

## PRESS RELEASE RENEW 2022

On July 7 the second meeting of the RENEW project consortium was held at the smelter and refinery facilities of Atlantic Copper (Huelva, Spain). The RENEW project aims to reduce the carbon footprint in the process of recycling WEEE (Waste from Electric and Electronic Equipment) in the copper sector, minimizing the presence of plastics and studying their recovery. The reduction of the carbon footprint has become a strategic aspect from the point of view of Europe, which sets the goal of reducing greenhouse gas emissions for the next years.

As part of the project, two prototypes have been designed that allow plastic to be separated from PCB (Printed Circuit Boards) waste before recovering the metals contained in the same waste, and a prototype with a technology that will allow studying the recovery of the separated plastic. The process will reduce the carbon footprint of the PCB recycling process.

The beginnings of the project date back to 2019 with the studies carried out by Atlantic Copper, which made it possible to define the appropriate process sequence for the separation of plastics. In 2021, the current consortium was consolidated, proposing the execution of the two pilot plants that will simulate different separation processes of the plastic contained in PCBs, and a pilot plant to study the technology for the recovery of separated plastics. In January 2022, the kick off meeting was held, whose attendance was planned remotely due to the incidence of COVID-19. During this first year of the project 2022, the designs of the pilot plants and their detailed engineering have been carried out, and the pilot equipment was procured by the partners. By 2023, it is planned to install the pilot plants and demonstrate the separation and recovery technologies through the three pilots to be carried out in Tallinn (Estonia), Seville (Spain) and Pfinztal (Germany). And in 2024, the technical and economic study of the implementation of these processes in two different scenarios at industrial scale is planned: a copper smelter and a waste management plant.

Moreover, RENEW is acting to increase the collection of WEEE. The second objective of RENEW, in fact, is to test an innovative WEEE collection method (eco-point), alternative to the traditional ones. It will be developed by ERION in an Italian city in a strategic location, aiming at reducing the distance between the citizens and the eco-point. Indeed, in Europe, in 2019, as average, only 49% of the generated WEEE have been collected and sent to proper treatment.

The project is coordinated by Atlantic Copper, and co-funded by the European program EIT Raw Materials which promotes innovation in the raw materials sector. The partners of the consortium are Atlantic Copper, the Technological University of Tallinn, the German Technological Center Fraunhofer, TREEE and Erion and the Belgium University KU Leuven.

Atlantic Copper is a Spanish company, whose shareholder is the North American multinational Freeport-McMoRan Inc., a company positioned among the largest producers of copper, gold and molybdenum in the world. The Atlantic Copper Metallurgical Complex in Huelva is an industrial production center dedicated to the integral valorisation of metallic raw materials containing copper, precious metals, sulfur and iron. The main raw materials are concentrated metallic ores and recycled metallic materials. Its main business is to produce high-grade refined copper, a material with extraordinary qualities that make it essential for sustainable development, the energy transition and the challenges of decarbonization.

Fraunhofer is the world's leading applied research organization. A pioneer and trendsetter in innovative developments and research excellence, it is helping to shape our society and our future. Founded in 1949, Fraunhofer currently operates 76 research institutes and units throughout Germany.

TalTech is a research-focused Estonian university offering bachelors, masters and doctoral degrees in technology, applied sciences, IT, business and maritime studies. In the project, they are the developers of one of the technologies for plastic separation from PCBs

Erion is a non-profit organization, created by Italian Producers for the environment and the community in order to ensure the effective fulfillment of all the obligations arising from the Extended Producer Responsibility and to comply in an ethical, certified and profitable manner with the national WEEE legislation.

TREEE (Treatment and Recycling of Electrical and Electronic Equipment) is a waste manager that owns five treatment plants and a logistics company in Italy, and it is a leading national platform for the recycling of electronic waste in the Italian market.

KU Leuven, university in Belgium, is dedicated to education and research in nearly all fields. Its fifteen faculties offer classes and degree-granting academic programmes, whilst research activities are organised by departments and research groups. KU Leuven boasts thirteen campuses, spread across 10 cities in Flanders.

EIT Raw Materials is the Raw Materials Innovation and Knowledge Community of the European Institute of Innovation and Technology (EIT), which is an independent EU body, based in Budapest, which strengthens the Union's capacity for innovation. The EIT nurtures entrepreneurial talent and supports new ideas, bringing together the parts of the 'knowledge triangle' made up of companies, universities and research centres.

