

International Conference on Sustainability in Energy and Buildings

Invited Sessions

Title of Session:

Sustainable Energy and the Electricity Supply Utilities

Name of Chair:

Roger Morgan, Emeritus Professor Liverpool John Moores University, UK

Description:

Sustainable sources of energy present challenges to the companies that generate and distribute electricity (the Electricity Supply Utilities). Public and political attention has concentrated on the primary sources of energy – a new generation of nuclear power stations, a huge increase in offshore wind generation, and so on. But equally important is the effect on the energy transport infrastructure. Partly this is due to the different nature of energy geography, limited by availability of natural resources rather than by the ability to deliver fuel. For electricity this may involve a change from centralised to distributed generation. Also important is a possible shift in demand, with an increase in the distributed demand at off-peak times in people's homes.

This session will consider the nature and scale of the challenges, and will look at existing, projected and possible future responses and strategies. Among the topics that might be considered are

- electricity distribution infrastructure for local generation
- can 'green' generation be dispatchable? (can it be asked to generate, or not, on demand?)
- future generation and distribution strategy and policy
- demand scheduling, demand-side management and dynamic pricing
- improved local distribution control

Papers on these topics, or any other relevant ones, are invited from research groups in universities and industry, engineers and those concerned with policy and strategy in this area.

Website URL (if any):**Email & Contact Details:**

r.morgan@ljmu.ac.uk