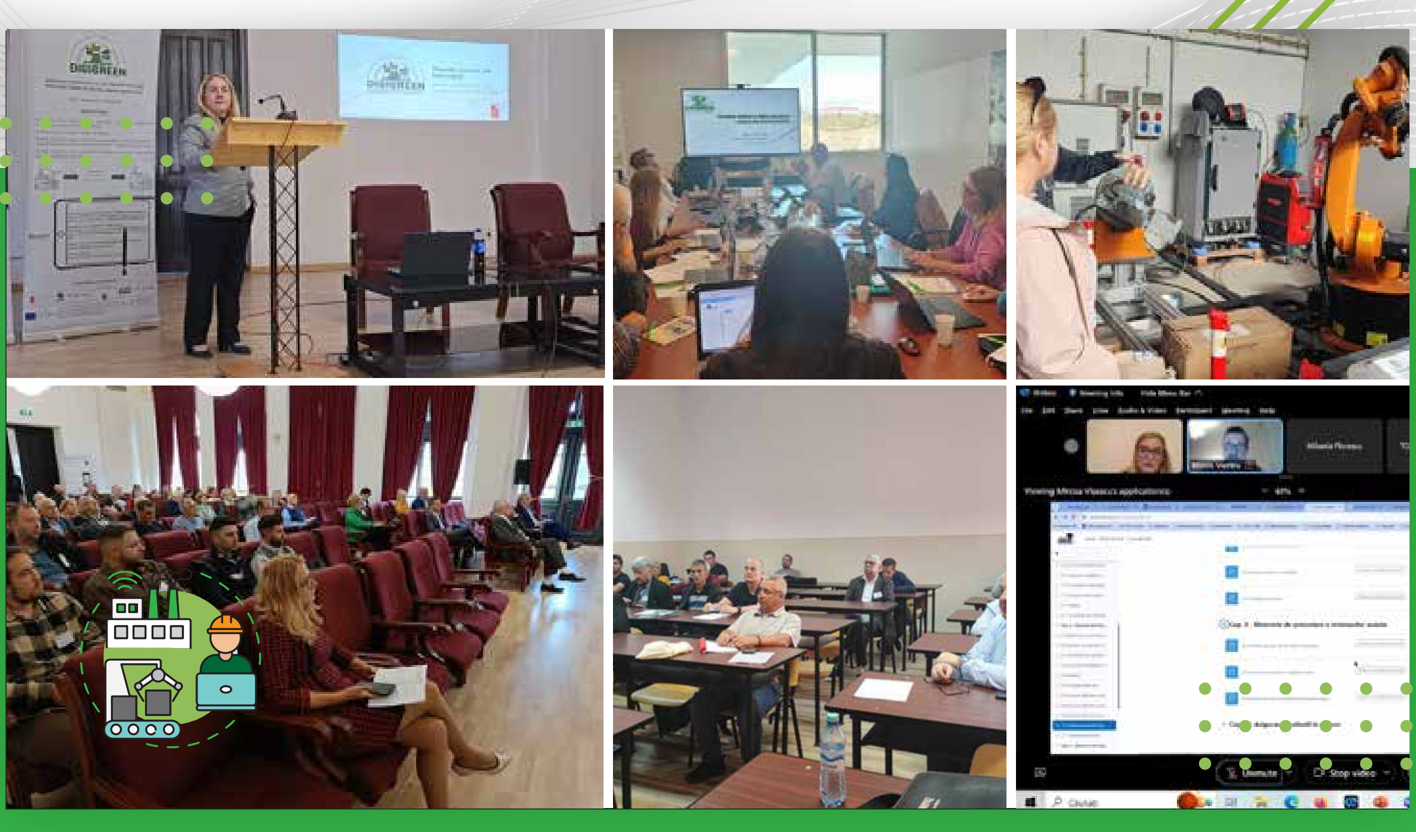
DIGIGREEN

IMPROVED WORKFORCE TO SET TRANSITION FROM
MANUFACTURING TO DIGITAL GREEN FABRICATION

Project Number: 2021-1-RO01-KA220-VET-000028028

4th NEWSLETTER (December 2023)



Unlocking Success: Highlights from DIGIGREEN's Multiplier Event, Transnational Meetings, and Digital Innovations

In order to disseminate the project results, the Multiplier Event took place in October, 13, 2023 organized by the University of Craiova in the city of Drobeta Turnu Severin. At this event 40 people, high school teachers, young entrepreneurs and workers, attended and shown their interest to the DIGIGREEN project and its achievements. The project and the new technologies for transition from traditional manufacturing to the new plants were presented.

