InnoGlobal

Skills for Energy Intensive Industries

The Pact for Skills is an EU initiative designed to support public and private organisations in adapting to the green and digital transitions through investment in upskilling and reskilling. As part of this initiative, Large-Scale Skills Partnerships (LSPs) have been set up within 14 industrial ecosystems. These partnerships operate as a shared engagement model where major players across value chains—such as industry associations, SMEs, and public authorities—collaborate to provide coordinated, system-wide skills development.

The case study below highlights InnoGlobal's involvement in the Energy-Intensive Industries (EII) ecosystem and the Skills4EII project.

InnoGlobal is an active member of the Energy-Intensive Industries (EII) ecosystem, which includes key manufacturing sectors such as steel, chemicals, cement, ceramics, rare earth minerals, pulp & paper, and water. This ecosystem plays a critical role in achieving the EU's sustainability and industrial transformation goals.

Skills4EII Project

Launched in January 2025, **Skills4EII** is a four-year EU Commission-funded initiative aiming to drive a **skills transformation** across energy-intensive sectors. The project supports the vision of **Industry 5.0**, which emphasises sustainability, resilience, and a human-centric approach to industrial innovation.

The Skills4EII partnership includes:

34 members across **11 EU Member States**

Industrial leaders and training providers in **steel, chemicals, cement, ceramics, rare earth minerals, pulp & paper**

