LOW-TROPHIC AQUACULTURE IN OFFSHORE WIND FARMS

THEMATIC ROADMAP

Finance & Funding



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This project has received funding from the European Union's Horizon Europe research and innovation programme under Grant Agreement No 101093888. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.

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Introduction

Low-trophic aquaculture in offshore wind farms combines food production and renewable energy in the same marine space. Growing this sector needs further development of farm systems, monitoring tools, data services, consultancy and environmental assessment methods.

This thematic roadmap looks at how finance and funding can help these innovations move from project-based development to uptake, scale-up and market readiness, matched to each innovation's maturity and potential.

Why This Matters

ULTFARMS' results range from market-ready innovations to non-commercial and policy-oriented tools, so no single funding model fits all. The four prioritised key exploitable results align with wider sustainability goals, strengthening their case for both public and sustainable finance.

Technical success alone is not enough. Scale-up depends on design guarantees, lower investor uncertainty and clear offtake conditions: who buys the biomass, at what volume, quality, timing and price. Without this clarity, even strong technology scales slowly.



UN SDG 9: Industry, Innovation and Infrastructure
ULTFARMS KER: Innovation

UN SDG 12: Responsible Consumption and Production
ULTFARMS KER: Responsible production

UN SDG 13: Climate Action
ULTFARMS KER: Climate Action

UN SDG 14: Life Below Water
ULTFARMS KER: Life Below Water

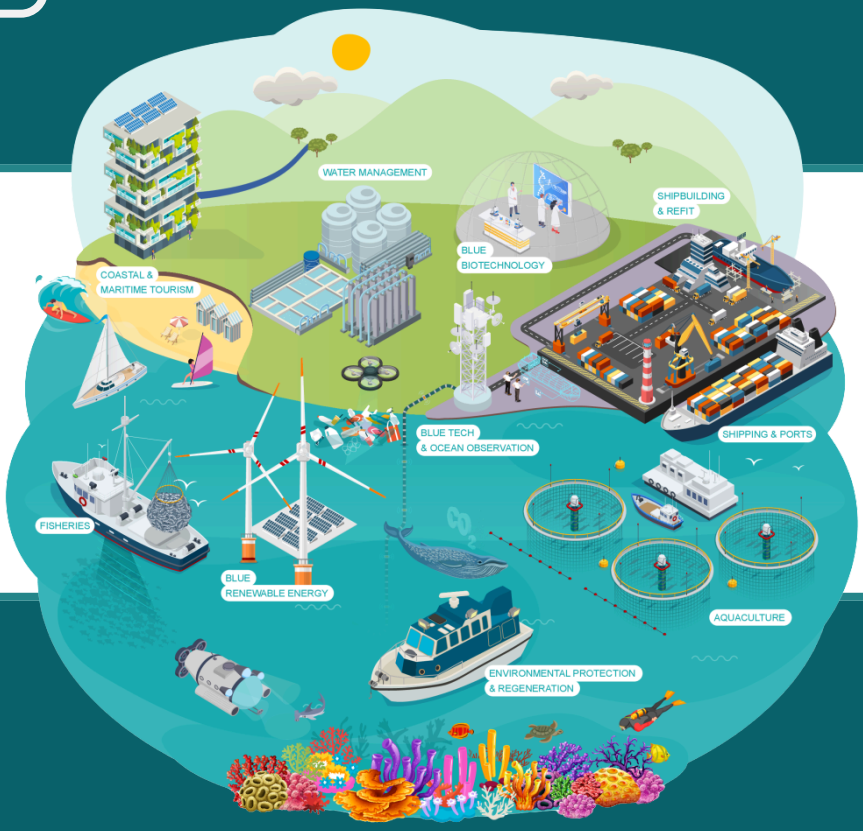
Pathways

Early stage: cascade funding
Also known as Financial Support to Third Parties, this model sees the European Commission fund a larger EU project, which redistributes part of its budget through open calls, usually to SMEs, start-ups and scale-ups. For offshore multi-use, it supports targeted testing, early digital tool use, small-scale validation and collaboration between developers and operational partners, making it well suited to early-stage proof of performance, users and value.

Later stage: diversified funding
In practice, scale-up follows a sequence: public funding to test and reduce risk first, then investment support and private finance for deployment, operation and replication.

Type of output	Likely funding route
Technologies/services with clear market potential	Innovation funding, investment support, private capital
Scientific knowledge, monitoring methods, environmental assessments, policy recommendations	Research, environmental and policy programmes

BlueInvest, a European Commission initiative, supports this transition through coaching, networking, matchmaking and market intelligence, helping blue economy start-ups and scale-ups build investment readiness.

