

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

Call:

LC-SC3-RES-16-2019

Topic/s:

Supporting the balancing of the power grid and increasing the flexibility of the energy system is possible through dispatchable renewable energy sources, such as for example bioenergy and hydropower. The specific challenge is to increase the potential and performance of dispatchable technologies to provide flexibility services to the energy system by improving their technological characteristics.

Scope:

Proposals will address one of the following sub-topics:

Bioenergy carriers: Development of intermediate bioenergy carriers for energy and transport from biogenic residues and wastes and energy crops from marginal lands not applicable to food or feed production through feedstock flexible technologies at a conversion cost reduced by at least 25% from the state-of-the-art, excluding the feedstock cost, and with increased energy density, storage and trade characteristics, where relevant, and improved GHG performance. The state-of the art for conversion costs per technology will be clearly presented in the proposal with cost figures and versatility of use where appropriate.

Hydropower: Development of low and ultra-low head and sea water resistant equipment (such as for example bulb-pump turbines) guaranteeing at least 70% round-trip efficiency and making low-head seawater storage and other low head applications of hydropower viable, for example at unexplored locations (e.g. like at coastal dams and islands), by minimising at the same time potential impacts on fish.

Virtual Power Plant: Increase the performance of an integrated portfolio of renewable energy sources (namely a combination of variable output and dispatchable renewable sources) to operate together as a Virtual Power Plant, capable of providing flexibility and ancillary services to the energy system. The solution has to be competitive compared with solutions combining variable output renewables with electrochemical storage.

Proposals are expected to bring the technologies from TRL 3-4 to TRL 4-5 (please see part G of the General Annexes).

The Commission considers that proposals requesting a contribution from the EU of between EUR 3 to 5 million would allow this challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Call Budget: 15000000,00€

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...>