Go/No go decision in Innovation Action projects

Online Webinar – 15th of February 2023



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Horizon Europe Cluster 5 Work programme – overview

Destination 1 – Climate science

Climate science

Destination 2 – Cross-cutting solutions Destination 3 – Energy supply

Batteries

Cities

Breakthrough

technologies

Renewable

Energy system, grids and storage

CCUS

Citizen and stakeholder engagement Destination 4 – Energy demand

demand

Buildings

Industry

Clean and competitive solutions for all transport modes

Destination5-

Zero-emission road transport

Aviation

Waterborne transport

Transportrelated health and environmental issues Destination 6 -Transport and Smart Mobility services

Connected, Cooperative and Automated Mobility

Multimodal and sustainable transport systems for passengers and goods

Safety and resilience







Past topics with mandatory go/no go moments

Call Topic	Projects
HORIZON-CL5-2021-D3-02-01	1
Demonstration of wave energy devices to increase experience in real sea condition	
HORIZON-CL5-2021-D3-03-12	4
Innovation on floating wind energy deployment optimized for deep waters and different sea basins (Mediterranean Sea, Black Sea, Baltic Sea, North-east Atlantic Ocean) HORIZON-CL 5-2022-D3-01-02	3
Demonstration of innovative materials, supply cycles, recycling technologies to increase the overall circularity of wind energy technology and to reduce the primary use of critical raw materials	C
LC-GD-2-1-2020	2
Innovative land-based and offshore renewable energy technologies and their integration into the energy system	
LC-GD-2-2-2020	3
Develop and demonstrate a 100 MW electrolyser upscaling the link between renewables and commercial/industrial applications	
Grand Total	13

Future topics with mandatory go/no go moments

Topic Identifier	Topic Description	Estimated Submission Deadline
HORIZON-CL5-2023-D3-01-08	Demonstration of sustainable tidal energy farms	30 March 2023
HORIZON-CL5-2024-D3-01-08	Demonstration of sustainable wave energy farms	January 2024
HORIZON-CL5-2024-D3-02-09	Demonstrations of innovative floating wind concepts	September 2024



Demonstration of sustainable tidal energy farms TOPIC ID: HORIZON-CL5-2023-D3-01-08

Deadline for submission 30 March 2023 17:00 CET

Scope:

Demonstration of sustainable tidal energy pilot farms (minimum 4 MW installed capacity and at least 4 devices) in full operational conditions for long periods of time is essential to advance this sector. It is the way to bridge the gap from technology development to market development while reducing costs, reducing risks and attracting investors for future commercial projects. The farm is expected to be composed of several devices of the same series.

The tidal energy farms have to be connected to the electricity grid. To focus on the technologies with the greatest chances of success, the single tidal device to be used in the array deployment is expected to be satisfactorily demonstrated at full scale before, with limited chances to incorporate the learnings. Any change on the tidal device may be incremental but should not involve

fundamental changes to the device design or composition.' The innovatic effective and high-performance pilot farm. The project is expected to del After the project it is expected that the farm will continue to be operated f

The project should develop and execute an effective operation and main Proposals are expected to address also all the following for betwee sup Industrial design and manufacturing processes, circularity of the cal) ray digital infrastructures.

Projects are requested to demonstrate the technologies a and species. Present an environmental monitoring plan and the IEA OES environmental task.



inly lie on the pilot farm systems and supporting industrial manufacturing activities that enable a costwith a minimum capacity of 4 MW and operate the farm at least 2 years in the lifetime of the project.

the farm and for the individual devices themselves:

y, scalability, installation methods, transport, operation & maintenance, supply chains and the related

e implemented during the demonstration action. Environmental monitoring data should be open source and be shared with EMODNET

The project has to include a clear go/no go moment ahead of entering the deployment phase. Before this go/no-go moment, the project has to deliver the detailed engineering plans, a technoeconomic assessment, including key performance indicators based on international recognized metrics, a complete implementation plan and all needed permits for the deployment of the project, and if needed a plan to achieve certification by an independent certification body before the end of the action. The project proposal is expected to present a clear and convincing pathway to obtain necessary permits for the demonstration actions and allow for appropriate timelines to achieve these. The project is expected also to demonstrate how it will get a financial close for the whole action. For this the use of other EU/national/regional support mechanisms can be considered. Independent experts will assess all deliverables and will advise for the go/no-go decision.

The exploitation plans should include preliminary plans for scalability, commercialisation, and deployment (feasibility study, business plan, financial model) indicating the possible funding sources to be potentially used (in particular the Innovation Fund).

Data from the pilot structures should be collected to understand the performance and behaviour of the structure and the surrounding environmental condition, to optimise the environmental impact of tidal energy harvesting.

The selected projects are expected to contribute to the BRIDGE initiative^[1], actively participate to its activities and allocate up to 2% of their budgets to that end. Additional contributions to the 'Alliance for Internet of Things Innovation' (AIOTI) and other relevant activities (e.g. clusters of digital projects and coordinating actions) might be considered, when relevant.

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Before this go/no-go moment, the project has to deliver the **detailed engineering plans**, a **techno-economic assessment**, including key performance indicators based on international recognized metrics, a **complete implementation plan** and all needed **permits for the deployment** of the project, and if needed a plan to achieve certification by an independent certification body before the end of the action.

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- Propose milestone + verification means listing clearly which documents are necessary for the project board to move to the next phase.
- Experts judge its credibility during the evaluation. FID condition for this milestone
- CINEA will review attainment of milestone (ad hoc or linked to a periodic review) with independent experts.







FID for demonstrator precedes Go / No-Go decision

Sound financial management ≠ demonstrator procurement before FID.

FID delay = consortium suspends project until FID ready.

Significant FID delay = consortium terminates project.







Read call text carefully (the requirement is not identical in all topics)

Check the FAQ (updated regularly)

Introduce a credible, achievable milestone

Do not take the Go/No go decision lightly

□ Inform CINEA well in advance





Thank you!

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- CINEA on LINKEDIN: https://www.linkedin.com/company/cinea-european-climate-infrastructure-environment-executive-agency/about/
- CINEA website: <u>https://cinea.ec.europa.eu/index_en</u>



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