



EDDIE Final Event and LSP on the Digitalisation of the Energy System Keynote Speeches and Event Highlights

14th of December 2023, EDDIE Consortium

The EDucation for DIgitalization of the Energy Project organized its final event - "EDDIE Final Event and LSP on the Digitalisation of the Energy System" - after almost four years of constant activity of the European Consortium which implemented the project. The event took place on Thursday, 14th December 2023, at the Permanent Representation of Romania to the European Union in Brussels and it was dedicated to identifying and assess skills gaps, needs, high-impact policies and regulations in the energy sector, for energy transition through digitalization. The focus of the event was on the emerging digital era of the energy sector, but also on the way towards building a Large-Scale Partnership (LSP) under the EU Pact for Skills initiative taking benefit from the Sectorial Skills Strategy that will be developed by EDDIE project. The consortium is pleased to announce that the European Commission (EC) promotes the strategic partnership for skills to advance the digitalisation of the energy system.

EDDIE FINAL PROJECT MEETING – SESSION 1



Opening the EDDIE Final Event and LSP on the Digitalisation of the Energy System, Miguel Ángel SÁNCHEZ FORNIÉ - Associate Researcher at Institute for Research in Technology, belonging to the School of Engineering, COMILLAS, and coordinator of the project pointed out the aim of the event of presenting all the results, achievements and outcomes of the EDDIE project, as well as to promote the Large-Scale Partnership, that, move is a further step in the EU response to the shortage of skills linked to the clean energy transition. In his introductory speech, Mr. FORNIÉ, underlined that "The main objective of this SSA was to develop a long-driven Blueprint for the digitalisation of the European Energy sector to enable the matching between demand the current and future demand of skills necessary for the digitalisation of the Energy sector, and supply - the supply of improved VET and beyond (University, LLL)"

After a short introduction, the coordinator of the project invited Mr. Pavol Krempasky, project officer for EDDIE on behalf of the funding Agency, to address a few words in the context of the final event in the context of EC visions for greener, more digital and more resilient future. He pointed out the collaboration and innovations carried out within the project as a way of commitment to advancing the digital transformation of energy systems, aligning seamlessly with the European Union's strategic objectives for sustainability and efficiency. The achievements of EDDIE paved the way for the development of the large-scale partnerships to drive meaningful change in this critical sector. The EC will benefit from the dedication and expertise of all involved stakeholders and will leverage the insights gained from EDDIE for endeavors in the pursuit of a more sustainable and digitally integrated energy landscape.

Further on, Roberto ZANGRANDI - Secretary General - E.DSO for Smart Grids, gave a keynote introduction. Mr. Zangrandi mentioned that we are discussing about digitalisation since long time ago, and he mentioned that the E.DSO will continue to support digitalization of the energy system and that large distributors are extremely attentive in bridging the gap between competences. Their investments are significant in the area of upskilling and reskilling of their resources. Mr. Zangrandi underlined that "The role of the LSP is to cooperate with academia, corporate university, the institutions in order to promote and sustain the evolution."





Dr. Panos KOTSAMPOPOULOS - Senior Researcher at National Technical University of Athens (NTUA), addressed the skills gaps and needs by presenting the main outcomes of the WP2. He started by describing the methodology used, challenges, current and emerging skill needs and gaps. Mr. Kotsampopoulos mentioned also the surveys conducted, underlining that the key area that present skill gaps towards digitalization converge towards data management and analysis, bug data, cybersecurity and programming & development competences. "The (electric) power sector showcases the biggest skill gaps" pointed him. "University curricula, online training platforms and industrial training programs cover several aspects of digitalisation, yet there is plenty of room for improvement to foster digital transformation.", said the Senior Researcher.

















Michela CREMONA - Projects Officer at E.DSO, spoke about the stakeholders' identification, classification, and characterization topic, mostly covered in the WP3. The process behind was to first identify the stakeholders (industry, education, administration, social & others, and individuals), to map them based on impact metrics and to create in the end a very wellconnected network. Ms. Cremona underlined that "The Strategic Network: The Database summarizes at this moment 55 members and 25 entities." She said that "Jobs marketplaces, training programs, tools & systems marketplaces, and marketplaces for other services have been identified and used to determine the stakeholders' interest".





Berna BALCI - Research Associate at RWTH Aachen University addressed the subject of EU context for skills and how synergies can be developed. Ms. Balci mentioned that the topic has been done in the project by the assessment of the policies and requirement, part of the WP4 that targeted the preparation and evaluation of the best practices for Vocational Education and Training (VET) and Long-Life-Learning (LLL) at national, regional and European level and about the synergies with European frameworks. As such, a series of best practices have been collected for VET, university education and LLL. "One of the synergies is emphasis on digital literacy, digital competencies, and digital fluency in education", she mentioned.

