Geological aspects of renewable energy

SPEAKER: Bruce Levell (Shell)

Moving to a lower carbon energy system and, over time, displacing fossil fuels with renewable energy will involve new challenges for geologists.

In this talk we will explore these challenges. Below ground geothermal energy is an obvious example. High grade for converting to power, low grade for space heating, and shallow for seasonal storage and heat pumping. Underground energy storage, for example hydrogen in salt caverns, may be a more effective and flexible solution than batteries to the challenges of matching renewables’ intermittent supply with demand.

Less obviously the siting of renewable energy projects from hydro electric power or storage to wind farms, both onshore and offshore, is based fundamentally on conditions created by geology.

Last but not least, the new resources required to manufacture the energy conversion equipment needed to supply renewable energy on a global scale will place new demands across the periodic table for resources which already is beginning to constrain and shape the commercial solutions.

Date: Wednesday 14 November 2012

Timings: This lecture will be given at 3pm and 6pm on this day (with tea/coffee served for half an hour before each), so please let us know, when applying for tickets, which talk you would like to attend.

Venue: The Geological Society of London, Burlington House

Entry to this lecture is free to all, but by ticket only. Please call at reception (to your right) or contact the Society by post, phone, fax or email (see below).

For further information, please contact:
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