I3FLOAT Floating Offshore Wind Strategic Innovation Agenda

Feedback contribution by
Online participatory process

Co-funded by the European Union

I3FLOAT aims to strengthen the European floating offshore wind value chain by accelerating innovation, fostering interregional cooperation and supporting SME participation

- **I3FLOAT is a European initiative aimed at accelerating the development of floating offshore wind** by strengthening collaboration across regions, industry and research actors, with a particular focus on building a more competitive and resilient value chain

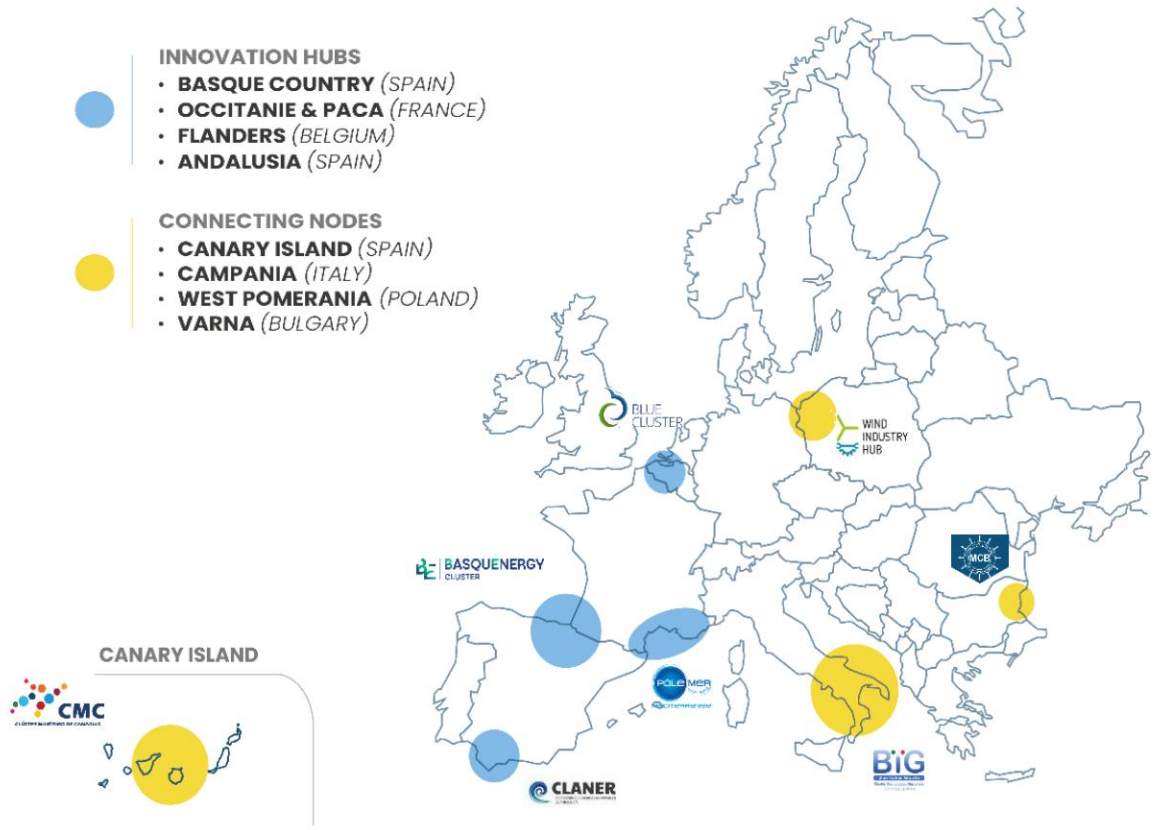
- **The project brings together 24 partners from 8 European regions,** combining innovation hubs and emerging regions to share knowledge, align capabilities and foster interregional cooperation in floating wind technologies

- **A core outcome of the project is the development of a shared Strategic Innovation Agenda,** which identifies and structures the key technological priorities needed to advance floating offshore wind towards large-scale deployment and industrialization

- **This Agenda will be developed through a participatory process involving industry stakeholders and experts,** ensuring that the defined innovation lines are technically sound, relevant to market needs and aligned with sector challenges.

