

# CASE STUDY



## **Project Title**

1 kWp Solar Photovoltaic and 6 kW Wind Turbine

## **Client**

Gullane Primary, East Lothian Council

## **Summary**

Gullane Primary School established the Gullane School Grounds Improvement Group (GSGIG) in response to an increasing awareness that the school grounds were failing to provide the children and the wider community with an appropriate environment. As part of the grounds improvement, the school wanted to install a wind turbine and PV panels to generate electricity for the school. The main aim of the project was to reduce the environmental impact of the school and support the education of the children and the wider community. The school has now achieved the Silver Eco School award.

## **Technical Information**

- 8 Kyocera KC125 (125 Wp) panels
- 6 kW Proven (WT6000) Wind Turbine
- 2 SMA Windy Boy (3000) inverters (wind)
- 1 Fronius Micro 800 W inverter (PV)
- 2 Large display monitors in main assembly area
- Remote PC Data Logging

## **Electricity Generation**

- 1 kWp PV system = 800kWh per year
- 6 kW wind turbine = 16,900kWh per year (est.)

## **Environmental Benefits**

The school will reduce their consumption of electricity by 25% and CO<sub>2</sub> emissions will be reduced by 7.6 tonnes per year.

## **Funding**

- The DTI Major Demonstration scheme ([www.est.org.uk/solar](http://www.est.org.uk/solar))
- The Scottish Community & Householder Renewables Initiative ([www.est.org.uk/schri](http://www.est.org.uk/schri))
- Gullane Primary School and East Lothian Council

For more information about renewable energy grant funding see [www.est.org.uk/schri](http://www.est.org.uk/schri) or call 0800 138 8858.

## **Project Support**

Solar and Wind Applications Ltd provided a turn key development to our client, Gullane Primary School. This included support for: system designing; grant funding applications; planning permission; consultation with client and the Distribution Network Operator; liaising with East Lothian Council; and system installation and commissioning.



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