Case Studies

Cambridgeshire County Council
Park and Ride

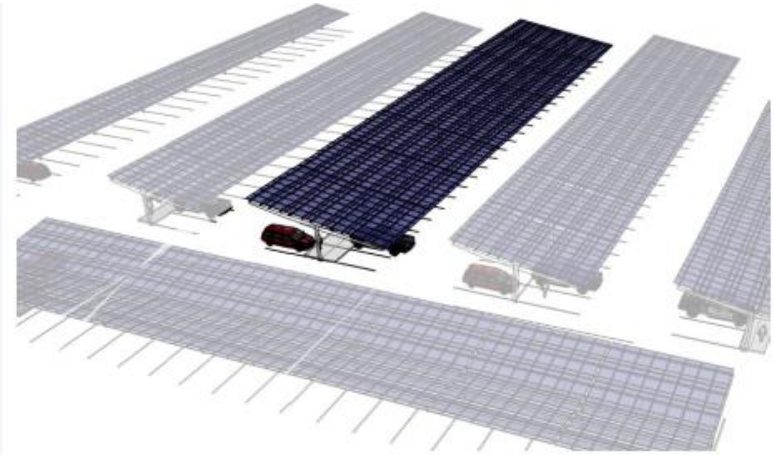
Overview

Cambridgeshire County Council has already successfully used Re:fit to optimise the energy efficiency of numerous properties and to contract for large-scale renewable energy generation. These projects will reduce CO_2 emissions by more than one million tonnes and produce significant cash benefits. Cambridgeshire County Council is now using Re:fit to develop a highly innovative solar PV project for a park and ride scheme, which includes the use of battery storage and off-grid energy sales to a local customer.

As part of the Council's exciting programme, this demonstrator will provide an income stream and other notable benefits, such as helping develop local businesses, building resilience to local energy-grid supply challenges and providing charging points for electric vehicles powered directly by renewable energy.

The Smart Energy Grid (SEG) Demonstrator Project plans to provide just less than 1MW capacity of renewable electricity per annum. This will enable the export of energy directly to local businesses through a private wire power purchase agreement (PPA), while battery storage is being used to enable the park and ride site to provide energy for LED lighting and electric vehicle (EV) charging.

The project is looking to overcome significant market failure (such as problems with the local grid network) and innovate through bringing a number of products together to work in a system. Re:fit is being used to help provide guaranteed performance and significantly reduce the risk to Cambridgeshire County Council.



Key facts:

- 19,000MWh of energy generated over 25 years
- saving more than 3,000 tonnes of CO_2 over the 25-year life
- provides self-powered non-grid solution
- overcomes local grid constraints
- fully renewable power for on-site EV charging
- eligible for support funding due to innovative nature
- supports local businesses and develops local supply chain.

Eligibility for government-backed grant funding
The nature of the project means it is eligible for potential support through European Structural and Investment Funds (ESIF), which supports increasing the number of small-scale renewable energy schemes in England. The project looks to address a number of key actions, including measures to support increased production of renewable energy and the demonstration and deployment of renewable energy technologies, including smart/off-grid supply and use of energy storage.

Boosting the local economy
The project also covers support to build local capability and capacity for the supply chain in renewable energy and storage because it will also offer 40 small and medium-size enterprises access to a programme that includes knowledge transfer from the SEG project, analysed and targeted to build individual business and group knowledge to boost supply-chain capacity and leadership.

The final application for support under ESIF will be submitted in November to gain the approval required to proceed with the project. Cambridgeshire County Council hopes to use the project and its learning to inform further capacity building towards facilitating the vision for 28 per cent of Cambridgeshire's energy being produced locally from renewables.

"This project will help to demonstrate an innovative combination of technologies that directly addresses local energy issues with a low-carbon solution. Not only will renewable energy be used to run on-site facilities, charge electric vehicles and power a local business, the project will also help build local cleantech businesses and supply-chain capability for the future. Re:fit provides an approach that has reduced timescales, a factor critical in helping the Council to meet key deadlines for seeking wider funding support."

Sheryl French, Project Director, Energy Investment

Energy efficiency and financial savings through Re:fit

Re:fit is a procurement framework and support service available to all public sector organisations in the UK. Since 2009 it has been helping organisations to deliver "spend-to-save" environmental retrofit projects that both improve their buildings and, importantly, make substantial guaranteed financial savings.