

REFITTING MACHINE

Arduino expert for the recovery of obsolete machines

The Toolkit

To provide high-quality knowledge and skills needed to modernize existing machinery in order to make them "smart" and more adapted to the nowadays requirements of the manufacturing industry.

ICT Tool

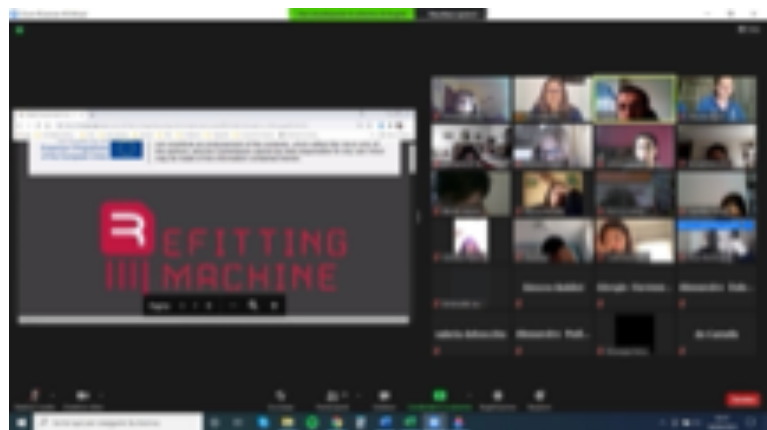
The tool for Competence Assessment to evaluate the knowledge and starting skills of the educators, identify the needs of the specific target in order to provide them with useful skills so that they can enter the world of work.

e-Learning Platform

An open education digital platform for the provision of the training material developed throughout the project.

WHAT'S NEW ON THE REFITTING MACHINE PROJECT?

It has been a busy period for the Refitting Machine team. After working hard to develop interesting educational materials, a series of piloting sessions took place in March-May 2021, where all partner organizations tested the designed modules and project results. A minimum set of 20 participants in each country were recruited, including specialists in the STEM fields, technology, and revamping. Due to the international situation that did not allow face-to-face meetings, most piloting sessions took place online.



In specific, the partners tested the following project results:

- * **Experts Program Toolkit:** Each partner was responsible for testing a particular or a number of particular modules of the Toolkit. The piloting participants had the opportunity to go through the educational materials, read their content, and learn more about revamping machine and STEM education.

* **"ICT Tool for Competence Assessment"** provided the opportunity to testers to assess their knowledge and starting skills through diagnosing the competence gaps and proposing an indication of areas needed for improvement. During the pilot testing sessions, the participants took the assessment test to evaluate its effectiveness, accessibility, and usability. The data gathered will help partners fine-tune the Tool and formulate individual report templates, which will be generated once a user completes the test, indicating the areas of improvement.



* **Gamified e-learning platform:** the open education digital platform now hosts all the educational material that were developed by the partners, in the form of the game. During the pilot testing sessions, the participants were able to navigate the platform, complete the modules and read various case studies of successful machine revamps. The feedback collected will help the partners fine tune the platform and improve any aspects of navigation.

For their next activities, the project team is going to hold a three-day training event, to present the results of the project, discuss the value of revamping machine, and explore techniques such as 3D design.

REFITTING MACHINE BLOG

Don't forget to have a look also, at our **blog**! The partners of the "Refitting Machine" project are committed to post constantly updates and interesting articles about Arduino, technology, and machinery revamping. Our latest articles focus upon Circular Economy, digital and STEM education, engineering, and many more.



To keep track of all the activities implemented in the *"Refitting Machine - Arduino expert for the recovery of obsolete machines"* project, stay tuned in our [website](#) and see how the learning path is going further!

PROJECT PARTNERS



VISIT OUR NEW WEBSITE:



Disclaimer: The information and views set out in this website are those of the authors and do not necessarily reflect the official opinion of the European Union. Neither the European Union institutions and bodies nor any person acting on their behalf may be held responsible for the use which may be made of the information contained therein.

What is Circular Economy?

As more and more practices revolve around the protection of the environment and the achievement of long-term social and economic sustainability, circular economy has come to play a vital role into making this happen. It is a system that aims to eliminate waste and depletion of resources through retaining as much value as possible and for as long as possible.

How does it work?

To put it simply, the current industry takes resources from earth to produce products, which then are usually thrown away, creating massive amounts of waste. In circular economy, the goal is to design out the negative impacts of economic activity that not only causes damage to the environment and natural systems, but to human health as well. To achieve this, circular economy employs the concept of reusing, repairing, remanufacturing, and recycling, preserving value in the form of energy and materials, while avoids non-renewable resources.



By transitioning to circular economy, the industry helps to build long-term resilience, generate business and creates new job opportunities, and overall contribute to social, economic, and environmental prosperity. Therefore, modernizing old or obsolete machines are key elements in the world of circular economy, as it contributes to the creation of a close-loop system, minimizing the use of resource inputs and the creation of waste and pollution.