The project has reached the objectives regarding the TPMs and LTTAs. Between November 13 and November 17, 2023, the TPM#4 and the LTTA#3 took place in Porto Salvo, Portugal. All the partners participated in these activities with at least one person. The several matters regarding the project were discussed at the transnational project meeting. At the LTTA#3, several materials were presented, which aroused the interest of the audience. Then, all the participants went to the scheduled technical visits and the most interesting activity with the practical demonstration was the AREOLA project presentation, where the innovative training delivery methods and tools based to the virtual augmented reality were exhibited. Also, the visits in the ISQ laboratories were very useful for the entire project tea.

The Romanian Welding Society has implemented a digital platform for welding training for schools. On the occasion of the launch of this platform, a webinar was held on November 28th, 2023 on the topic "Possibilities of modernizing the training process for the welding occupation" organized by the ASR Timișoara. The event was held online on the Webex platform and gathered 47 participants from the pre-university, school inspectorates, industry and university environment. The platform will be very useful for the specialists, trainers and teachers from the welding area, being part of the activity in DIGIGREEN project .

The project has three main results (PR):
PR1: Methodologies for digital training and assessment
PR2: Training and Assessment Frame Design
PR3: Digital tools and data for training and assessment

The current status of the project is PR3, the first two PRs being finished already.

DIGIGREEN Project

Empowering the Future: Highlights from the DIGIGREEN Project's Concluding Conference on Green and Digital Skills Transition in Advanced Manufacturing

The European DIGIGREEN Conference was organized in Portugal – Lisbon - by the European Welding Federation (EWF), on the 20th of November 2023.
This landmark event brought together partners and invited stakeholders from Industry and Education, including EWF sectoral members from all over Europe.

The European DIGIGREEN Conference was integrated into the "Sustainable Futures: Green and Digital Skills Transition" workshop that focus on the role of green and digital skills to allow advanced manufacturing industry to achieve the Twin Transition towards achieving a more sustainable future in Europe, and in the Global context.

The DIGIGREEN project results were presented in a dedicated Roundtable, where the best practices in training delivery, methods and tools were map and explored with the participants.

The capstone event marked the conclusion of the DIGIGREEN project, offering a comprehensive reflection on the accomplishments achieved during the preceding two years of collaborative partnership.

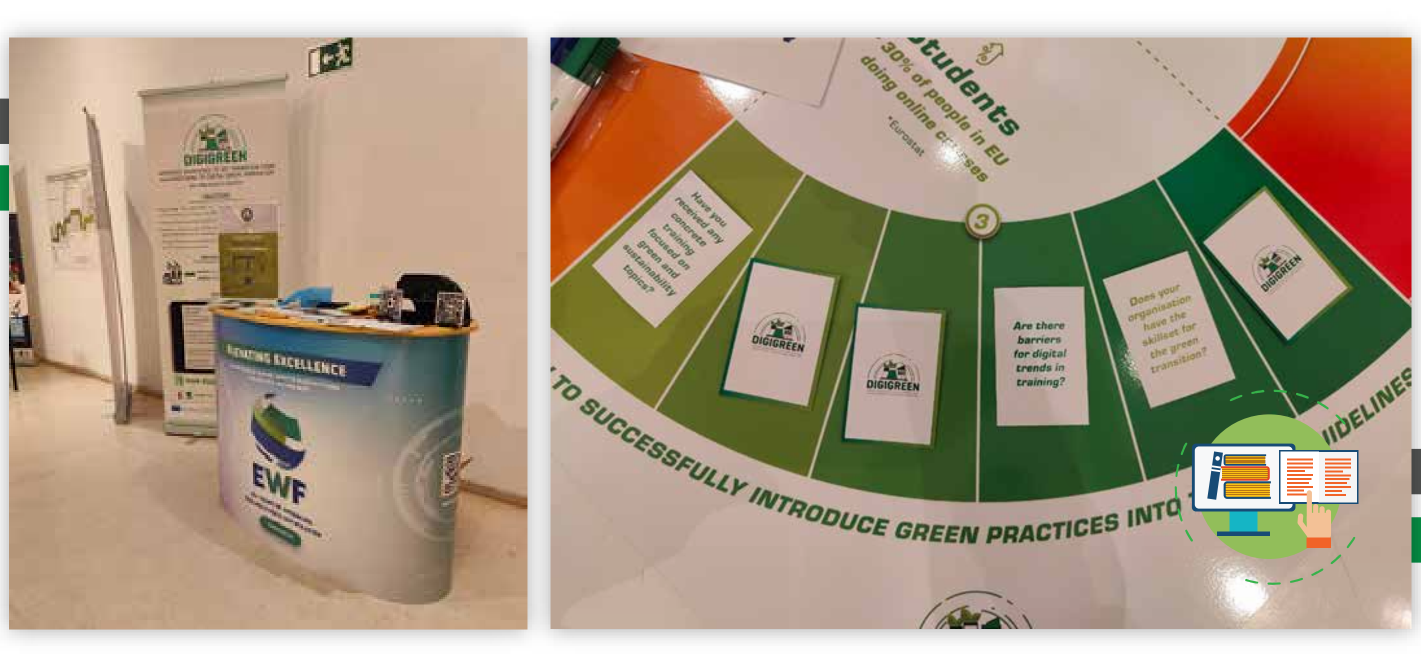
The project's three pivotal results were spotlighted:
PR1: Methodologies for digital training and assessment
PR2: Training and Assessment Frame Design
PR3: Digital tools and data for training and assessment

According to the Eurostat, around 30% of people in EU did online courses recently, this conclusion is aligned with the Delphi questionnaire that DIGIGREEN project promoted in the first semester of the project when trying to collect the perception and the needs for manufacturing in what it comes to training being delivered.
Along with other figures reflecting the impact of distance learning, the main conclusions point to the benefits of making training greener and more digital, reaching more workers and with less impact on the environment.

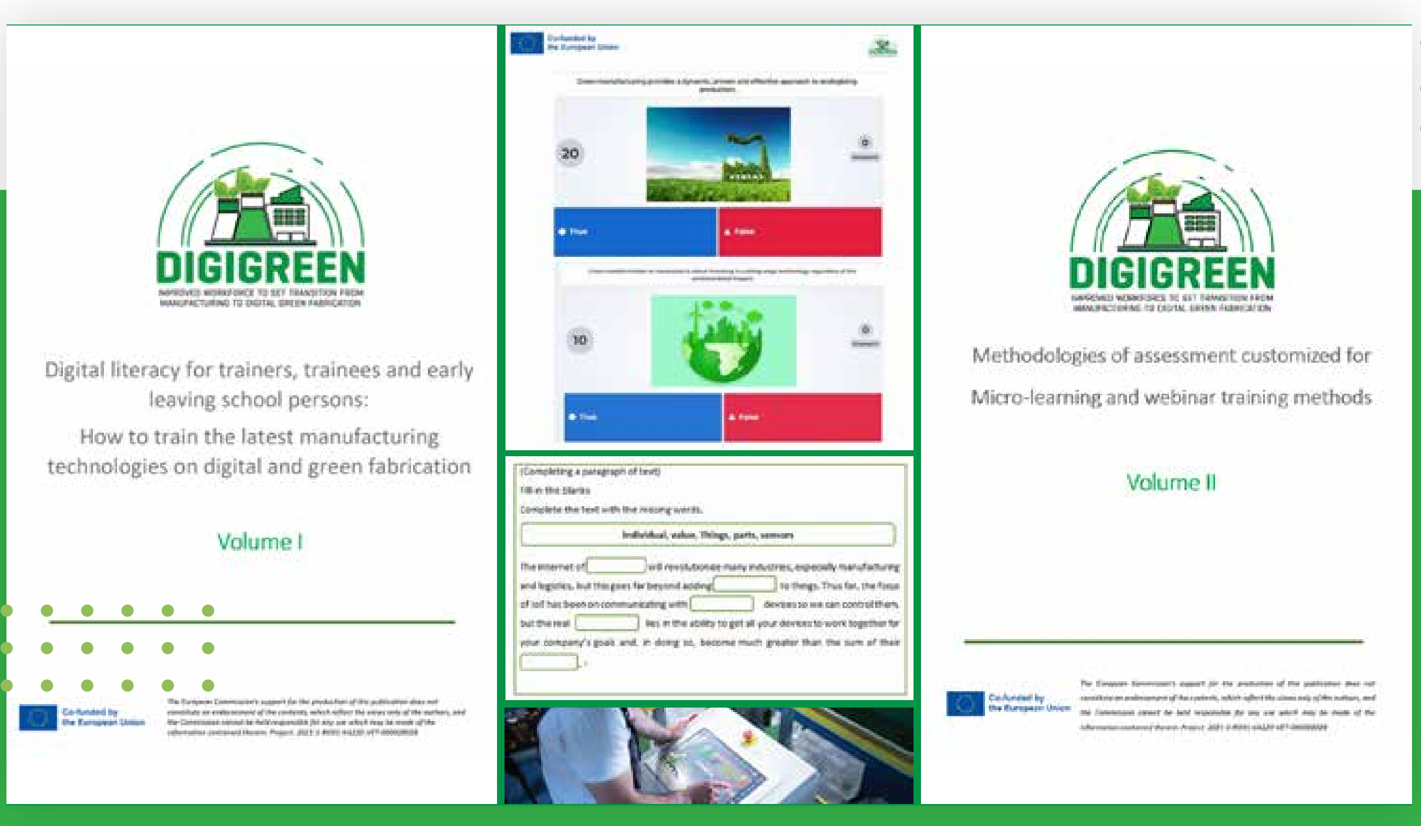
How to successfully introduce green and digital practices into training? This was also a question that was explored in the DIGIGREEN presentation. The project took the opportunity to present the set of new and innovative competences units developed in the scope of DIGIGREEN PR2, a training program that can support companies to overcome the need of became more digital and greener, facing the twin transition. The competence units are covering topics such as digital transformation, greening fabrication or transversal soft skills, both for level Comprehensive and Basic. The scope of the training is to gain minimal high-tech skills to serve the growing needs created by smart industrial specialisation and digital transformation. Also, to offer a solid foundation for the work of the future and to target in trainers in the field of manufacturing and manufacturing workers.

At the very end of DIGIGREEN presentation, the participants had the opportunity to get to know the new and digital training materials developed in the scope of PR3.
The e-books were showcase, the first one focus on green and digital fabrication processes for manufacturing and the second one, providing assessment methodologies and examples to use in the scope of DIGIGREEN.

The overall assessment of the conference was overwhelmingly positive, with the DIGIGREEN project garnering recognition and participants expressing keen interest in delving deeper into the presented solutions and implementing them in practical contexts.



Empowering the Future: Unveiling Two Groundbreaking E-Books from the DIGIGREEN Project



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Digital literacy for trainers, trainees and early leaving school persons:
How to train the latest manufacturing technologies on digital and green fabrication

Volume I

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Methodologies of assessment customized for Micro-learning and webinar training methods

Volume II

The DIGIGREEN project is committed with the empowering of the workforce to seamlessly transition from traditional manufacturing to cutting-edge digital and green fabrication methods, and that is reflected in the development of two comprehensive e-books that cater to the needs of trainers, trainees, and individuals considering a shift towards the exciting realm of digital and green fabrication.

Volume 1: "Digital Literacy for Trainers, Trainees, and Early Leaving School Persons: How to Train the Latest Manufacturing Technologies on Digital and Green Fabrication"

This volume comprises ten chapters, serving as a holistic guide to understanding and implementing digital and green fabrication technologies. The chapters start by covering fundamental aspects such as data, files, file extensions, conversions, CNC, and robotics programming languages. We then delve into sustainable fabrication, addressing essential questions about pollution, types of pollutants, and the measurement of environmental parameters.

The subsequent chapters are dedicated to specific details about the digital and green transition for key fabrication technologies, including machining and forming, injection molding, joining and surface conditioning, and additive manufacturing. The final two chapters provide a comprehensive overview of the structure of a micro-course and a webinar, offering in-depth insights into the organization of these training sessions. In total, Volume 1 spans 330 pages and touches upon 15 micro-course and webinar topics.

Volume 2: "Methodologies of Assessment Customized for Micro-Learning and Webinar Training Methods"

Geared towards trainers, Volume 2 focuses on methodologies of assessment tailored for micro-learning and webinar training methods. It encompasses a variety of assessment types, ranging from oral assessments such as group discussions and debates to essay-style exams, game-based learning, quizzes, H5P, simulations, and problem-based learning. All these assessment types are reinforced with examples drawn from the most critical fabrication technologies. This volume, which is an invaluable resource for trainers, spans 101 pages.

We believe that these e-books will be instrumental in equipping individuals and organizations with the knowledge and skills needed to thrive in the digital and green fabrication landscape. Stay tuned for more updates as we continue to work towards a sustainable and innovative future.

DIGIGREEN PROJECT PARTNERS

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