



**solarcentury**

## BIH Housing Association, Owenvale Court, Northern Ireland

**Owenvale Court, a residential home in West Belfast, has embraced the drive towards zero carbon output, by incorporating sustainable energy technology.**

Jointly managed by BIH Housing Association and Saint John of God Association, the home is the first in Northern Ireland to be powered by the latest innovation in integrated renewable energy - C21e solar electric roof tiles - supplied by Solarcentury, the UK's leading solar energy company, specialising in building integrated photovoltaics.

Replacing traditional roof tiles, the 19Wp system will provide over 15,400kWh and save approximately nine tonnes of CO<sub>2</sub> each year. The installation of 360 solar roof tiles to the existing 2002 build two storey building of Owenvale Court was completed in just five days and the C21e photovoltaic tiles are now a vital part of the main roof, covering an area of 130m<sup>2</sup>. Within the first eight weeks of operation, the system had generated 3,217 kWh of free, clean electricity, saving almost two tonnes of CO<sub>2</sub>.

BIH HA wanted Owenvale Court to be both economically and environmentally friendly, particularly with regard to energy efficiency. Many housing associations and commercial companies are increasingly turning to photovoltaics (PV) as an onsite renewable energy technology, which also enhances the Eco-homes rating their buildings can achieve. It is widely accepted that common electricity production is the one of the primary emitters of CO<sub>2</sub>, therefore solar PV cells which create electricity from daylight, provide a clean, locally produced alternative, with a lifespan of beyond 40 years.



An important part of the project at Owenvale Court was to make the residents and staff aware and educate them on the need for reducing energy usage. A large electronic display panel in the reception area of the building shows the amount of electricity being generated by the solar roof tiles and the amount of national grid electricity saved as a result.

Alan Rea, Director of Housing at BIH says:

*"We're delighted with our new roof; the solar tiles are a fantastic way to cut our carbon emissions and contribute to ongoing electricity production. We see it as a very sound investment for the home, as we know we can rely on them to work. As part of our Corporate Social Responsibility strategy, BIH intends to undertake further renewable energy projects where we can"*

*"As a result of this project we are not only cutting our CO2 emissions and reducing waste, we are also saving significant sums of money each month from the clean energy that is being created from the daylight source,"* comments Patrick Doak, General Manager at Owenvale Court.

The Owenvale Court project was funded by the DSD under the Environment & Renewable Energy Fund and the work was carried out by Solarcentury, using their C21e solar PV tile. Grants are now being awarded to help housing associations, schools, local housing authorities, and other public sector and charitable bodies throughout the UK to go solar by covering 50% of the cost of a PV installation.

Date commissioned	2007.03.10
Technology	Solar PV
Installation Type	Pitched roof
System size (kWp)	18.73
Forecast electricity generation / year (kWh)	15400
Panel area (m2)	146
Building integrated	Yes
CO2 saving / year (kg)	8747
Energy produced (kWh)	5831
Date of last energy reading	2007.06.19
Type of project	Public sector