

Photovoltaic (PV) – Oxford Island in Craigavon

Craigavon Borough Council

Background:

Oxford Island is a National Nature Reserve. It is a peninsula situated in the southeast corner of Lough Neagh, our largest freshwater lake.

Lough Neagh Discovery Centre is situated in Oxford Island and enjoys a unique and beautiful setting on the edge of the Lough where visitors can learn all about the history, the culture and wildlife in and around Lough Neagh.

Centre facilities include:

- The Loughside Café specialising in home cooking
- A craft and gift shop with examples of local crafts
- A local information office for visitors to Craigavon
- Meeting rooms for courses, conferences and lunches

The System

The PV's comprise 26 x Sanyo modules and have been completed with 190 modules.

The total peak output of the PV's is 4.94 kW and the estimated total power produced annually is 4,450 kWhrs. This would typically provide power for:

- 167,000 slices of toast
- 243,000 cups of tea
- Total power for 1.5 three bed houses
- Lighting for 7.5 three bed houses
- Save 1912 kg of CO2 emissions



How does it work?

The word photovoltaic means electricity from light. A PV cell is a small energy conversion system that converts the sun's energy directly into electricity. This is achieved by making use of the properties of semi-conducting materials, such as silicon, which release electrons when they are exposed to light. When daylight strikes the specially designed PV cell, it creates an electric field across two or more layers of silicon, and generates an electric current.

Cost:

The Energy Saving Trust will contribute 50%* of the costs; NIE will contribute up to a further 25%* leaving local authorities to pay approximately £7,500 for the high efficiency Sanyo system that has a 25-year guarantee. This is a unique PV offer for local councils enabling benefits of both bulk discount and a 75%* grant (from NIE and EST).

*Based on the current maximum contribution per kWp.

Useful contacts:

www.niesmart.co.uk
www.actionrenewables.org
www.solarcentury.co.uk
www.est.co.uk

Supported by:

