

Sectoral Blueprints ESSA and SPIRE-SAIS Lessons Learned

**3rd Virtual Get Together (VGT) on sectoral skills intelligence** online – 26th of September 2023

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### Central Elements and Challenges for Successful Skills Intelligence

- Social innovation process: Sustainability orientation right from the beginning
- Industry driven: integration of main stakeholders of the sector, company requirements are in front
- Ecosystem approach: companies, training providers, social partners, research and education organisations, policy, civil society
- Foresight: Surveys, Workshops and Desk Research
- Reduction of complexity
- Open online training platform with a business model: steelHub
- Rollout to member states, sectors (SPIRE-SAIS), and regions
- Integration in existing European Sector Governance





Social Innovation Process					
Challenge	Idea	Invention / Intervention	Implemen- tation	Institutionali- sation/Impact	
<ul> <li>In-time adjustment of skills demanded by companies because of technological and economic developments</li> </ul>	<ul> <li>Set-up a Steel Industry related European Steel Skills Agenda and Alliance as a sectoral Blueprint</li> </ul>	<ul> <li>Involving relevant stakeholders from companies, social partners, training providers, education and research</li> <li>Developing new vocational education and training practices, tools and measures</li> <li>Set-up of new development structures, alliances</li> </ul>	<ul> <li>Setting up Online and Regional Training Eco- Systems</li> <li>Collecting and developing training modules</li> <li>Testing of skills checklists and foresight measures</li> <li>Getting feedback from companies, social partners, training providers,</li> </ul>	<ul> <li>Improving and establishing sustainable governance structures</li> <li>Companies / employees: new training and access possibilities</li> <li>Organisational/ personnel development: new motivation, lifelong learning, behavioural changes</li> <li>Online and Regional</li> </ul>	

and leadership

structures

education and

research

Education and Training Eco-Systems

# Blueprint for an Industry Driven Long-term Skills Strategy

### Mission

Industry driven proactive adjustment of the future skills demands developed by the industry and for the industry.

### Main objectives

- Proactive skills adjustments.
- New training and curricula requirements.
- Political support measures.
- Successful sectoral upskilling schemes.
- Efficient management of knowledge.
- Improve recruitment and retention.
- Key Performance Indicators (KPIs).



# technische universität

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

### 24 partners (partly with double functions) +21 associated partners



### Eco-system Approach

#### Steel associations and social partners

- 1. EUROFER
- 2. World Steel Association
- 3. UNESID
- 4. Staalindustrie Verbond VZW GSV
- 5. German Steel Federation Wirtschaftsvereinigung Stahl
- 6. Federacciai
- 7. European Cold Rolled Steel Association CIELFFA
- 8. Association of Finish Steel and Metal Producers
- 9. OS KOVO

#### **Research institutions**

- 1. TU Dortmund University,
- 2. Cardiff University,
- 3. RINA/CSM,
- 4. DEUSTO,
- 5. Scuola Superiore Sant'Anna,
- 6. Visionary Analytics,
- 7. SSSA

#### **Plus associated partners**

- 1. ESTEP European Steel Technology Platform,
- 2. IndustriALL (European Industry Union),
- 3. EIT RawMaterials,
- 4. Industriarbetsgivarna (Swedish Industry Federation),
- 5. Polish Steel Technology Platform,
- 6. Celsa Group
- 7. Enrico Gibellieri (European Steel expert),
- 8. Unite and Community (UK unions),
- 9. CEPIS Council of European Professional Informatics Society,
- 10. University of the Basque Country,
- 11. Warwick University,
- 12. ArcelorMittal Italy,
- 13. Fédération Métallurgie CFE-CGC,
- 14. Metalowców NSZZ "Solidarność",
- 15. UK Steel,
- 16. SAAT Consulting,
- 17. Greensteel Academy / Liberty Steel,
- 18. Commercial Metals Company (CMC),
- 19. Swansea University
- 20. ArcelorMittal Germany
- 21. Liberty Steel

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#### Steel companies

- 1. ThyssenkruppSteel Europe
- 2. ArcelorMittal (Poland, Spain)
- 3. Salzgitter AG
- 4. Sidenor
- 5. BARNA (Celsa)
- 6. Tata Steel Europe

#### Education and training providers

- 1. Steel Institute VDEh ,
- 2. IMZ, Scuola Superiore Sant'Anna (SSSA)
- 3. DEUSTO
- 4. TKSE Training Centre
- 5. ArcelorMittal Training Centre Spain
- 6. World Steel University
- 7. Cardiff University
- 8. RINA/CSM
- 9. Tata Steel