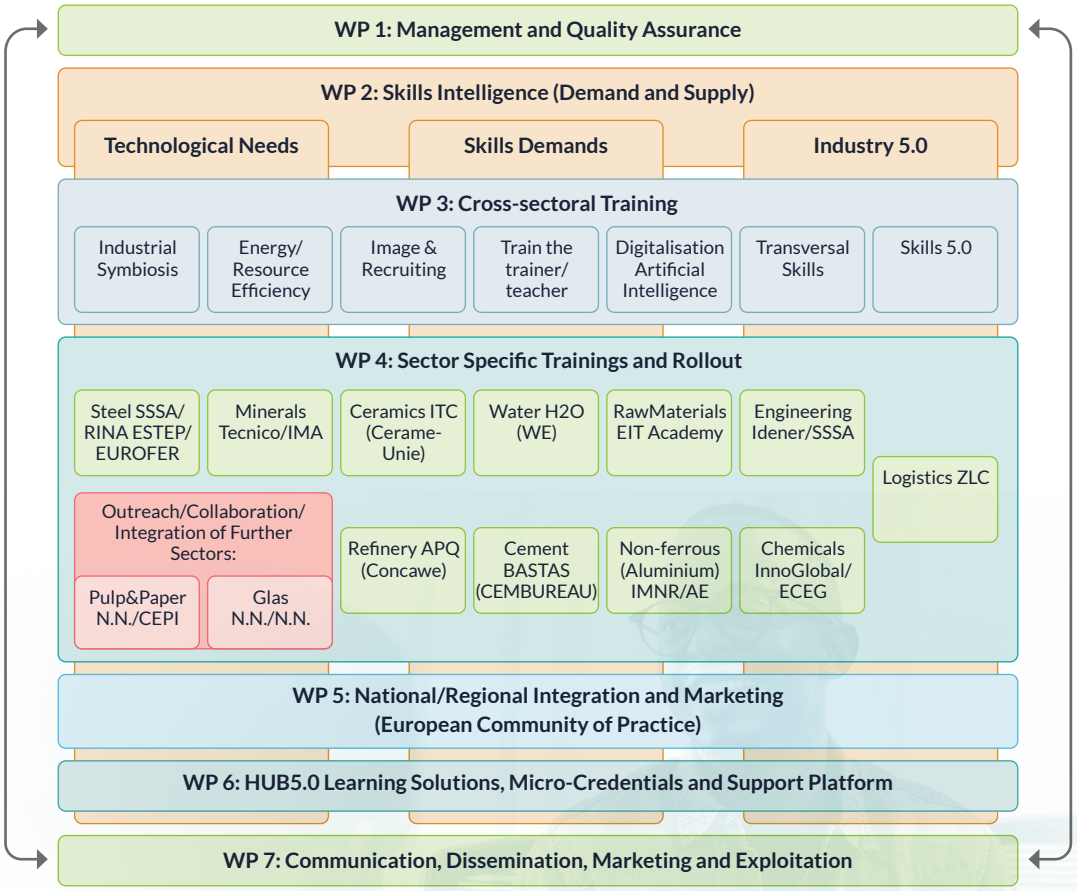
Scale

50% workers participating in upskilling or reskilling actions annually by 2030.

This is estimated to mean approximately **3,500,000** workers each year by 2030.

Key aims of the Skills4EII project include:

- Creating a common skills framework aligned with digital and green transition needs.
- Strengthening training ecosystems at both national and regional levels.
- Developing HUB 5.0, a digital learning platform tailored to Process Industry 5.0.
- Promoting cross-sectoral learning by identifying transferable skills.



Digitalisation is transforming the steel industry. But without the right skills, even the best technology falls short. InnoGlobal, as a member of the EU Horizon funded Skills4EII initiative, is responding with Skills4sight—a new AI-powered tool designed to future-proof the steel workforce by identifying evolving skills needs through real-time intelligence.

Milestones

2,310,000 workers are participating in upskilling and reskilling actions each year by 2025. This is estimated to mean **33%** of the workforce.

2,800,000 workers are participating in upskilling and reskilling actions each year by 2027. This is estimated to mean **40%** of the workforce.

The Challenges

Building a coordinated, pan-European response to ensure energy-intensive industries remain competitive, sustainable, and equipped for the future.

InnoGlobal is focused on the steel industry, which is being transformed by digitalisation, however even the best technology falls short without the right skills.

Steel stakeholders face major disruptions as AI, automation, sustainability targets, and demographic shifts are reshaping production and labour needs.

Skills gaps are slowing progress: Without timely training responses, digital investments won't yield their full potential.

Better data is needed in order to act: Real-time, sector-specific skills intelligence is essential for designing effective upskilling strategies.

Solution

InnoGlobal is leading the aggregation of industry feedback and curricula build-out through the development of Skills4sight, a new AI-powered intelligence tool. Designed to future proof the steel workforce by identifying evolving skills needs through real time intelligence.

Skills4sight automates skills trend analysis by:

- Using **machine learning and natural language processing (NLP)** to extract data from websites and research outputs.
- **Adapting to website changes** and interpreting complex, unstructured data.
- **Conducting multimodal analysis**—pulling insights from text and visuals (e.g., graphs).
- **Generating timely intelligence** to inform skills planning and workforce development.

Skills4EII - Skills4sight: AI Dashboard

- Systematic job and skills analysis & forecasting
- Sector-specific & cross-sectoral
- Early Warning System
- AI analysis tool: Skills4sight

Intelligent Content Ingestion: Automatically gathers information from websites, PDF documents, and URLs

AI-Driven Document Analysis: Quickly extract important data and trends from large documents, including key numbers and overall sentiment.

Intelligent Content Ingestion: Responds to specific questions in plain language, and it will quickly find relevant answers from its collection of documents.

Intelligent Content Ingestion: Pulls together information from different sources, summarises the key points, and shows them on easy-to-read dashboards.

Conclusion

The **future of manufacturing sectors such as steel, chemicals, cement, ceramics, rare earth minerals, pulp & paper, and water** is not just about smarter machines—it's about smarter people. With tools like **Skills4sight**, we can **anticipate change, adapt training**, and **stay competitive** in a fast-evolving landscape.

InnoGlobal, Ravenscourt Campus, Three Rock Road, Sandyford, Dublin 18, Ireland
Tel: +353 1 485 3346 Email: info@innoglobal.com www.innoglobal.com