

CLEAN ENERGY

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 ⁽⁵⁾

Key Areas	Innovative renewable energy generation and energy storage including manufacturing of components for production of renewable energy or energy storage, smart energy grids, energy efficiency.			
WHO can apply?	<ul style="list-style-type: none"> • Legal entities: Private or public bodies, established in any country in the world • International organisations Projects must be located in EU Member States or EEA countries (i.e, Norway, Iceland or Lichtenstein) <p>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 emission.			
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>TANGO (January 2021 – August 2033) The project aims to develop an industrial-scale pilot line in the south of Italy to manufacture innovative, high performance photovoltaic (PV) modules, increasing production capacity by 15 times, from 200 megawatt (MW) to 3 gigawatt (GW) per year. Production will include bifacial heterojunction (B-HJT) PV cells, which offer a very important effective efficiency improvement of up to 20%, relative to current state of-the-art cells, and an innovative module design called “Tandem”. The modules produced in one year (3 GW) will have the potential to generate 5,445 GWh of renewable electricity per year.</p>	<p>Green the Flex (GtF) (January 2022 – September 2028) The project aims to open the electricity market to decentralised units and use these units’ flexibility to provide load-shifting management service. To do so, the project will connect and integrate more than 2,500 small devices into one entity (a virtual power plant – VPP) that can then participate in the energy market and provide flexibility to harmonise electricity demand with generation. The project will have the capacity to shift demand of 4.4 gigawatt hours (GWh) annually from peak to off-peak, thereby supporting the integration of renewables and diminishing the need for fossil fuel for peak load times. It foresees also to provide ancillary grid services and avoid all greenhouse gas emissions produced by conventional technologies to generate the equivalent amount of electricity.</p>	<p>GREENMOTRIL (January 2022 – December 2029) The project’s objective is to transform the seaport of Motril into the first European port able to operate off-grid while maintaining its basics services, based on a self-managed energy community which uses renewable energy and storage technologies and can intelligently manage power demand using advanced technologies. The initiative will bring together citizens, social entrepreneurs, public authorities and other organisations to take part in the energy transition of the port.</p>	<p>NorthSTOR + (April 2022 – December 2034) The project aims to both validate the technology development of an innovative, stationary energy storage system (ESS) and to industrialise the production of the solution at a mass-scale. The final product, the Voltainer, will feature Lithium-ion ESS based on a battery cell which was originally developed for the automotive sector. This will result in a larger and more energy dense cell than what is currently available on the market, including superior characteristics in terms of performance, safety, costs, flexibility, connectivity, traceability and life-cycle environmental impact.</p>
	<p>Innovation Fund projects</p> <p>Innovation Fund Project Portfolio Dashboard</p>			

⁽⁵⁾ 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.