

Octubre Ayudas/Convocatorias nº 116
ÁREA: CIENCIAS E INGENIERÍA

Opening date	Programme	Deadline date
12 October 2021	Horizon Europe Framework Programme (HORIZON)	30 March 2022
Call	Building and renovating by exploiting advanced materials for energy and resources efficient management (IA)	
Link	Call link	
Beneficiaries	Any legal entity, regardless of its place of establishment, including legal entities from nonassociated third countries or international organisations (including international European research organisations) is eligible to participate (whether it is eligible for funding or not), provided that the conditions laid down in the Horizon Europe Regulation have been met, along with any other conditions laid down in the specific call topic.	
Budget	367 200 000 EUR	
Topic description	<p>Projects are expected to contribute to the following outcomes:</p> <ul style="list-style-type: none"> • Buildings are responsible for approximately 40% of energy consumption and 36% of CO2 emissions in the EU. Renovation of existing old buildings has the potential to lead to significant energy savings – potentially reducing the EU's total energy consumption by 5-6% and lowering CO2 emissions by about 5%; • Compared to state of the art materials and components, the newly developed materials should deliver: <ul style="list-style-type: none"> - Reduction by at least 30% of the embodied energy and CO2 at component level; - Improvement by at least 20% of insulation properties; - Reduction by at least 15% of the total costs compared to existing solutions; - Demonstration of at least a 5% reduction of the energy spent during the whole life cycle of a building. - Increased durability and lifetime, lower maintenance costs and environmental footprint. • Demonstrate innovative retrofitting solutions using the building insulation materials as real cases approaching net zero energy standards and their replicability potential; • Improvement of the quality of information from product manufacturers to facilitate better decision making; • Strengthening of the competitiveness of the European construction sector in the field of “green” construction technologies; • Sustainable building materials will be supporting the circular design. Self-sustaining buildings in respect to energy usage; • New insulation materials should be cost effective, environmentally safe, fire resistant and can be easily applied on existing surfaces (e.g. spray coating); • Return on investment should be below 7 years for deep retrofitting of buildings; • Advent of a new generation of skilled workers and SME contractors in the construction sector aware of the need of a systemic approach towards energy efficiency should be promoted through the proposed activities. 	
Scope	Building envelopes and renovation materials that boost energy savings, save resources and decrease carbon emissions, both during construction and operation of the buildings. In view of the climate targets, Europe's building infrastructure needs a deep rehabilitation of residential buildings (including buildings of historic value) while lowering the costs of refurbishment. Building materials with adequate insulation properties are directly related to the Green Deal and the well-being of our citizens	