



Short course

Renewable Energy Policy, Modeling and Analysis of Potential

24 - 25 March 2014

www.cranfield.ac.uk/sas/energypolicy



Cranfield University offers this two-day short course providing an insight in the European energy policy and market. It will additionally give an introduction to renewable energy (RE) potential modelling within a Geographical Information System (GIS) environment.

Course overview

Delivered through a combination of lectures and practical sessions, the course will allow delegates to broaden their knowledge of renewable energy policy and the European electricity market. Delegates will learn how to carry out modelling at a local and national scale within a GIS environment. From an evaluation of the outputs of the model the potential of a region or an entire nation for the deployment of various renewable energy technologies can be extracted. The model has been built and used by Fraunhofer ISI (Institute for System Innovation) in the PowerACE model environment. The potential for the RE technologies wind, solar PV, solar CSP, will be analysed. This model had been used in several projects for the DESERTEC industrial initiative, European and national projects.

Who should attend?

The course will be of particular interest to scientists, engineers, managers, technologists, and postgraduate researchers from the energy sector. It will also be valuable to manufacturing and engineering companies, policy makers, investors, research academics, technical professionals, technical staff and non-specialists who wish to gain a better understanding of the potential of the various renewable energy technologies, its opportunities, and its benefits at a regional or national scale.

Fees

The course takes place in Mitchell Hall on the Cranfield campus. The non-residential fee for the course that includes tuition charges, lecture notes, use of laboratory tools, software and materials, refreshments, lunches, course dinner, and a company visit, is £640.

Course timetable

Day 1 Monday	Day 2 Tuesday
9.30 - 10.00 Registration	9.30 - 10.00 Introduction to Day 2
10.00 - 10.30 Introduction	10.00 - 11.00 Practical modelling session 2: Advanced methods in GIS renewable energy modelling
10.30 - 11.00 Lecture 1: EU energy policy	
11.00 - 11.30 Break	11.00 - 11.30 Break
11.30 - 12.15 Lecture 2: Development and implementation of RES in Germany	11.30 - 12.30 Lecture 4: Conclusions and future work
12.15 - 13.00 Lecture 3: Introduction to Geographic Information Systems	
13.00 - 14.00 Lunch	12.30 - 13.00 Lunch
14.00 - 17.00 Practical modelling session 1: First practical approach on working with GIS in RES modelling	13.00 - 19.00 Company visit
Course Dinner	

Speakers

[Dr. rer. nat. Martin Pudlik](#) is a scientific researcher in the Competence Center Energy Policy and Energy Markets at the Fraunhofer Institute for Systems and Innovation Research (ISI). The Fraunhofer-Gesellschaft is a non-profit organization and Europe's largest institute for applied research. It has about 80 research institutes all over Germany. It conducts application-oriented research to benefit the economy and society at large. The Fraunhofer ISI analyses the origins and impacts of innovations. They research the short- and long-term developments of innovation processes and the impacts of new technologies and services on society. Their expertise lies in a broad scientific competence as well as an interdisciplinary and systemic research approach.

[Dr Christopher Sansom](#) is an internationally recognised authority on CSP, whose current projects include concentrating solar power for electrical power generation, solar collector characterisation and ageing evaluation, polymer films for solar power plant heliostats and line-focus solar collectors, linear Fresnel community scale CSP, heliostat design and manufacture, solar thermal heating and cooling, solar driven desalination and water purification, thermal storage, and nanostructured thermo-electric devices for energy harvesting. Chris is a Member of the International Solar Energy Society (ISES) and the sole UK member of the EERA - CSP Joint Programme.

Further information

For details on course content:

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For location and accommodation:

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