



**GREEN
WELD**

NEWSLETTER #1

01. Introduce GREENWELD Project - EWF

In today's rapidly evolving world, the digital and green transition has become imperative. To achieve this, it is crucial to address key competencies such as green, digital, and sustainable skills. At GREENWELD, we recognize the importance of identifying these skills and developing effective strategies to overcome the challenges associated with them. While some sectors may experience less impact during this transition, industries like construction, agriculture, and automotive will require workers to acquire new skills as their sectors undergo restructuring.

Vocational and Educational Training (VET) centers are at the forefront of this digital and green transition, serving as pillars for the training and education of both the current and future workforce.

GREENWELD aims to focus on welding technology and the sectors where this technology is widely utilized, addressing the unique challenges in identifying and developing new skills required for the green transition.

Our primary focus is on developing curricula that address green skills for welders and adapting learning methods with a greener perspective, such as the use of welding simulators. We will build upon the European Federation for Welding, Joining and Cutting (EWF) Qualification for Welders as our starting point.

In line with this vision, we understand that training programs need to respond swiftly to the emerging competence requirements. Government-funded training programs, universities, and training institutions play vital roles in creating green skills, adapting quickly to new demands.

Technical and vocational training centers also play a crucial role in equipping individuals with entry-level skills for green jobs.

GREENWELD is committed to implementing the developed training program, focusing on green skills, across three different countries: Denmark, Greece, and Spain. This program will cater to students aspiring to become welders as well as current welders who may require additional green skills to meet market demands. Upon successful completion of the pilot activities, candidates will be awarded Green Welding Certificates, recognizing their competency in green skills.

Aligned with the current needs for the green transition and environmental climate change, GREENWELD proposes to identify and develop the necessary skills for integration into the EWF welder's guideline. EWF's Harmonized Qualification System for welding in Europe, adopted by 30 different countries, will serve as the foundation for integrating these new skills and implementing harmonized training programs across various nations.

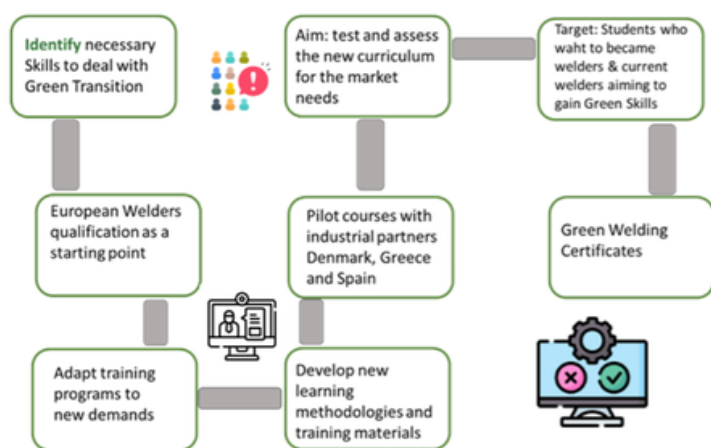
Furthermore, GREENWELD will develop innovative learning methodologies and training materials to facilitate this training. For instance, virtual training using simulators and gamification will enable workers to acquire welding skills with reduced environmental impact compared to standard training programs.

In summary, **our goals and priorities are interconnected:**

- Identify and develop new green skills to integrate into the Welders and Operators curriculum, with a specific focus on combating climate change.
- Identify and develop new learning approaches that are greener and incorporate innovative tools and strategies for effective training implementation.
- Organize pilot courses to test and assess the new curricula in collaboration with our industry partners, addressing the market's evolving needs.
- Issue Green Welding Certificates and Diplomas, providing digital credentials that recognize the capabilities of workers.

We invite you to join us on this exciting journey towards a sustainable future.

Stay tuned for further updates on our progress!



02. WP2 – SWISS and Talleres Corral

IWork Package 2 of the GREENWELD/Green Welding Certificates project, an initiative generously funded by the Erasmus+ program of the European Union, places a significant emphasis on the Current Green Skills Needs and Innovative Learning Approaches for Welders.

