

ESTEP SPRING DISSEMINATION EVENT

5-6 JUNE 2025 KRAKOW (POLAND)

Empowerment and
Recruitment of People in the
Steel Industry

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SKILLS@EII

Skills Alliance for the Green,
Digital and Social Transformation
of the Energy Intensive Industries



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An initiative of the European Commission

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LSP Energy Intensive Industries of the Pact for Skills

Large Scale Partnership for



Find out more:



Energy-Intensive Industries (LSP EII)

The **Pact for Skills** is comprising 14 industrial ecosystems and more than 2,500 members

The **LSP EII** is one of the ecosystems and is focussing on Energy-Intensive Industries:

- it is based on and further developing two sectoral Alliances:



Composition of LSP EII

- sectors represented so far: Steel, Minerals, Water, Engineering, Logistics, Non-Ferrous Metals (Aluminium), Ceramics, Raw Materials, Welding, Chemicals, Cement
- Blueprint members and new members
- 41 signatories: 8 companies (also training providers), 12 industry associations, 1 union, 1 industry park, 6 training providers, 13 consultancies and research institutions (most of them are also training providers)



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LSP EII: Participating Organisations About 20 from the Steel Industry

A.SPIRE
APQuimica
ArcelorMittal
Asocaición de Investigación de las Industrias Cerámicas (ITC-AICE)
BASTAS BASKENT CIMENTO SAN. VE TIC. A.S.
Cardiff University
CELSA Group
CiaoTech Srl.
CIELFFA
CIRCE - Centro Tecnológico
EIT RawMaterials GmbH
ESTEP – European Steel Technology Platform
European Aluminium
European Chemical Employers Group ECEG
European Federation for Welding, Joining and Cutting
EYDE Cluster
Ferriere Nord
Fundacion Zaragoza Logistics Center
H2O-People
Höchst Industrie Park
IDENER
IMA-Europe
IndustriAll European Trade Union
INEGI - Institute of Science and Innovation in Mechanical and Industrial Engineering
InnoGlobal
Institute of Philosophy and Sociology, Bulgarian Academy of Sciences (IPS-BAS)
ISQ - Instituto de Soldadura e Qualidade
National Research&Development Institute for Non-ferrous and Rare Metals - IMNR
NEHEM BV
Pittini Group
RINA Consulting - Centro Sviluppo Materiali S.p.A.
SCUOLA SUPERIORE SANT'ANNA
Sidenor Aceros Especiales SLU
The European Steel Association, EUROFER
thyssenkrupp Steel Europe AG
Time Vision Cooperativa Italia
TU Dortmund University - Social Research Centre sfs
UNESID
Universidade Lisboa
University of Deusto
World Steel Association



Energy Intensive Industries

The Energy-Intensive Industries ecosystem includes raw materials, chemicals, iron and steel, forest-based products, plastics, refining, cement, rubber, metals and fertilisers.



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Clean Steel Partnership (CSP)

The Clean Steel Partnership's mission is a steel industry driven proactive adjustment of the future skills based on demands developed by the industry and for the industry. Research work on skills development always remains important and continuous support actions are needed.

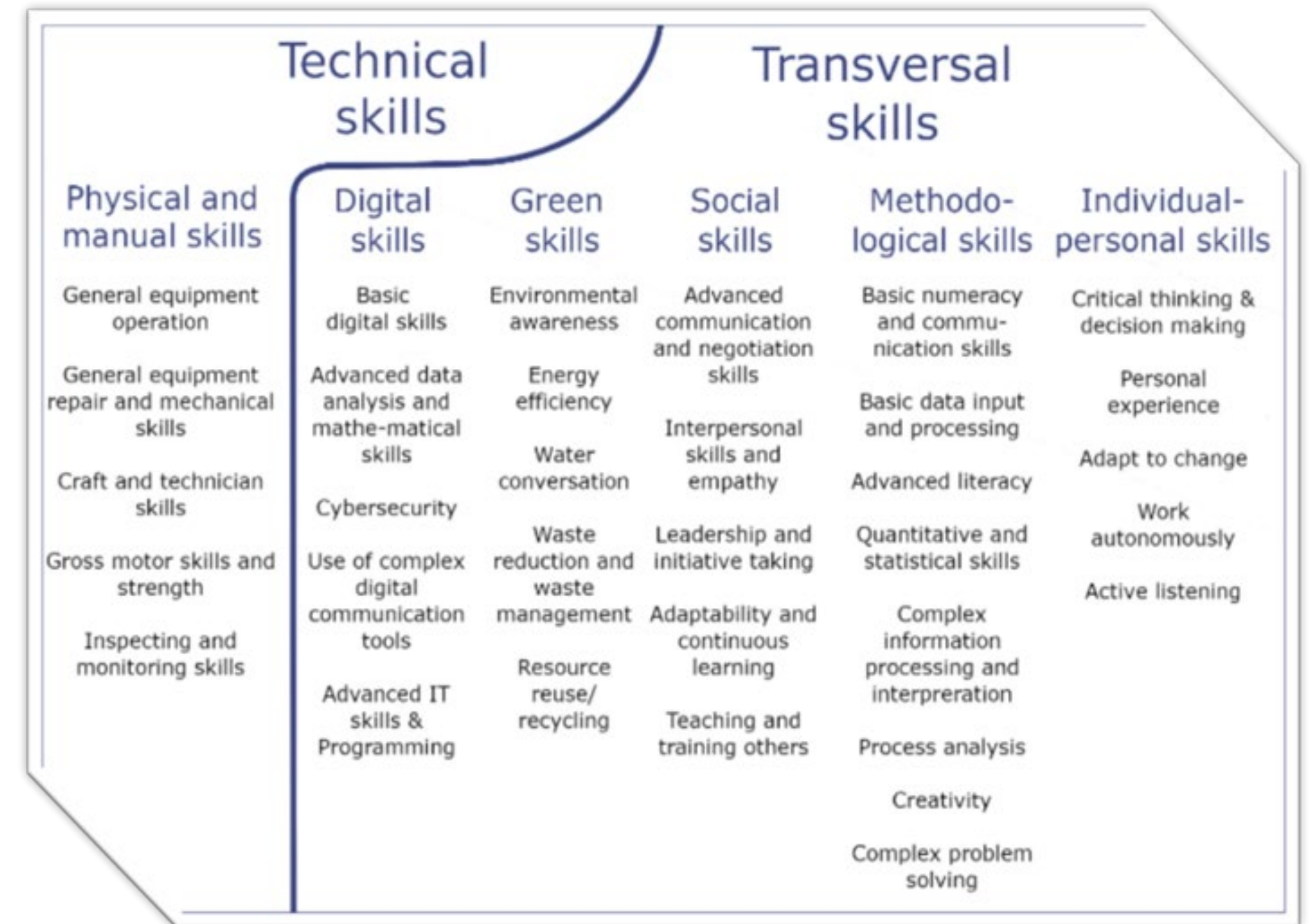
There is a need for a scenario where IT (Information Technology), OT (Operational Technology), and human factors collaborate, supported by intelligent systems, to create an integrated and cooperative environment. Here, OT represents the physical systems and processes being managed and connected to digital infrastructures.



