

SOFIA SAVOVA SZ REDA, BULGARIA



JTP Session Reskilling and future-proof jobs 12.05.2022



Context

- Decarbonization (EU27) = the loss of ~76k workers' jobs in the coal business until 2025 (154k until 2030).
- Partnership countries (GR, DE, AT, RO, BG, PL) = represent 81% of the total EU coal workforce.
- Job demand in the EU27 RES sector = 304k new jobs/year until 2030 – 60% expected in wind & 24% in solar PV



PROMEA: Hellenic Society for the Promotion of Research and Development Methodologies, Greece

BFI: Vocational Training Institute, Austria

RENAC: Renewables AcademyAG, Germany

LTT: Ticleni Technological High School, Romania

SZREDA: Stara Zagora Regional
Economic Development Agency,
Bulgaria

MEERI: Institute for Research on Minerals and EnergyEconomy, Poland

RES-SKILL: Reskilling coal industry workers for the renewables energy sector

RES-SKILL Erasmus + prpject aims to strengthen VET provision in the energy sector aimed at coal workers for compatible RES sector jobs, to increase their reemployment opportunities & cover at the same time RES sector's skills demand.



Timeline

Sept 2020

Until March 2021

101:

Until Jan 2022

Until July 2022

Until Feb 2023

Project start

RES -S KILL learning outcomes

IO2: Career reorientation toolkit IO3: Learning units and Open Educational Resources IO4:
Resources on the
establishment of Joint
Competence Centres on
career reorientation

Objectives



Develop a novel curriculum & tailored training content to facilitate coal workers' reorientation to the RES industry.



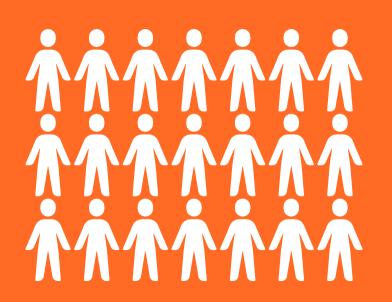
Support VET providers to integrate the RES-SKILL materials into their VET & WBL offerings.



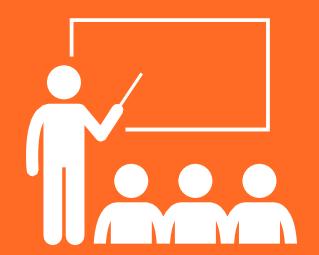
Improve cooperation between VET providers & businesses to provide opportunities that will enable coal workers to transition to the RES sector.

RES-SKILL target group

- VET Providers & Training centers
- Coal Workers
- Renewable Energy & Coal Sector Employers
- Renewable Energy & Coal Sector Social Partners
- Public Authorities & Policymakers



190 000 people in the partnering countries



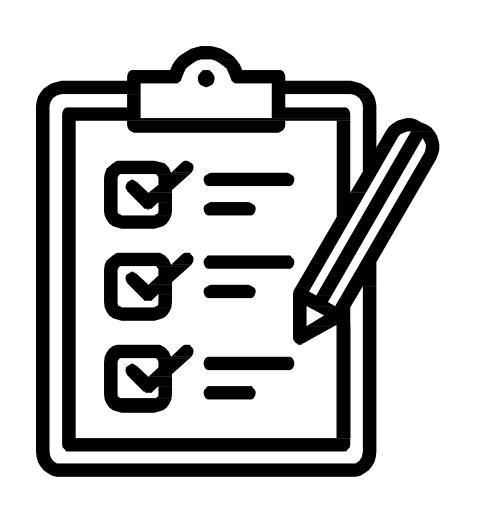
Limited training opportunities

RES-SKILL results



- Learning outcomes for coal workers' career reorientation
- Learning units, career reorientation toolkit
 & guidelines to implement successful
 transitions
- Open Educational Resources in 6 languages
- Strategic & operational plans for the establishment of Joint Competence Centres
- Pilot run of a Joint Competence Centre for career reorientation & reskilling
- 6 national info-days

Developed resources so far



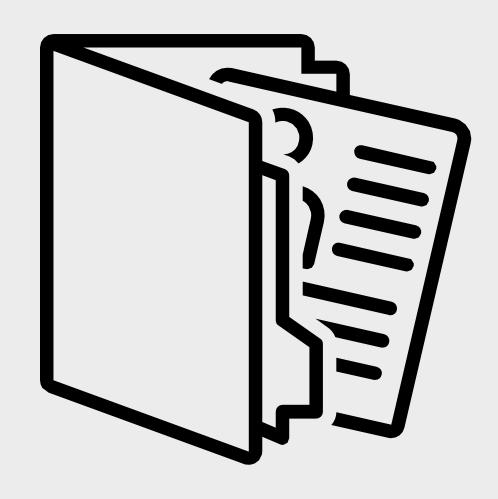
The Assessment tool to identify learning pathways:

- is an online assessment form, which will be able to suggest the skills needed to be acquired to strengthen the employability of a coal worker in the RES sector.
- offers to VET providers and RES sector employers a tool for identifying the most appropriate learning pathway to be followed by a learner.
- indicates the most fitting (skills-wise) occupational profile in the RES industry, i.e. proposing optimal transition profiles for each learner

Developed resources so far

The RES -S KILL portfolio:

- is an online tool for individual usage by coal workers so as to build their 'passport' of previous experience and thereby demonstrate competencies they have obtained against job-specific criteria
- enables users to name their occupation and with inbuilt assistance be able to describe the main task, technical skills, responsibilities, knowledge, soft skills and digital skills
- **brings out** the knowledge, skills and competencies of coal workers in the form of a CV using results of research and analysis of present coal workers' skillsets.