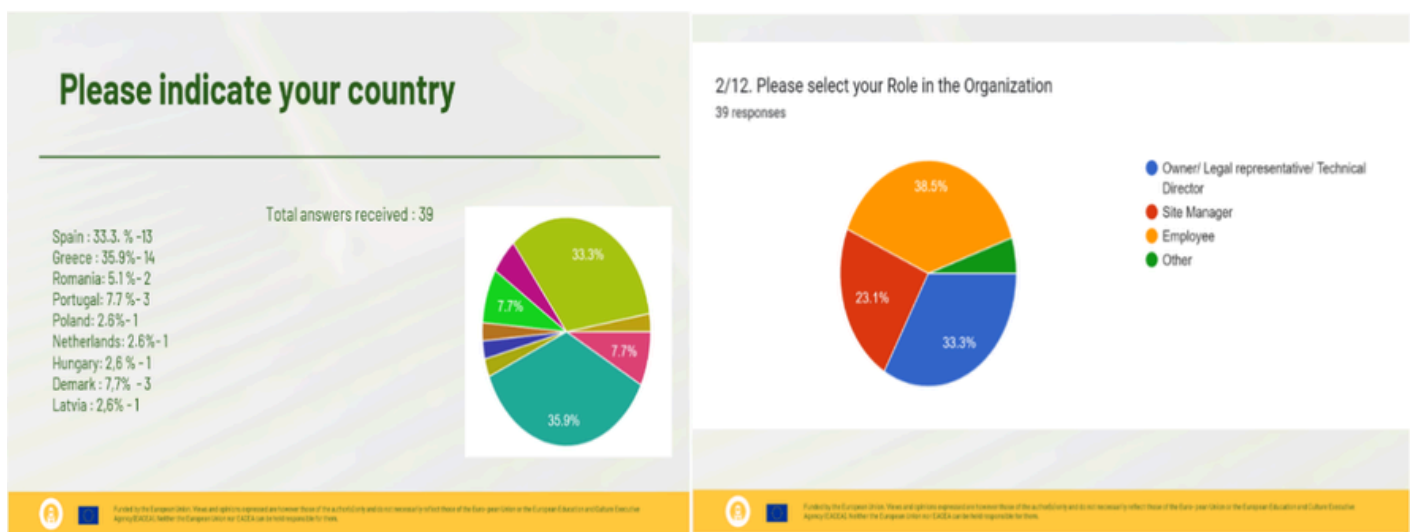
The primary objective of this work package (W.P.) is to discern the green skills needs that exist within the industry and training sectors associated with welding processes. Additionally, it seeks to bring to light innovative training methodologies for welders, ensuring they are equipped to perform their tasks in a manner that aligns with sustainability efforts. In order to achieve these objectives, the project implemented Questionnaires that were specifically addressed to the Industry and Training Sector. These questionnaires were devised to help ascertain the current state of affairs and to identify the green skills that welders need to possess in today's environment-conscious world.

Moreover, partners undertook a comprehensive Desk Research endeavor. The goal of this research was to tap into all possible sources of information that can contribute to making the welding profession a greener one. Every potential lead was pursued to uncover ways in which the welding industry can adopt more sustainable practices. Once the data from the survey questionnaires and the desk research was collected, it was validated in a Round Table discussion. This collaborative dialogue brought together experts from the industry and Vocational Education and Training providers (VETs) to share their insights.

Their contribution, based on their practical experience and knowledge, helped provide a realistic depiction of how the identified green skills and new training methodologies can be implemented in a pragmatic way.

Following the assessment of these needs and innovative training approaches, a set of Green Recommendations will be drafted for welders' training processes. The aim of these recommendations is to increase the awareness of green practices in both the industrial production sector and educational institutions.

This new environmentally-conscious approach, set to emerge from Work Package 2, promises to boost not only the welders' green awareness but also that of the broader range of stakeholders. It is expected to encourage the procurement of more efficient and less environmentally damaging equipment, advance the digital skills of those involved in the welding industry, and reduce waste and costs associated with vocational training. Overall, this will contribute to a reduction in the industry's environmental carbon footprint, aligning the welding sector more closely with the world's urgent sustainability objectives.



