

THE ROLE OF EUROPEAN CITIZENS IN SECURING THE SMART GRID TOWARDS 100% RENEWABLES

RESERVE PROJECT FINAL CONFERENCE

11th of September 2019, 13:00 – 16:30

Organized by RESERVE

Hosted by MEPs Adina VĂLEAN and Rareş BOGDAN

European Parliament, Rue Wiertz 60, Brussels
Building: ASP Altiero Spinelli – Room 2Q-2

The Conference highlights the main results and key achievements of the RESERVE Project “Renewables in a Stable Electric Grid”, a 3-years lasting project developed by an International Consortia and co-financed by the European Commission, aiming at ensuring Electricity Grid stability with up to 100% renewables for the benefits of the European citizens.

The EU has set an ambitious goal of using at least 32% Renewable Energy Sources (RES) in Europe by 2030. As a result, many new RES, driven by power electronics, will be installed in the grid. This change affects the fundamentals of grid operation and makes a rethink of the basics of grid control and automation necessary. This is the challenge which RESERVE addresses.

Programme

Registration and Welcome Coffee: (12:30 – 13:00)

Welcome Address (13:00-13:15)

- Corneliu BODEA – President, Romanian Energy Center - CRE
- Adina VĂLEAN - Member of the European Parliament, Chair Committee on Industry, Research and Energy – ITRE, EPP Group

Keynote Speeches with Q&A (13:15-14:15)

- Roberto ZANGRANDI – Secretary General, EDSO for Smart Grids
- Mark VAN-STIPHOUT – Deputy HoU, Research and Innovation, DG ENERGY, European Commission
- Uroš SALOBIR, ENTSO-E Research, Development and Innovation Committee

Coffee Break: (14:15 – 14:30)

Session 1: Citizens and the RESERVE Project (14:30-15:20)

Moderator: **Ganesh SAUBA, Principal Consultant, DNV-GL**

- **Objectives** and **main results** from this 3-years project.
- **Discussion with the main stakeholders** about the RESERVE Project outcomes and their impact on the current and future organization of the Power System, in terms of rules, technical operation and for the European citizens benefits.
- **Key questions:** how to increase energy security and reliability; how to favour greater RES penetration, thus reducing the environmental impact; how to facilitate RES integration in the National and Regional Power Systems, encouraging cost-effective power exchanges in Europe to benefit all citizens.

The RESERVE and SOGNO Projects and 5G-enabled ICT Solutions – Fiona WILLIAMS (14:30-14:40)

Panel discussion with Key Stakeholders (14:40-15:20)

- **Adrian TIMBUS** – Vice-president Portfolio, Power Grids Business, ABB Switzerland
- **Gerald SANCHIS** – Business Development, RTE
- **Uroš SALOBIR** - ENTSO-E Research, Development and Innovation Committee
- **Henning TWICKLER** - Senior Policy Advisor, E.DSO for Smart Grids
- **Antonello MONTI** - RESERVE Project Technical Director, RWTH
- **Thales PAPAZOGLOU** – Professor at Technological Educational Institute of Crete

Session 2: Policy Recommendations and Future Cooperation towards 100% RES Integration in Europe (15:25-16:25)

Moderator: **Mihai PĂUN, Vice-president, Romanian Energy Center**

- What are the policies that Europe wants to promote to fostering RES integration to the electricity grid?
- How could the stakeholders contribute to their implementation?
- How does RESERVE intend to address the future challenges?

Mobilizing the Foundational Economy towards a Renewable and Sustainable Energy Future, Colin HASLAM, Professor, Queen Mary University of London (15:25-15:35)

- **Mirela DIMA** - Director Regulatory Division, CEZ Romania
- **Claudia BRÂNDUŞ** – ENEL EU Public Affairs
- **Christian EGENHOFER** - Director Energy Climate House, Centre for European Policy Studies – CEPS
- **Brittney ELZAREI** – Senior Policy Officer, The European Association for Storage of Energy - EASE
- **Dan PREOTESCU** – Senior Project Manager, Romanian Energy Center

Closing remarks: Fiona WILLIAMS - Coordinator of RESERVE (16:25-16:30)

For any further information or inquiries, please contact RESERVE Secretariat at: contact@re-serve.eu.

Information about the event is also available on the BRIDGE website [HERE](#).

Looking forward to hearing from you soon and to a successful event.

RESERVE Project TACKLES POWER GRIDS WITH UP TO 100 % RES GENERATION

RESERVE “Renewables in a Stable Electric Grid” has analysed what introducing 100% RES means for the distribution and transmission grids. RESERVE moves from the components to the system level, defining completely new operational methods that could be the key to solving the problem of controlling grid frequency and voltage in the future. These solutions are needed quite urgently given that situations with high penetration of renewables for short time periods are already happening today so new solutions for grid automation and control are already required.

RESERVE investigated using 5G-enabled ICT to provide the communications services needed to ensure system stability by enabling near real-time control of the distributed energy network.

The RESERVE simulation infrastructure was developed to interconnect many individual European simulation facilities and Field-Trials in Germany, Ireland, Italy and Romania to simulate and test the RESERVE frequency management concepts in large scale simulations.

In addition to defining how the future grid can be operated and controlled in the context of up to 100% RES, RESERVE has studied and defined draft solutions for the non-technical impacts that the new grid management techniques bring with them. These impacts affect:

- The ancillary services (the services which maintain grid stability and security) which must be adapted as we change from large centralised generation towards large-scale distributed RES;
- The Network Codes (the rules by which the grid is operated), which must be adapted to enable running the power grid with up to 100% RES;
- The existing Business Models of the grid operators and other stakeholders, which need to be adapted.

More info at: <http://www.re-serve.eu/>

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