Fernando DE CUADRA - Professor, COMILLAS and coordinator of the project talked about the Blueprint strategy and about the sector skills strategy. Mr. de Cuadra presented the methodology and tasks of the EDDIE strategy, but also the results based on 4 candidate services (marketplaces on dissemination, training, jobs and systems). The main outcomes of the strategy are the "Entity" (Association) and the LSP. "The research and dissemination portal, that will be a living observatory of the technologies, state of the art, inform source for both the training providers and companies about future needs so that can anticipate their training plans.", underlined Mr. de Cuadra. Other ideas are training programmes, jobs, tools & systems marketplace and other services.





Eduardo Lessa - NTT Data talked about the implementation of the Trining Programme Marketplace. First, Mr. Lessa detailed what EDDIE Database represents: information collector of the online website in order to manage the wide variety of data regarding energy digitalization. In the database context, a training programme (TP) is a set of structured fields compiled and managed by the Entity Official Content Editor. Further, he explains, "There are 2 actors, TP supplier (ex: institution) and TP consumer (ex. student)" that have the possibility to filter the page and access the training that is of interest and read all the information related." The next step of the TP will consist in future updates after feedback from users, validation workflow, virtual assistant and option to clone an existing training.

Alexandro CHRONIS - Researcher, NTUA presented the validation and pilot sites experiences. The central pilot was performed in the city of Aachen and 4 smaller pilot sites in Cologne, Athens, Milano and Spain. The implementation was followed by an assessment to measure the impact of the activities. Mr. Chronis revealed that "The main finding from the Aachen pilot are the enhanced understanding and interest of participants of the energy grid and the digitalization of the energy transition, focus on career exploration, improvement potential of used demonstrating objects with small updates, hands-on, interactive approaches are effective in motivating participant and enhancing interest."



Roundtable for the Association for Digital Skills in Energy

The moderator of section Roundtable for the Association for Digital Skills in Energy, part of the Session 1, Miguel Ángel SÁNCHEZ FORNIÉ, presented the speakers and led the conversation, mentioning that in January 2024, in accordance with Belgium's laws, a legal, non-profit Association will be implemented.

















Zabala Innovation (leading international consultancy firm in innovation strategy and R&D financing), represented by Alessandro PROVAGGI and Maria Laura TRIFLETTI, presented the way in which they will support the establishment and management of the new Association. "Zabala is excited to be part of the initiative, since we also supported Comillas at the proposal writing stage. There are some projects that bring a lot of value to the sector and EDDIE is such a project.", mentioned Mr. Provaggi. Further, Ms. Trifletti underlined: "The EDDIE Entity, The Association, will function based on a set of strategic objectives (need to match with the EC intentions, like support research & education initiatives that promote digital literacy) and operational objectives (keep & maintain EDDIE's strategy)."

PIERSTONE Brussels (full-service law firm for the digital economy), represented by Patrice VANDERBEEKEN, presented the way in which he supported the drafting of statute. The option was a regular non-profit entity, which can have regular members (membership fee, voting rights in GA, participation in WG/TF, director) and associate members (contribution to certain costs, no voting rights in GA, no director). The Association will have a secretariat for daily management and a president with director for all matters towards third parties. Mr. VANDERBEEKEN, mentioned that "The incorporation should not take longer than 2 weeks and it will have a legal personality."



LARGE-SCALE PARTNERSHIP (LSP) ON THE DIGITALISATION OF

THE ENERGY SYSTEM - SESSION 2

The moderator of the second session "LARGE-SCALE PARTNERSHIP (LSP) ON THE DIGITALISATION OF THE ENERGY SYSTEM" was Mr. Miguel SANCHEZ-FORNIE who introduced the speakers and led the panel discussions.



Karsten KRAUSE - Head of Sector, Directorate-General for Energy (DG ENER), European Commission underlined that there is a positive trend on the employment in the energy sector, and looking on not only in the industry, but also on the the SMEs, in the surveys, four SMEs said that they already faced some shortages when they wanted to hire new employees. "We need to have the right skills needed for a clean tech industry". Digitalization is one of the driving factors and a game changer for the energy sector. "We talked this morning about the Action Plan that we published and we are trying to see what digital innovation could mean for the energy sector moving towards digital innovation that needs digital business models in the industry, for the consumers and for SMEs side". Mr. Karsten pointed out that the Large-Scale Partnership on digitalization of the energy system is harmoninsing

the work in the different areas and indicates some milestones that needs to be coordinated with the stakeholders to start the partnership agreement.

