

CLIMATE, ENVIRONMENT AND MARITIME

Innovation Fund

EU fund for climate policy, with a focus on energy and industry. It aims to bring to the market solutions to decarbonise the European industry and support its transition to climate neutrality while fostering its competitiveness.

Budget (2021-2027): €16 billion⁽¹⁰⁾

Key Areas	<ul style="list-style-type: none"> Innovative low-carbon technologies and processes in Energy-Intensive Industries (EII), including products that can substitute carbon-intensive ones Carbon Capture, Utilisation and Storage (CCUS) Maritime transport Circular economy 			
WHO can apply?	<ul style="list-style-type: none"> Private or public bodies, established in any country in the world International organisations <p>Projects must be located in EU Member States or EEA countries (i.e. Norway, Iceland or Lichtenstein). Projects may also be located in Northern Ireland on the condition that they concern the generation, transmission, distribution or supply of electricity.</p>			
WHAT activities can be funded?	Highly innovative technologies, processes, business models or products/services, that are sufficiently mature and have a significant potential to reduce greenhouse gas emissions.			
Range of EU Contribution	Up to 60% (in case of regular grants) and up to 100% (in case of competitive bidding) of the relevant costs calculated according to the methodology indicated in each call for proposals (usually covering capital and operational costs minus revenues over the first ten years of operation).			
Links to relevant calls	IF calls for proposals			
Target Technology Readiness Level (TRL)	From 7 (System prototype demonstration in an operational environment) to 9 (Actual system proven in an operational environment - competitive manufacturing in the case of key enabling technologies, or in space) As detailed in the TRL scale annexed to the Work Programmes of the Horizon Europe EU funding programme .			
Project examples	<p>Silverstone (December 2021 – December 2030)</p> <p>The project plans to deploy commercial scale CO₂ capture and mineral storage of the emissions of the Hellisheidi geothermal power plant in Iceland, one of the largest geothermal power plants in the world.</p> <p>The project will bring an innovative technology to full commercial scale, demonstrating its competitiveness and enabling the power plant to reach a near-zero carbon footprint.</p>	<p>ECOPLANTA (November 2021 – March 2038)</p> <p>The project will revolutionise municipal solid waste management by using non-recyclable materials rejected by sorting centers to produce circular chemicals and advanced biofuels. The project will deliver first-of-a-kind commercial plant for the European market, using waste that would otherwise end up in landfill.</p> <p>The plant will produce 237 kt/y of methanol, and thereby recover 70% of the carbon present in the non-recyclable materials.</p> <p>The methanol produced will displace fossil-based chemicals and fuels.</p>	<p>eMETHANOLxWSolution (October 2023–December 2029)</p> <p>The project aims to demonstrate an innovative combination of foldable suction sails and a dual-fuel engine designed to fit the new hybrid tanker, thus enabling the use of e-methanol as fuel and wind for increased energy efficiency.</p> <p>The technology used will be able to replace the conventional technology that uses fossil fuels, contributing to the decarbonisation of the shipping industry and customer's zero emission supply chains of renewable fuels in the Baltic Sea and the North Sea.</p>	<p>FUREC (January 2023 – April 2038)</p> <p>The project aims to transform non-recyclable solid waste into hydrogen and provides circular feedstock to the chemical industry.</p> <p>First, the waste is converted into pellets in a waste treatment plant. The dry pellets are then sent to Chemelot, a major chemical cluster, for conversion into hydrogen that is supplied to OCI N.V.'s ammonia production plants.</p> <p>The process uniquely combines torrefaction, milling and entrained flow gasification, followed by the transformation of CO (Carbon monoxide) and water, through synthetic gas, to CO₂ and hydrogen. During the first ten years of its operation the FUREC plant foresees to produce 54,000 tonnes of hydrogen per year.</p>

⁽¹⁰⁾ The Innovation Fund is financed by the [EU Emissions Trading System \(ETS\)](#) revenues. Budget (2020-2030): €40 billion, calculated by using a carbon price of €75/tCO₂.