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- ETRA I+D S.A. – Spain
- Electric Cooperative of Alginet – Spain
- Fraunhofer IWES – Germany
- AIT Austrian Institute Of Technology Gmbh– Austria
- Engineering - Ingegneria Informatica Spa– Italy
- ASM Terni Spa – Italy
- Ecopower cvba – Belgium
- DERlab E.V. – Germany
- SICS Swedish ICT Ab – Sweden
- AUEB – Greece
- ECRO Srl – Romania
- BDIGITAL – Spain
- Hypertech – Greece
- CARBONCOOP – UK
- Finnovaregio – Belgium
- ICCS – Greece
- DNV GL – Netherland
- University of Manchester – UK
- GoodWolfe Energy Limited – UK
- UNINOVA - Portugal

CONTACT

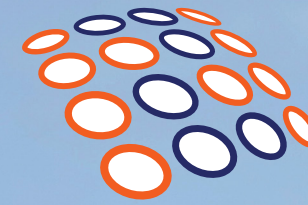
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Nobel Grid

Smart energy for people

PROJECT OBJECTIVE

NOBEL GRID will provide advanced tools and ICT services to all actors in the Smart Grid and retail electricity market in order to ensure benefits from cheaper prices, more secure and stable grids and clean electricity. These tools and services will enable active consumers' involvement, new business models for new actors and the integration of distributed renewable energy production.

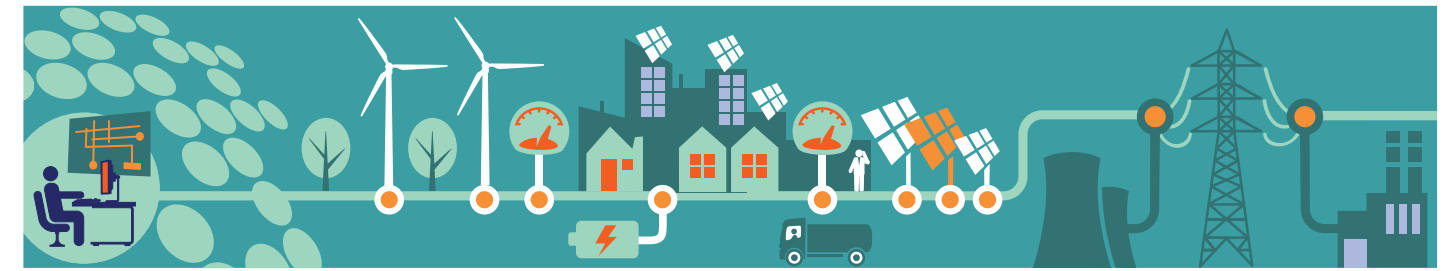
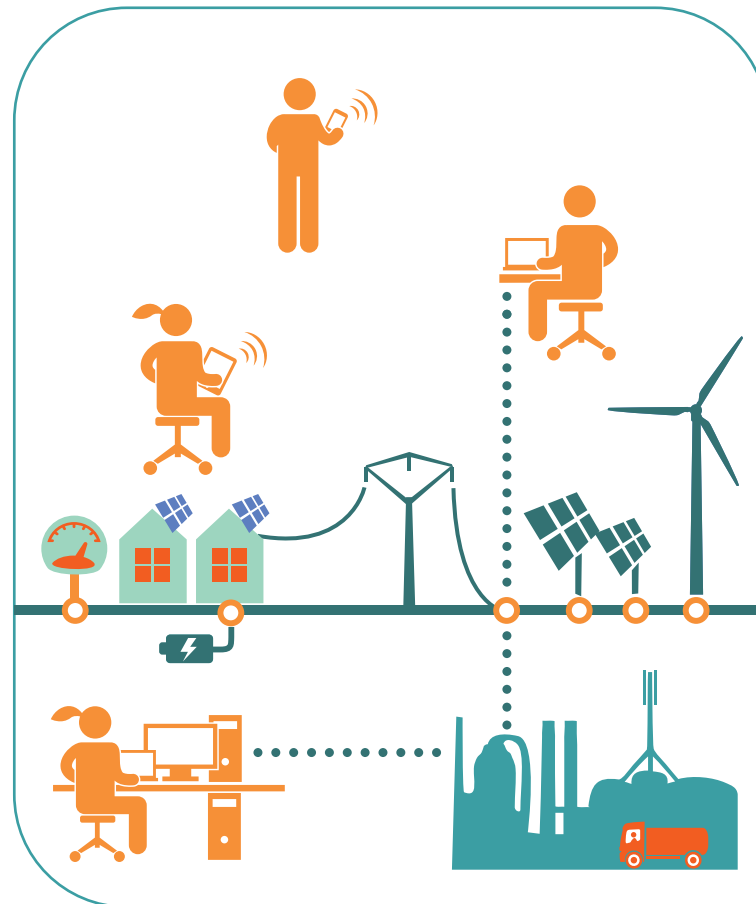
NOBEL GRID will offer advanced services, not only for Distribution System Operators (DSO's) but to all actors in the distribution grid in order to improve on quality of life for EU citizens.



