



WITHIN THE SCOPE OF A EUROPEAN PROJECT IN THE ENERGY AREA UNTIL 2020

15M€ TO 3 EUROPEAN COUNTRIES INCREASE THE INTELLIGENCE OF THEIR GRIDS – PORTUGAL, SWEDEN AND SLOVENIA

INTEGRID PROJECT HAS 14 PARTNERS THAT WILL HELP TO INSTALL 5 SMART GRIDS DEMONSTRATORS IN EUROPE

15 million will be available until 2020 so that three European countries can increase the intelligence of their electrical grids. For that reason, more than 50 people, from 14 institutions of 8 European countries, are working on this project, funded by the European Commission in 11.3M€, with the goal of installing five smart grids demonstrators – 3 in Portugal, one in Sweden and one in Slovenia.

In Portugal, the demonstrator will be located in three different regions (Oeste, Lisboa and Alentejo) and the targets are residential and industrial consumers. In Sweden, the demonstration area will be in Stockholm and the focus is residential consumers. The Slovenian demonstrator will be located in Ljubljana, targeting residential consumers and buildings.

The main goal of the InteGrid project is to demonstrate innovative solutions for smart grids in three pillars: flexibility on the electrical energy consumption from residential and industrial consumers, energy storage systems and load/renewable energy forecast.

In the particular case of residential consumers, an energy management technology will be developed in order to empower consumers to decrease electricity bills in a smart way.

What will this technology allow?

“One of the direct benefits is for residential consumers that will have access to more information about their behaviours as consumers and that will have more instruments that will allow them to increase their energy efficiency and interact with the grid in a more active way. The solution we are developing integrates community/social network concepts and other technologies, such as the photovoltaic generation and small-scale storage”, explains Pedro Godinho Matos, InteGrid coordinator and consultant at EDP Distribuição.

Nevertheless, the industrial consumers will also have direct benefits, since they will have access to tools and systems that will allow them to make their consumption flexibility available to Distribution System Operators (DSOs). The project will quantify the technical and economic benefits expected from the provision of flexibility from the industrial side.

“In this project, we will demonstrate advanced data analytics techniques in a real environment to optimize the electrical energy consumption of different industrial processes and methodologies to



quantify its temporal flexibility”, refers Ricardo Bessa, Technical Director of the project and researcher at the Center for Power and Energy Systems of INESC TEC.

The InteGrid consortium is formed by the following partners: EDP Distribuição (project coordinator), INESC TEC, Águas de Portugal and New R&D – Centre for New Energy Technologies (Portugal), Austrian Institute of Technology GmbH (AIT) and cyberGRID GmbH & Co. (Austria), Elektro Ljubljana (Slovenia), GE Grid Solutions (UK), DNV GL Netherlands (The Netherlands), KTH – Royal Institute of Technology, SIM AM – LocalLife and Ellevio (Sweden), IIT Institute for Research in Technology, Comillas University (Spain) and SAP SE (Germany).

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