

THE REDOL PROJECT A PROCESSES4PLANET SUCCESS STORY

For the Circularity of the Process Industries, Towards a Zero-Waste Europe

Context. The Need



On average, each EU citizen produced 500 kg of waste in 2020, and not even half of it got recycled. Given the urgency of climate mitigation and the importance of circularity in reducing greenhouse gas emissions, action was needed to support and enhance Europe's efforts.

The Solution: A Processes4Planet Project



The Horizon Europe REDOL project (full title Aragon's REgional Hub for circularity: Demonstration Of Local industrial-urban symbiosis initiatives) is an ambitious initiative engaging 35 partners from 12 countries for a period of four years. It is funded under a Processes4Planet call and coordinated by A.SPIRE's member, CIRCE. The project kicked off on 1 December 2022.

The Aim



REDOL aims to recycle and turn waste into innovative circular products, thus creating fully circular cities. The project focuses on five different value chains (each of them constituting an environmental pain point): packaging, plastics, construction and demolition waste, textiles and waste electrical and electronic equipment – WEEE. Developing state-of-the-art technologies for sorting and recycling waste, REDOL will reduce landfilling and propose sustainable practices.

The Path



One of the cornerstones of the REDOL approach is the urban-industrial symbiosis. The project also has a community and regional approach, aiming to holistically harmonise cities and industries.

The Expected Impact: Towards a Zero-Waste Europe

The project coordinators from CIRCE presented the project on The Grant (the podcast about EU funding and research project proposals). They explained the relevance of the project and how circularity will be implemented in the five value chains, from sorting to recycling. They also mentioned that the project team is already looking into exploitation ways for the solutions developed and highlighted the added value of the Processes4Planet Partnership and the network (the podcast episode can be found [here](#)).

REDOL develops new recycling technologies, using secondary materials to create circular products, implementing digitalisation and replication aspects, and fostering social awareness. By tackling all these dimensions, the project becomes the epitome of Horizon Europe projects.

REDOL has a community approach with a focus on regionality and is set to revolutionise waste management. The ground-breaking solutions will be first tested and demonstrated in Zaragoza, north-eastern Spain. By 2040, the solution implemented in Spain is projected to reduce CO2 emissions by **280kt/year** and to save a total of **14 billion EUR**, enabling the consolidation of Zaragoza's hub for circularity.

The REDOL's approach is highly replicable and will be further implemented in Prato (Italy), Bornholm (Denmark) and Amsterdam (The Netherlands).

The project will develop new organisational procedures, business models and social innovation actions, empowering communities and having a long-term impact. On the societal level, it aims to change the thinking paradigm and the political landscape, promoting active participation in collection schemes.



A.SPIRE is proud to present this Processes4Planet promising project, considering REDOL a success story and a valuable tool in bringing the European Process Industry towards circularity and climate neutrality. The future will be built with regional hubs for circularity and societal involvement and action. A collaborative effort for a prosperous society and a zero-waste Europe.

Visit the [REDOL website](#) and learn more about "turning waste into opportunity."

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