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International  
Renewable  
Energy  
Storage  
Conference

IRES

15-17 March 2016

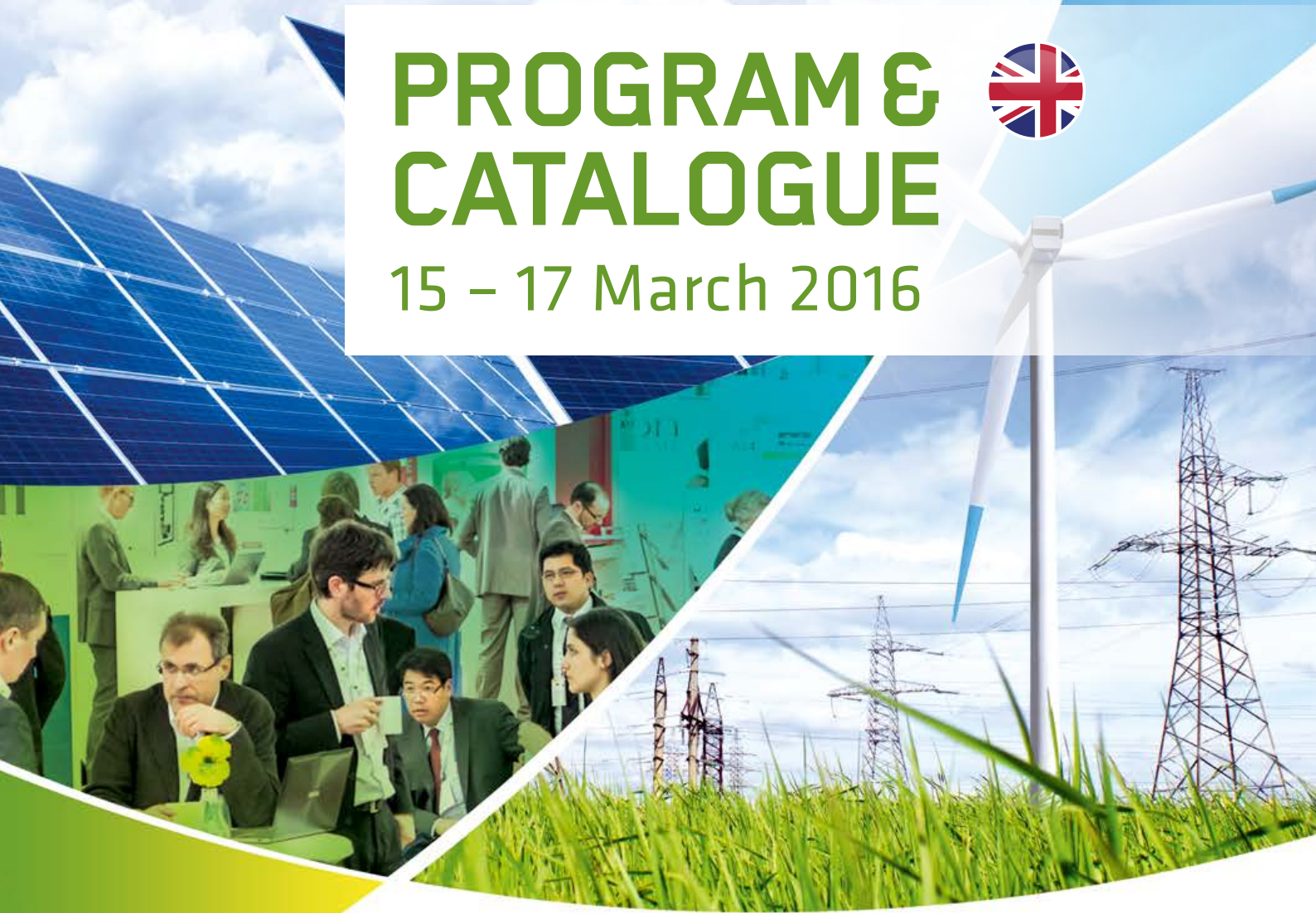
Düsseldorf, Germany  
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# EXPO AND CONFERENCE

