European Commission

CHEMICALS

# INNOVATION FUND

Deployment of net-zero and innovative technologies

## ReOil 25000: ReOil 25000

The Innovation Fund is 100% funded by the EU Emissions Trading System

## | Project Factsheet

In the ReOil 25000 project, OMV aims to build a first-of-its-kind industrial chemical recycling facility for post-consumer plastics (PCP) on a large scale. The project's innovative solution is continuously operating pyrolysis, a patented technology that can process annually 200 000 tonnes of end-of-life plastics. These plastics would otherwise be incinerated for energy recovery or sent to landfills. ReOil 25000 would become Europe's largest chemical recycling plant, reaching a relative greenhouse gas (GHG) emission avoidance of 115% compared to the reference scenario.

The ReOil® technology will convert end-of-life PCP into circular feedstock, replacing fossil resources in the production of plastics. Thanks to its innovative heat transfer technology, which reduces the viscosity of molten plastic and lowers heat and energy requirements, the chemical recycling technology will allow for handling various viable feedstocks and processing large volumes of input materials. This scalability makes it suitable for large-scale industrial

**COORDINATOR**
OMV DOWNSTREAM GMBH

**LOCATION**
Austria

**CATEGORY**
Energy intensive industries (EII)

**SECTOR**
Chemicals

**AMOUNT OF INNOVATION FUND GRANT**
EUR 81,630,000

**EXPECTED GHG EMISSIONS AVOIDANCE**
2,176,874 tonnes CO2 equivalent

**STARTING DATE**
01 March, 2025

**ENTRY INTO OPERATION DATE**
30 September, 2029

**FINANCIAL CLOSE DATE**
31 March, 2027

** Calculated vs. the 2021-2025 ETS benchmark of 6.84 tCO2e/tH2, not taking into account additional carbon abatement due to substitution effects in the H2 end use application, i.e. conservative estimate.*

Updated on 23 May 2025

use and significantly reduces GHG emissions, avoiding nearly 2.2 million tonnes of CO2e over its first ten years of operation. The technology makes plastic recycling more efficient and environmentally friendly.

Mechanical recycling is the primary method for recycling PCP, involving shredding and remelting. As chemical recycling targets hard-to-recycle plastics, the two technologies are complementary. Additionally, chemical recycling, particularly through pyrolysis, can produce higher quality plastics equivalent to virgin materials. Given the high level of innovation needed for chemical recycling and the relatively growing nature of the market for this method, projects demonstrating the technology and business models in commercial deployments are needed. The project answers these needs and directly contributes to the European Green Deal and the new Circular Economy Action Plan by enabling the production of high-quality recycled plastics that meet the stringent requirements of the Packaging and Packaging Waste Regulation.

ReOil 25000 will contribute to creating a circular economy for plastics. It has the potential to establish new, more circular value chains for the processing and recycling of difficult-to-recycle plastic waste in Europe. This will enable hard-to-abate segments of the plastic industry to significantly reduce their environmental impact, thereby contributing to the overall decarbonisation of the sector. Implementing the chemical recycling plant will require a skilled workforce for its operation and maintenance, leading to the creation of jobs. From a consumer perspective, the project will enable the production of recycled products requiring high purity levels, such as packaging for the food industry or medical products, which must meet strict safety standards.

## | Participants

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| **OMV DOWNSTREAM GMBH** | Austria |