The main objectives of the CSP Mission are:

- Proactive skills adjustments.
- New training and curricula requirements.
- Political support measures.
- Successful sectoral upskilling schemes.
- Efficient management of knowledge.
- Improve recruitment, integration and retention.

A large span of skills categories is involved following the T-shape approach of combining technical with transversal or soft skills. The figure shows an overview (Source : ESSA, CSP SRJA).



Clean Steel Partnership: New Approaches for Skills Adjustment Needed

Closing the Skills Gap

- Emphasis on digital skills, including AI, programming, and cybersecurity.
- Revising education curricula to match future labour market needs.
- Providing lifelong learning opportunities tailored to individuals and industries.

Learning and Upskilling

- A comprehensive learning system focusing on relevant and high-quality courses.
- Overcoming barriers such as time, cost, and informational constraints.
- Enhance digital learning capabilities.
- Establishing public-private partnerships for sector-specific training.
- Promote and sustain online learning possibilities like the online training platform steelHub.

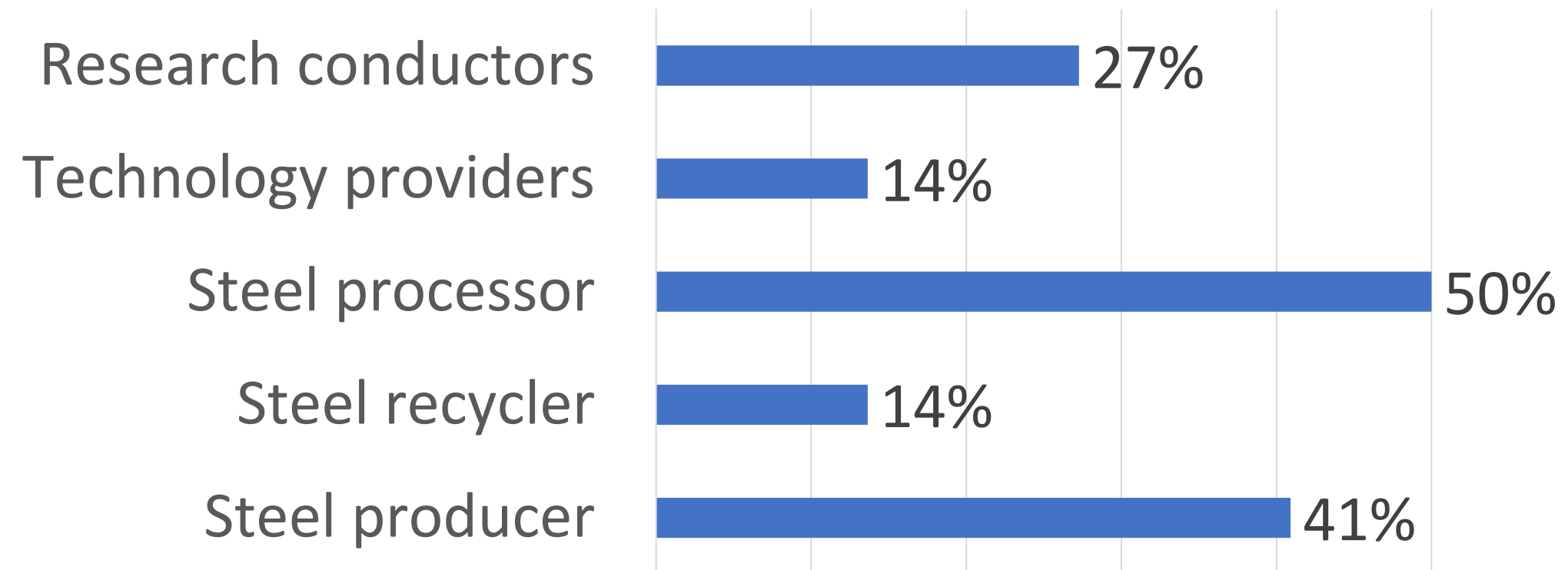
Attracting and Retaining Talent

- High-tech talent shortages due to demographic challenges and global competition.
- Better integration of international professionals and students.
- Offering EU scholarships for STEM fields and creating internships in research centres.
- Promote internships and talent learning events for students with training, challenges and visits of industrial sites and research locations

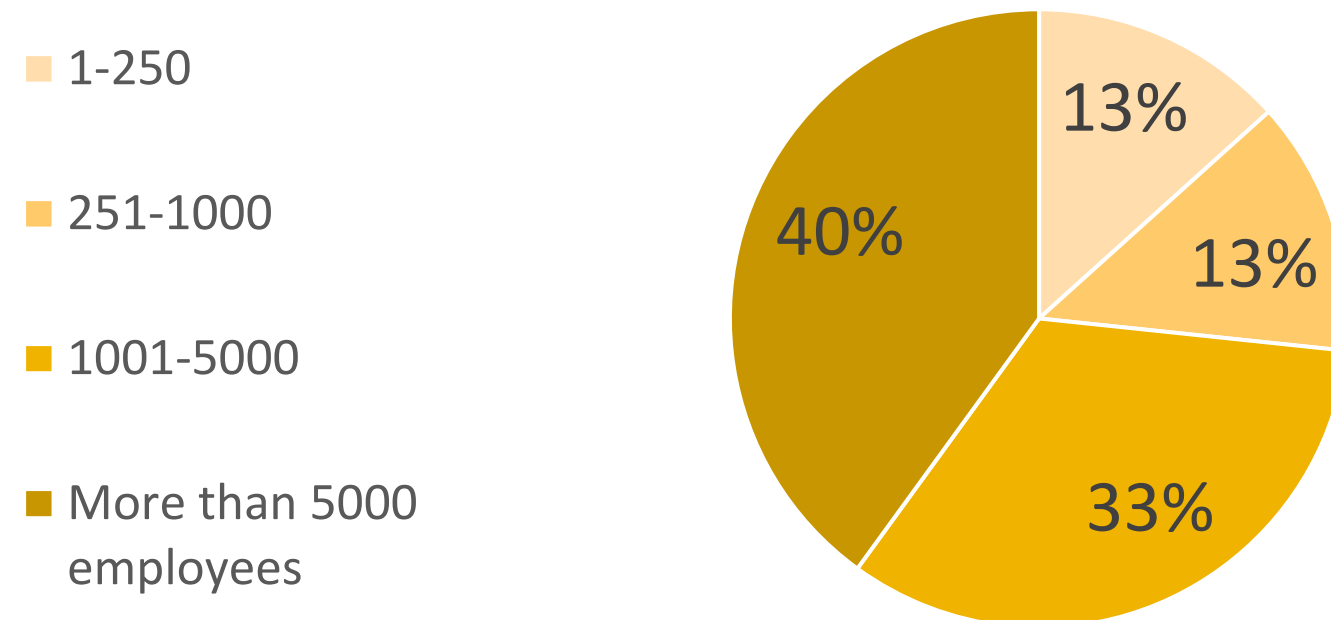
Vocational Educational Training (VET)

- Regional disparities and the lack of coordination in VET systems across Member States.
- Creating incentives for companies to support apprenticeship programs.
- Encouraging partnerships between VET providers, employers, and trade unions.

