

**Programme:** EU-HORIZON 2020 Societal challenges - Secure, Clean and Efficient Energy - 2014-2020

**Call:**

LC-SC3-NZE-5-2019-2020

**Topic/s:**

CCUS in industrial applications faces significant challenges due to its high cost and the fierce international competition in the sectors concerned. However, these sectors currently account for 20% of global CO<sub>2</sub> emissions, and in the 2 degree scenario, should represent half of the stored CO<sub>2</sub> by 2050. Relevant sectors with high CO<sub>2</sub> emissions are for example steel, iron and cement making, oil refining, gas processing, hydrogen production, biofuel production and waste incineration plants.

Projects will focus on integrating CO<sub>2</sub> capture in industrial installations, whilst addressing the full CCUS chain. Projects will elaborate a detailed plan on how to use the results, i.e. the subsequent transport, utilisation and/or underground storage of the captured CO<sub>2</sub>. Important aspects to address are of technical (e.g. the optimised integration of capture plant with industrial processes; scalability; CO<sub>2</sub> purity), safety (e.g. during transportation and storage), financial (e.g. cost of capture; cost of integration) and strategic nature (e.g. business models; operation and logistics of industrial clusters and networks).

Projects are expected to bring technologies to TRL 6-7 (please see part G of the General Annexes). Technology development has to be balanced by an assessment of the societal readiness towards the proposed innovations. Relevant end users and societal stakeholders will be identified in the proposal, and their concerns and needs will be analysed during the project using appropriate techniques and methods from the social sciences and humanities, in order to create awareness, gain feedback on societal impact and advancing society's readiness for the proposed solutions. Projects should also explore the socio-economic and political barriers to acceptance and awareness with a view to regulatory or policy initiatives.

The Commission considers that proposals requesting a contribution from the EU in the range of EUR 10 to 12 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

In line with the strategy for EU international cooperation in research and innovation (COM(2012)497), international cooperation is encouraged, in particular with relevant Mission Innovation[1] countries such as China[2].

**AG1 priority fields:** Energy

**Call Budget:** 33000000,00€

Co-funding type:

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**Opening date:** 07 May 2019

**Deadline date:** 27 Aug 2019

**Call presentation and documents:** <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunit...>