

DRES2Market: Technical, business, and regulatory approaches to enhance renewable energy capabilities

to take part actively in the electricity and ancillary services markets

GOALS & CHALLENGES

DESCRIPTION

DRES2Market evaluates affordable approaches for enabling large scale penetration of renewable energies in the electricity markets and supply ancillary services (reserve, voltage control and black start service) based upon 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 the impact of the most promising solutions by using computing tools, taking into consideration evolution and variability of market prices with an increase in the share of renewable installations.
- Simulating electricity markets and systems to identify the most promising integration approaches and to evaluate their effectiveness.

Analysis and evaluation of existing technologies to design appropriate approaches and techniques for an effective integration of distributed generation in the electricity and ancillary services markets.

Recommending the appropriate standards for technologies and proposing their evolution in order to meet market requirements.

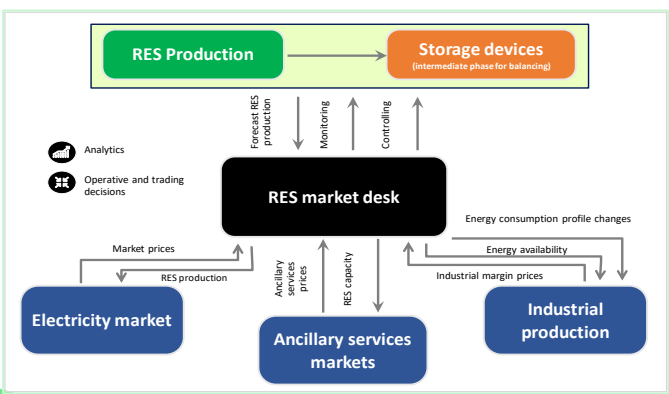
Analysis of the current European electricity markets to develop guidelines for effective approaches and active participation of variable renewable energies and distributed generation in EU electricity markets.

Analysis of the European Union and North American grid codes as well as market rules and assessing their evolution to enable the participation of variable renewable energies.

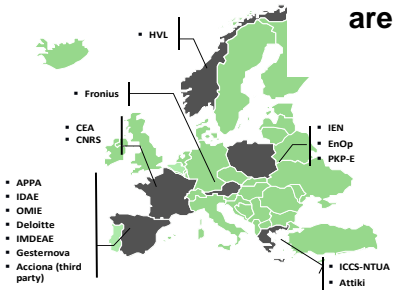
Designing techniques and approaches for the active involvement of final consumers in the penetration of variable energy resources according to market criteria and requirements.

Developing recommendations for equipment and device standards for enhancing RES integration, as well as for the regulatory harmonization within the EU.

Renewable energies, storage devices and smart technologies have witnessed a profound development in recent years, and these advances could be used to enhance the integration of variable renewable energies in electricity markets and to provide ancillary services.



6 EU countries and 15 partners are involved in the project



CONTACT