Contribution ID: **68** Type: **Oral Presentation**

Skills for Industrial Symbiosis and Energy Efficiency (Skills4EII)

Monday 11 May 2026 12:50 (20 minutes)

The green transition of Europe's energy-intensive industries and especially the steel industry through hydrogen and renewable energy sources as well as through industrial circularity and symbiosis demands technological readiness and systemic upskilling and reskilling. This contribution explores workforce transformation for Europe's energy-intensive industries, focusing on pro-active skills adjustment for industrial symbiosis and energy efficiency.

This presentation shows first results of the social innovation based Skills4EII and SPIRE-SAIS Skills Alliance where the steel sector is prominently engaged. Based on outcomes of the Skills Alliance for Industrial Symbiosis (SPIRE-SAIS) and the skills intelligence tool "Skills4Sight"of Skills4EII skills classification, affected job profiles and game changer profile roles will be presented. This includes outlining the most urgent cross-sectoral and sectoral skills needs and related training approaches (via the online training platforms steelHub, SKILLS4Planet, Hub 5.0). Additionally, the results of the Technology and Skills Radar 2025 for the steel industry are presented. Linked to the green, digital and social transition of the steel industry (and other energy intensive industries) this ensures future-proof skills and prepares the workforce for future challenges.

Skills4EII is a mission-oriented innovation project focusing on Industry 5.0 principles, integrating SPIRE-SAIS and ESSA project to develop a cross-sectoral platform for training and certification,identifying evolving occupational profiles and gaps in existing education offerings.
Based on the results of ESSA and SPIRE-SAIS, supported by the Pact for Skills Large Scale Partnership Energy Intensive Industries LSP EII, Skills4EII is exploring what skills will be needed in the future and offers practical guidance to help energy-intensive industries and especially the steel industry to get their workforce ready for the energy transition and adapt to new challenges.

Speaker Country

Germany

Speaker Company/University

TU Dortmund University

Primary author: SCHRÖDER, Antonius (TU Dortmund University)

Presenter: SCHRÖDER, Antonius (TU Dortmund University)

Session Classification: Industrial Symbiosis for the steel sector: opportunities, challenges and success stories

Track Classification: EMECR: EMECR 4. Circularity and by-product management in steel industry