EDDIE

EDucation for DIgitalisation of Energy

Newsletter no.2 – April, May, June 2020

Description and Benefits

EDDIE is a four-year (starting January 2020) Erasmus+ European Union funded collaborative project creating a Sector Skill Alliance (SSA) to develop a long-driven Blueprint for the digitalization the European Energy sector. The Consortia is coordinated by COMILLAS and brings together 16 partners from 10 EU Countries.

The challenge of the project is to develop a long-driven Blueprint for the digitalization of the European Energy sector to enable the matching between the current and future demand of skills necessary for the digitalization of the Energy sector and the supply of improved Vocational Education and Training (VET) systems and beyond.

Digital Energy Education

Briefly

Title: Education for Digitalisation of Energy
Type of action: Sector Skill Alliance
Topic: EPP-1-2019-ES-EPPKA2-SSA-B
Grant Number: 612398
Total Cost: € 3,995,690.00
EC Contribution: € 3,995,690.00
Start Date: 01/01/2020
End date: 31/12/2023
Duration: 48 months
Project Web Site: *www.eddie-erasmus.eu*
Key Words: Digitalization, Energy, Education, SSA, VET
Project Coordinator: COMILLAS

With the support of the Erasmus+ Programme of the European Union

Project Objectives

1. **Develop** a European Sectoral Skills Alliance
2. **Implement** improved/new qualifications in national VET and beyond systems.
3. **Fostering** the collaboration and mobility among European training centres, universities, and industries.
4. **Provide** a sustainable framework that allows education providers to define and update educational programs responding to industry changes.
5. **Improve** the attractiveness of the Energy sector as a career choice

Concept and approach

The objective of the project to develop a Blueprint Strategy for the Digitalisation of the Energy value chain (BSDE), will be based on the sustainable cooperation between key industry stakeholders, education and training providers, social partners and public authorities. The BSDE is an industry-driven strategy that will meet and anticipate the skills' demands for the sustainable growth and digitalisation for the European Energy sector. This new strategic approach will reinforce the competitiveness of the European Energy Sector in an efficient and innovative way by creating a highly skilled workforce.

Addressing the main challenges the industry faces towards the digitalization of the energy system and the new skills

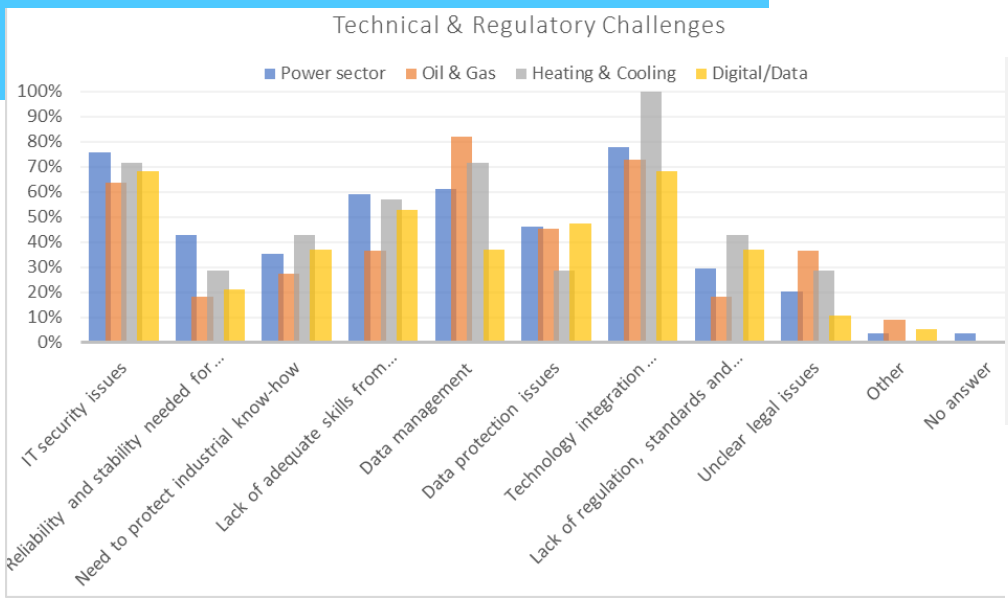
The EDDIE project's approach as an industry-driven activity, where the skills emerge as a need of practical application instead of the classic approach that starts from fundamentals to reach application, raises the need to consult the industry when addressing challenges in the energy sector.

