

Solar Meadow opens at Edinburgh College



A five acre site at Edinburgh College's Midlothian Campus has been transformed into Scotland's first Solar Meadow. Designed and installed by energy company SSE, the innovative £1.2m construction project has around 2,560 solar panels installed on the site, which will be planted with biodiversity grasses and wildflowers.

The site will generate the equivalent of the energy the campus requires to meet its electricity needs from renewable sources and reduce its carbon emissions by 300,000 kg per annum.

Importantly the solar meadow site will act as a research centre, focusing on the interaction between biodiversity and solar technology and analysing the effect of environmental conditions such as weather, pollen and dust on the output of the panels. The data will be of particular interest as these panels are situated on one of the most northerly sites for solar power in Europe. Edinburgh Napier University is supporting the project with a research assistant, who will work with staff and students at Edinburgh College to collect and analyse data.

Engineering students at Edinburgh College will be able to enhance their studies, using the site as an outdoor classroom. Interacting with the panels allows students to develop key skills which are increasingly sought after for Scotland's growing renewable energy sector.

Professor Steve Tinsley, Vice Principal, Corporate Development at Edinburgh College, is leading the Solar Meadow project. He

said:-“It’s great to witness the culmination of such an exciting project which has created this unique solar power site at Edinburgh College. In creating the Solar Meadow we are able to show that Scotland is making a strong commitment to advancing engineering innovation and developing clean technologies for a low carbon economy.

“The Solar Meadow is the first teaching facility of its kind in Scotland that will help not only to provide the next generation of engineers with essential skills, but also allow the college to become less reliant on fossil fuel energy.

“We believe the Solar Meadow also looks great and will become a significant attraction for local people as well as visitors to the Capital. It is also fantastic that the project has enabled the College to engage with schools and local community groups to develop their own renewable energy projects; it really is giving something back to the local community in more ways than one.”

Richard Chandler, SSE’s Head of Green Deal and Energy Solutions, added:- “As the UK’s largest generator of electricity from renewable sources, it made perfect sense for us to be involved in this project which is the first of its kind in Scotland.

“The Solar Meadow will not only generate around 560,000 kW hrs every year – enough energy to power 170 homes – but is also a fine example of how industry and education can work well together. This project will bring benefits to the college, its students and the wider community as well as further strengthening Scotland’s renewable energy resources.”

Twenty three year old Alana Beaton, who is an NC Intermediate Electrical Engineering student from Inverness, said:-“I’m really interested in renewable energy and I’m excited that Edinburgh College is leading the way with the solar meadow.

“We have studied renewable and green technology within the

Electrical Engineering course at College, and a great importance is placed on sustainable engineering, so the fact that the College has taken this on board and is using this technology is definitely a step in the right direction. I'm really looking forward to using the solar meadow as part of my course. I think it will further my interests within solar energy technologies and modern engineering in Scotland."

The launch of the solar meadow is the culmination of Edinburgh College's Engineering Week, which started with an open day aimed at increasing interest in engineering among school pupils in Edinburgh and the Lothians.

The MacTaggart Scott Hydraulics, Pneumatics and PLC Laboratory, also situated at Edinburgh College's Midlothian Campus was also opened this week. The result of a long standing partnership between Edinburgh College and MacTaggart Scott, the laboratory represents an investment of £100,000 over 5 years. College engineering staff will use the facility to train MacTaggart Scott apprentices and staff, while engineering students at the college will use the laboratory to build their hydraulic and pneumatic skills.

The next phase of equipment to be installed in the laboratory will include wave and tidal simulators, which will recreate North Sea conditions, suitable for testing wave and tidal technology in the confines of a laboratory. Access to this technology will allow our students to develop crucial skills in wave and tidal energy. Many of them will then go on to be employed in Scotland's renewable industries with companies such as MacTaggart Scott.