## PROGRAM & CATALOGUE



15 - 17 March 2016



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## SHORT OVERVIEW

## ESE/IRES CONFERENCE – DAY 1

Tuesday, 15 March 2016	
✓	⌚ Time    ⓘ Information & Speaker
	9:00 – 10:00 Arrival of Attendees – Breakfast
	10:00 – 11:20 Welcome Address & Keynotes “Free Entrance for all Visitors & Delegates”
	11:20 – 12:00 Coffee break – Visit of the Exhibition
	12:00 – 13:35 ESE/IRES Session 1 - Regulatory Framework
	13:35 – 15:00 Lunch break – Visit of the Exhibition
	15:00 – 16:20 ESE/IRES Session 2 - Research and Science
	16:20 – 17:00 Coffee break – Visit of the exhibition
	17:00 – 18:20 ESE/IRES Session 3 - Global Projects
	18:30 BVES Networking Reception

For more information, see page 28

## ESE/IRES CONFERENCE – DAY 2

Wednesday, 16 March 2016	
✓	⌚ Time    ⓘ Information & Speaker
	08:30 – 08:40 Arrival of Attendees – Breakfast
	08:40 <b>ESE Session 4</b> - Energy Storage in the Building Sector <b>Intro Finance Track</b> powered by VDE Institut
	08:40 <b>IRES A1</b> Applications, Case Studies and Scenarios <b>IRES A2</b> PV Home Storage <b>IRES A3</b> Politics / Economics <b>IRES A4</b> Batteries
	10:30 – 11:00 Coffee break – Visit of the Exhibition
	11:00 <b>ESE Session 5</b> - Opportunities for SME and Start Ups <b>Keynotes Finance Track</b> powered by VDE Institut
	11:00 <b>IRES B1</b> Applications, Case Studies and Scenarios <b>IRES B2</b> PV Home Storage <b>IRES B3</b> Decentralised Storage Solutions <b>IRES B4</b> High-Temperature TES for Electricity Production
	12:50 – 14:00 Lunch break – Visit of the Exhibition
	14:00 <b>ESE Session 6</b> - Industry/Process
	14:00 <b>IRES C1</b> Applications, Case Studies and Scenarios <b>IRES C2</b> Flexibility Options <b>IRES C3</b> Large Scale Storage <b>IRES C4</b> TES in Buildings
	15:30 – 16:00 Coffee break – Visit of the Exhibition

Wednesday, 16 March 2016	
✓	⌚ Time    ⓘ Information & Speaker
	16:00 <b>ESE Session 7</b> - Energy Storage Systems for the Energy Turnaround in Industrial and Utility Markets
	16:00 <b>IRES Postersession</b>
	18:45 – 19:00 Departure Shuttle Bus to Dinner/Party
	19:00 – 0:00 <b>Dinner/Party</b>

For more information, see page 29

## ESE/IRES CONFERENCE – DAY 3

Thursday, 17 March 2016	
✓	⌚ Time    ⓘ Information & Speaker
	08:30 – 08:40 Arrival of Attendees – Breakfast
	08:40 <b>ESE Session 8</b> - TSO/DSO/Smart Grids
	08:40 <b>IRES D1</b> Applications, Case Studies and Scenarios <b>IRES D2</b> TES for Efficiency Increase in Industry <b>IRES D3</b> Power-to-Gas / Power to Liquids <b>IREN 04</b> Netze und Speicher
	10:30 – 11:00 Coffee break – Visit of the Exhibition
	11:00 <b>ESE Session 9</b> - Intersectoral storage
	11:00 <b>IRES Postersession</b> <b>IREN 04</b> Stadtwerke und Speicher
	12:50 – 14:00 Lunch break – Visit of the Exhibition
	14:00 <b>ESE Session 10</b> - Intersectoral storage
	14:00 <b>IRES E1</b> Applications, Case Studies and Scenarios <b>IRES E2</b> Large Scale Storage <b>IRES E3</b> Power-to-Gas / Power to Liquids <b>IREN 04</b> Speicher für die Energiewende
	15:30 <b>Celebratory Closing</b>
	15:30 – 16:00 Coffee break – Visit of the Exhibition
	16:00 <b>Summary</b> “Free Entrance for all Visitors & Delegates”
	16:45 <b>Closing of the Conference</b>