Taking this into account, the project's consortium developed a dedicated survey in order to obtain necessary feedback from actors across the whole energy system (all sectors), with diversity in terms of geographic location, size, type of organisation and operational focus (DSOs, TSOs, suppliers, service providers etc).

The survey aimed to address the main challenges the industry faces towards the digitalisation of the energy system, the technologies and tools usage, the added value produced, and the new skills needed towards the new digital era. The survey was answered by 57 reference stakeholders applying best practice solutions representing the whole energy value chain.

The key findings are mentioned below:

- The lack of adequate skills of employees is pointed out by most of the participants.
- Reduced costs are the most impactful added value from digitalisation.
- Simplification of management and the improvement of Quality of Services (QoS).
- Digitalisation is regarded as a key factor for enabling new and green technologies.
- Most of the companies provide training to their employees with a preference to in-house training.
- Digitalisation is increasingly adopted in the energy sector.
- Challenges are not particularly differentiated among energy system sectors.
- Business model adaptation and costs are issues from economic and organisational point of view.
- Acceptance of new technologies and privacy concerns are the main social challenges.
- Technology integration and data management are important technical challenges.
- National policies and educational approaches play a key role and will be further investigated in WP4.
- The recent COVID-19 crisis underlined the importance of digitalisation in the energy system.



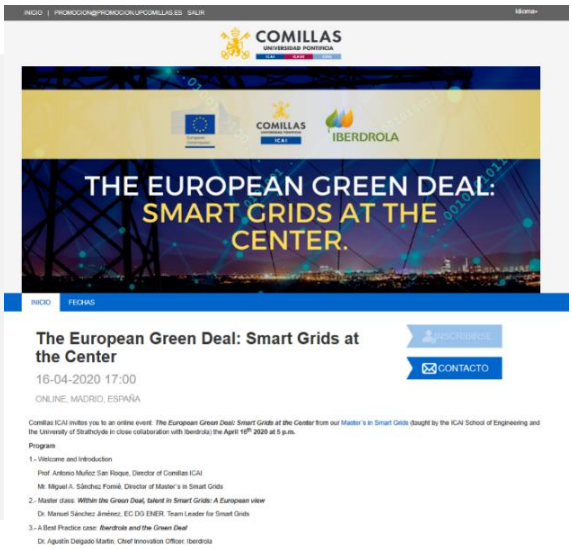
For more information and the detailed analysis please refer to the document D2.1 Current challenges in the energy sector and state of the art in education and training (***here***).

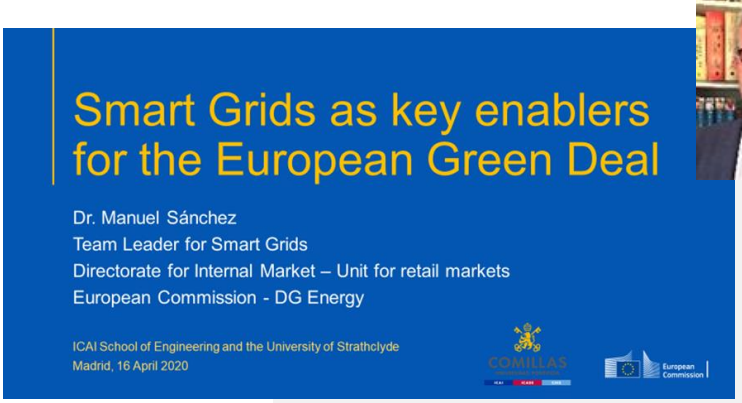
EDDIE at the webinar "THE EUROPEAN GREEN DEAL: SMART GRIDS AT THE CENTER"