RES-SKILL: the regional prospective: Stara Zagora

- Maritsa East energy complex (3 lignite coalfired TPPs, mine companies, enrichment plants, a briquette plant)
- A total capacity of 3035 MW
- A total area of 240 sq. km
- A total of about 16 000 employees directly affected by the decarbonization process
- Coal phase out year: 2038









STEL SECTOR CAREERS





Erasmus+ Programme (Key Action 2-Cooperation for innovation and the exchange of good practices)

Agreement Number: 2018-3059/001-001

Project Number: 600886-EPP-1-2018-1-DE-EPPKA2-SSA-B

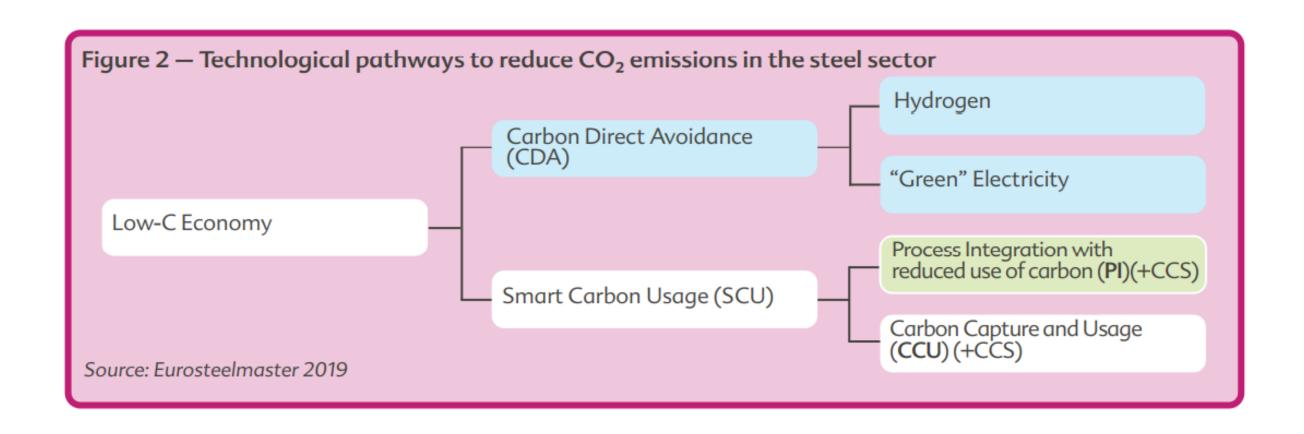
Preparing for a Just Transition

Meeting green skill needs for a sustainable steel industry





Decarbonisation and Digitalisation



The application of digital technologies can be crucial for improving energy efficiency, water and wastewater management and emissions control.

To meet digital and decarbonization targets the industry will need to:

- i. attract new talents, and
- ii. meet emerging skills needs

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Green Transition

92% of steelworkers surveyed view the green transition as necessary.

78% of respondents believe the Green Transition will lead to radical technological change in the UK steel industry.

79% of respondents have not been consulted by their employer about the green transition.

Neglected training includes entrepreneurial skills (4% received this), advanced digital skills (10%), analytical thinking (16%), resilience (21%), and sustainable development (24%).

55% of respondents believe they currently possess the right skills to cope with the green transition.

Only 41% of respondents think the green transition will improve job security and employment opportunities in the UK steel.



Steel Industry Jobs Demand



Figure 27: Most demanded jobs in the steel sector



Steel Industry Skill Needs

Figure 4 — Ten most cited skills needs in the ESSA project case study countries

-	Digital skills	
-	Communications and connectivity	
\dashv	Teamwork	
\dashv	Data analysis	
-	Metallurgical skills	
-	Problem solving and critical thinking	
-	Adaptation	
-	Advanced engineering	
-	IT skills	
-	Process/system knowledge	

Source: Antonazzo et al. (2021b)



Transversal Skills: Metallurgical Manager

Transversal skills	
	Basic digital skills
	Advanced data analysis and mathematical skills
Digital skills	Cybersecurity
	Use of complex digital communication tools
	Advanced IT skills & Programming
	Environmental awareness
	Energy efficiency
Green skills	Water conservation
	Waste reduction and waste management
	Resource reuse/recycling
	Advanced communication and negotiation skills
	Interpersonal skills and empathy
Social skills	Leadership and managing others
	Entrepreneurship and initiative taking
	Adaptability and continuous learning
	Teaching and training others
	Critical thinking & decision making
Individual,	Personal experience
personal skills	Adapt to change
	Work autonomously
	Active listening
	Basic numeracy and communication
	Basic data input and processing
	Advanced literacy
Methodological	Quantitative and statistical skills
skills	Complex information processing and interpretation
	Process analysis
	Creativity Complex problem solving



Future Proofing the EU Steel Industry





Monitor skills needs



Improve the image of the sector and careers within it



Include underrepresented groups, such as women and migrants



Provide and promote training in transferable skills



Expand and promote on-the-job forms of training



Promote (reverse) mentorship as a way of knowledge transfer





Future Proofing the EU Steel Industry



ESTEP FG People in close cooperation with EUROFER (SAC) and industriALL (SSDC Steel)

European Steel Technology and Skills Foresight Panel (ESSA ETP) ESTEP FG People / Smart Factories Online Training Ecosystem
"steelHub,,
(ESSA OTS)

worldsteel

Regional Training Eco-Systems
(ESSA RTS)

ESTEP FG People
in close cooperation with national
associations and regional coordination

