



TURN GOOD IDEAS INTO BUSINESS

Making Offshore production and transport
green, clean and sustainable

D1.4

Topic description for the Call of Proposals



This project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No 101005541



Project Acronym GreenOffshoreTech

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Deliverable D1.4 Topic description for the Call of Proposals

Work package WP1

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Version	Version date	Comments
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0.2	25/02/2022	Updated after first feedback from reviewer (SCA).
0.3	28/02/2022	Updated after feedback received from both reviewer (SCA, MAI)
0.4	08/02/2022	Updated after final feedback received from entire Consortium.
1.0	23/03/2022	FINAL version. Submitted to EC.

Quality control

Version reviewed	Date of review	Review result - Approved or Request for changes
0.1	22/02/2022	Reviewer 1 (UL, SCA): Request for changes.
0.2	25/02/2022	Reviewer 1 (UL, SCA): APPROVED, minor changes.
0.3	28/02/2022	Reviewer 2 (TvR, MAI): APPROVED, minor changes.
0.4	09/03/2022	Reviewer 1 (UL, SCA): APPROVED; Reviewer 2 (TvR, SCA): APPROVED.
1.0	23/03/2022	Final check for submission to EC (HBP, MNU): APPROVED.



Disclaimer

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1. Executive Summary

This document is deliverable **D1.4 Topic description of the Call for Proposals** of the GreenOffshoreTech project.

This document describes the Topics of the Call for Proposals to support innovation in SMEs which will be launched by the GreenOffshoreTech Consortium:

- TOPIC 1: Advanced Materials
- TOPIC 2: Advanced Manufacturing and Digitalisation (IoT, AI, Big Data)
- TOPIC 3: Environmental Technologies (Circular Economy - Waste Prevention, Reuse, Recycle, Recovery)
- TOPIC 4: New Energy Carriers (Hydrogen, Methanol, Ammonia, Lithium-ion Cell)

The Topics are ready for publication and will be implemented in the pack of Call documents (deliverable **D3.1 GreenOffshoreTech Call for Proposals document**).

2. Introduction

GreenOffshoreTech project

GreenOffshoreTech aims at supporting innovation in Small and Medium-sized Enterprises (SMEs) and fostering the development of the emerging Blue Economy industries by enabling new cross-sectorial and cross-border value chains based on shared challenges and the deployment of key enabling technologies (KET).

Therefore, the GreenOffshoreTech project will provide EUR 3 million in funding for innovative SME projects in form of a competitive open “Call for Proposals”.

This Call for Proposal will be announced and managed by the **GreenOffshoreTech Consortium** and is financed by the European Union’s Horizon 2020 research and innovation programme under Grant Agreement no 101005541 (the **GreenOffshoreTech Project**) which is a cluster facilitated INNOSUP project aiming to support innovation in SMEs.

Aim of this deliverable

Overall objective of this deliverable is to present and describe proposed Topics for the Call of Proposals based on potential new industrial value chains identified in Deliverable **D1.3 Potential new industrial value chains based on emerging technologies**.

Section 3 describes the methodology used to conclude on the selection of the Topics for the Call for Proposals.

Annex 1 represents the actual topic descriptions ready for publication and which will be implemented in the pack of call documents (deliverable **D3.1 GreenOffshoreTech Call for Proposals document**).

3. Methodology

Selection of topics for the Call of Proposals was done in 4 steps (see **Figure 1**):

Step 1 - Identification of first draft topics for the Call of Proposals on the basis of technologies and potential new value chains selected and ranked by project partners - clusters above the average for all Green Offshore Sectors;

Step 2 - Review of draft topics for the Call of Proposals during the common project meeting;

Step 3 - Verification of topics for the Call of Proposals following project partners opinions and preparation of description of topics;

Step 4 - Approval of topics for the Call of Proposals and their description during the consensus workshop.

