

How to build Smart Energy Regions

Programme

4-5 July 2016

Karlsruhe, Germany

Contact: JRC-CONFERENCE@ec.europa.eu

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TechnologieRegion
Karlsruhe
Hightech meets the Good Life




Baden-Württemberg
MINISTERIUM FÜR UMWELT, KLIMA UND ENERGIEWIRTSCHAFT

Karlsruhe / Ettlingen, Germany

4-5 July 2016

Rationale

Aim

This joint event is organised by the Karlsruhe TechnologieRegion and the European Commission's Joint Research Centre and supported by and under the patronage of the Ministry for Environment, Climate Protection and the Energy Sector of Baden-Württemberg. The event aims to contribute to the assessment of how regions and local communities can achieve ambitious and sustainable greenhouse gas emission reduction targets in the energy sector. This comes at a crucial moment, following the historic agreement to combat climate change and to unleash actions and investment towards a low carbon, resilient and sustainable future at the 2015 Paris Climate Conference. This is underpinned by the European Commission priority of establishing a European Energy Union aiming to make energy more secure, affordable and sustainable. Wiser energy use while fighting climate change is both a stimulation for new jobs and growth and an investment in Europe's future.

Goal

The event addresses representatives of the local and regional government level, scientists and experts as well as representatives of the European Commission to discuss good practices and innovative concepts for smart energy solutions at local and regional level. Together, the participants will discuss and exchange good practices and innovative concepts supporting local and regional low-carbon energy policy.

Background

The integration of renewable energy sources begins at local and regional level where demand and supply of electricity can best be balanced taking into account the capacities of neighbouring regions also. In this context, the European Union offers a wide range of funding opportunities and other instruments to support local and regional authorities in their effort to reduce carbon emissions and become more energy efficient. Energy is one of the key priorities in Horizon 2020, the EU Framework Programme for Research and Innovation. Horizon 2020 dedicates more than EUR 7 billion in the period 2014-2020 to energy research. The Cohesion Policy through the European Structural and Investment Funds invests about EUR 38 billion in the period 2014-2020 to facilitate the shift towards a low-carbon economy at regional level. In addition, the European Fund for Strategic Investments (EFSI) supports the deployment of strategic infrastructures in the field of energy as well as the expansion of renewable energy and resource efficiency.

The Joint Research Centre analyses the regional development of various renewable energy technologies, as well as the status and future trends of the energy market in the different EU regions. It also assesses renewable energy resources, regarding availability, logistics and economic performance at regional level. The Joint Research Centre is also performing comparative regional-level cost-benefit and security analysis for a cost-effective, reliable and secure development of the power system with a high share of renewables.

The Joint Research Centre is running the Smart Specialisation Platform for Energy which supports the optimal and effective uptake of the Cohesion Policy Funds for energy and provides guidelines and scientific support for the creation of regional expert clusters to design, evaluate and monitor the Sustainable Energy Action Plans of the Covenant of Mayors initiative.

The Joint Research Centre also assesses the integration of the Baltic States' electricity network into the Nordic market and EU electricity market and gives scientific support to the EU Strategy for the Danube Region.

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Monday, 4 July 2016

Venue: Buhlsche Mühle, Pforzheimer Str. 68, 76275 Ettlingen

12:30 - 13:00 Registration and welcome canapés

13:00 - 13:20 Opening Session

Katrin Schütz, State Secretary, Ministry of Economic Affairs, Labour and Housing, Baden-Württemberg

Frank Mentrup, Lord Mayor of Karlsruhe and Executive Chairman of the Karlsruhe TechnologyRegion

Maive Rute, Deputy Director-General, Directorate-General Joint Research Centre,
European Commission

13:20 - 13:35 Key Note I

Speeding up, bottom up: transition to EU Smart Energy Regions

Lambert van Nistelrooij, Member of the Committee on Regional Development, European Parliament

13:35 - 13:50 Key Note II

Beyond the 2015 Paris Climate Conference – Climate Protection and Energy Policy in Baden-Württemberg

Karl Greißing, Ministerialdirigent, Ministry of the Environment, Climate Protection and the Energy Sector, Baden-Württemberg

13:50 - 14:30 Panel discussion

Decentralised energy systems – a European Vision?

