



COASTAL REGIONS IN TRANSITION TO THE BLUE BIOECONOMY

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Project Facts

- **12** Project Partners
- **9** Regions
- **3** Sea Basins: Baltic & North Sea, Atlantic
- **36** Months (August '22-July '25)
- **2.3** Million EUR Budget (Horizon Europe Programme)
- Coordinated by SUBMARINER

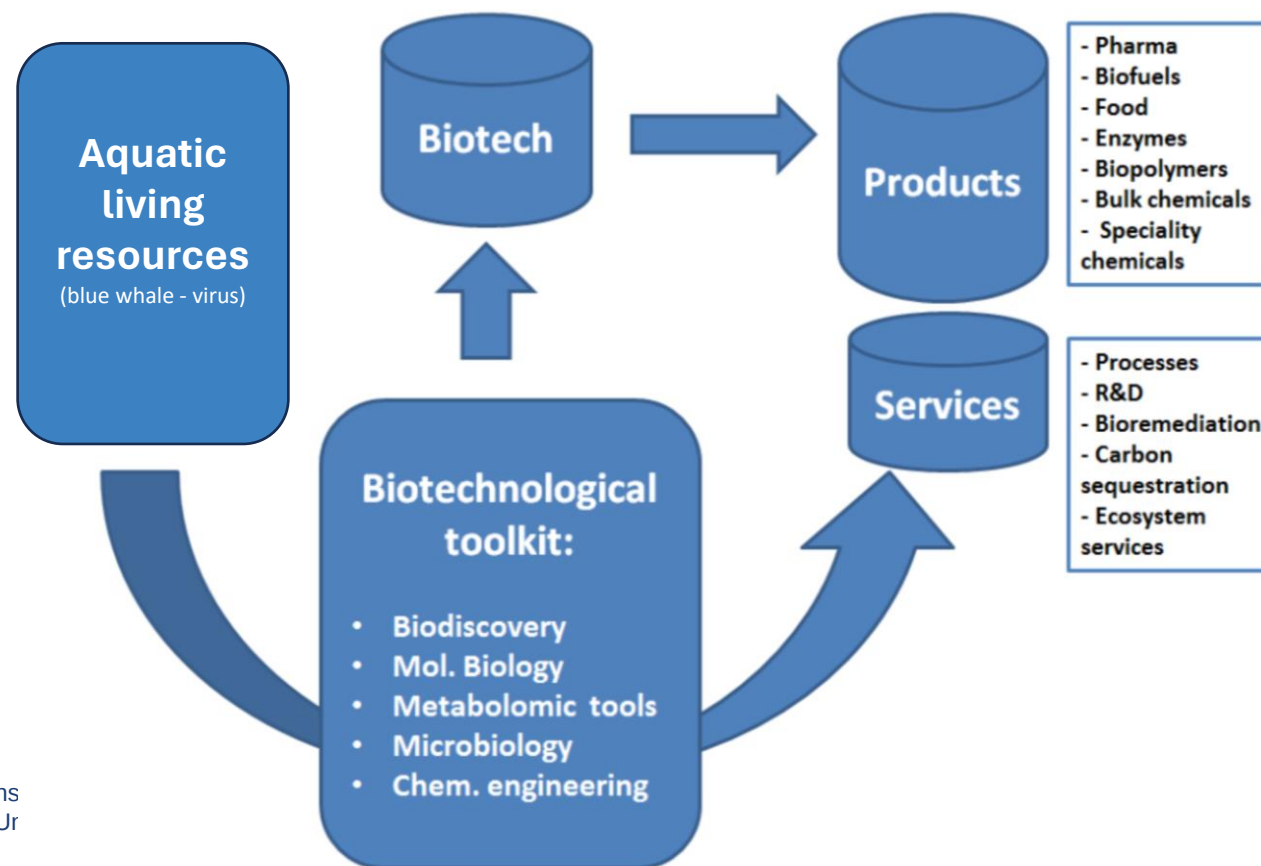


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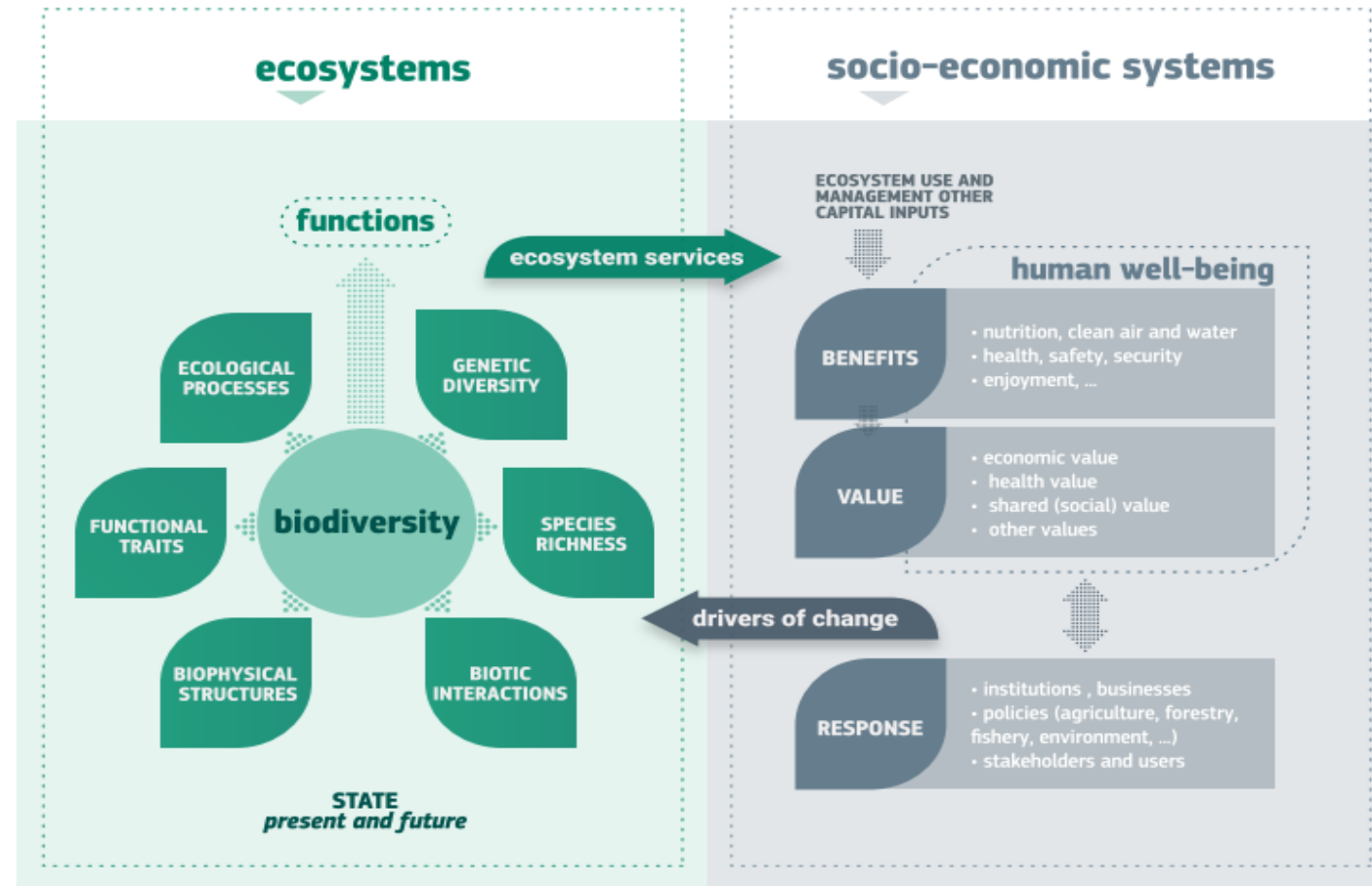
Blue Bio Value Chains

De blauwe bio-economie maakt gebruik van aquatische organismen om op duurzame wijze een scala aan producten, processen en diensten te leveren waar de mens gebruik van maakt.



Blue Bio Value Chains

Ecosystem services



EU Ecosystem Assessment conceptual framework for assessment of ecosystem services (Maes et al., 2021)



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Wat zijn Ecosysteemdiensten

"De voordelen die mensen halen uit ecosystemen"

- *Ondersteunende diensten: primaire productie,...
- *Productiediensten: voedsel, energie,...
- *Regulerende dienst: zuivering van water en lucht, koolstofvastlegging,...
- *Culturele diensten: recreatie,...

Ecosysteemdiensten van Blue Bio activiteiten:

Mosselen: voedselproductie, terugwinning van voedingsstoffen, kustbescherming,...

