

KSCA 'Zero Carbon Project'

RCEF Stage: 2



The Story

The Edward Marsh Centre (formerly the Kinver Sport & Community Association) is a 1960s built community and recreation facility located in the centre of Kinver, South Staffordshire. It is typical of buildings of this type and age, having been extensively modified over the years. The challenge has been to improve both the thermal and aesthetic properties of the building and incorporate the new building works. The overall aim is to 'future proof' the centre through the use of renewable energy systems to replace old, inefficient lighting and heating systems. This will ensure it continues to be a major community resource, fit for purpose in response to the climate crisis. The improved insulation will reduce energy consumption by more than 50%, and reduce operating costs by over £11k annually. Total grant support (Stage 1 & 2) £86,500

Challenges & Risks

The project has support from the local community, including the Parish Council. The major issues surround the practical and financial implications of modernising a complex, extensively modified building such that it is a much improved facility and low carbon. The grants obtained have been critical to scoping the scale of the structural issues and providing detailed designs for the integration of new energy systems. This process is fundamental to enabling the Trustees to apply for capital expenditure grants

Lessons Learned

This has been a complex process, involving many different specialists, including architects, renewable energy consultants, Principal Designer and other stakeholders. Other technologies had been considered, such as rainwater harvesting and EV charging points for public use. These have been discarded due to cost or legal complexities. The consultants have also produced a reference guide for similar retrofit projects.

Key Facts

Zero carbon ambition	Extensive retrofit project; 'fabric first' with renewable energy systems, reduce energy consumption by more than 50%
Renewable energy systems	Solar PV, ASHP, solar thermal and ventilation Ground source heat pump.
Major works with new build	Complex building with old, inefficient technology
Community resource	Aim to 'future proof' building

Key Figures

<b>Project size:</b> <b>Tech type</b>	Solar PV- 30kWp Solar thermal – 600l ASHP – 80kW
<b>Energy Generation</b>	Solar, ASHP, hot water
<b>Private finance leveraged</b>	TBC
<b>CO2 savings</b>	25 TCO2
<b>RCEF grant</b>	Stage 1 Stage 2

Further Notes

LEP area: Staffordshire

Link for further info: <https://ksca.uk>