

EUROPEAN RESEARCH & INNOVATION DAYS

VIRTUAL
EVENT

Day 2

Horizon 2020 EUROPEAN GREEN DEAL CALL Info
Day – Presentation of the Call areas & topics

Area 2 - Clean, affordable and secure energy

Topic LC-GD-2-1-2020: Innovative
land-based and offshore RE
technologies and their integration
into the energy system

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H2020 EGD Call Info Day – Presentation of the Call areas & topics Area 2 - Topic LC-GD-2-1-2020



Land-based and offshore renewables must become main energy source to make Europe climate-neutral.

This has to happen while ensuring stability and resilience of energy system.

General policies: Clean Planet for all, SET-plan, New Circular Economy strategy, SDG's United Nations

(Proposals to clearly indicate which subtopic is addressed !)



Subtopic 2:

Demonstration of innovative technologies to enable future large scale deployment of offshore renewable energy



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SPECIFIC CHALLENGE

Build out of offshore renewable energy needs to ensure cost efficiency, fostering a green economy and protecting the environment and biodiversity.

Build a modern infrastructure to seamlessly integrate the power of offshore resources in the energy system

Making use of the potential of different European sea basins.



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Area 2 - Topic LC-GD-2-1-2020 – Subtopic 2 (offshore RE)



SCOPE

Projects must demonstrate at sea critical offshore renewable energy innovations, notably:

- offshore renewable energy power generating systems – (floating) wind, wave, tidal and/or solar systems on a floating or fixed bottom substructure and/or
- grid infrastructure and may address
- Power to X/battery /storage systems to increase the resilience



H2020 EGD Call Info Day – Presentation of the Call areas & topics

Area 2 - Topic LC-GD-2-1-2020 – Subtopic 2 (offshore RE)



SCOPE

Grid infrastructure some more detail....

- grid infrastructure: -real life demonstration of innovative DC, AC/DC hybrid technologies (e.g. multivendor Multiterminal HVDC systems, grid forming converter, HVDC diode rectifiers, modular multilevel converter, DC Circuit Breaker -for floating innovative dynamic inter-device/inter array cable and connections



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SCOPE (cont'd)

The innovative demonstration actions might be part of a larger project or already making use of existing infrastructure. Multi-functional platforms can be considered.

Proposals should address also the following:

- Industrial design and manufacturing processes,
- Regulatory, market and financial challenges.
- Marine spatial planning issues as well as currently known barriers such as costs, public acceptance
- environmental monitoring plan respecting regulatory framework





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SCOPE (cont'd)

- The project consortium should demonstrate how it contributes to knowledge building and innovation.
- The project should clearly demonstrate a proposed pathway to obtaining necessary permits for the demonstration actions and financial close for the whole action.
- The project has to include a clear go/no go moment ahead of entering the deployment phase.



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EXPECTED IMPACT

- roll-out of large-scale deployment of offshore renewable energy, considering existing or alternative (decentralised) systems and all other environmental (like GHG reductions), ecological, social and economic impacts along the value chain.
- increase incentives for investment and economies of scale in offshore bringing down costs and create new business models and services.





H2020 EGD Call Info Day – Presentation of the Call areas & topics Area 2 - Topic LC-GD-2-1-2020 – Subtopic 2 (offshore RE)

TYPE OF ACTION:
Innovation action

TARGET TRL:

7 (system prototype demonstration in operational environment)

EXPECTED EU CONTRIBUTION:
EUR 20 to 35 million

INDICATIVE BUDGET:
EUR 68 million

Deadline:
26-01-2021 – 17.00 hrs BXL time

(At least highest ranking proposal addressing Offshore renewable energy power generating systems and the highest ranking proposal addressing Grid infrastructure will be funded, provided it attains all thresholds. This condition to ensure a balanced portfolio will also considered to be met if one project addressing both aspects will be funded.



THANK YOU !