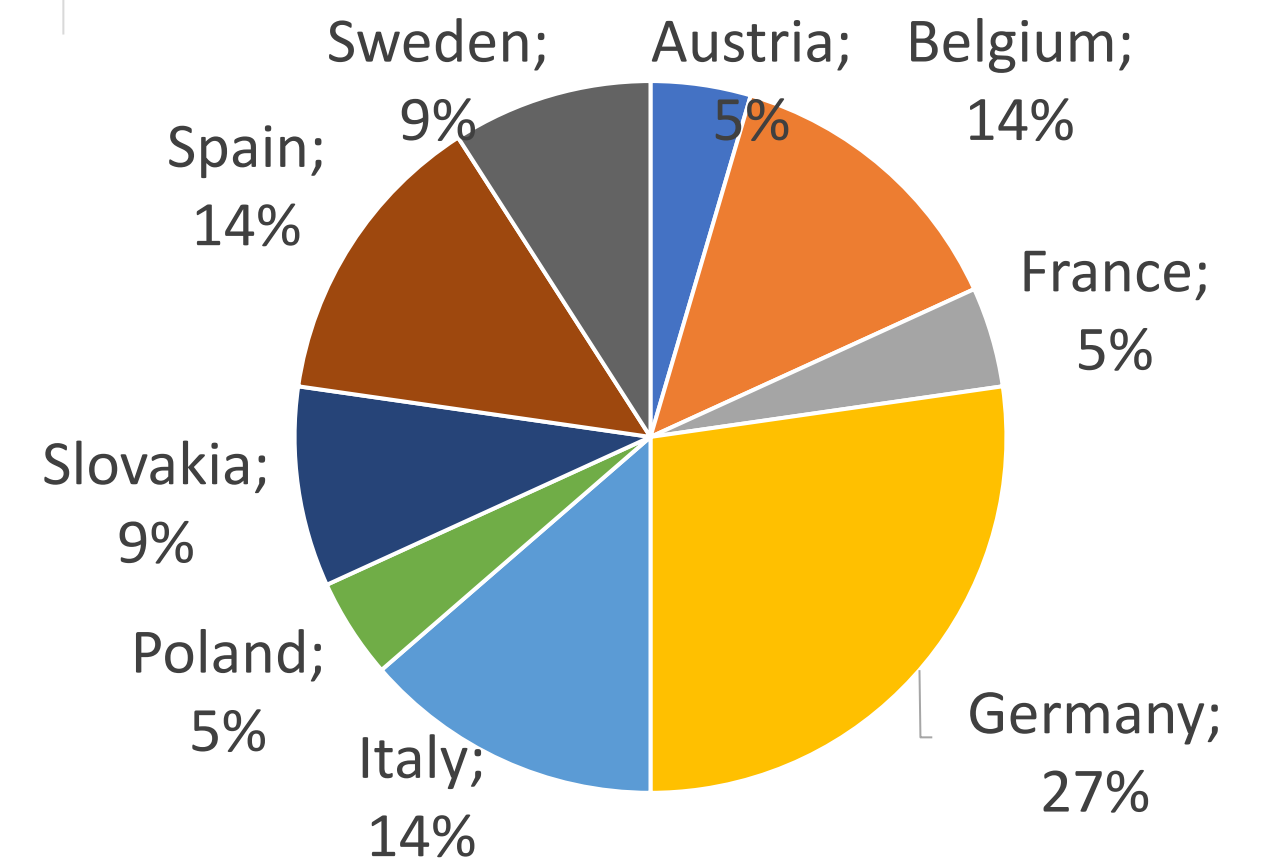
ESSA Technology and Skills Radar 2025 (22 Participants)



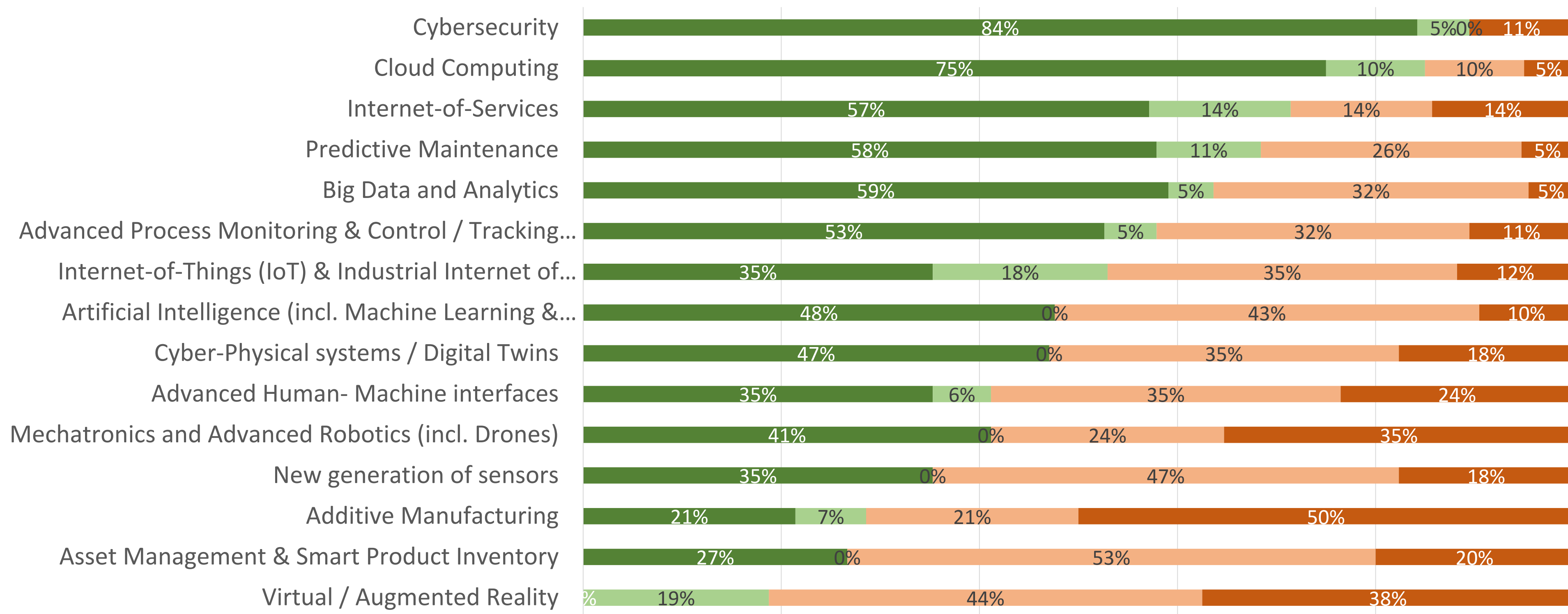
Employees



Countries



ESSA Technology and Skills Radar 2025: Technology Usage (supplied, high importance)



