

# *DRAFT*

## iiESI Workshop - *The Value Proposition for Energy Systems Integration*

Imperial College, London

May 16, 2017

A iiESI workshop will be hosted by Imperial College on May 16 (in conjunction with an EPRI Power Delivery and Utilization Advisors Meeting – [EPRI European Advisors Meeting - London](#) ). This workshop will address **The Value Proposition for Energy Systems Integration** and the research coordination that is needed to realize the value proposition. The agenda includes a morning session providing background on research activities that are relevant and an afternoon session with example case studies that are already illustrating this value proposition. Both sessions are designed to be interactive and help set the stage for improved coordination around this important research topic.

### **Morning – Energy Systems Integration Framework**

- **Economic Assessment Framework for Energy Systems Integration – Goran Strbac (Imperial College)**
- **EPRI Integrated Energy Network and the Economics of Energy Integration – Tom Wilson (EPRI)**
- **Energy Systems Design for Developing Countries – Pankaj Batra, Central Electricity Authority, India**
- **The potential for active demand response with heat pumps – Erik Delarue (KU Leuven)**
- **Infrastructure Investment Requirements for the Integrated Energy System - Grid Modernization - Konnie Staschus, ENTSO-e**
- **Smart Multi Energy Systems: Challenges and Opportunities (NTNU, via Skype)**
- **Discussion**

### **Afternoon - Example Case Studies**

- **IEN Concept in Japan – Naoki TODA, Chief Economist, TEPCO Research Institute**
- **Energy storage applications for self-consumption, Nina Munzke (KIT)**
- **Combined heat and power applications in the UK – UK Catapult Representative (TBA, Mark O'Malley)**
- **Integrating the customer - REALVALUE - Rowena McCappin, Glenn Dimplex**
- **Fueling transportation in a low carbon world – (TBC, Mark O'Malley)**
- **Energy Systems Integration in Denmark – Peter Borre Erikson**
- **Discussion**

**Wrap Up - Developing the action plan – Session led by Bryan Hannegan (NREL)**

These are global issues and different priorities and solutions being implemented around the world. Understanding the value proposition, taking into account all perspectives, is critical as a starting point. This workshop will help characterize the approaches for assessing the value proposition and the needs for basic research, standards development, demonstrations, etc. to validate the value proposition. iiESI will help provide coordination of these research efforts from around the world.

The workshop will be held at Imperial College (contact is Goran Strbac - [g.strbac@imperial.ac.uk](mailto:g.strbac@imperial.ac.uk)) For logistics and coordination, please contact Kathryn Avedon - [Kathryn.Avedon@nrel.gov](mailto:Kathryn.Avedon@nrel.gov).