

PROJECT

EUniversal

Market enabling interface to unlock flexibility solutions for cost-effective management of smarter distribution grids

The goal of EUniversal is to implement the Universal Market Enabling Interface (UMEI) concept by bringing forward an open, adaptable and modular approach to interlink active system management with electricity markets and foster the provision of flexibility services, acknowledging the activation needs and the coordination requirements with other commercial parties and TSOs.



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18

PARTNERS

7

COUNTRIES

€9,7 M

TOTAL BUDGET

3

YEARS



EUniversal
UMEI

EN UN CLICK

Coordinador	Programa	Fechas
EDP Distribuicao Energia SA	HORIZON 2020	2020-2023
Sector	Web	
Smart Grids		

01 Challenge

Create a flexible, robust and smart citizen-centred power network connected with heating, gas and transport networks is a key factor in the energy transition, while advancing in security of supply and affordability. These issues cannot be solved only through the current means and will require innovative tools based on smart-grid technologies and through the adoption of algorithms for increased observability, thus enabling enhanced grid automation and control. Active neutral market facilitation will need to encompass the activities to ensure the conditions for the uptake of flexibility offers and new business models, and for the large participation of consumers.

02 Solution

Enable the transformation of the electricity grid by overcoming existing limitations in the use of flexibility by DSOs through the implementation of a Universal Market Enabling Interface (UMEI). Grids will become capable of accommodating future scenarios fostering innovate market mechanisms, and bringing additional value to society. The viability and universality of the concept will be demonstrated in several distinct environments to assess the impact of flexibility technologies in distribution system operation, the potential of new smart grids services and tools, and to validate the market ecosystem necessary to enabling a proper interaction among all energy actors and fostering the market uptake.

03 Impacts

Replicability increasing RES and DESRs and the energy storage solutions . Socio-economic impacts by empowering energy consumers and environment impacts by reducing green house gas emissions. Nonetheless, those are not the only ones because Euniversal expects to create a market transformation by improving the infrastructures and changing the policy on TSO-DSO coordination and distribution.