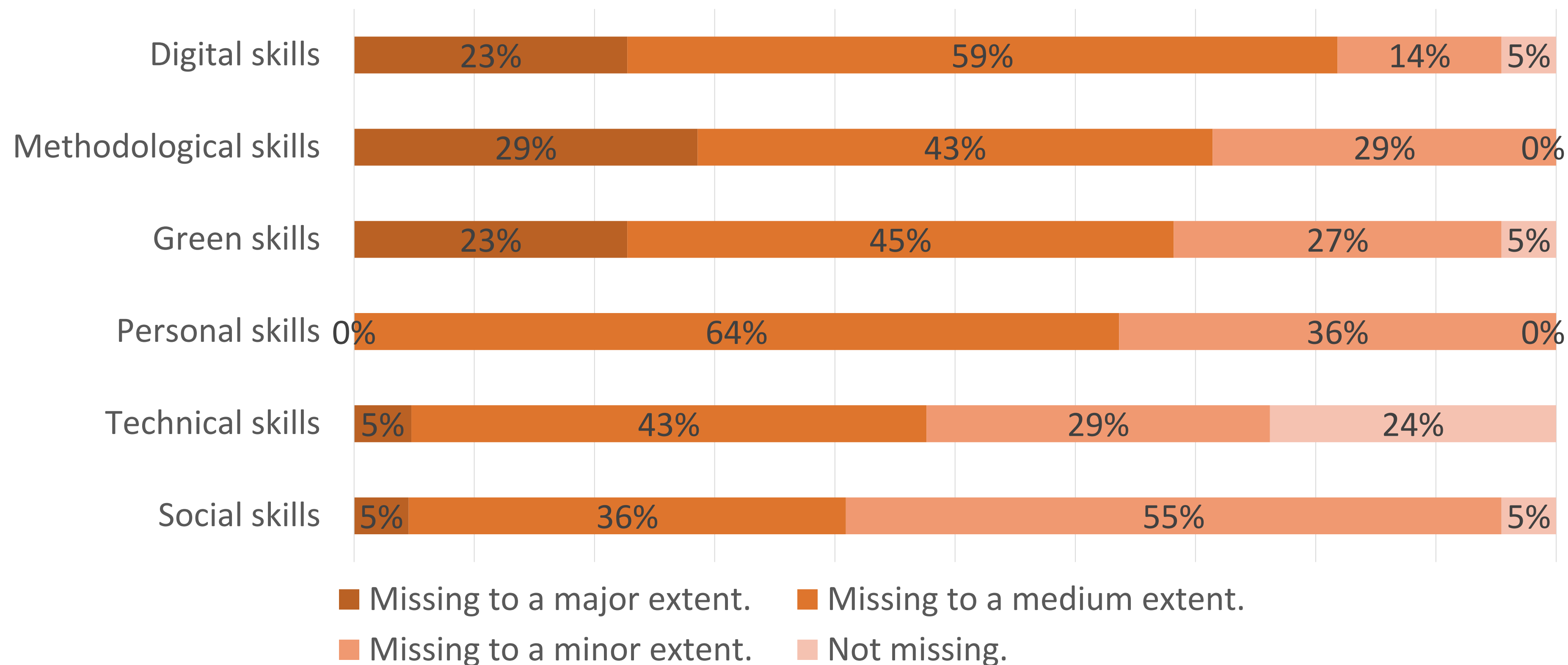
■ In use / supplied / high importance →

■ In use / supplied / high importance ↓

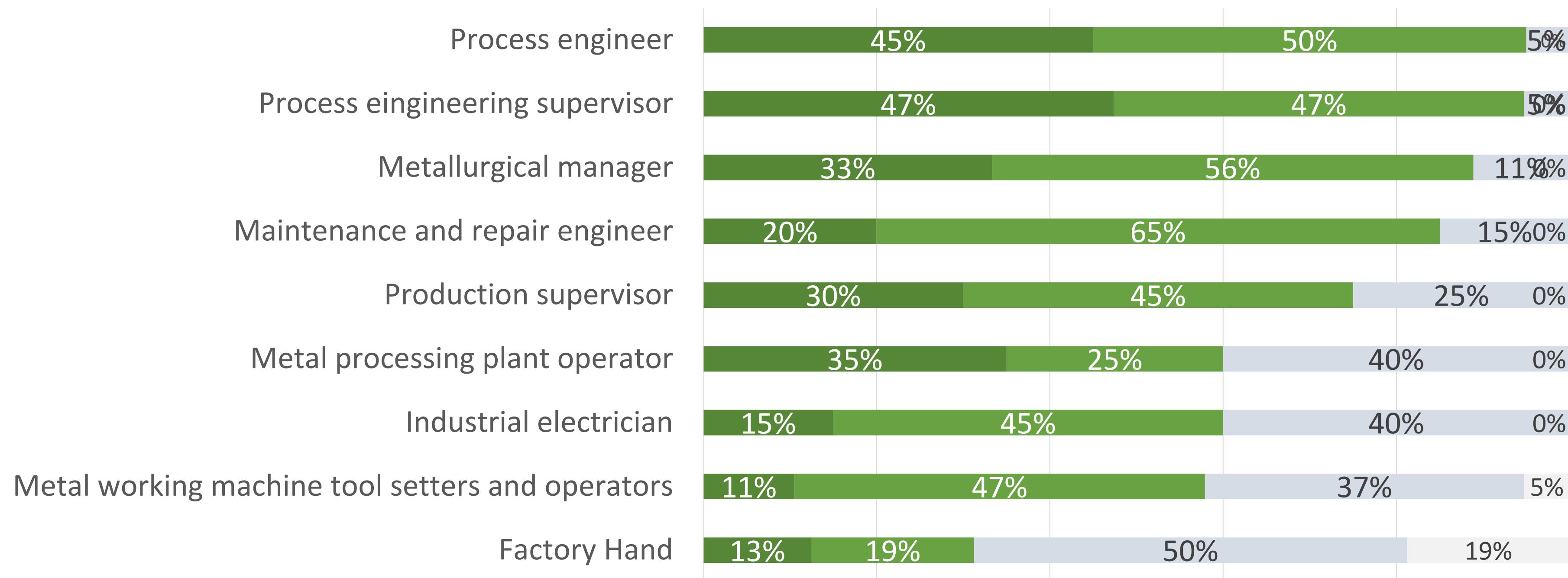
■ Not in use / not supplied / low importance ↑

■ Not in use / not supplied / low importance →

ESSA Technology and Skills Radar 2025: Missing Skills



ESSA Technology and Skills Radar 2025: Job profiles affected by task changes



■ Affected to a major extent. ■ Affected to a medium extent. ■ Affected to a minor extent. ■ Not affected.



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Blueprint “New Skills Agenda Steel”:
Industry-driven sustainable European Steel Skills Agenda and Strategy (ESSA)



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Image and Recruiting



Image and Recruiting: Central Topic of Steel Regions

Image and Recruiting was the central topic in the different countries and regions in which ESSA rollout workshops were conducted:

- *Recruitment problems* / the *poor image* of the steel industry
- Need to *attract female and new talent*
- *Unattractive job profiles* for new people
- *Shortage of skilled students*
- *Poor relationships* among Companies, Universities and Public Administrations

Solution Approaches:

- Development of a **new narrative** for steel
 - Highlighting the steel industry's sustainability and transformation efforts
 - Adaptation and modernisation of job profiles
- Improvement of **relationship and cooperation**
 - Showing more presence in schools and universities
 - Exploiting regional potentials by strengthening regional networks
- **Changed target groups** → more efforts needed to attract talent
 - E.g. by creating new channels of access to the steel industry (Social Media)
 - Targeted measures to involve women in the steel sector

