

# COMMUNITY RENEWABLE ENERGY AT LOCAL LEVEL

## Ferryhill Ladder Centre



The Ferryhill Ladder Centre (Lakes and District Development Education Resource Centre) provides a wide range of services to the local community, including training, activities for families and young people, a community café, and general advice. In order to raise awareness of energy savings and carbon emissions amongst its users, the Ferryhill Ladder Centre decided to investigate the possibility of installing solar panels.

REALL carried out an initial site visit and provided advice on the different types of solar panel, and in particular enabled the group to make an informed choice between solar photovoltaic panels and solar water heating. REALL then assisted with the feasibility study, and helped the centre find funding and installers.

Using renewables has reduced the energy costs of the centre and successfully raised the awareness of carbon saving amongst the centre's users. The project co-ordinator, Sandy Denny, confirmed that "having the solar panel demonstrates that we are helping to make the project more self sufficient and reduce our environmental impacts. The panel has had a range of knock-on effects by raising people's curiosity and

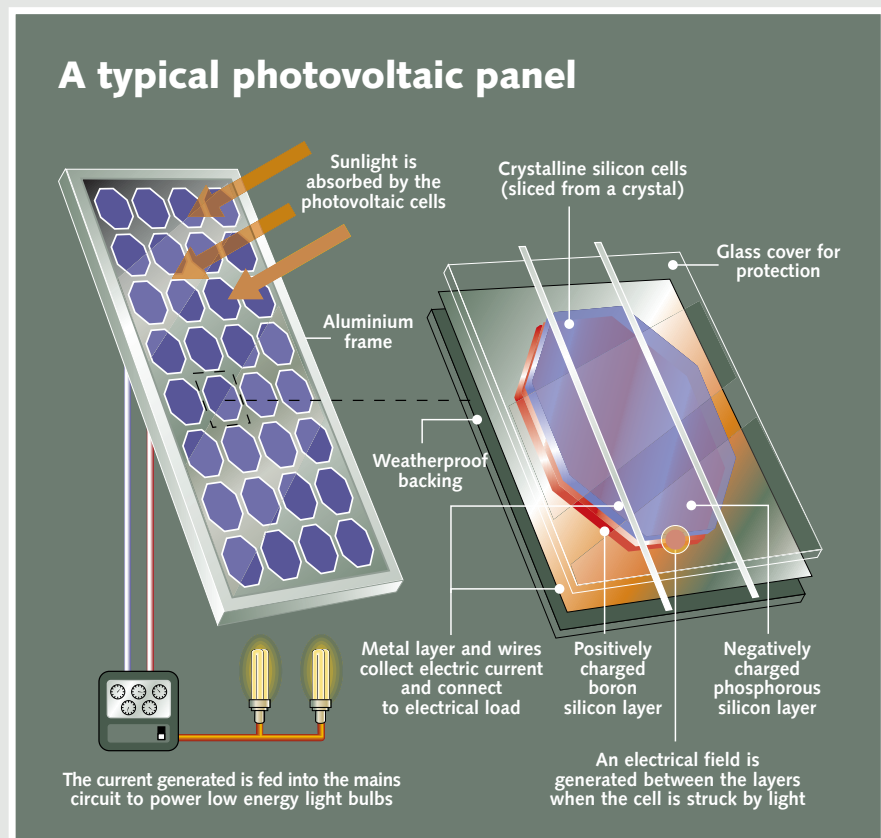
interest." Those using the centre have the opportunity to learn more about the panels and sustainable energy consumption. The PV panels have become part of the identity of the building and a symbol of the innovative thinking of the Ladder project workers.

The photovoltaic array is rated at

600W. Daylight stimulates a reaction within the panels to produce electricity, and although they generate more in summer, they do not need bright sunlight to function. Although these panels do not make the centre independent of grid electricity, they make a contribution to its electricity requirement, and reduce electricity bills accordingly.

The PV panels were installed by local company Winsund, at a cost of £6,000, but the business was awarded a grant from the DTI's Major PV Demonstration Programme (now closed, and replaced by the Low Carbon Buildings Programme) and the Single Regeneration Programme. This enabled the centre to cover 100% of installation costs.

Photovoltaic panels of this size will save, on average, 200kgs of CO<sub>2</sub> emissions per year.



# CLEAN GREEN TECHNOLOGIES



## Solar water heating

Over a year, solar water heating can provide about 60% of a typical family's hot water.

## Solar photovoltaics

PV panels generate electricity from the sun, produce no CO<sub>2</sub> and are maintenance free.



## Wood heating

Heating with wood is carbon neutral as growing trees lock up the CO<sub>2</sub> emitted by burning them.



## Micro wind power

In an open location wind turbines make a useful contribution to electricity supply.

## Hydro power

For buildings near a river, hydro can generate power with no pollution.



## Ground sourced heat pumps

Heat from the ground for underfloor heating or extra large radiators. Uses electricity efficiently.

## Funding for renewables and energy efficiency

There are various funding sources for renewable energy and energy efficiency at both local and national level. Advice on funding is available from your local rural community council:

### Community Action Northumberland

Tower Buildings, 9 Oldgate, Morpeth  
Northumberland NE61 1PY

### Durham Rural Community Council

Park House, Station Road, Lanchester  
Durham DH7 0EX

### Tees Valley Rural Community Council

Queensway House, Queensway  
Middlesbrough TS3 8TF

**REALL** was run by Community Action Northumberland and Durham Rural Community Council and operated in conjunction with partners. Funding has now come to an end, and Community Action Northumberland can no longer supply specialist renewable energy advice, although Community Action field workers are able to offer general guidance.

Funding for **REALL** was received from:

Community Action  
Northumberland



## Further information

Further information about community ownership of renewable projects is available from the **Department of Trade and Industry**. [www.dti.gov.uk/files/file15108.pdf](http://www.dti.gov.uk/files/file15108.pdf).

Information about energy co-operatives - **Energy4All**

Tel: 01229 821028, Email: [info@energy4all.co.uk](mailto:info@energy4all.co.uk)  
and web: [www.energy4all.co.uk](http://www.energy4all.co.uk)

Information about energy matters for communities may be obtained from **Café**.  
Community Helpline 08701 261444, email [café@est.org.uk](mailto:café@est.org.uk) and web [www.est.org.uk/cafe](http://www.est.org.uk/cafe)

Small scale renewables may be seen on the **Tynedale Renewable Energy Trail** and there is an exhibition at Kielder Castle, open from Easter to October. [www.tynedalerenewableenergy.org.uk](http://www.tynedalerenewableenergy.org.uk)

The **SEED** Programme

**Community Renewables Initiative**

**PB Power and RC Engineering**