Oesters: kustbescherming, nursery effect,.....



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 Deliverable 3.2	BBC value chain					
Ecosystem Services	Bivalves	Crustaceans	Fish	Macroalgae	Marine bacteria	Microalgae
Provisioning						
Food	x	x	x	x	x	x
Raw materials	x	x	x	x		x
Medicinal resources		x		x	x	x
Regulating						
Water filtration and nutrient assimilation	x			x		x
Coastal protection	x			x		
Carbon sequestration and storage	x					
Biochemical cycling	x			x		
Biological control				x		
Supporting						
Habitat protection and maintenance	x			x		
Maintenance of genetic diversity	x					
Sediment creation						
Water cycling	x					
Oxygen production				x		x
Cultural						
Recreational activities and mental and physical health	x	x	x	x	x	x
Tourism and ecotourism		x				
Sense of place and spiritual connection			x	x		
Aesthetic and spiritual appreciation and inspiration for culture, art, and design			x			



01 TO INCREASE SUSTAINABLE BLUE BIOMASS PRODUCTION



ACTION POINTS

01 Framework Ecosystem Services
Framework (local, national or regional) for quantification and monetisation of Ecosystem Services.

BLUE MISSION BANOS

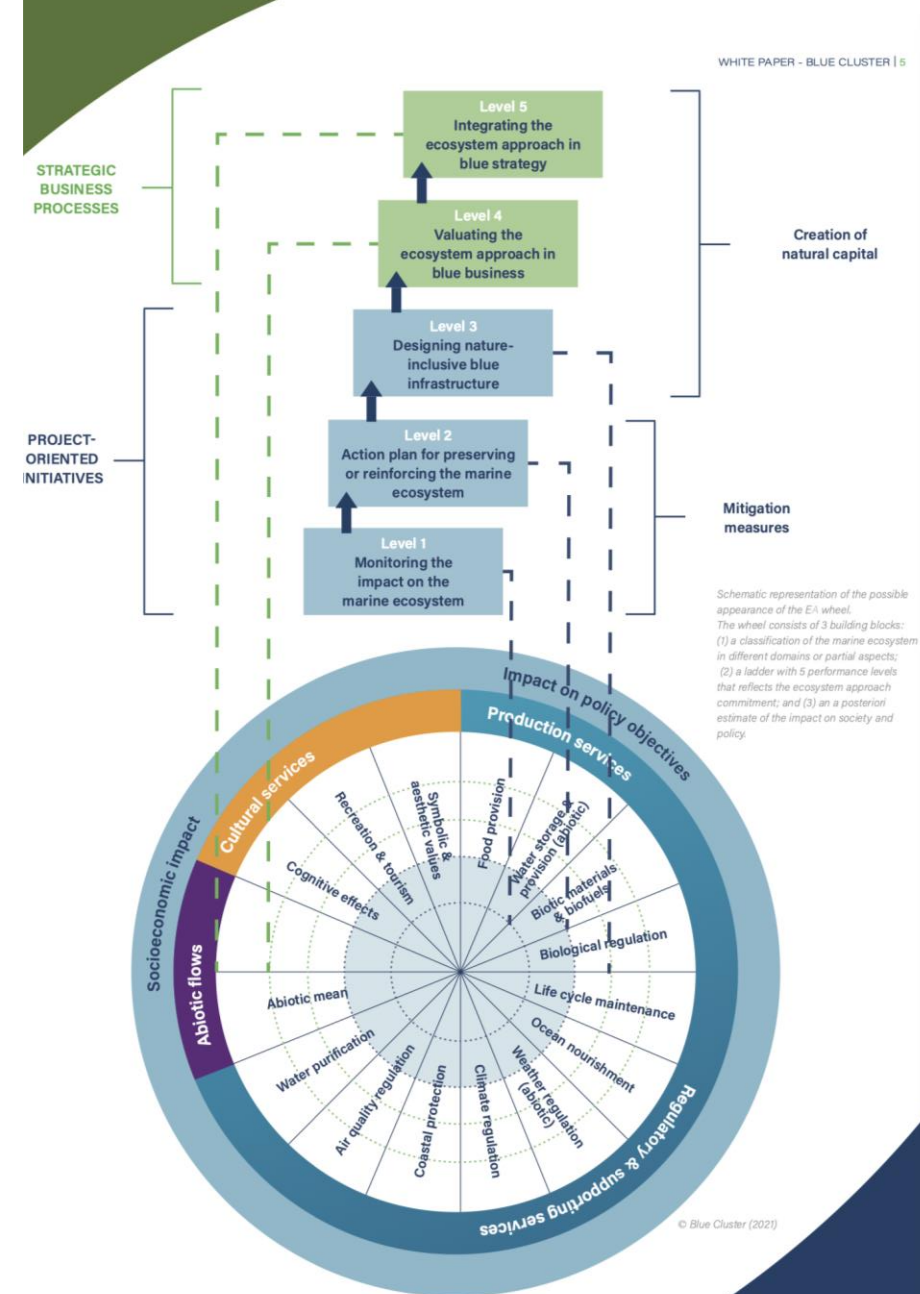


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Ecosystem Services Valorization

- Ecosystem Approach (EA) Wheel provides inspiration for **impact assessment** and **cognitive framework** to understand ecosystem services and their benefits for companies and policymakers.
- It sets a “ladder” of integration of ecosystem services into decision-making.
- It defines environmental and socioeconomic impacts of ecosystem services.



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Ecosystem approach

Zijn deze ecosysteemdiensten belangrijk voor een regio?

- Kan lokale voedselproductie zijn, maar ook product richting retail
- Kan bescherming zijn,...
- Kan regionale product placement zijn (eten + toerisme + ..),...
- Kansen voor natuur inclusief design voor andere activiteiten
-

Maar onze activiteiten off/nearshore hebben impact: toepassen van ECOSYSTEM APPROACH

Onze activiteiten in relatie tot het milieu:

- Kunnen we die negatieve effecten verminderen?
- Kunnen we de positieve effecten van bepaalde ES benutten of versterken?