- **I3FLOAT includes pilot projects and open calls to support the validation and demonstration of innovative solutions,** contributing to bridging the gap between innovation and real-world applications, while fostering SME participation in the sector.

8 regions, 24 partners



The **Floating Wind Strategic Innovation Agenda** is a participatory agenda that focuses on the upcoming **bottlenecks** of the floating wind sector and that will serve as **challenges** for the Open Calls

FUTURE ROAD MAP

Floating Wind Strategic Innovation Agenda has a dual objective: to serve both as a technological and strategic reference for the sector and as input for future I3FLOAT Open Calls

Floating Wind Strategic Innovation Agenda

Target 1

To establish itself as a technological and strategic benchmark / reference for the sector in the coming years

Floating Wind Strategic Innovation Agenda

Target 2

To serve as input for defining challenges that feed into I3FLOAT Open Calls

The content **focuses exclusively on technology and innovation,** excluding social impact, business models, financing or skills

Focus on **technological innovation**

Focus on **high levels of technological maturity** (TRL 5+)

Full lifecycle coverage of the floating wind sector

Structure oriented towards future funding Open Calls

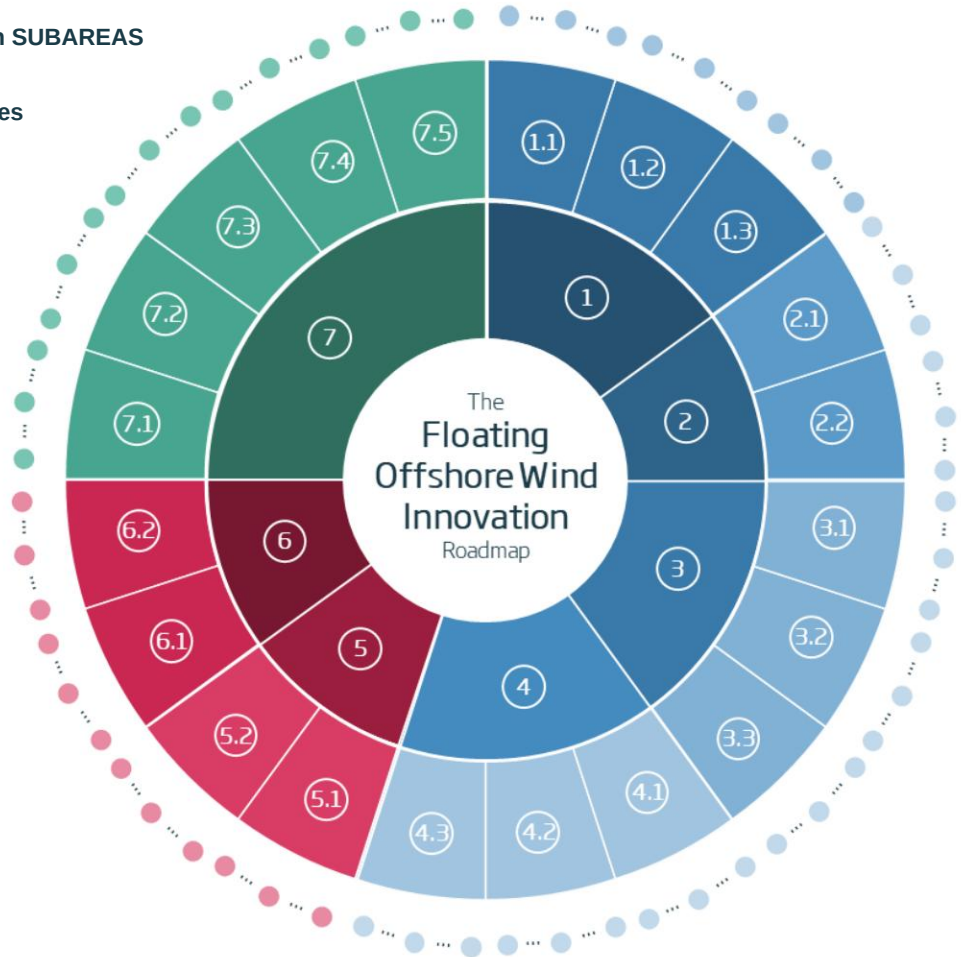
Following internal work and with the support of the consulting firm Minsait, the agenda has been structured into 7 areas, 20 subareas and a set of innovation lines within each subarea