Skills Alliance for Industrial Symbiosis -A Cross-sectoral Blueprint for a Sustainable Process Industry (SPIRE-SAIS)



Sozialforschungsstelle

## Industry driven consortium



#### \*\*\*\* Co-Era \*\*\*\* of th

Co-funded by the Erasmus+ Programme of the European Union

#### PROJECT PARTNERS AND COUNTRIES



Industry sector associations: A.SPIRE, ESTEP, IMA Europe, European Aluminium, Water Europe, ECEG, Cerame-Unie

Companies:Covestro(Chemicals),Sidenor, Ferriere Nord (Steel), MYTILINEOS(Aluminium), Suez (Water)

Education/training providers & RTOs: Scuola Superiore Sant'Anna, Fundation Circe, ITC, ISO, International Synergies, H2Opeople

Researchinstitutions:TUDortmundUniversity,CSM/RINA,VisionaryAnalytics, IMNR, Łukasiewicz-IMN

**Regional institutions:** ART-ER

Associated partners: EIT Raw Materials, thyssenkrupp Steel Europe, CEFIC, CEMBUREAU, ITO (Universitat Politècnica de València), Carbon Market Watch, Circle Economy, University of Deusto

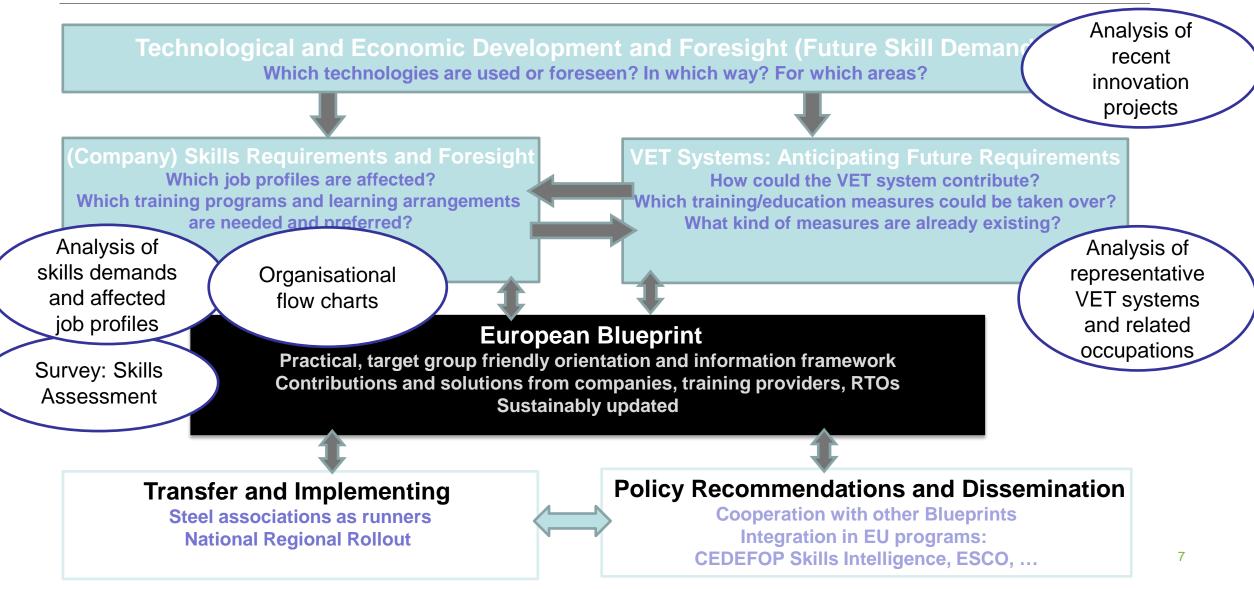
- ➢ 24 partners
- > 13 associated partners
- ➤ 12 countries
- > 10 industry sectors





