

Photovoltaic (PV) – Coleraine Council Depot

Coleraine Borough Council

Background:

The Council Depot at Loughanhill Industrial Estate is the heart of all Council activities.

Coleraine Borough Council was formed in 1973 by the amalgamation of the urban councils of Coleraine, Portrush and Portstewart, and the rural councils.

The Borough, which covers 190 square miles, has a static population of around 56, 000, although large numbers of tourists swell the population during the summer months.

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 contribute 50%* of the costs; NIE contribute 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:

