

PRESS RELEASE

Tags: Recycling / Environmental technology / Waste treatment / Sensor-based sorting / ____

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Recovering 90% of end-of-life PU is possible!

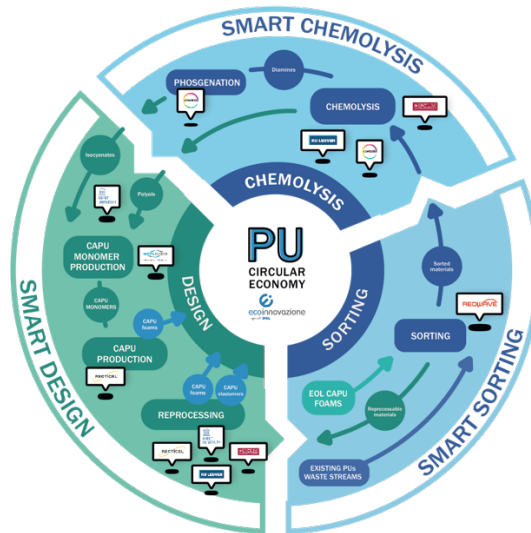
REDWAVE joins other leading companies to extend the life cycle of Polyurethane.

Linear economy is a process which has been normalized through several decades, it consists in turning natural resources into products that are taken for disposal once they are not useful anymore, or, can they still be usable in a proper way? It depends on the action that follows. By taking initiatives like recycling and reusing, the social and environmental impact decreases. Reducing the consumption and, therefore, the generation of waste is also another alternative. These actions are fundamental premises of the circular economy.

Many organizations and companies all around the European Union are concerned about providing solutions regarding the issue. The *PUReSmart* project aims to change and improve the current polyurethane lifecycle through applicable methods that will transform the component into a more sustainable material. Polyurethane (PU) is a thermoset polymer, therefore, PU foams such as mattresses and upholstery are extremely difficult to recycle, in fact, most of them are sent to landfills or incineration plants with energy recovery, little is recycled mechanically. The *PUReSmart* project rises to the challenge of implementing technologies focused on an efficient chemical recycling process.

This is only possible due to a consortium constituted by nine members from six European countries that will be developing smart sorting technologies to separate EoL PU materials in order to create new PU products. The most competent companies in the field are taking care, each institution contributes differently, REDWAVE is the part in charge of providing automated sorting solutions to recover PU foams from waste streams, in this way, the demand for raw materials and waste is reduced.

The smart sorting strategy will last four years during which partners will be working together with the final goal being to recover 90% of the end-of-life PU material. The investment of 6 million Euros is funded by the European Union within the Horizon 2020 Research and Innovation Program.



Project Organization (Closed-Loop of Polyurethane)



Sensor-based sorting technology for PReSmart

Katharina Ander, member of REDWAVE's R&D team, explains that *"within the PReSmart project we are testing different sensors to find the best solution to differentiate the PU foams. Thanks to the broad chemical knowledge of the consortium, we have a solid database. At the end of the project, our technology will be able to sort the end-of-life PU foams into different fractions. These fractions will subsequently be fed to either chemical or mechanical recycling processes. And of course, we are aiming high: Despite the large volume of the foams, we want to be able to handle high feed rates to make PU recycling economically feasible."*

If we look closely into the topic, linear consumption is already unsustainable for our planet. It is time to unit attempts in favour of our environment and support actions focused on improving our present and sowing the seed for a more sustainable future.

Further information:

REDWAVE www.redwave.com

LinkedIn www.linkedin.com/company/redwave1

Instagram @redwavecares

Youtube www.youtube.com/user/sortingsystemredwave/videos

PReSmart www.puresmart.eu

LinkedIn www.linkedin.com/in/puresmart/

REDWAVE – COMPANY DETAILS:

REDWAVE is your reliable partner for profitable solutions in the recycling and waste industry. It supplies groundbreaking and economic sorting plants for recyclables as well as turnkey waste treatment plants. Furthermore, REDWAVE is a leading manufacturer of sensor-based sorting machines with a sturdy industrial design which achieves high performance and quality recovery of materials. REDWAVE does not stop at the sensor level but provides the complete machine taking responsibility for the sorting result. It also focuses to have its software and hardware knowledge in house as this gives their clients the required flexibility and allows them to continuously develop their products and react quickly on market and customer needs.

REDWAVE operates worldwide and headquartered in Austria. It maintains branch offices in Germany, China, Singapore and the US.

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