03. Roundtable - WGI

Roundtable Event

In the context of the GREENWELD/Green Welding Certificates project, which is funded by the Erasmus+ program of the European Union, a Round Table was organized with the participants from Industry and Training sector, occupied in welding process.

During the Roundtable Event a brief presentation of the Greenweld Project and Partners, for better understanding our goals.

The aim of the event was to validate the results gathered by Partners, by the following actions.

- Survey Questionnaire for Industry's Green Needs
- Survey Questionnaire for VET's Green Needs
- Desk Research of Green Needs, Opportunities and Training Methodology.

Experts from Industry and Training sector state their opinion in accordance with the presented results, for evaluation proposes.

Furthermore, participants' discussion regarding how they understand Green Welding Certificates, from their professional perspective, and how critical they assess the gathered results, gave a more realistic picture of the Current Green Needs, their necessity and their implementation possibilities in welding production and education.

All results will be included on the Final Report of Green Needs Analysis, Learning Methods, and Recommendations, which is going to be release soon. [GREENWELD Project](#)



04. TPM2 - CESOL

Description of the activities carry on in Madrid:

CESOL Asoc. Española Soldadura y Tec. de Unión hosted the 2nd Transnational Project Meeting on 19th and 20th April 2023, in Madrid (Spain) and Partners were focus on achieving the first Milestone of the project: The current green skills needs and new learning approaches for welders, in order to increase the capacity and readiness of VET centers to manage an effective shift towards digital education, which has proven to be the most effective way to address virtual training. Digital technologies will be used for education, training, teaching, learning, and assessment.

During the two days of the meeting, important issues within the framework of the project were discussed and decided upon in order to ensure that all assigned tasks are carried out in a clear and orderly manner, such as:

- Clarify the Project Management of GREENWELD.
- Current Green Skills Needs and Learning Approaches for Welders.
- Development and adaptation of Welders Training programs and materials.
- Implementation of Green Welding Certificates.
- Dissemination & Exploitation of GREENWELD Project.

Presentation of the partners involved in the project:

- **Mercantec - Karrierecenter Midt** , from Denmark and Project Coordinator, is a merged school between a vocational and a business school/gymnasium. Mercantec has yearly 3.000 full time students and employs about 500 employees. The educations at Mercantec ranges from vocational educations, business, and technical high school/gymnasium to adult further education.

- **European Federation for Welding, Joining and Cutting (EFW)** , is a European organization established as an international non-profit association that acts as a representative of manufacturing community in Europe, providing the exchange of scientific and technical information and contributing to the removal of technical barriers. EFW was created in 1992 by all the welding institutes of the European Community with the aim of updating and harmonizing training and education in the field of welding technology. EFW also manages a harmonized system for training, qualification, and certification of personnel, with more than 400.000 diplomas awarded, covering different levels of qualification and different industrial requirements. In addition, manages the Qualification, Training and Certification system of personnel in Joining, Welding, Additive Manufacturing and Cutting and the International Additive Manufacturing Qualification System IAMQS .

- **WELDING GREEK INSTITUTE - WGI** , is a non-profit organization in Greece that promotes the continuous development and recording of all methods in the welding process. Established in May 2007, it has around 500 members and aims to enhance the educational level of technical staff to promote competitiveness and improve the quality of welded structures. WGI facilitates the quality control process with trained staff and emphasizes professional ethics. The organization collects and processes information from national and international research on welding development, collaborates with national, European, and international organizations to monitor publications on the welding industry, and organizes theoretical seminars and practical workshops for further education and specialization. It also provides consulting services, technical inspection, and technical documentation for product quality, production processes, and the welding process. WGI also supports companies and organizations according to relevant standards and specifications for metal processing. WGI organizes conferences, visits, exhibitions, and participates in international conferences and meetings, exchanging scientific information and experiences with public bodies.

- **Swiss Approval Türkiye** from Greece, is an Engineering Company, with innovative approach in the Certification services, and use of advanced technologies and specific know-how, in different inspection and certification areas. With more than 55 professional Engineers as full time Employees, our company's strategic goal and central focus is to establish solid partnerships and entrusted corporate relationships, the framework of which will be a continuous added value interaction resulting to benefits in the customer's outcome. Swiss Approval is ISO 17024 accredited Certification Body, for a wide range of technical professions, extendable to economic and management related professions, such as Welders Certification, Inspectors Certification, Welding Coordination personnel Certification Schemes, Painting and Coating Inspectors.

