

Kirkhill District Amenities Association Solar Project

Introduction

Kirkhill District Amenities Association (KDAA) serves the area around Kirkhill, six miles west of Inverness. The Association operates a playing field, community hall and an all-weather sports pitch near the centre of the village. Built in 1986 the building is off-gas, and electricity is the only form of energy consumed on the premises.

As with any facility, there is a need to secure income to cover running costs and maintenance of the hall and pitch. Also, with plans for an extension, the need for additional income to allow for the development was highlighted.



The committee discussed how they could raise income, and the opportunity to use Feed in Tariffs (FiTs) through the installation of photovoltaic technology was recognised. This project makes use of the south-south west facing roof to generate electricity that is used onsite with some also exported. The income from the sale of electricity and the FiTs is used to support the maintenance and development of the facilities.

Equipment

Sharp Electronics 3.96kW Photovoltaic System comprising 22 x 180W

The following selection process for the photovoltaic installation was carried out:

- A tender was issued to all Scottish MCS registered installers (over twenty in total)
- There were a total of four responses
- Two were unsatisfactory and two were examined
- The lower price of the two quotes was chosen

Cost and Grant Funding

Total project cost	£17,596	The remaining funding was obtained through: KDAA own funds (reserves)
CARES grant	£14,596	
CARES grant percentage	83%	

Fuel Bill Savings.

Through income generated by electricity sale and FiTs, coupled with electricity bill savings, the project is expected to benefit KDAA by c. £1,700 per annum. During the initial three years this income is to be used to repay the investment of £3,000 in the project back into KDAA reserves. After year three, income will be used for development and maintenance costs for the hall and sports pitch.

Emission Savings

Estimated kWh savings p.a.	3,207
Annual Co2 savings (kg)	1,379
Lifetime Co2 savings (kg)	28,580

Project Monitoring

There is full logging and an incorporated display meter to show both cumulative output and instantaneous production.



Local Impact

There has been an increase in both economic and environmental sustainability of the community centre, and increased awareness of photovoltaic microgeneration within the community.

Lessons Learned

The main problems have related to applying for the FiT. The FiT will only be paid from the date that the FiT application is *received*, so it is essential to submit the application as soon as the installation is complete. It took a while for Kirkhill to organise the FiT due to the lack of post code and the need to provide additional information which was not originally requested on the application form, as they are community organisation and not a domestic customer.

Sandra Hogg, Treasurer of Kirkhill District Amenities Association, said:

“We have a great site with a south facing roof, so we wanted to make use of it to produce electricity for the hall. The more power we can produce ourselves, the lower our future electricity bills will be. The Amenities Association makes sure the Hall and the new multi-use sports pitch are available for groups like the Cubs, Bowlers and Tots. Energy bills have been rising, and we need to keep these as low as possible. Our panels are expected to produce over 3,000 kilowatt-hours per year and cut our greenhouse gas emissions by well over one tonne of carbon dioxide every year for the next 25 years and beyond.”

For further information, contact:

Kirkhill District Amenities Association Contact:

Sandra Hogg
Kirkhill District Amenities Association
Kirkhill Community Centre
Kirkhill
IV5 7PE

E: kdaa@kirkhillandbunchrew.org.uk

Community Energy Scotland Contact:

Jamie Wilkinson
Development Officer – North East Scotland
Huntly Business Centre
Gordon Street
Huntly
Aberdeenshire
AB54 8FG

T: 01349 860126

E: jamie.wilkinson@communityenergyscotland.org.uk