



# Project Newsletter

Issue #1

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Dear reader,

You have just received the 1st newsletter of the **CROCEMS project** (Collaborative RObotics for Circular Economy in Manufacturing Sectors). The project fills a gap in vocational education and training and creates a new course focusing on the introduction of **circular economy in manufacturing sectors** by using collaborative robotics to perform waste management.

Proper waste management is a key element in ensuring resource efficiency and the sustainable growth of European economies. Pressures of the regulatory framework and according to the EU 7th Environment Action Programme the priority objectives for waste policy are: Reduce the amount - Maximise recycling and re-use - Limit incineration. The manufacturing sector has the proper methodologies and the proper technology to have a better performance in their waste management, with the objective of zero waste production and circular economy. The final purpose of the project is to deliver a comprehensive **training course** on how to apply Collaborative Robotics to Circular Economy processes.

Best wishes,  
**CROCEMS project team**

## Policy context of our project

Traditional management and disposal of waste, as landfill or incineration, can have serious environmental impacts). In 2020 [Eurostat], 4.8 tonnes of waste was generated per capita in the EU-27. Almost 32.2% of this - 4.8 tonnes - was landfilled and 39.2% was recycled. The long-term goal is to transform Europe into a recycling society that avoids waste and uses unavoidable waste as a resource where possible. The aim is to achieve much higher recycling rates and minimize the extraction of additional natural resources.

The urgency of addressing skill gaps is clear across industries, and more important than ever.



**CROCEMS project will conceive, check and carry out an innovative educational programme for manufacturing sectors' workers, especially waste managers, production managers and assembly line managers. It will foster the implementation of waste management into manufacturing sectors' companies by using pedagogical methods following the learning outcomes approach.**



## Basic data about the project

The project was launched in February 2022 with support from the Erasmus+ programme and will run for three years. It brings together five partners from business and academia from four different EU Member States, including Spain (CETEM and University DEUSTO), Germany (University KARLSRUHE), Poland (ATMOTERM), Netherlands (STICHTING FONTYS).

## Our project explained in 100 words

The CROCEMS project aims to develop a Vocational Education a Training (VET) course and a corresponding professional skill/competence profile in line with ECVET. This course will cover the learning needs of Manufacturing Sectors companies' workers and students interested in Circular Economy Business Models and its interaction with Collaborative Robotics that are pertinent to the labour market. The project includes the development of a VET course and an Open Online E-learning Platform. The course will be offered as a free educational resource available in English, German, Spanish, Polish and Dutch.