Hydrogen Transformation

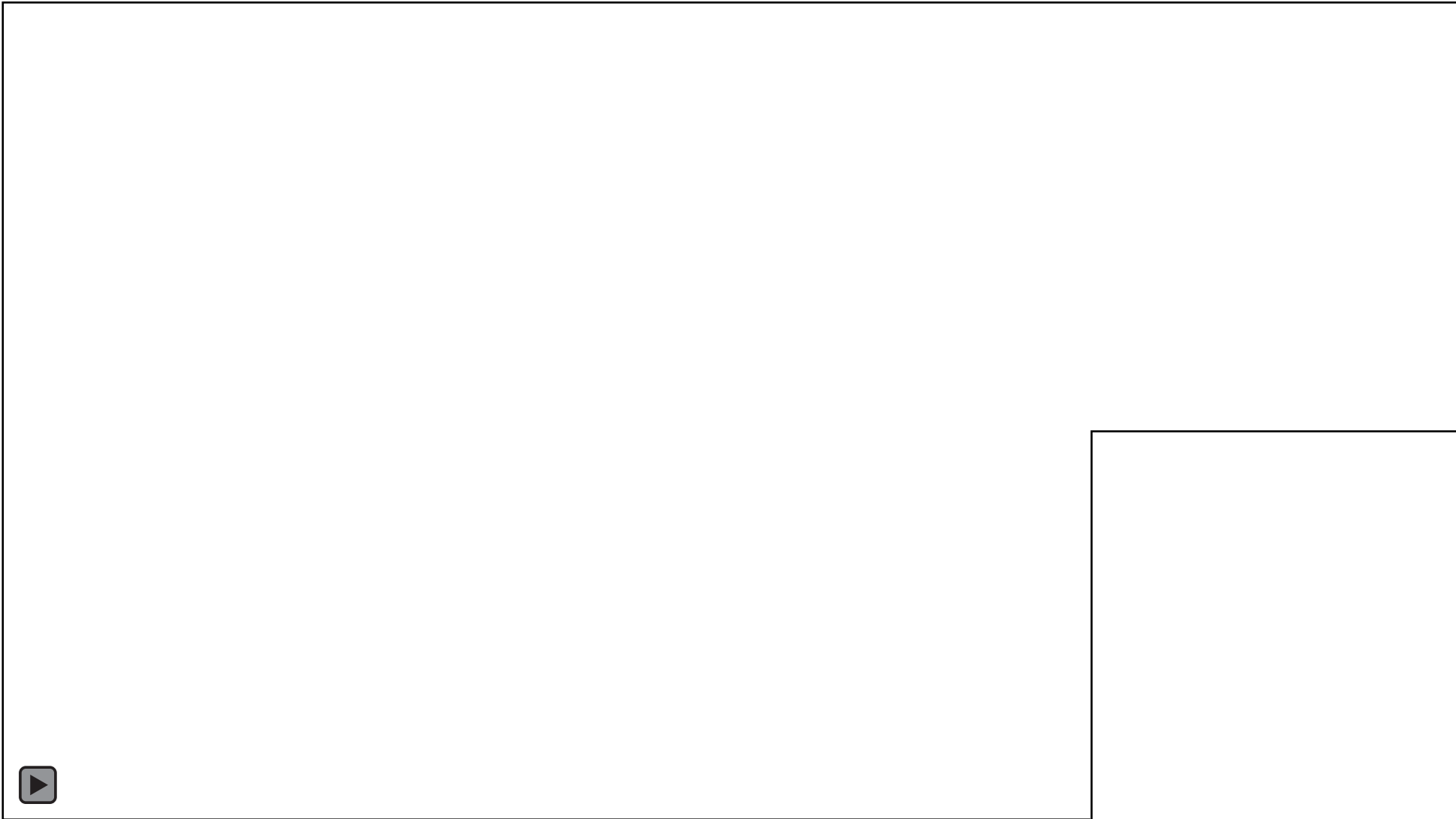
The topic of hydrogen transformation also offers opportunities in terms of **image and recruitment**:

- New incentives for applicants by ***highlighting green and digital aspirations of the steel industry***
→ opportunity to change the narrative and the image of the steel industry and to attract talent
- Opportunity for the ***establishment of new, modern job profiles*** against the background of hydrogen
→ modernizing the steel industry, better reaching target groups (talents)