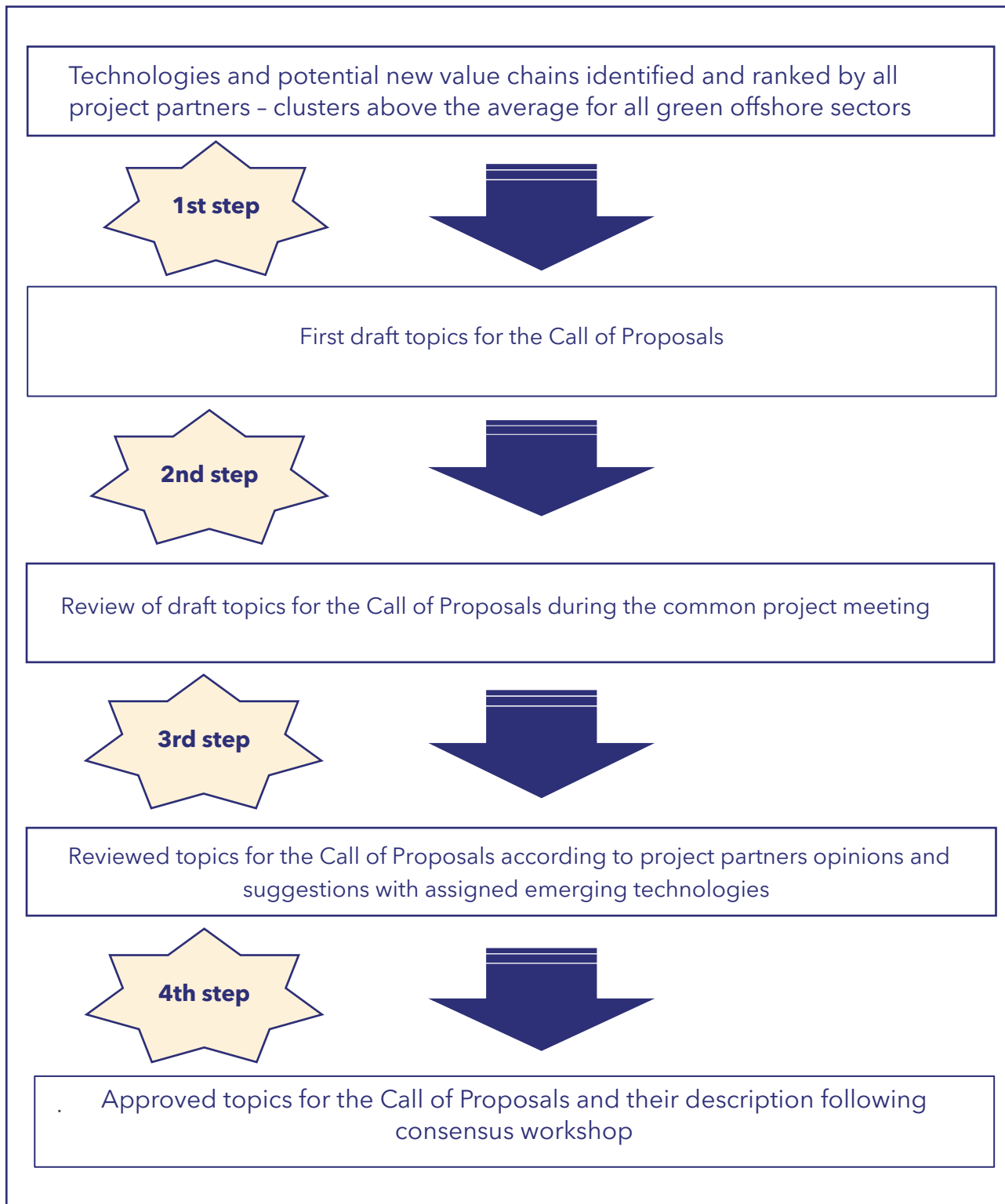


Figure 1. Methodology for selecting and describing topics for the Call of Proposals

Annex 1 - Topic description for the Call for Proposals

This Call for Proposal funds projects for the **development of new sustainable products, processes, or services** addressing challenges of one or more of the targeted four offshore sectors:

- offshore wind,
- offshore aquaculture,
- offshore oil & gas,
- waterborne transport.

