

“Scaling-up renewables through decentralised energy solutions”

Invitation-only Workshop hosted by

IEA Renewable Energy Working Party (REWP)

Tuesday 28 March 2017

UIC-P Espaces Congrès

16 rue Jean Rey, 15th arrondissement Paris, France

The rise of decentralised and variable power generation, in particular through solar PV, combined with trends such as the growing role of electric vehicles, storage, district heating and demand response, offer opportunities for integrated local energy solutions. These link sectors (electricity, heat and transport), as well as demand and supply and are facilitated by smart data. Potentially, there are large benefits in terms of greater overall system efficiency, lower carbon emissions and a reduction in local air pollution.

This workshop will look at the role of integrated local energy solutions in driving the global energy transformation. It will provide perspectives from different IEA member and partner countries and from different sectors, with the aim to identify priorities for policy making. Questions to be addressed include:

- What contribution can decentralised, local energy solutions make to driving renewables deployment and the decarbonisation of energy systems?
- What are the benefits of sector coupling (linking power, heat and electro-mobility)?
- What are the innovative business models that drive integrated local energy solutions?
- What policy changes are required to enable decentralised energy solutions to become pervasive?

This event, organised by the IEA’s Renewable Energy Working Party and with the active participation of members of its Renewable Industry Advisory Board, will bring together senior decision-makers from the key players worldwide - governments, municipalities, and energy industry - to discuss and review opportunities for renewables in decentralised and local energy systems.

Agenda

08:45 – 09:00	Registration and welcome coffee
Welcome 09:00 – 09:15	Opening remarks <ul style="list-style-type: none"> • Paul Simons, IEA Deputy Executive Director • Martin Schöpe, Ministry of Economic Affairs and Energy, Germany and REWP Chairman
Session 1 09:15 – 11:15	New business models for power <p>The rapidly falling costs of renewables (especially rooftop PV) and storage have opened up the scope of decentralised/distributed generation at a variety of scales. This provides challenges for the traditional utility model but also many opportunities. This opening session will explore questions such as:</p> <ul style="list-style-type: none"> • What is the role of decentralised energy solutions in a decarbonized energy system vis-à-vis more centralized options? • Is decentralised generation and the emergence of the prosumer just a small-scale phenomenon or could it become disruptive? • Does the increasing popularity of self-generation (especially through solar PV) threaten the traditional utility model? How can traditional utilities adjust? • What does this mean for the regulation of the utility sector? <p>Moderator: Paolo Frankl, Head, IEA Renewable Energy Division</p> <p>Setting the scene: Peter Fraser, Head IEA Gas, Coal and Power Markets Division</p> <p>High-level panel:</p> <ul style="list-style-type: none"> • Francesco Venturini, CEO ENEL Green Power • Felix Dembski, VP Strategy, sonnen GmbH • Thomas Plagemann, Chief Commercial Officer, Vivint Solar • Francisco Laverón, Head of Energy Prospective, Iberdrola • Alexis Steverlynck, Key Program Manager, Distributed Energy, ENGIE
11:15-11:45	Coffee break
Session 2 11:45 – 13:00	Drivers for change – the role of cities, industry and smart solutions <p>Cities and companies have been at the forefront of the shift towards more decentralised energy, with many setting themselves ambitious targets for renewables. This shift is increasingly being facilitated by smart energy solutions and data. This session will examine this trend and look at the following issues:</p> <ul style="list-style-type: none"> • What have been the drivers behind city and industry decentralised energy investments? • How can these players help provide greater energy system integration? • How essential are smart energy systems and data in facilitating these local energy solutions? <p>Moderator: Bryan Hannegan, Associate Lab Director - Energy Systems Integration, NREL, US</p> <p>Presentations:</p> <ul style="list-style-type: none"> • Sun Jin Yun, Professor of Environmental and Energy Policy, Seoul National University, Korea • Jonas Tolf, Head Energy and Climate Change Unit, City of Stockholm, Sweden • David de Jager, Operating Agent, IEA-RETD • Shin-ichi Inage, Department Manager, Hitachi Ltd & Professor, Tokyo Institute of Technology, Japan <p>Discussion panel: speakers + Gert De Block, European Federation of Local Energy Companies</p>
13:00 – 14:00	Buffet lunch

<p>Session 3 14:00 – 15:15</p>	<p>Electro-mobility, storage and renewables</p> <p>Electric vehicles and storage can play an important role in facilitating the integration of variable renewable power sources, with options becoming increasingly attractive to consumers at all scales. This session will aim to address questions such as:</p> <ul style="list-style-type: none"> • How essential are electric vehicles in decarbonisation scenarios and what are the prospects for them taking off as a consumer choice? • How should grid operators plan for the expansion of electric vehicles? What are the challenges? • What new storage solutions are emerging to facilitate both EVs and larger shares of variable renewables? <p>Moderator: Jesse Scott, IEA Gas, Coal and Power Markets Division</p> <p>Presentations:</p> <ul style="list-style-type: none"> • Guillaume Berthier, Sales & Marketing Director, Electric cars, Renault • Pierpaolo Cazzola, Senior Transport Analyst, IEA Energy Technology Policy Division <p>Panellists:</p> <ul style="list-style-type: none"> • Matteo Codazzi, CEO, CESI, Italy • Yann Laot, Strategic Marketing Manager, Transportation, Telecom and Grid, Saft Batteries • Thomas Veyrenc, Director of Markets and Regulatory Affairs, RTE, France
<p>15:15 – 15:30</p>	<p>Coffee break</p>
<p>Session 4 15:30 – 16:45</p>	<p>Heat and sector coupling</p> <p>Heat accounts for more than half of final energy consumption and its provision is by its very nature local and decentralised. However, at present, renewables play a very small role in heat supply. This session will discuss options for heat supply decarbonisation that can also provide broader system integration services. Questions to be addressed include:</p> <ul style="list-style-type: none"> • How can local authorities ensure that local heat supply is decarbonised and provides maximum system benefits through effective sector coupling? • What are the roles of district heating and heat electrification in providing system integration services? • In the already decentralised heat sector, is there possibly a need for more centralisation (e.g. through heat networks) to facilitate the deployment of renewables? <p>Moderator: Ute Collier, IEA Renewable Energy Division</p> <p>Speakers:</p> <ul style="list-style-type: none"> • Wiebke Fiebig, Director, Municipal Energy Agency, City of Frankfurt am Main • Birger Lauersen, Manager International Affairs, Danish District Heating Association <p>Panellists:</p> <ul style="list-style-type: none"> • Monica Axell, General Manager, IEA Heat Pump Centre • Karl-Heinz Backhaus, Head Government Relations, Associations and Standards, Vaillant Group • Paul Voss, Managing Director, Euroheat and Power
<p>Wrap-up 16:45 – 17:00</p>	<p>Concluding remarks</p> <ul style="list-style-type: none"> • Martin Schöpe • Simon Müller, Head Systems Integration Unit, IEA Renewable Energy Division