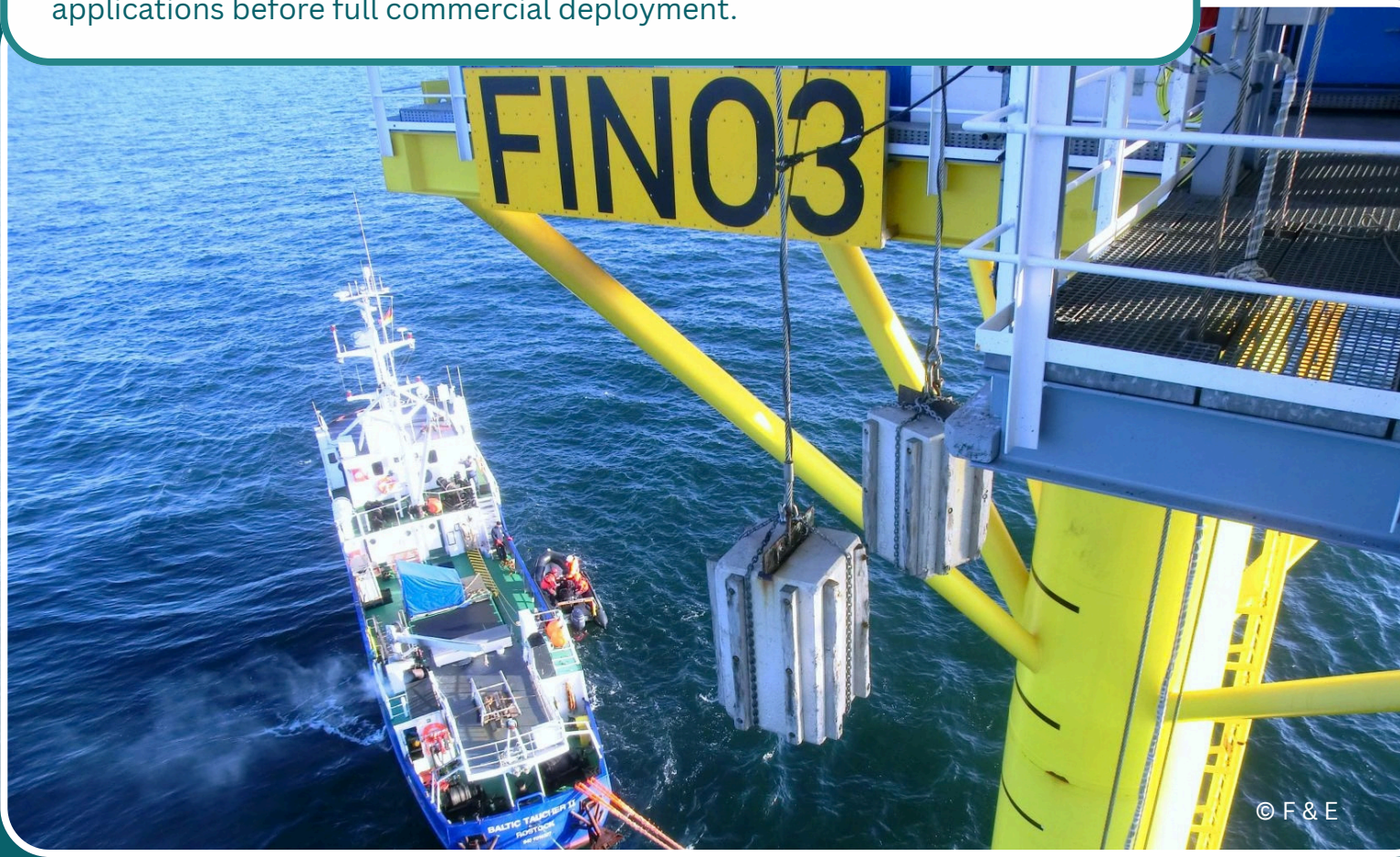


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A Working Example:

A useful example from the project is the development of offshore consulting services based on pilot experience. Expertise on farm design, anchor installation, vessel layout, environmental assessment, licensing, insurance and legal issues is being shaped into an integrated service for future developers, showing that research-based knowledge can already support new offshore applications before full commercial deployment.



Historical Note: Building on UNITED

The German pilot's business case builds on a feasibility study for commercial multi-use, first developed during UNITED and updated since; UNITED partners' market and licensing connections in Germany carried over directly into ULTFARMS.



The Way Forward

Blended finance and bankability:
Public support remains essential for innovation, testing and early uptake, but long-term replication needs this combined with finance suited to commercial growth.

What unlocks bankability:

- Clear ownership and reliable insurance arrangements
- Stronger design guarantees and better risk data
- Certainty on revenue models and market uptake
- Clear access rights and protection strategies for results, technologies, data and know-how; unresolved IP questions can delay licensing, investment and commercial agreements

What funding strategies should cover:
Not just physical infrastructure (cultivation lines, anchors, floats, moorings), but also monitoring, digital support, compliance, consultancy and environmental services, plus the arrangements needed to protect and use these results in practice.

What could strengthen investor confidence further:
Incentives linked to ecosystem benefits, and stronger integration of multi-use into planning and tenders.

The core message:
Finance and funding for offshore low-trophic aquaculture are not only about access to money. They are about creating the legal, commercial and operational conditions that make scale-up investable.

Further Reading

ULTFARMS Deliverables:

- D5.1 Exploitation and business plan
- D5.3 Final KERs business plans
- D7.3 Sustainability goals of business models

OLAMUR Deliverables:

- D1.4 Economic data for investment & upscaling

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