supply. The battery storage element makes use of excess generation not used at source and can be used for fast frequency response for the grid and grid balancing. Gridlogic software is installed to all Tesla storage systems for this purpose.

The solar PV and battery storage has reduced Comrie Croft's running costs, which allows them to concentrate funding on their other environmental and sustainable programmes. The business aims to become a model for sustainable rural regeneration and carries out many activities to help achieve this, like working to reduce waste and energy consumption, improving sustainable transport links and rewarding customers who use public transport or active travel to get to Comrie Croft. The shop on site sells only locally sourced goods and uses local suppliers at every opportunity, requesting the most sustainable options.

Andrew Donaldson, Managing Director of Comrie Croft said, "We are now averaging an 85% electricity saving, which equates to a £13,500 saving on our electricity bills annually. With efficiency measures we are aiming for 100%. It has made us much more aware of what electricity we are using and when. On top of that there will be a small financial contribution from the Feed-In Tariff and electric car charging. There are also less quantifiable benefits from the 'green marketing' effect."

## **LESSONS LEARNED**

The Comrie Croft project has shown that these different elements of renewable energy generation, electric battery storage and EV charge points can be combined successfully to provide a sustainable energy system. This has reduced running costs for the business and increased the provision of EV charge points available for visitors and members of the public to use.

Andrew commented, "Getting assistance from CARES was a genuine pleasure – minimal bureaucracy, helpful advice, and a focus on a successful end result which is now generating significant interest amongst everyone who sees it."

Website: www.comriecroft.com

To find out more about community benefits from renewable energy projects, visit www. localenergy.scot/community-benefits

LOCALENERGY.SCOT 0808 808 2288