Felix ROHN, Policy Officer, Directorate General for Employment, Social Affairs and Inclusion (DG EMPL), European Commission stressed out that: "We have now more and more Large Scale Partnership like Digitalization of the Energy System and we want to support them. The Pact for Skills and the Large-Scale Partnership are here to stay and support you, and we want of course also, observe the work, the training programmes, the people who are trainned and change their carrer because of the impact of the Large-Scale Partnership."

Panel Presentation of the Partnership Agreement of the LSP for the Digitalisation of the Energy System

The moderator, Mr. Miguel Ángel SÁNCHEZ-FORNIÉ, presented the panel speaker, mentioning the challenges in the Energy Sector and there is an unprecedented transformation. "The Strategic View that is mentioned in the Digital Action Plan and states that was created the Large-Scale Partnership on Skills for the Digitalization of the Energy Sector with the vision of

















achieving the Digital Skills, as required by the European Energy Sector, during its transition building on the results and platform of the EDDIE Project".



Mr. Nikos HATZIARGYRIOU - National Technical University of Athens — NTUA underlined the importance of ETIP-SNET Platform that is important to support the partners in the Large-Scale Partnership. "ETIP-SNET is a platform which gathered all the stakeholders of energy, meaning TSOs, DSOs, flexible generators, renewable, storage, ICT and also research and acadamia. It is an important tool in development of the skills." Mr. Nikos concluded his remarks that can confirm the high interest of ETIP-SNET in the Partnership activities.

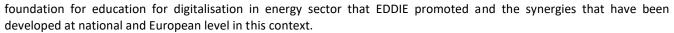
Mr. Vasileios ZOTAKIS, Novel Group Sarl – NOVEL recall the words of Dr. Panos KOTSAMPOPOULOS from NTUA, that there is a large demand on skills about cybersecurity, data management and the gap in the E-Learning Platforms that could be developed. "The training materials and the standardization are most important. This is actually the first step, what we have done so far, we have opened the market of digitalization in the energy systems about skills, public and private bodies that cooperate together with tools like surveys, digital tools". Mr. Vasileios stressed out that the Vocational Education Training and the certification as well is the best combinations that is needed for young people in the framework of the employment market, that needs training courses, specializations and connecting them with the energy market.





Lorant DEKANY, European Network of Transmission System Operators for Electricity - ENTSO-E pointed out regarding the Large-Scale Partnership for Digitalization of the Energy sector and the fact that it is a huge oportunity. This requests high commitment for ENTSO-E from multiple sides. "We are currently working on the implementation of the Digitalization of the Energy System Action Plan. We hope that the Large-Scale Partnership will bring the skills workforce that is required and that will be to a centralized level".

Mihai Mladin, Romanian Energy Center – CRE highlightedthat EDDIE Consortium succed to create synergies in the context of European Projects, and to build in a proper way the project results. "We are in the middle of the energy transition. The digitalization is a key point. There are two main triggers that determines the energy transition: high renewable penetration and distributed generation and this two are envolving the digitalization of the energy sector. We are finally in position to have skilled people to properly run these solutions and this was the main gap." Mihai also pointed out the important





In this framework, the European Commission recently published an article that promotes the strategic large-scale partnership for skills to advance the digitalisation of the energy system. This new large-scale skills partnership is an important action identified in the Action Plan for the Digitalisation of the Energy System, adopted in October 2022, to deliver on the Commission priorities of the European Green Deal and the digital transition — also in line with the REPowerEU plan. It will complement existing skills partnerships in the renewable energy industrial ecosystem regarding on- and offshore renewable energy, as well as the digital ecosystem skills partnership.

Final Remarks

In the Final Remarks, Ms. Cristiana MARCHITELLI, Policy Officer, Directorate-General for Energy (DG ENER), European Commission pointed out the challenges faced when drafting this Digitalization of Energy Action Plan regarding the consumers engagement, realized that to boost the competitivnes of the sector and to create the services that not only could be competitive, but to be usefull for the society, we need to have skills trained workforce to actually create those products and services. "If I can tell what I would like for the project to go further is to have even more concreate objectives, because the Partnership Agreement sets and indication of the path forward, but I would like that once the Entity is established, all the Partners came together to have a clear idea of the target and the timeline and clear milestones". Ms. Cristiana concluded with the need to identify the target stakeholders and then to come up with an objective that creates concreate outputs.