Online Training Platform: SKILLS4Planet and steelHub

SPIRE-SAIS: Image&Recruitment Repository

<https://www.aspire2050.eu/sais>



<https://hub.steeluniversity.org>



Skills4EII Work Program



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INDUSTRY 5.0



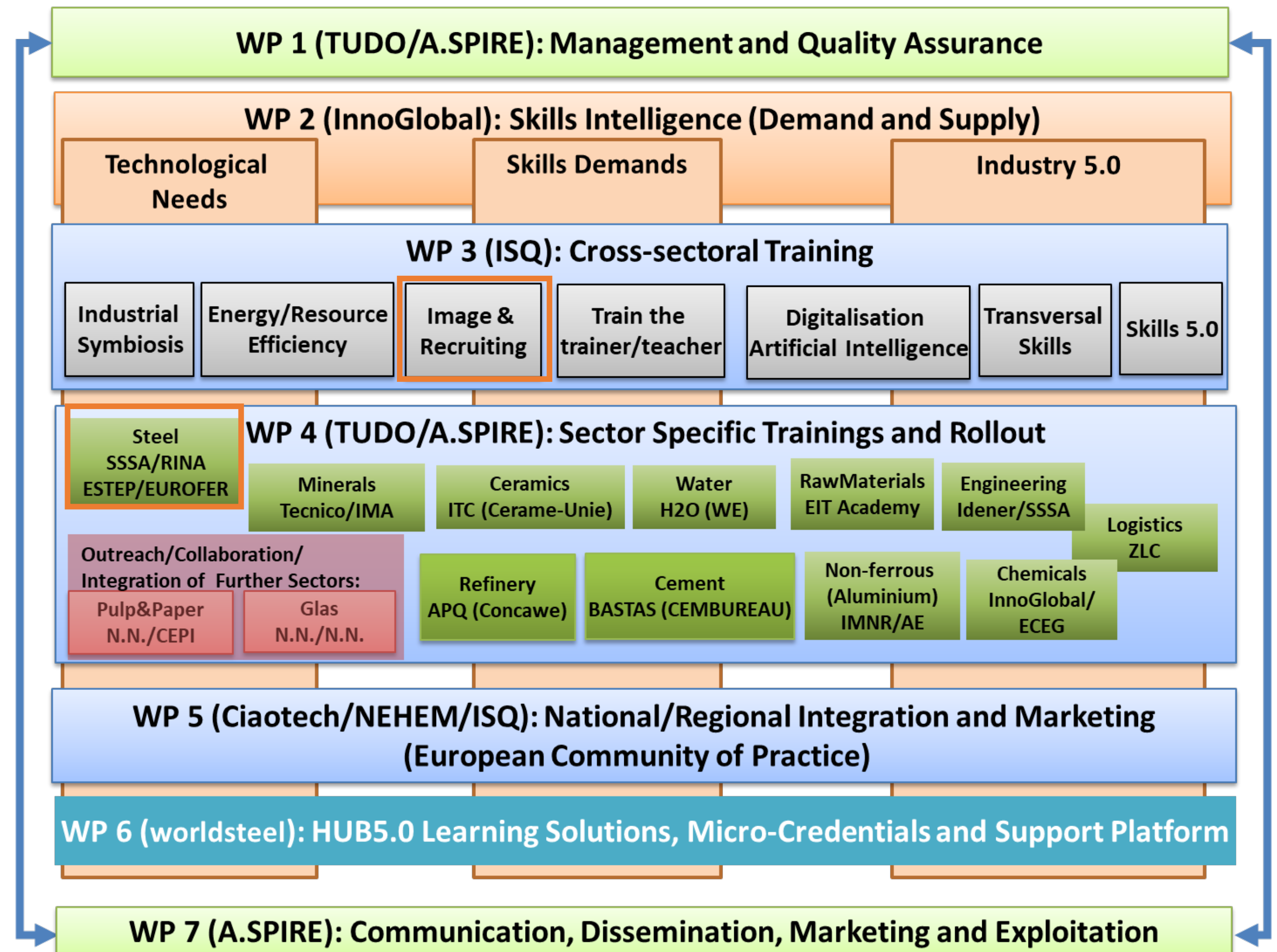
Human-
centric



Sustainable



Resilient



Sustainable future steel production and people recruiting and skilling (SUPER)



Decarbonisation Transformation

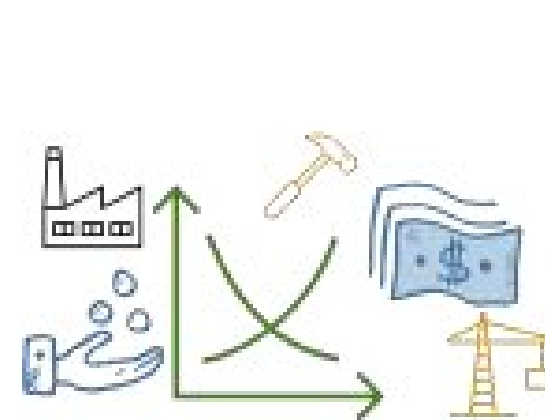
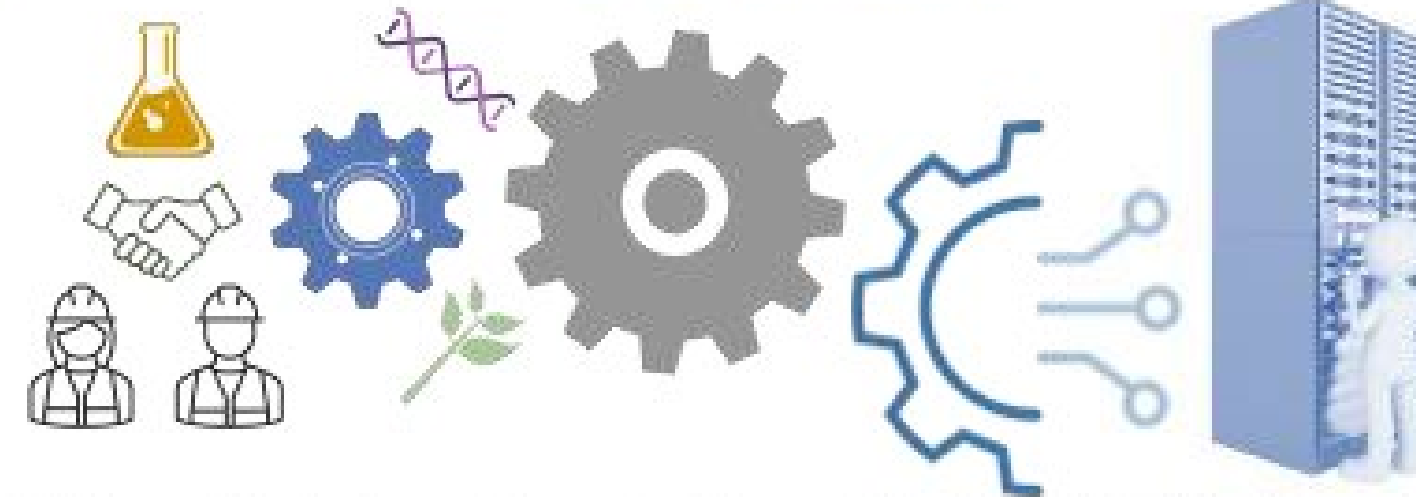


Generation Change & Workforce



SUPER

Skilling & Interdisciplinarity & Digitalisation



OPEX &
CAPEX



Infrastructure &
Renewable Energy



Policy



Image of Steel Industry

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**PACT FOR
SKILLS** *Leader*

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Thanks for your attention!

ESSA: <https://www.estep.eu/essa>

SPIRE-SAIS: www.spire2050.eu/sais

Skills4EII: <https://www.aspire2050.eu/skills4eii>

LSP EII: https://pact-for-skills.ec.europa.eu/about/industrial-ecosystems-and-partnerships/energy-intensive-industries-large-scale-partnerships_en

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