



# IEA Symposium on Demand Flexibility and RES Integration Thinking the Smart Grid from the Consumer End

# SMART GRIDS Week 2016, LINZ AG, Wiener Straße 151, 4021 Linz, Austria

Monday, 9th May 2016

Registration: Free to attend (register at: <u>http://www.smartgridsweek.com</u> or email to contacts)

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Demand side flexibility is needed in order to effectively integrate renewables and distributed generation in the future energy system. The enabling of flexibility involves many different aspects – from the technical capabilities of equipment (e.g. heat-pumps, storages, photovoltaic systems), consumer behavior to aggregation for market participation – and will lead to new services for the energy system. These aspects are targeted by various technology collaboration programs of the International Energy Agency (IEA).

Experts from these energy technology initiatives will discuss recent research results, technology options and international activities together with academics, distribution network operators and representatives from industry.



The symposium is organized and supported by IEA DSM Task 17: Integration of Demand Side Management, Distributed Generation, Renewable Energy Sources and Energy Storages. Link: <u>www.ieadsm.org</u>

## Supported by









# Program

### 9:30 Registration

#### 10:00 Welcome and Keynotes

- 10:10 IEA International Energy Agency Jean Francois Gagne (Energy Technology Policy Division Head, IEA)
  10:30 Demand Side Management: Towards Energy Efficiency
  - Rob Kool IEA DSM Chair

#### **10:50 Technology and Equipment Flexibility**

- 10:50 Heap Pump Program Annex 42 Smart Heatpumps for enabling demand flexibility Dennis Mosterd (BDH, The Netherlands)
- 11:10 Energy Conservation Energy Storage Annex 28 DESIRE Distributed Energy Storage for the Integration of Renewable Energies Andreas Hauser (ZAE Bayern, Germany)
- 11:30 **Photovoltaic Power Systems Task 14 Increasing PV Integration with demand flexibility** *t.b.c. (Fraunhofer, Germany)*
- 11:50 Solar Heating & Cooling Task 53 Integration of Solar Energy at the demand side *Tim Selke (AIT, Austria)*
- 12:10 Electric Vehicle as domestic electric storage: vehicle to home Christina Corchero (IREC, Spain)

#### 12:30 Lunch

#### 13:30 Building Flexibility

13:30	Energy in Buildings & Communities Annex 67 - Towards zero-energy districts
	Glenn Reyners (KU Leuven, Belgium)
13:50	Energy in Buildings & Communities Annex 58 - Building-based load forecasts for DSM
	Susanne Metzger (TU Wien, Austria)
1/1.10	Demand Side Management Task 17 - Buildings Interoperability - Characterizing connecte

14:10 Demand Side Management Task 17 - Buildings Interoperability – Characterizing connected buildings equipment (Steve Widergren, PNNL)

#### 14:30 Coffee Break

#### 15:00 System Flexibility & Customer driven New Energy Services

- 15:00 **ISGAN Annex 6 Using distribution connected flexibility to improve T&D system operation** *Anthony Zegers (AIT, Austria) and Susanne Ackeby (STRI, Sweden)*
- 15:20 Demand Side Management Task 25 Business Models for a more effective market update of DSM energy services *Reinhard Ungerböck (gea, Austria)*
- 15:40 **Demand Side Management Task 17 Integrating the Customer Demand Side Flexibility** *René Kamphuis (TNO, The Netherlands) and Matthias Stifter (AIT, Austria)*

#### 16:00 Panel Discussions

16:00 **Demand Flexibility – the missing link between Consumer and the Energy System?** Experts and the audience will discuss the current situation, trends and future perspectives of demand side flexibility and renewable energy integration.