For more information, see page 34

## SIDEEVENT

### OTTI - POWER-TO-GAS - 16TH MARCH 2016

Mittwoch, 16. März 2016, 8.50 - 17.00 Uhr

1	<b>Opening address</b> Bernd Porzelius, OTTI e.V., Regensburg, Germany
2	<b>Objective of the conference</b> Prof. Dr.-Ing. Michael Sterner, Technical University OAS, Regensburg, Germany
3	<b>Why Power-to-Gas will make the energy system more economic - results of the wind gas study</b> Prof. Dr.-Ing. Michael Sterner, Technical University OAS, Regensburg, Germany
4	<b>State-of-the-art of Power-to-Gas in France</b> Marc Jedliczka, HESPUL énergies renouvelables & efficacité énergétique, Lyon, France
5	<b>European framework for Power-to-Gas and Power-to-Fuel</b> Katarzyna Drabicka, European Commission, Brussels, Belgium
6	<b>Necessary framework conditions for a business case in Germany</b> Werner Diwald, Deutscher Wasserstoff- und Brennstoffzellen Verband / performing energy, Berlin, Germany
7	<b>First experience with advanced power to gas concept based on PEM technology - comparison with alkaline electrolysis</b> Dr. Andrei Zschocke, Uniper Energy Storage GmbH, Essen, Germany
8	<b>Power-to-X progress and developments at Hydrogenics</b> Dr. Bernd Pitschak, Hydrogenics, Gladbeck, Germany
9	<b>Potential role of electrolytic hydrogen in reducing carbon monoxide emissions in CCGT plants</b> Philipp Andres, Next Hydrogen, Mississauga, Canada
10	<b>Efficiency record at the Power-to-Gas pilot in Ibbenbüren</b> Carsten Stabenau, Westnetz GmbH, Dortmund, Germany
11	<b>Power-to-Gas plants in Switzerland - operational experiences</b> Dr. Elimar Frank, HSR Technical University of Applied Sciences Rapperswil, Switzerland
12	<b>1 MW methanisation project BioCat in Denmark</b> Dr. Doris Hafenbradl, Electrochaea GmbH, Planegg, Germany
13	<b>Underground Sun Storage using depleted gas reservoirs for Power-to-Hydrogen and Power-to-Methane</b> Stephan Bauer, RAG Rohöl-Aufsuchungs Aktiengesellschaft, Wien, Austria
14	<b>Questions and panel discussion</b> Power-to-Hydrogen / Power-to-Methane and Power-to-Methanol - where are the next niches?
15	<b>Mathematical optimization of PtG plants</b> Dr. David Wenger, CEO Wenger Engineering GmbH, Ulm, Germany
16	<b>Methanol as e-Fuel from carbon dioxide - an application of Power-to-X</b> Dr. Arthur Heberle, Mitsubishi Hitachi Power Systems Europe GmbH, Duisburg, Germany

#### Power-to-Gas and Power-to-X for Europe's Energy Transition

As official side event of Energy Storage Europe and the 10th IRES conference the 5th OTTI Conference Power-to-Gas will take place at CCD Süd, Düsseldorf, Germany on March 16th, 2016.

The focus of the conference will be on projects for the European energy industry. Besides market development topics like Power-to-Gas and Power-to-X implementation in industrial MW-scale will be discussed. Meet international specialists, leading scientists and business experts of well-known companies like E.ON, RWE, Hydrogenics, Next Hydrogen, RAG, Electrochaea and gain comprehensive information about the state of technology as well as the latest results from research and development.

#### Contact

##### OTTI - Renewable Energies

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### 5TH INTERNATIONAL CONFERENCE AND EXPO ON ENERGY AND MICROGRIDS IN CHINA

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