This Call for Proposal covers many exiting areas such as:

- Reducing CO₂ emission and increase of renewable energy sources,
- Increasing resource efficiency,
- Reducing environmental footprint,
- Improving work safety and work conditions

Project proposals must address at least **one of the four topics**. In the topic, the project proposal must address at least **one of the fields**.



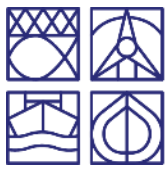
We are looking for projects in the following fields:

- Development and production of advanced materials and structures designed to function in the exposed offshore environment.
- Of particular interest are materials that are either eco-designed, corrosion resistant, light weight, cost-effective or durable. Solutions suitable include materials for offshore multi-use platforms, wind farms and aquaculture as well as vessels.



We are looking for projects in the following fields:

- Digitalisation and data technologies for working in offshore environments.
- Inspection, monitoring, testing integrity.
- Robotic and digital solutions with a focus on improving operational and personnel health and safety.
- Satellite technologies for offshore applications and their supply chains.
- Innovative technologies supporting greater resilience of passenger, supply, and emergency transport services.



Environmental Technologies

(Circular economy - Waste Prevention, Reuse, Recycle, Recovery)

We are looking for projects in the following fields:

- Reduction of waste and environmental impact through prevention, reuse, recycling, and recovery.
- Innovative technologies supporting circular economy throughout the value chain, from design to decommissioning.
- Innovative technologies supporting energy efficiency and water efficiency throughout the value chain.
- Innovative technologies that provide solutions for and mitigate against the impacts of climate change and greenhouse gas emissions, including carbon capture and storage (CCS).



New Energy Carriers

(Hydrogen, Methanol, Ammonia, Lithium-ion Cell)

We are looking for projects in the following fields:

- Innovative technologies to support the capture, storage and transportation of energy to the end user.
- Decarbonisation and modernisation of waterborne transport products, services and fleets.
- Development of complimentary onshore infrastructure.
- Development of onshore infrastructure, including requirements for clean energy waterborne transport, production, repairs, and maintenance.

Environmental and sustainability requirements for proposals.

All Projects supported by GreenOffshoreTech shall deliver innovative solutions that contribute to one or more of the following:

- Meet the EU's targets to **reduce CO₂ emissions**. Such as by reducing CO₂ emission and increase of renewable energy sources.
- **Increase resource efficiency**. Such as through reduction of total energy usage, increasing energy efficiency, reducing waste (living and non-living), and reducing raw material usage (e.g., natural resources, water, minerals) to support the circular economy business model.
- **Reduce environmental footprint**, such as reducing air, soil, and water pollution, reducing hazardous substances and their disposal, reducing noise, and overfishing, as well foreign invasive aquatic species.
- **Improve work safety and work conditions** in the blue economy.

All projects supported by GreenOffshoreTech shall contribute to meeting the goals of the **European Green Deal** and the **UN's Sustainable Development Goals (SDGs)** and in one or more of the following areas:

- SDG #14: Conserve and sustainably use the oceans, seas, and marine resources for sustainable development.
- SDG #7: Ensure access to affordable, reliable, sustainable, and modern energy for all (renewable energy).
- SDG #12: Ensure sustainable consumption and production patterns (resource efficiency, pollution, waste).
- SDG #13: Take urgent action to combat climate change and its impacts (CO₂ emission).
- SDG #9: 'Build resilient infrastructure, promote inclusive and sustainable industrialization, foster innovation.

All projects supported by GreenOffshoreTech shall contribute to meeting the **goals of the EU's 2030 Climate & Energy Framework** within the following key targets:

- At least 55% cuts in greenhouse gas emissions (from 1990 levels).
- At least 27% share for renewable energy.
- At least 27% improvement in energy efficiency.

For more reading, go to the GreenOffshoreTech website (LIBRARY) and download: "**D1.1 Challenges, needs and trends of four offshore industrial sectors**" <https://greenoffshoretech.com/library/>