



# RESKILLING COAL INDUSTRY WORKERS FOR THE RENEWABLES ENERGY SECTOR

European Union—

- The RES-SKILL project (“Reskilling coal industry workers for the renewables energy sector”) seeks to help coal workers transition into high-demand jobs in the renewable energy sector.
- The project facilitates workers' transition by leveraging coal workers' skill complementarities to perform renewable energy jobs.
- By providing training and re-employment opportunities, RES-SKILL contributes to the resilience of regions dependent on transitioning industries.

## What are the objectives?

**The transition to a decarbonised economy in the EU will have a significant impact on the workforce in the coal industry.** Projections suggest that around 76 000 jobs will be lost in coal mines and plants by 2025, with this figure potentially rising to 154 000 by 2030. This will particularly affect countries such as Greece, Germany, Austria, Romania, Bulgaria and Poland, which together employ 81% of the EU's coal workforce. Meanwhile the renewable energy sector is experiencing rapid job growth. Given the transferable skills of coal workers, such as experience in hazardous environments and the use of both manual and sophisticated technologies, there is a unique opportunity to transition these workers into the renewable energy sector with minimal retraining.

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● **Keyword**

Skills and labour shortages;  
reskilling and upskilling

● **Theme**

local employment and skills;  
economic and community  
development

● **Geographical Scale**

Cross-regional

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● **Countries**

[Austria](#) | [Bulgaria](#) | [Germany](#) |  
[Greece](#) | [Romania](#) | [Poland](#)

**From 2020 to 2023, with an Erasmus+ grant of nearly EUR 300 000, the RES-SKILL project aimed to address the limited opportunities for retraining coal workers.** Within the EU, only Germany offers relevant continuing vocational education and training (C-VET) courses for transitioning coal workers, typically taking around 2.5 years to complete. Meanwhile, job demand in the EU renewable energy sector is expected to grow by 304 000 new jobs per year until 2030, with 60% of these jobs expected in the wind sector and 24% in the solar PV sector. Estimates suggest that the supply of new jobs in the renewable energy sector in EU countries could potentially absorb up to 90% of current coal jobs.

**The RES-SKILL project tapped into this opportunity by improving VET for coal workers, thereby increasing their chances of re-employment in the renewable energy sector and meeting the sector's growing demand for skilled labour.** Specific objectives included developing a novel curriculum and tailored training content, supporting VET providers to integrate RES-SKILL materials, and improving collaboration between VET providers and companies to create transition opportunities.

## How does it work in practice?

**The RES-SKILL project was a collaborative effort involving VET providers, industry representatives, social partners, and regional development agencies from Germany, Greece, Austria, Romania, Bulgaria, and Poland.** These institutions played diverse roles, from curriculum development to the establishment of training centers.

The project was structured around several activities:

- Identifying skill complementarities and mismatches between coal workers and renewable energy sector occupations. This analysis informed the development of learning outcomes and a new curriculum tailored to coal workers transitioning to the renewable energy industry. The curriculum was supplemented with pedagogical materials provided as Open Education Resources (OERs) for broad accessibility.
- Developing transition profiles, self-assessment tools, and skills portfolios to help coal workers understand their current competencies and identify areas for improvement.
- Creating resources for the establishment of Joint Competence Centres, serving as hubs for career reorientation and reskilling. These centers provided the necessary training and support for coal workers to move into renewable energy roles.
- Disseminating outputs through national info-days and other events to raise awareness and foster public discussion on effective VET for coal workers.

## What has been the impact?

**One of the primary outcomes of RES-SKILL was the development of learning materials tailored to coal workers' career reorientation.** These materials provided a clear pathway for coal workers to transition into renewable energy roles, ensuring that the skills they acquired were directly applicable to their new careers.

**The project produced comprehensive learning units, a career reorientation toolkit, and guidelines to support effective training and career shifts for both workers and VET providers.** Additionally, Open Educational Resources (OERs) were developed in six languages, making the training materials accessible to a wider audience across different regions.

**To promote the project's results and stimulate public discussion on improving VET for coal workers, six national info-days were organised.** These events raised awareness about the project and its benefits, encouraging broader participation and support from various stakeholders.

**RES-SKILL also formulated strategic and operational plans for the establishment of Joint Competence Centres, laying the groundwork for these hubs to become operational.** For instance, a pilot run of a Joint Competence Centre provided insights and feedback for further refinement and scaling. These centers are expected to play a crucial role in the transition, offering a structured environment for career reorientation and practical training. They will also foster collaboration between VET providers, industry stakeholders, and social partners, ensuring the training provided is relevant and meets the needs of the renewable energy sector.

## What can other communities learn from this example?

- By identifying and leveraging the existing skills of workers in declining industries, communities can minimise the retraining period and facilitate smoother transitions into emerging sectors, thereby maintaining employment levels and economic stability.
- Training programmes may benefit from strong collaboration between vocational education providers, industry stakeholders, and regional development agencies, ensuring that the training is relevant, comprehensive, and meets the specific needs of the evolving job market.
- Developing and distributing Open Educational Resources (OERs) serves to create training materials that are widely accessible, allowing a diverse range of communities to adapt and implement these resources according to their specific needs and contexts.

## Further information

- [RES-SKILL project](#)

- [RES-SKILL - Erasmus+ \(europa.eu\)](https://europa.eu/erasmus-plus/en/programmes/erasmus-skills-2021-2027)

## OECD resources

OECD (2023), *Job Creation and Local Economic Development 2023: Bridging the Great Green Divide*, OECD Publishing, Paris, <https://doi.org/10.1787/21db61c1-en>.

OECD (2023), *Assessing and Anticipating Skills for the Green Transition: Unlocking Talent for a Sustainable Future*, Getting Skills Right, OECD Publishing, Paris, <https://doi.org/10.1787/28fa0bb5-en>.

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