Moderator: **Karl-Friedrich Ziegahn**, Head of Division “Natural and Built Environment”, Karlsruhe Institute for Technology – KIT

Discussion with the representatives of the opening session and the keynote speakers

14:30 - 15:00 Coffee break

15:00 - 16:30 **Session 1: Scientific evidence to improve the effectiveness of sustainable energy policies and measures**

The session focuses on existing potentials of greenhouse gas emission reductions and energy efficiency as well as current trends in environmental and adaptation technologies.

Moderator: **Karl-Friedrich Ziegahn**, Head of Division “Natural and Built Environment”, Karlsruhe Institute for Technology – KIT

Heinz Ossenbrink, Head of Unit, Energy Efficiency and Renewables, Directorate-General Joint Research Centre, European Commission

Renewable energy deployment now and in the next 5 years

Andreas Zucker, Knowledge for Energy Union, Directorate-General Joint Research Centre, European Commission

Self-consumption under different regulation schemes

Dogan Keles, Head of Research Group “Energy markets and energy system analysis”, Karlsruhe Institute for Technology - KIT

Impact of renewable energies on markets and future design of electricity markets

Phil Jones, Chair of Architectural Science, Welsh School of Architecture, Cardiff University

Drivers and barriers for a zero carbon built environment

Ales Gnamus, S3 Platform, Unit for Territorial Development , Directorate-General Joint Research Centre, European Commission

What drives innovation? Economic development perspectives for cities and regions - Presentation of the Smart Specialisation Platform on Energy

Q&A with the audience

16:30 - 17:00 **Coffee break**

17:00 - 18:30 **Session 2: Local and regional strategies**

The session focuses on the functionality of measures taking into account the impact of eco-innovations on climate protection whilst strengthening local and regional competitiveness.

Moderator: **Ales Gnamus**, S3 Platform, Unit for Territorial Development, Directorate-General Joint Research Centre, European Commission

Examples of regional and local strategies

Bertrand Zuindeau, Project Manager, Regional Council Hauts-de-France, France

The Third Industrial Revolution in Hauts-de-France : Current State and Perspectives

Jochen Ehlgötz, Executive Director, Karlsruhe TechnologyRegion, Germany

Innovation as a key to sustainable development – regional potentials and challenges

Astrid Madsen, Process Manager for Energy Transition, City of Rotterdam, the Netherlands

Innovative urban energy planning

Nikola Kibritev, Director of the Sustainable Development Department, Ruse Municipality, Bulgaria

Transforming cities for a smart, sustainable Europe – example from the lower Danube region

Furio Honsell, Mayor of Udine, Italy

Are smart cities healthy cities?

Jeremy Draper, Energy Manager, Milton Keynes, United Kingdom

Imagine 2050: A City Roadmap to a sustainable Zero Carbon City by 2050

Q&A with the audience

Venue: Schlossgartenhalle, Kloostergasse 8, 76275 Ettlingen

19:30 **Evening reception hosted by the Land of Baden-Württemberg**

Tuesday, 5 July 2016

Venue: Schloss Ettlingen, Schloßplatz 3, 76275 Ettlingen

08:30 - 09:00 **Welcome coffee**

09:00 - 10:30 **Session 3: Optimisation of policies and measures to build Smart Energy Regions**

Three parallel workshops analyse policies and measures to build smart energy regions. The central questions of this session are what measures make sense and how to avoid disincentives? The session will discuss good practices and innovative concepts to efficiently reach the energy and climate targets. Guiding questions for all three workshops:

- *What is the status quo?*
- *Which are the obstacles and challenges?*
- *What are concrete good examples and what could be done better?*

Workshop 1: Smart Grids as backbone for Smart Energy Regions

Chair: **Heinz Wilkening**, Unit for Energy Security, Distribution and Markets, Directorate-General Joint Research Centre, European Commission

Christoph Schlenzig, Member of the Board, Smart Grids-Plattform Baden-Württemberg e.V.
Energy infrastructure in transition – local and regional challenges

Dudley Stewart, General Secretary, Micro Electricity Generation Association, Ireland
Community ownership of renewable energy projects

