







Date & Time = 22 September 2022 – 13:30 – 15:00 CET (14:30 – 16:00 RO) DESCRIPTION

Session Title

Skills for the twin green and digital transition.

Challenge addressed by the session

To identify and assess skills gaps, needs, high-impact policies and regulations in the Energy Sector, for energy transition through digitalization

Session organisers:

Organiser 1: EDDIE Project - Education for Digitalisation of Energy

Organiser 2: **EdgeFLEX Project** - Providing flexibility to the grid by enabling VPPs to offer fast dynamics control services

Organiser 3: *IEEE PES Task Force* on Innovative Teaching Methods for Modern Power and Energy Systems.

Organiser 4: **DG EMPL.B2**

Agenda

Introductory session in which the projects will highlight the challenges and tools developed (30'):

- Mihai Mladin, EDGEFLEX project presentation (7')
- Miguel Ángel Sánchez Fornié, EDDIE project presentation (7')
- **Panos Kotsampopoulos**, IEEE TF on Innovative Teaching Methods for Modern Power and Energy Systems Chair (7')
- Felix Rohn, DG EMPL (7')

Afterwards, an interactive panel discussion will take place, involving different speaker profiles (40'). A tentative line-up might be:

- Bianca de Vivo and Joachim Schwerin -DG Grow
- Norela Constantinescu, ENTSO-E.
- **Tero Vartiainen**, Representative of Cybersecurity Curricula Recommendations for Smart Grids (CC-RSG) or Cybersecurity Skills Alliance A New Vision for Europe.
- Charles ESSER (CEER)
- Q&A session (20').

The panel session will ensure gender balance. The facilitation of the discussions will be ensured by a moderator on behalf of DG ENER.









DETAILED DESCRIPTION

Concept and Focus

To support the adoption and implementation of innovative solutions proposed by several research projects, the emerging occupations and industry-driven skills, regulatory framework and policies play an important role. Thus, the European education system must adapt and align with the requirements of green technologies and sustainable business solutions, for the increasing share of RES-based generation, digitalization and flexibility in operation, by mitigating the mismatch of skills between the industry and education.

The focus of the proposed session is to discuss and highlight some of the most significant skill gaps, the necessary curricula changes, and the most appropriate regulatory and policy measures required for the adaptation of technologies in the emerging digital era of the energy sector. All these challenges require specific knowledge and skills, not always present in the current work streams. Furthermore, another objective of the proposed session is to pave the way towards building a large-scale partnership under the Pact for Skills taking benefit from the Sectorial Skills Strategy that will be developed by EDDIE project.

The proposed interactive session will combine the efforts of two project consortia, one (EdgeFLEX) promoting smart energy and cybersecurity solutions, which will trigger discussions on emerging technologies and associated skills needs and occupations. EDDIE (Erasmus+ funded project) will bring the perspective on education and the design of an industry-driven sector skills strategy on how to address the skills gaps and needs. This will be enhanced by the participation of the IEEE PES Task Force on Innovative Teaching Methods for Modern Power and Energy Systems, which investigates, creates, and promotes the use of innovative teaching methods and material in modern power and energy systems. The interaction with the audience during the session will be facilitated by using Slido.

Relevance of the Topic

The new era of the energy system requires re-skilling and up-skilling across all levels to develop clean energy technologies and solutions (Competitiveness Progress Report 2021). The relevance of the topic is quantified by the role of education, policies and regulations in encouraging and supporting the transition to Climate-neutral Europe, digitalization of the energy sector and cyber-threat mitigation, enabling a sustainable green transition. The proposed session will discuss and highlight the role and contributions of education in addressing skills gaps and energy industry needs to achieve the social objectives of the European Skills Agenda, Repower EU, the Green Deal and the role of EU at all levels also in the context of the Pact for Skills launched in 2020. The debate will focus on a new industry-driven educational approaches, methods and tools tailored to the industrial application in the energy sector.