Strategic Innovation Agenda structure proposal

Innovation AREAS

Innovation SUBAREAS

…nnovation lines



Design and construction

1 **Floating substructures, mooring systems and dynamic cables** ÿ Design and engineering of floating
- 1.1 substructures (floaters) ÿ Mooring and anchoring design ÿ Dynamic submarine cable systems for floating
- 1.2 offshore wind
- 1.3

2 **Electrical infrastructure and grid connection**
- 2.1 Floating substations and electrical conversion
- 2.2 Grid management and stability for floating wind farms

ÿ **Wind turbine, tower or alternative supporting structures and FOW-specific control** ÿ Adaptation of the wind turbine (WTG) and tower to floating foundation
- 3.1
- 3.2 Control and dynamic behavior of the floating system
- 3.3 ÿ Validation and aero-hydro-servo modeling for FOW ÿ **Wind farm layout design and site**

4 **anning**
- 4.1 Site characterization and wind farm planning
- 4.2 Integrated wind farm design (co-design) ÿ Environmental impact and
- 4.3 ecosystem effect mitigation

Industrialisation, logistics and offshore installation

5 **Industrialization**
- 5.1 Modularisation, process-oriented standardization and industrial automation
- 5.2 Port-based component integration and heavy lifting operations

6 **ogistics and offshore installation**
- 6.1 Logistics, load-out, float-off, wet storage and port-to-site transport ÿ Offshore installation and hook-up of platforms,
- 6.2 cables and mooring systems

O&M and Decommissioning

7 **peration & Maintenance and Decommissioning** ÿ Data acquisition for O&M digitalisation ÿ
- 7.1 ata management and structuring for O&M digitalisation ÿ Data
- 7.2 xploitation for O&M digitalisation ÿ Heavy offshore maintenance and major offshore interventions ÿ
- 7.3 ecommissioning, repowering and end-of-life strategies of the floating
- 7.4 ystem
- 7.5

The Strategic Innovation Agenda will be built taking into account the different innovation priorities in the sector, along with input from project participants and experts

Process of defining and disseminating the I3FLOAT Strategic Innovation Agenda

What **inputs** will we take into account?

Innovation priorities and **roadmaps** (wind / floating sector)

Regional *Floating Wind strategies*

ETIPWind *- Roadmap Floating offshore wind* ***(2020-2027)***

ETIPWind *- Strategic Research & Innovation Agenda* ***(2025-2027)***

ETIPWind *– Wind Roadmap (Research & Innovation priorities* ***2020-2027)***

Other leading sector initiatives include the **Floating Wind Joint Industry Project**

Contributions from **participants in the project**

Workshop 1

Online participatory process

Others

WFO (World Forum Offshore Wind), which has **7 working groups** focused on different **technological topics** in the sector

Leading companies of different profiles (floating platform, Technology Center, Utility, Floating foundations, Electrical substations, etc.)

The participatory process begins at this stage, opening stakeholder involvement in the development agenda

Floating Wind Strategic Innovation Agenda

Innovation AREAS

Innovation SUBAREAS

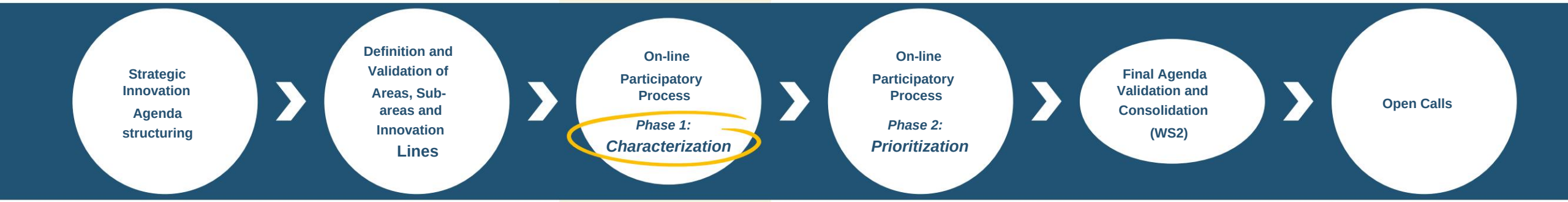
Innovation lines

At this stage, stakeholders are invited to contribute to phase 1 of the participatory process (characterization of innovation lines) by reviewing and refining the definition of each line