- **CESOL Asoc. Española Soldadura y Tec. de Unión**, from Spain, is an Association of People and Companies, independent and non-profit, in the service of welding and other joining technologies. CESOL has more than 40 years of experience and is the national reference point in Spain specializes in information, certification of people, products and processes, training, advice and technical assistance to industries that use welding and other technologies like adhesive bonding or Additive Manufacturing. CESOL maintains permanent relations with virtually all Associations and National Institutes with similar characteristics throughout the world, either directly or through organizations: EFW (European Welding Federation), which is a member and IIW (International Institute of Welding), providing one of the representatives in their national governing bodies.

- **Talleres Corral**, from Spain, is a medium size industrial company, founded in 1958, focused on the production of welded components for high requirements components for rolling stock, energy, and aeronautic sector. Currently our staff is composed of highly qualified professionals in all areas involved like welding, machining, assembly, painting, and bonding. All of the means of production are in house, having internal capacity for make components by laser cutting, bending, curving, robot, and manual welding (TIG, MIG-MAG, plasma, laser, spots and studs), machining (milling and turning), painting and other auxiliary processes. Talleres Corral maintains permanent relations with virtually all Associations, National Institutes and R&D organizations developing new processes and products, and is and ATB for welding training into the EWF scheme.

- **Quantified Impacts ApS**, from Denmark, is a platform that automatically helps companies collect, manage and structure all data with relevance to climate. They provide manufacturing companies with carbon footprint calculations on each item number and manufacturing process based on the ISO 14067 standard.

GREENWELD| Partners



05. GREENWELD in the scope of the Green Week - EWF

GREENWELD Project was presented in the Green Week 2023, this year dedicated on skills for sustainable, resilient, and socially fair communities organised across Europe, and beyond.

The webinar "Developing Skills for a Sustainable and Resilient Education and Industry", organized by European Federation for Welding, Joining and Cutting (EWF), took place on the 5th of June and it was broadcast all over Europe.

The event was focused on the green skills promotion to allow manufacturing industry to achieve the green transition and achieve the goals foreseen for the next years at the European Global context.

The webinar gathered a group of experts representing industry as well as education and training organizations towards an exciting debate about the following questions:

- What is the role of education and training, in the green transition?
- Which are the main barriers and enablers for a greener education?
- Which skills are required by the industry workforce, trainees and education staff to cope with the Green transition?
- How can we reach the workers and prepare them to join this new way of thinking industry?

John Hansen from MERCANTEC, Georgia Kolyva from WGI, Mikkel Sørensen from Quantified Impact, and Ana Luísa Marques from EWF were invited to present the project and be part of the discussions panel for Education and Industry.

During the webinar, participants had the opportunity to share practical results and experience from ongoing initiatives in the field of education and green skills, as example the GREENWELD project.

The event was also attended by ESCO, presenting the green skills and knowledge labelling.

Agenda

WEBINAR_GREENWEEK_AGENDA.pdf

06. GREENWELD next activities – EWF

GREENWELD project is just get on its second semester and new activities are ahead:

- Close the Needs Analysis Report on Green Skills needs, for Welder's training
- Organise a Capacitation Workshop on Learning Outcomes and EWF's methodology
- Develop and adapt the Welders Training programs and materials

By October, the partnership will meet in Greece, WGI will host another progress meeting. If you want to know more about the **project results**, [click here](#).

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Project Results

WP3 – Development and Adaption of Welders Training Program and Materials

Development of a user guide for training implementation

WP2 Need Analysis Report

GREENWELD Project results overview

Green Welding Certificates

GREEN WELD

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Green Welding Certificates

GREEN WELD

FEEDBACK

About:
Addressing green skills for welders. Revise qualification and integrate new training methods e.g virtual training, gamification, or welding simulation to improve the sustainability for welders.

Time period:
01-11-2022 to 31-10-2024

Budget:
EUR 250.000,00

Partners



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