- Kunnen we een waarde geven aan de ES?



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Ecosystem approach

- Waarom een waarde geven?

- *Bewustwording, bereidheid of verplichting creëren om de ES positief te beïnvloeden, zelfs als deze niet direct economische waarde opleveren voor het bedrijf

- *Kwantificering en waardering van ecosysteemdiensten biedt besluitvormers (zowel in de industrie als in het beleid) de mogelijkheid om afwegingen te maken tussen alternatieve beleidsscenario's:

- Minder ecologische impact als voedsel van mariene oorsprong is in vergelijking met voedsel van oorsprong op het land

- Gezonder: ook een winst op lange termijn voor de overheid qua kosten gezondheidszorg?

- Multi-use in offshore parken: positieve bijdrage mosselweek?

- *Een ecosysteembenadering kan het maatschappelijk draagvlak vergroten en zo de verschillende spelers een “license to operate” geven.



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Ecosystem Services Valorization

Gedurende project:

- Zoeken naar afstemming tussen bestaande framework, ontwikkelde tools, best practices,...
- Zoeken naar de belemmeringen voor Ecosystem Approach in de BlueBio
- Regionale workshops: Bewustzijnscreatie en inspiratie voor Ecosystem Approach in de BlueBio

Projectdeliverable:

- Handleiding om Ecosystem Approach in te leiden bij beslissingsprocessen in bedrijfsleven en beleid



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Questionnaire BlueBioClusters ES

*Top 3 kennislacunes op het gebied van ecosysteemdiensten:

- Integratie van waarderingsbenaderingen en -strategieën
- Levenscyclusanalyse van de waardeketen
- Betrokkenheid en participatie van belanghebbenden

*Aanvullende opmerkingen:

- Onduidelijkheid over wetgeving rond ecosysteemdiensten
- Onbekende effecten van klimaatverandering op habitats/fysieke omstandigheden die de waardering van ecosysteemdiensten kunnen veranderen



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Matchmaking, Acceleration and Business Support

- Stakeholder and technology **mapping**
- **Matchmaking** events, **co-creation** workshops and **mentoring**
- **Funding** for startups
- **Engage** investors, funders, mentors/coaches, ecosystem stakeholders and industry in a continuous dialogue

