

Solar photovoltaic and thermal technologies

HSBC has developed trials for micro-renewable energy generation using solar photovoltaic panels to generate electricity and solar thermal technology to generate hot water. The trials have taken place at the HSBC Group Management Training College at Bricket Wood, Hertfordshire, at First Direct's head office in Leeds, and in Aubagne, France. More than 320 square metres of panels have been used both as ground- and roof-mounted technology trials.

Aims

The pilot project demonstrates HSBC's commitment to using renewable energy to reduce its environmental footprint.

- Installed in December 2006, the panels at First Direct cover over 100 square metres of roof. The panels can generate 10,000 kilowatt-hours (kWh) of electricity per annum, making a significant contribution to the site's energy requirement. In addition, they reduce the building's carbon dioxide (CO₂) footprint by over four tonnes per annum.
- Installed in June 2006, the Bricket Wood panels are both ground- and roof-mounted, covering over 200 square metres. In the first year, the panels have generated 20,000 kWh of electricity, saving the site over US\$4,300. The panels have reduced its CO₂ footprint by 7.5 tonnes per annum.
- HSBC France's Aubagne office building installed 18 square metres of solar thermal technology, which provides 66% of the building's hot water, reduces its CO₂ footprint by six tonnes per annum, and saves US\$2,300 in energy costs.

Achievements

Payback for this technology is dependent on location and operating conditions. Early indications from these trials demonstrate that performance matches specification and the estimated output has been achieved, which pave the way for further trials to be implemented elsewhere in HSBC.



Solar photovoltaic panels on the roof of HSBC's Group Management Training College.

'I am very proud of this project for two main reasons: firstly, the trials prove that the technology works effectively and secondly, this project was sponsored by my Corporate Real Estate team. This is the first installation of solar thermal technology for HBFR and it has already had a huge impact and interest from the public, customers, staff and other CRE teams. Aubagne's pilot can be duplicated across HBFR, in Fussy, Reims, Bordeaux, Nice or Marseille.'

Michel Grossi, Head of Corporate Real Estate, HSBC France

'HSBC places great emphasis on reducing the environmental impact of its operations and we believe that the installation of renewable energy technologies as part of the GEEP five year programme should be seen as an investment rather than a cost. These trials have been highly successful enabling us to move forward confidently with further trials across the portfolio.'

**Richard Spence, General Manager
Special Projects, HSBC Bank plc**