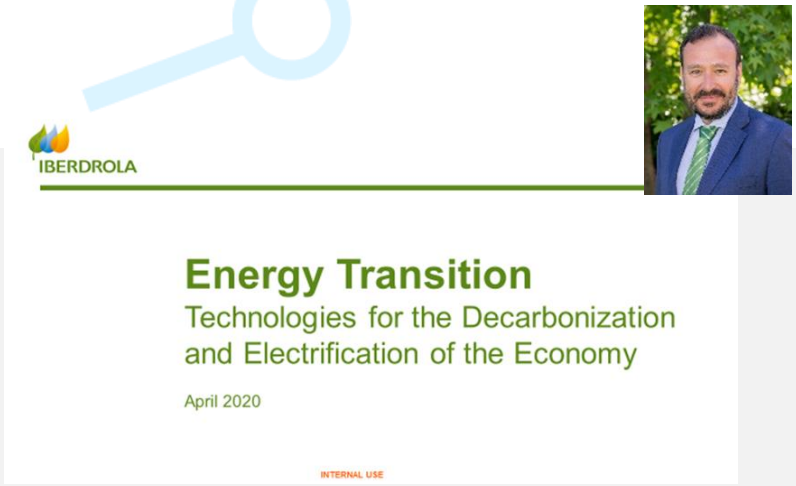
EDDIE project was mentioned and summarized during the webinar organized by COMILLAS with the title "the European green deal: smart grids at the centre", on **April 16th, 2020**.

The event, programmed to be presential, became online as the COVID19 impact in all over Europe was around that time. Registered 121 people, it was attended by 101.

The event was chaired by the principal of COMILLAS ICAI School of Engineering, Dr. Antonio Muñoz. In the Introduction, Miguel A. Sanchez-Fornie mentioned very specially EDDIE project as the best opportunity to align the needed education in energy as impacted by digitalization with the real request from the Industry.







Master classes were given by Dr. Manuel Sanchez Jimenez, head of Smart Grids in DG Energy European Commission and Dr. Agustin Delgado Martin, Chief Innovation Officer if IBERDROLA. Both confirmed the importance of Education for the future European Energy System and the clear opportunity of EDDIE project. Their presentations are available, registering to EDDIE's Newsletter.

EDDIE at The First International Online Video-Conference On Energy T&D Networks Organized by CRE

Romanian Energy Center (CRE) organized on the 30th of April 2020 the first International online video conference „Integrated Approach in the Management and Operation of Electricity Transmission and Distribution Networks". The format of the Event was an International Stakeholders Consultation focusing on the preliminary results and synergies within six EU funded projects: SOGNO, WISEGRID, PHOENIX, CROSSBOW, EDDIE and DEFENDER.

The highlights of the conference:

The future look of the Energy and the European Green Deal enabled by a Stable and Smart Grid with high RES were two of the main topics addressed by the two distinguished keynote speakers in the Opening Part of the conference.

The first session "Innovative T&D Solutions and ICT Services for Grid Operators ", started with the ***SOGNO*** project achievements (deploying more automated services in the MV and LV grids and Open Platform and Modular Services) demonstrations.

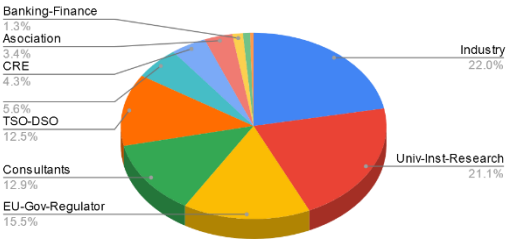
WISEGRID focused on the nine tools developed, standardization cooperation and citizen engagement for the EU Smart Grid of the future. ***PHOENIX*** project highlighted a self-learning and centralized ecosystem, to protect existing and new EPES components, from known and un-known cyber-threats, while ensuring data-privacy. ***EDDIE*** project was introduced by the coordinator, prof. Miguel Ángel Sánchez Fornié whom underlined the strategic approach for Education in the EU Energy sector as an industry-driven movement, where the skills emerge as a need of the real application. The session ended with a panel discussion underlining the expanded responsibilities of the DSO due to large penetration of renewables and specifically of the distributed generation for securing the Smart grids towards up to 100% Renewables.