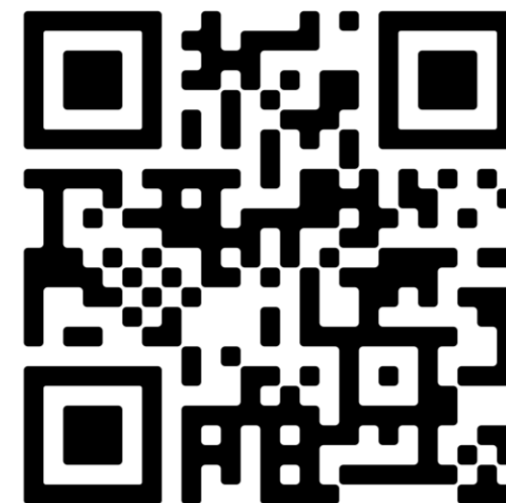
Blue Bioeconomy Session

29 February 2024

Oostende



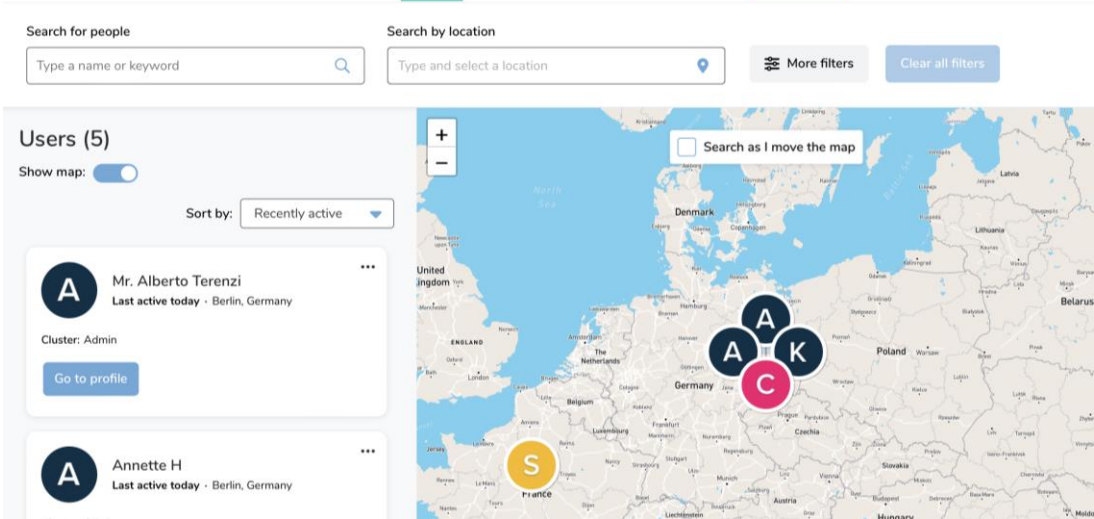
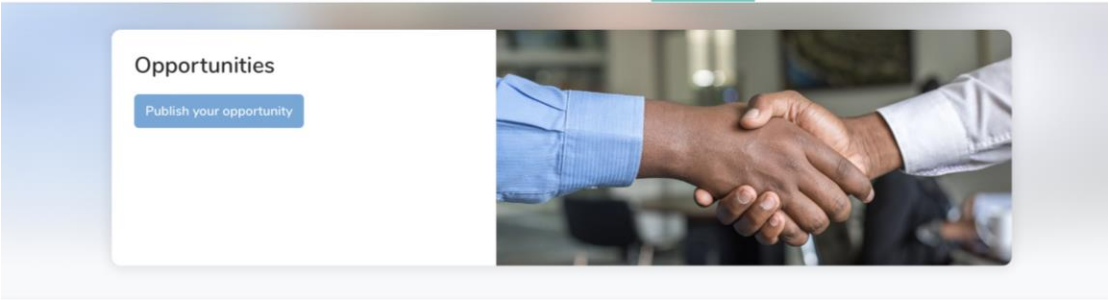
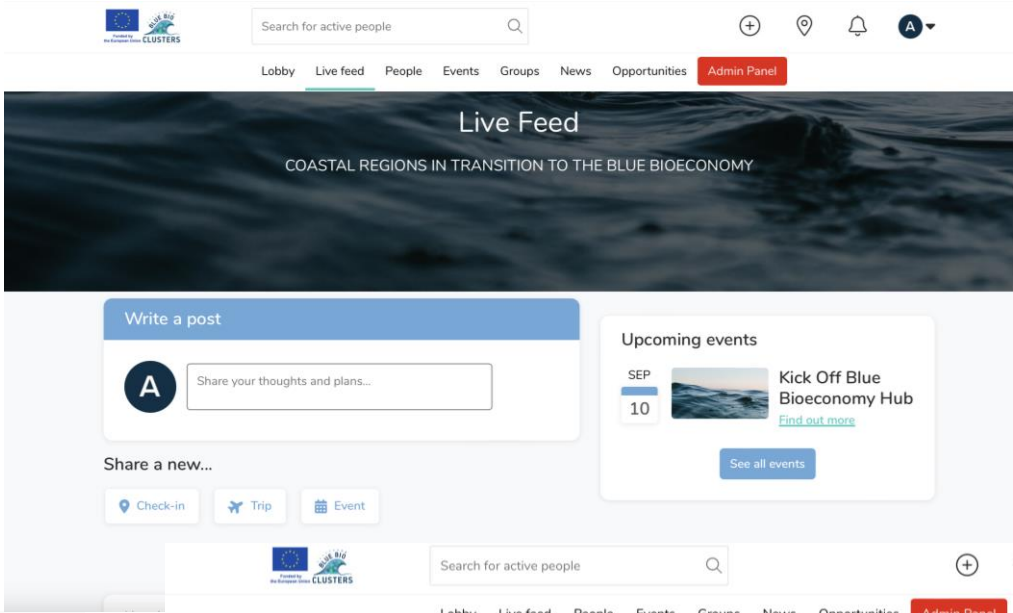
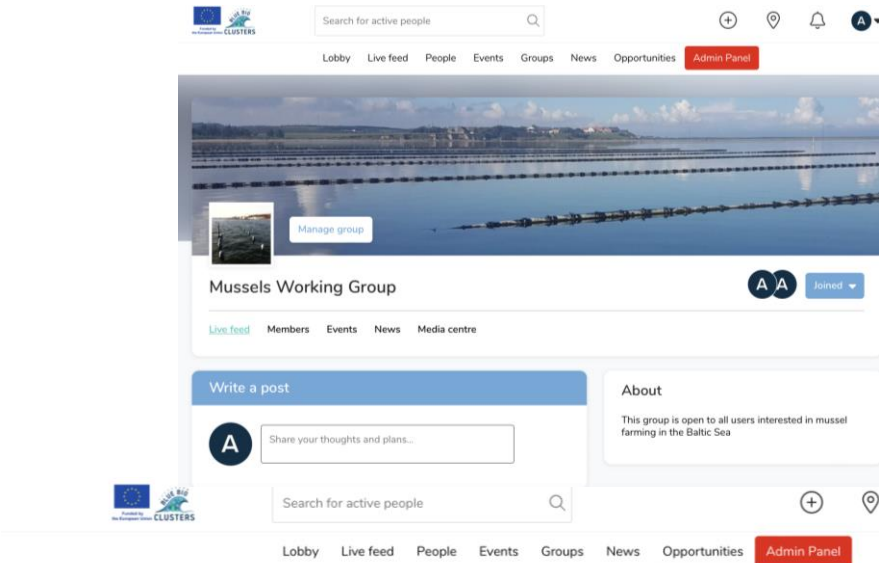
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Blue Bio Match