Summary of the project's main milestones

Tentative dates

We are here



November - December	December – March (2026)	April – May (2026)	June - July (2026)	July - September (2026)	September (2026)
Output	**Output**	**Output**	**Output**	**Output**	**Output**
Closed list of innovation **areas** and **sub-areas** and first identification of innovation lines for each sub-area, as a result of collaborative work between Minsait, and Basquenergy	**Validated agenda structure,** including areas, sub-areas and innovation lines, together with the **development of the corresponding fact sheets**	**Refined and enriched innovation line fact sheets** based on stakeholder **feedback** on their wording, scope and level of detail	**Prioritized innovation lines** based on stakeholder assessment of **variables** such as **TRL, technical and industrial feasibility, and cost**	**Strategic Innovation Agenda validated by stakeholders,** feedback for final adjustments, materials for disseminating Open Calls and next steps	The consortium will build two cascading funding programs or **"Open Calls"** to address the open challenges of the sector proposed by all stakeholders

Participation focuses on reviewing the technical sheets most closely aligned with each stakeholder's area of expertise and potential contribution

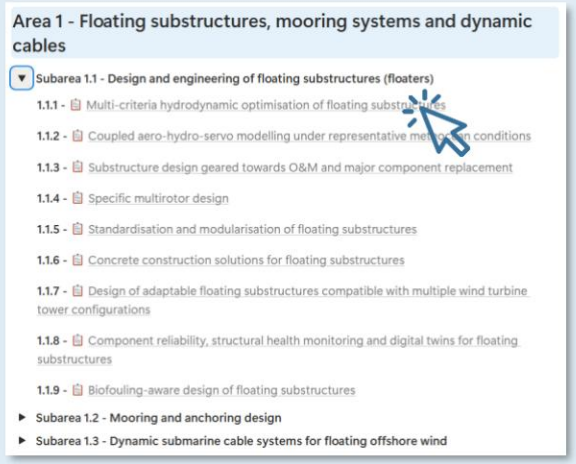
Online Participatory Process Phase 1: Characterization of innovation lines

1 Agenda Structure Overview (Notion)

Notion

The shared link provides access to the full agenda's tree structure, including all areas, subareas and associated innovation lines

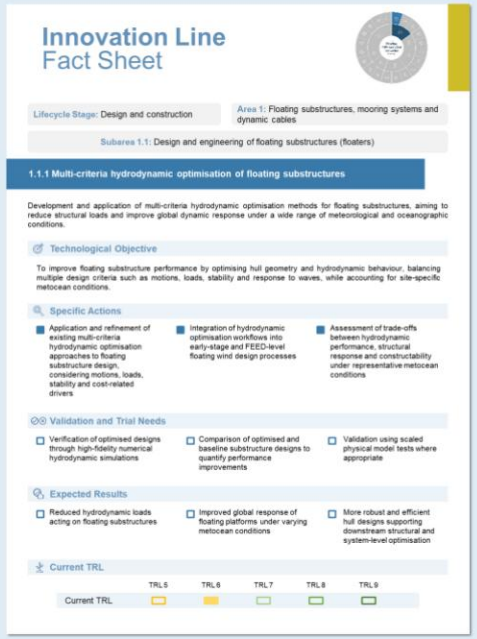
Each subarea contains a dropdown section giving access to the corresponding questionnaire for each fact sheet:



Example of Notion view

2. Feedback via questionnaire

By clicking in each innovation line, participants can access a **questionnaire** where the **proposed fields for the fact sheet are displayed,** together with dedicated **space for comments and additional contributions:**



Example of Innovation line 1.1.1

Please insert your feedback in these fields

Description

Technological objective

Specific Actions

Validation and Trial Needs

Expected Results

Current TRL

☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9

Additional comments

i3float

Thank you!

Co-funded by the European Union