## **Skills Anticipation Methods**

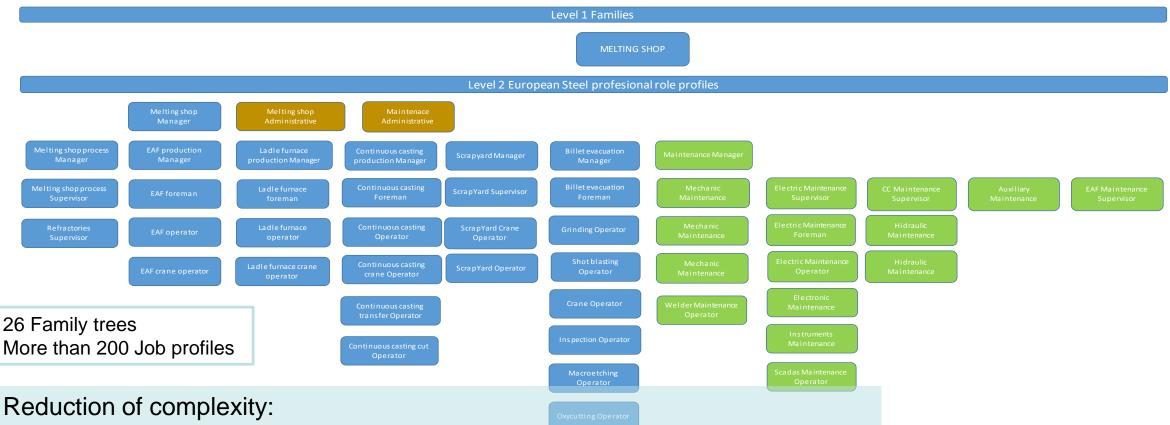








## Challenge Up-skilling of the Entire Workforce Reduction of Complexity



combining job profiles oriented at ESCO occupations, 9 selected job profiles representing different skills levels, production areas and functions