bluebiomatch.eu

- Matchmaking platform between technology providers and users
- Mentoring for startups and SMEs
- Regional and thematic groups
- Events and opportunities
- Online innovation ecosystems for all project stakeholders and beyond
- Interested blue bioeconomy stakeholders **welcome to join!**



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Blue Bio Match

The Blue Bioeconomy Hub



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Ecosystem Services and Valorisation



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Blue Regional Visions

- **Community of Practice** in the 9 project regions will:
 - Ensure **engagement** of local actors in innovative blue solutions
 - Support the development of regional **Blue Visions**, including action plans
 - Foster collaboration between **public and private** sector



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Project Outcomes



Stimulate the development of a **sustainable blue bioeconomy** by enabling **startups and SMEs** in the participating regions to realise their circular, eco-friendly business ideas



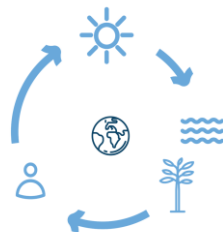
Showcase integrated and **circular blue bioeconomy value chains**, to serve as inspiration to European coastal communities



Develop tools for supporting businesses in integrating ecosystem services into novel ecology-driven business models and induce cross-sector collaborations along the value chains.



Foster **stakeholder engagement** through dedicated activities in the 9 project regions and beyond



Provide regional actors **access to the technologies** to realise their transition to blue bio-based solutions across their chosen value chains



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