

Case study

Using Innovative Technologies to help **Social Housing Provider** Tackle Fuel Poverty

Strategy & Feasibility

The Chief Executive of a Housing Association challenged Egnida to aid the organisation in achieving their key objective to address social deprivation in one of the areas in which their stock was located. This was proving particularly challenging as the area had been persistently excluded from previous grant funding schemes. Fuel poverty was identified as a major contributor to the areas deprivation. We identified that an innovative renewables scheme would have a significant impact on the areas deprivation, whilst breaching the funding barriers in place and therefore aiding the customer to meet their objectives.

Funding

egnida identified an opportunity to leverage grant funding from the recently introduced European funded scheme for innovative community based renewable energy projects, which offered to fund suitable projects up to 69% of funding but. We collaborated closely with the customer to prepare a draft to leverage £4.7m of this funding.

Implementation

To successfully access this funding would first require a pilot project to be set up to prove the scale of the community benefits. We utilised our expertise to identify and secure appropriate solutions that could benefit these fuel poor properties. An integrated mix of Solar PV, battery storage and remote boiler monitoring systems with environmental data outputs were carefully chosen to maximise the impact of the scheme.

We also worked closely with the Housing Association project team to quantify the 683 home full project and agree the parameters & outputs for a six home pilot project. The projected energy, carbon and cost savings from the pilot scheme were utilised as a basis for the European funding application.

Installation & Operations

We installed the chosen technologies in five homes along. We also installed a higher capacity battery-only storage system in a flat. This was programmed to charge up overnight on a lower off-peak tariff to reduce

fuel costs in properties without roofs suitable for PV, allowing these tenants to still gain significant benefits from the scheme. We fitted monitoring systems to all of these technologies which allowed us to ensure that costs dropped in line with the forecasts. A maintenance and reporting structure was also included for a 12 month period.

We are using our in-house systems capabilities to investigate operating these technologies as part of a wider Smart grid. This would enable us to overcome any hurdles with the DNO and ensure the whole project can be successfully rolled out across the remaining homes.

Customer Legacy

egnida is supporting the customer's ongoing engagement with national government. This is in order to prepare a business plan which will secure the £3.2m funding contribution needed to replicate the renewable energy solutions over the remaining six hundred homes.

The final outcomes of this project would produce an average fuel saving of £8,202 per household over 20 years, which achieves the customer's aims. The scheme would also lead to an increase of 1.3MW per annum in renewable energy in this community, saving 11,474 tonnes of carbon. Other projected benefits include a reduction in respiratory diseases and health problem due to the environmental monitoring systems enabling early identification of damp in the properties. This project therefore allows the customer to tackle social deprivation and improves the environment in which their tenants live, aligning them with national policy.

If you would like further information, please contact Amanda Biss on +44(0)2920 098 100 or email amanda@egnida.co.uk