Specific

**Digital skills** 

Green skills Social skills

subject-related skills / knowledge

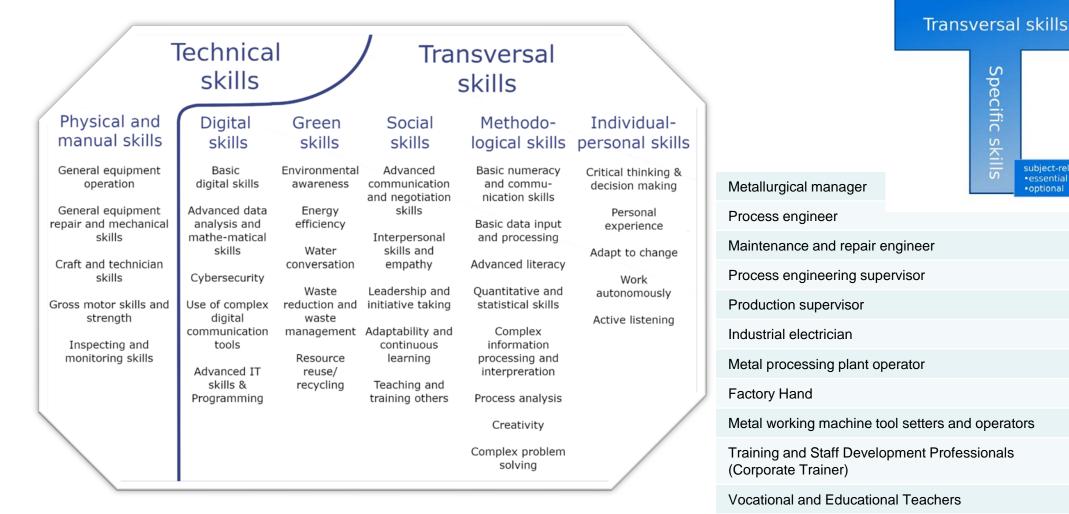
optional

Individual, personal skills

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Methodological skills

### Challenge: Incremental Up-skilling of the Workforce **Transversal Skills and Selection of Job Profiles**

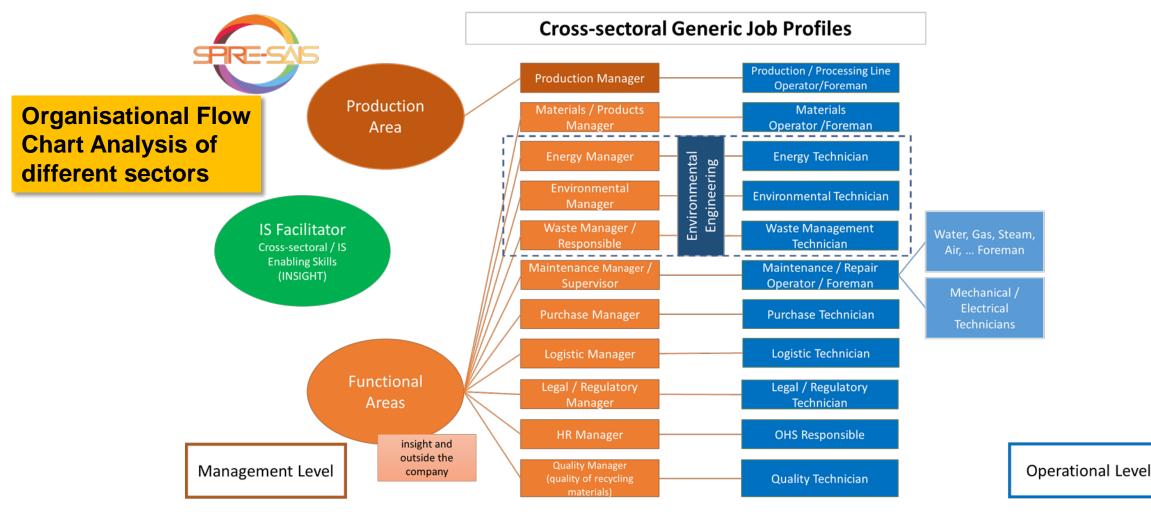






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### Challenge: Common Ground Across Different Industry Sectors Organisational Flow Analysis and Cross-sectoral Job Profiles







### Challenge: Skill Assessment Survey Based on Concrete Workplace Expertise

- Participants were specific job profile experts in the company
  - $\rightarrow$  Not easy to identify and reached
  - → Engaged connection nodes are needed (HR managers)
- Translation to the different languages are key
- Final Solution: Reduction of Complexity:
  - → shorter survey as a regular Technology and Skills Radar (open for any experts)
  - → Followed by an expert workshop discussing the results in-depth

	Survey 1	Survey 2
Period of survey	Nov. 2020 – Jan. 2021	May 2022 – Jan. 2023
Participants	33	40
Job profile assessments	113	144
Job profile assessments per participants	~ 3.4	~ 3.6
Languages	ENG, CZE, FRE, GER, ITA, POL, SPA	ENG, CZE, FRE, GER, ITA, POL, SPA



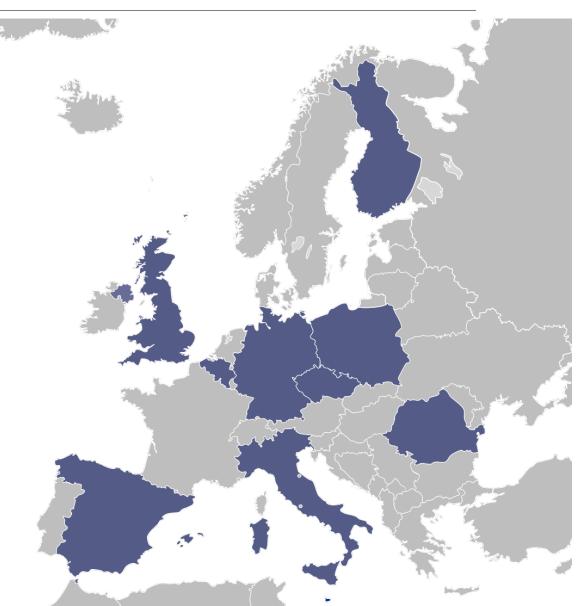


### National/Regional Rollout Workshops: Identifying specific national and regional skill needs

Country	Regional Focus	
Germany*	Rhein-Ruhr-Area, Saarland	
Czech Republic*	Moravia-Silesia	
Spain*	Basque Country Asturia	
United Kingdom	South Wales	
Italy	Friuli Venezia Giulia	
Poland	Silesia	
Finland*	No focus region	
Belgium*	No focus region	
Romania	Galati region	

Reach out to more than **140 additional stakeholders:** companies, public authorities, associations, unions, research institutions or universities, training providers, and others

\* National Rollout





# ESSA Online Training Ecosystem

# steelHub

https://hub.steeluniversity.org/



https://cdn.hub.steeluniversity.org/assets/videos/play.html?id=MRK0010







## steelHub: Training Ecosystem for Skills Intelligence Integrating Different Skills Expertise

Training Ecosystem Solution









# steelHub Skills Intelligence Capability Assessment and Training Offers





Technology infrastructure that facilitate communication and partnership between stakeholders of the Online Training Ecosystem.