Eloy Álvarez Pelegry, Director of the Department of Energy, Orkestra Basque Institute of Competitiveness
Policies and projects for smart grids and smart energy regions: the case of the Basque Country

Representatives of expert networks (ENTSO-E, EDSO, Smart City Alliance, ICLEI - Local Governments for Sustainability)

Rapporteur: **Annette Hurst**, Steinbeis-Europa-Zentrum / Enterprise Europe Network

Workshop 2: Research and Innovation Strategies for Smart Specialisation

Chair: **Ales Gnamus**, S3 Platform, Unit for Territorial Development, Directorate-General Joint Research Centre, European Commission

Magdalene Häberle, Head of ERDF Coordination Unit (European Regional Development Fund), Ministry of Economic Affairs, Labour and Housing, Baden-Württemberg
Dialogue oriented instruments and subsidiarity in smart specialisation

Michail Gkoumas, Special Service for Strategy, Planning & Evaluation, Ministry of Economy, Development and Tourism, Greece
Application of Entrepreneurial Discovery Process in the energy sector at regional level

Lothar Keck, CEO, fokus.energie e.V., Karlsruhe
Innovation platforms – from consultation to co-creation of policies

Rapporteur: **Norbert Höptner**, Steinbeis-Europa-Zentrum / Enterprise Europe Network

Workshop 3: Smart Cities and Communities

Chair: **Orsola Irene Mautone**, New energy technologies, innovation and clean coal, Directorate-General for Energy, European Commission

Martin Sawillion, KEA Climate and Energy Agency Baden-Württemberg
Energy Efficient Cities and Communities: Economic development and climate protection

Agnese Presotto, responsible for the Environmental Management System in Udine, Italy
Udine smart city: project Infinite Solutions and other innovative urban actions

Jaroslav Klusák, Energy Manager, City of Litoměřice, Czech Republic
Smart energy strategies - possibilities and limitations of local authorities in different settings

Representatives of expert networks (Covenant of Mayors, Smart City Alliance, ICLEI - Local Governments for Sustainability, eea-European Energy Award)

Rapporteur: **Valerie Bahr**, Steinbeis-Europa-Zentrum / Enterprise Europe Network

10:30 - 11:00

Coffee break

11:00 - 12:30

Session 4: How to build Smart Energy Regions

The panel and the following plenary discussions will focus on drivers of change to overcome prevailing market, policy and institutional barriers to low carbon growth. The session will discuss the specific role of the regional and local level.

Moderator: **Ulla Engelmann**, Head of Unit, International, Interinstitutional Relations and Outreach, Directorate-General Joint Research Centre, European Commission

Results of the workshops from the morning session & Experts' reflexions on implementation

Heinz Wilkening, Unit for Energy Security, Distribution and Markets, Directorate-General Joint Research Centre, European Commission

Ales Gnamus, S3 Platform, Unit for Territorial Development, Directorate-General Joint Research Centre, European Commission

Orsola Irene Mautone, New energy technologies, innovation and clean coal, Directorate-General for Energy, European Commission

Panel discussion on Governance, Financing and Collaboration

Diego Pavía, CEO of KIC InnoEnergy – access to markets

Ralf Goldmann, Head of Division, Energy and Solid Waste Division, JASPERS, European Investment Bank (EIB) – financial instruments

Peter Heydebreck, Interreg EUROPE, Lille – Policy Learning Platform

Kristine Kern, Professor for Governance of Urban Infrastructure and Global Change, Leibniz Institute for Research on Society and Space (IRS)

Q&A with the audience

12:30 - 13:00

Conclusions session

Maive Rute, Deputy Director-General, Directorate-General Joint Research Centre,
European Commission

Frank Mentrup, Lord Mayor of Karlsruhe and Executive Chairman of the Karlsruhe TechnologyRegion

13:00

Networking lunch

Optional

14:00 - 16:00

Following the event there is the possibility to either visit the FZI House of Living Labs in Karlsruhe (14:00-16:00) or to have a guided tour to discover the historic old town of Ettlingen (14:00-15:00).

Partner organisations



Notes

Notes



JRC Mission

As the science and knowledge service of the European Commission, our mission is to support EU policies with independent evidence throughout the whole policy cycle.



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