EXPECTED RESULTS

NOBEL GRID results will be based in three different actions:

1. Innovative solutions and tools for DSO's in order to provide secure, stable and robust Smart Grids to mitigate costs of management, replacement and maintenance of the grid in presence of very large share of renewable energy.
2. New services for all the actors of the distribution grid, including new actors, such as prosumers, aggregators and Energy Service Companies (ESCO's). This will include services for next generation distributed renewable energy integration and active demand response.
3. Smart Low-cost Advanced Meter (SLAM), addressing the needs of all the actors of the Smart Grid and make possible new business models with the active involvement of end users.



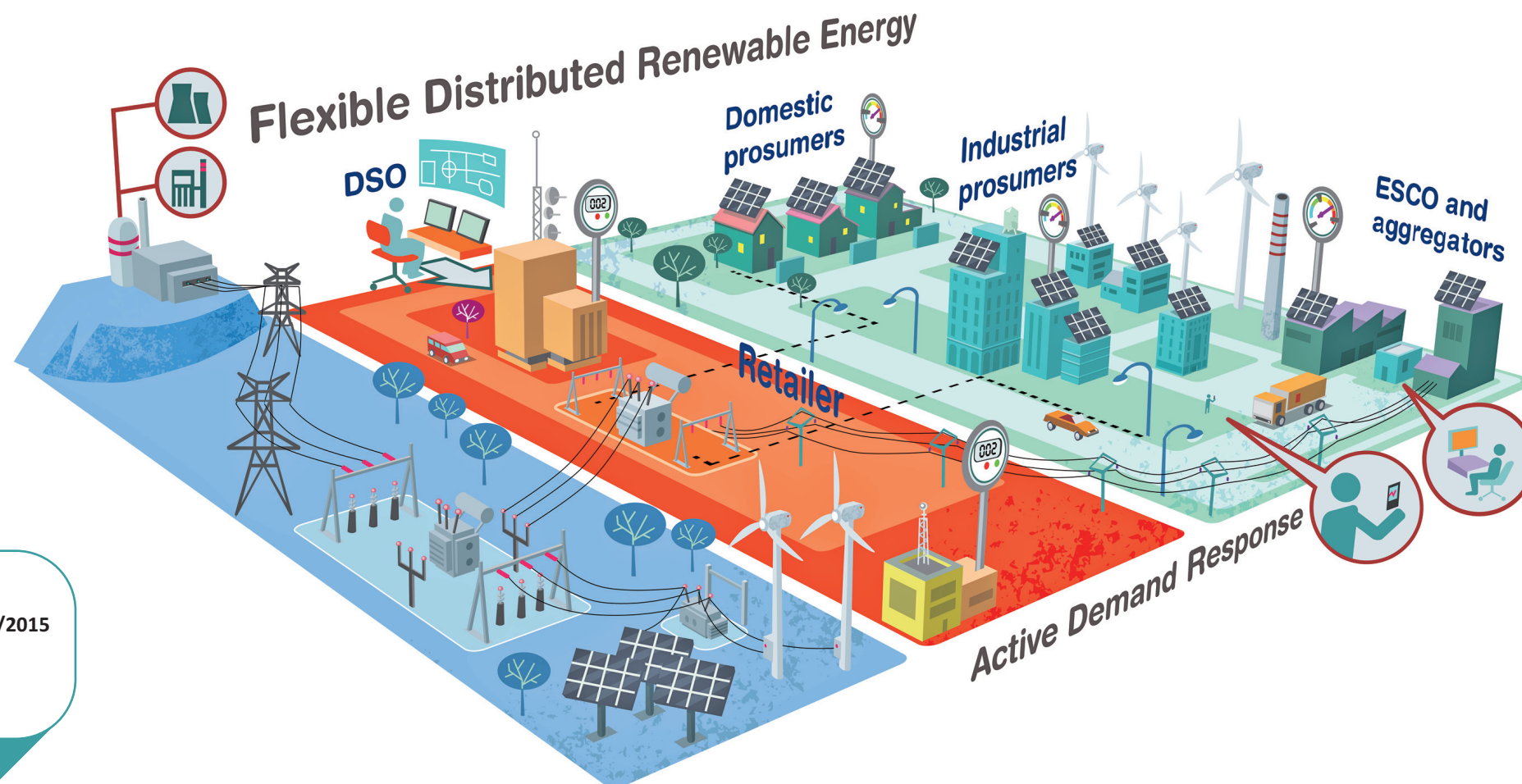
EXPECTED IMPACT

- Notable improvement on quality of life for EU citizens by enhancing the European energy mix, with the reduction of the emissions.
- Efficient and fair distribution of the benefits on the electricity distribution to all actors.
- Active participation of prosumers, and new players in energy markets, such as aggregators and Energy Service Companies (ESCO's).
- Opening up new markets for advanced smart grid and smart metering technologies to foster European industries' competitiveness.
- Promoting the implementation of new policies, market rules and legislation for smart grids and smart metering infrastructure.

DEMONSTRATION SITES

NOBEL GRID's results will be tested in real conditions in five different electric cooperatives and non-profit demonstration sites in five EU members' states:

- The electric cooperative of Alginet (Spain) is a holding formed by a DSO and an energy retailer. The Cooperative supplies 46 million kilowatts annually by means of 35 centres of transformation, with an installed power of 18,000 kW and almost 6,000 users benefit from the cooperative services, using smart meters.
- The renewable energy cooperative Ecopower in Flanders (Belgium) is a renewable generator and supplier cooperative. Ecopower has 47,419 cooperative members, 193,315 shares and 40,247 customers, consuming 98 GWh annually. Ecopower supplies 100% green electricity to the cooperative members and promotes a rational use of energy, renewable energy and the cooperative business model in general.
- The cooperative Carbon-coop in Manchester (UK) is an aggregator collaborating with Local DSO's from Manchester and acts as a Demand Service Provider. Carbon Co-op works with 3,000 households in the area.
- The public DSO ASM Terni (Italy) is a local DSO fully owned by the local municipality. The local multi-utility operator ASM directly owns and operates the power distribution grid and distributes electricity from the MV-LV and HV-MV substation to the 65,000 consumers' as well as owns some power generation units, with an increasing share of fluctuating Renewable Energy Sources, consisting mostly from photovoltaic farms.
- Meltemi eco-village (Greece) is a seaside camping located 15 km north-east of Athens. It consists of 170 cottages mostly used during summer. Meltemi has an interesting load curve which varies a lot between summer and winter. The electrical structure (all houses connected to the same MV/LV transformer) of the settlement makes it ideal for demonstration propose, especially when focusing on scenarios related to critical grid situations.



PROJECT DATA

- Starting date: 01/01/2015
- Duration: 42 months
- Budget: 13.9 M€