

IDENTIFIED CALL	
TOPIC	Decarbonisation of the EU building stock: innovative approaches and affordable solutions changing the market for buildings renovation
Type of Action	IA Innovation action
Hyperlink CALL	Link
Open call	24 th January 2018
Deadline CALL 1st stage	4 th September 2018
Challenge	<p>“The market for deep renovation of buildings needs to be transformed in terms of technologies, processes and business models. The multiple benefits of improved energy efficiency are well known, but more action is needed for Europe to achieve the higher rates of renovation that would reduce energy use and decarbonize the building stock in order to meet long-term climate and energy targets. In particular, deep renovations need to become more attractive to all relevant stakeholders, more reliable in terms of performance, less disruptive for occupants (especially in residential buildings), less time-consuming, less energy-intensive from a life cycle perspective, more environmentally friendly regarding applied materials and more cost-effective. There is a need to demonstrate and roll out holistic consumer-centred solutions that involve the whole value chain, ensuring high levels of comfort and a high quality of the indoor environment.”</p>
Scope	<p>Proposals should demonstrate solutions addressing building fabric and/or technical systems that ensure faster and more cost-effective deep renovations that result in high energy performance. Proposals should include innovations in technology and in design and construction methods with low embodied energy and on-site works organisation, industrialization and lowering cost of energy retrofitting and they should take into account any architectural constraints. They should also include innovations in business models and the holistic integration of disciplines across the value chain. Proposals should also consider energy efficient and low carbon solutions to retrofit building-level heating and cooling systems and the integration of on-site renewable energy generation[1], energy storage systems which allow for optimisation and flexible consumption, and, if relevant, integration with district heating and cooling systems. Proposals could address drivers of building renovation that go beyond a desire to reduce energy consumption and related energy costs. For example, decisions to renovate may sometimes coincide with structural repairs. They could also consider further development and improvement of hybrid energy systems using fossil fuel based heating systems coupled with RES based heating systems as well as the integration of highly-efficient buildings and local energy system solutions such as District Heating and Cooling, including hybrid solutions</p>
Impact	<ul style="list-style-type: none"> • Primary energy savings triggered by the project (in GWh/year); • Investments in sustainable energy triggered by the project (in million Euro); • High energy performance in the renovated buildings; • Measurable cost reduction compared with a typical renovation (i.e. a renovation that meets current minimum requirements of existing building regulations) or major energy performance improvement at comparable cost; • Reduction of time needed on site for renovation works by 20% compared to current national standard practice; • Demonstration of the effectiveness and replicability of the proposed solutions to lead to an increased rate of renovation for defined building typologies in several districts/cities/regions.
Budget call (and for project)	Between EUR 3 and 4 million would allow this specific challenge to be addressed appropriately.