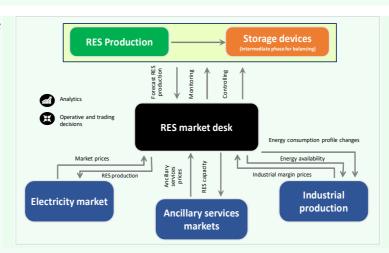


Newsletter #1

January, 2021

DRES2Market: technical, business and regulatory approaches to enhance renewable energy capabilities to take part actively in the electricity and ancillary services markets

DRES2Market is a European Union's Horizon 2020 granted research programme project, aiming developing a complete and comprehensive framework to facilitate active participation of distributed generation based on renewable energy - solar PV and wind energy in the electricity market and supply of ancillary services to the power system.





Objective & timing

Main aim of the DRES2Market project is to develop comprehensive and affordable approach to facilitate effective participation of distributed generation based on renewable energies in the electricity markets, and enable to provide balancing and reserve services according to market criteria.

The project started on 1st August 2020 and will last until 31st of January 2023.

Focus & targets

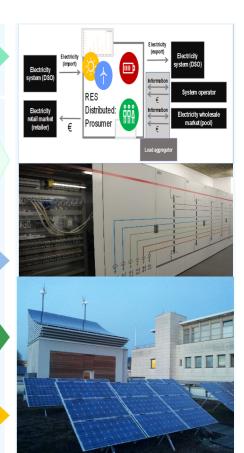
DRES2Market is focused on overcoming existing barriers, technology and regulatory framework for developing integration of RES technologies.

Evaluation of existing technologies (power generation, energy storage solutions, smart technologies, etc.) will be focused on designing appropriate approaches for effective integration of distributed generation in the electricity and ancillary services markets, proposing evolution of technology to fulfil requirements to participate in these markets and recommend standards for these technologies.

Analysis of existing grid codes and markets rules in the European markets to assess their capacity to enable participation of variable renewable energy.

Identification of opportunities for the active participation of final consumers (based on distributed generation) in penetration of RES technologies, according to market criteria and proposing collaborative schemes.

Identification of arguments of positive impact of RES technologies to obtain social acceptance of these technologies.

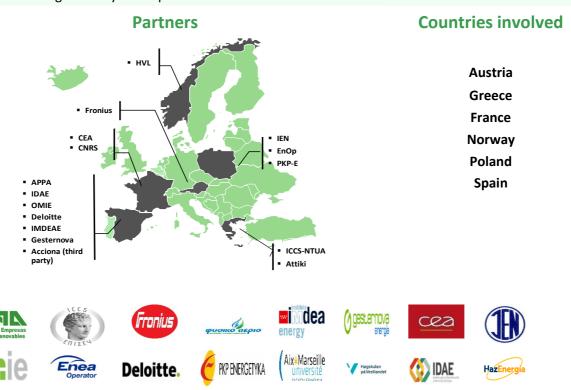


DRES2Market approach is based on a rational process: large penetration of RES is main strategic **driver in developing competitive advantages in the European renewable energy industry.** Large penetration enables achieving higher economic scale and improving technology capabilities, as well as will boost European competitiveness in this field.

DRES2Market evaluates affordable approaches for enabling large penetration of renewable energies in the electricity markets and supply ancillary services (reserve, voltage control and black start service) based on intensive use of technology and energy storage devices, and collaborative framework with final consumers. These approaches will be tested and validated at two levels:

- simulating impact of the most promising solutions using computing tools, taking into consideration evolution and variability of market prices with an increase in the share of Renewable installations;
- simulating an electricity market and system to identify the most promising integration approaches (technical and regulatory solutions, effective grid codes and appropriate market rules) to evaluate their effectiveness.

Characteristics of variable renewable energy technologies and storage devices will be evaluated for identifying their advantages and limits (including other possible barriers, like legal and administrative requirements) to propose technical and operational solutions that could mitigate them. Main topic will be to propose accurate and affordable approaches for effective integration of distributed generation based on variable renewable energy, enabling to sell excess of production in the wholesale market and supply balancing and reserve services according to the system operation needs.



Dissemination & communication

The consortium members are supported by created Stakeholder Committee, which consists of twelve members. They represent transmission system operators, scientific communitee, power system profesionals, as well as representatives of RES promotours, RES associations and energy agencies.

Valuable expert feedback provided by the Committee Members will be used during various stages of the project.

For more information please contact us or check the project's website: www.dres2market.eu

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