Second session "Developments in the Standardization for the Power Sector" highlighted through its speakers that the current paradigm and goal of energy self-sufficiency is too expensive and the best way for the future being cooperation, the blockchain technology can democratize the energy markets and can support the production and consumption of green energy while improving the efficiency of energy exchanges. **The conference ended with a panel discussion** with the focus on the issues of software products and implementation at national and regional levels, regulatory implications, the impact of digitalization on standardization and standardizing cyber security products and services.

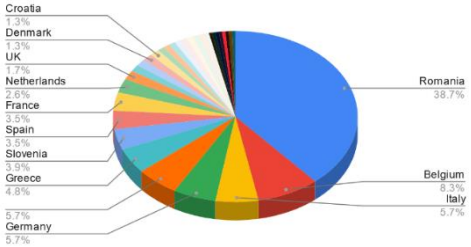
Participants:

220 Registrants – 35 Countries

By Sector of Activity



By Country



Over 120 Organizations

ENTSO-E and E.DSO first InnoGrid virtual session on key role of electricity networks in the energy transition

The European Distribution System Operators' Association (E.DSO) and the European Network of Transmission System Operators for Electricity (ENTSO-E) organised this year's InnoGrid edition as two independent webinars. InnoGrid's objective has always been to highlight what is new on innovation and to feature some of the leading R&D projects in Europe. In the first webinar, on June 18th, thoughts and projects were presented to contribute in making the Green Deal a reality.

Richard Vidlička, responsible for Innovation and International Grid Projects at CEZ Distribuce and Chair of E.DSO Projects Committee stressed once again the crucial rule of EU funded projects for the grids of the future and the fundamental importance of electricity networks playing as the "platform" for an effective climate neutral economy by 2050. While mentioning the important role of the EDDIE project, among others, in bringing the goal of a green Europe one step closer. The EDDIE project will bridge the gaps of digital skills and the energy transition by analysing major technology, economy, and social challenges.

The Virtual Session showed that power network operators are committed to support the energy transition overcoming the pandemic crisis. Innovative resilience means continuing to support the creation, on top of an adequate physical infrastructure, of a technologically advanced environment with smart, digitalized, and integrated solutions. **Cristobal Irazoqui,** Energy Policy Officer at DG Energy, stressed the fact that the Green Deal is a roadmap of actions which needs innovations and initiatives to reach the climate and energy targets in allotted time. Only innovation in hand of hand with digitalization can render the Green Deal a reality.

E.DSO is the key-interface between Europe's DSOs and the European institutions. It gathers 41 leading electricity distribution system operators (DSOs) in 24 countries, including 2 national associations, cooperating to ensure the reliability of Europe's electricity supply for consumers and enabling their active participation in the European energy system. With its committees E.DSO promotes the development and large-scale testing of smart grid technologies in real-life situations, new market designs and regulation. Being part of the EDDIE Consortium E.DSO is glad in contributing its expertise and wide network to better suit the education and training of more than 320.000 E.DSO member employees and collaborators to the new technical and digital challenges of the clean electrification of our future.

EDDIE at the European Vocational Skills Week – November 2020!

EDDIE will be involved in the European Vocational Skills Week this year between 09 – 13 November as an associated event for dissemination project's results, lesson learned and conclusions from the needs identified in the professional environment regarding the knowledge and skills on digitalization, VET providers, and the education system, with the involvement of policy makers.

The European Vocational Skills Week is an annual event during which local, regional or national organizations showcase the very best of Vocational Education and Training (VET) - a sector capable of empowering all people with the skills they need for a fulfilling personal and professional life.

EDDIE project consortium

Led by **Universidad Pontificia COMILLAS Spain**, **EDDIE** consortium brings together **16 partners from 10** EU member states and associated countries. Representatives of nine European energy utilities, end-user organisations, industry, SMEs, research and academia from Spain, Greece, Cyprus, Germany, Italy, Sweden, Romania, France, Belgium, Luxemburg, comprise the project consortium.

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