



Connecting the dots between and beyond individual seaweed projects

EU4Algae, EU Mission Ocean and Waters, RootLinks, EIT Water & more

Angela Schultz-Zehden, Managing Director
SUBMARINER Network & s.Pro sustainable-projects
Seagriculture - 18 June 2026

SUBMARINER NETWORK EEIG



Fredrik Gröndahl
President

Full Registered Members (Shareholders)



BioCon Valley®



SDU

F&E

Zentrum für Forschung
und Entwicklung in Kiel



Advisory Board Members (Premium Associates)



NIVA



Suomen ympäristökeskus
Finlands miljöcentral
Finnish Environment Institute



Fraunhofer

Associate Members (Regular members)

34+

academic institutions, SMEs, innovation hubs,
environmental organizations, and many more

Together we improve
the blue environment
and economy



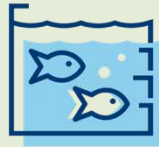
Sustainable, innovative blue solutions



Algae Cultivation,
Processing &
Products



Bivalve Farming,
Processing,
& Products



Sustainable
Aquaculture
& Fisheries

BlueBioMass



Ocean
Governance

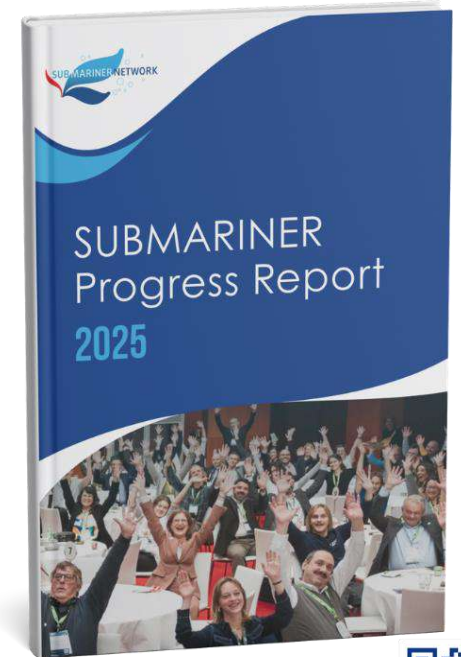
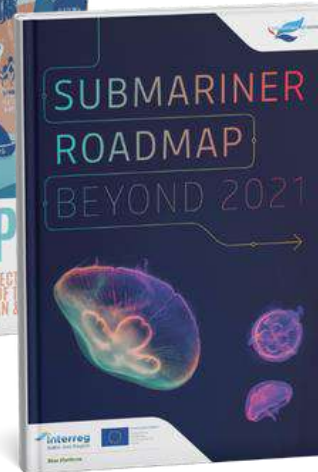


Business
Support



Education &
Capacity Building

Capacity Building



Ocean
Multi-Use



Marine
Protected Areas



Maritime Spatial
Planning

Marine Planning

TOGETHER WE IMPROVE THE BLUE ENVIRONMENT AND ECONOMY

€ 263 Million | **ACROSS 62 PROJECTS TO DATE**
32 active projects (2022-2029) | €188M current budget





DIVERSE EU FUNDING SOURCES:

- Horizon Mission 'Restore our Oceans and Waters'
- Horizon Cluster 6
- INTERREG
- EMFAF
- DG MARE direct funding
- Interregional Innovation Investment Facility
- Sustainable blue economy partnerships
- Circular Bio-Based Joint Undertaking
- ERASMUS+
- DG MARE service contracts
- National Ministries
- Philanthropic foundations



NETWORK REACH: STAKEHOLDERS

8500+ 90% from Baltic & North Sea Region



1650+

Individual
Experts



36

Countries
Represented



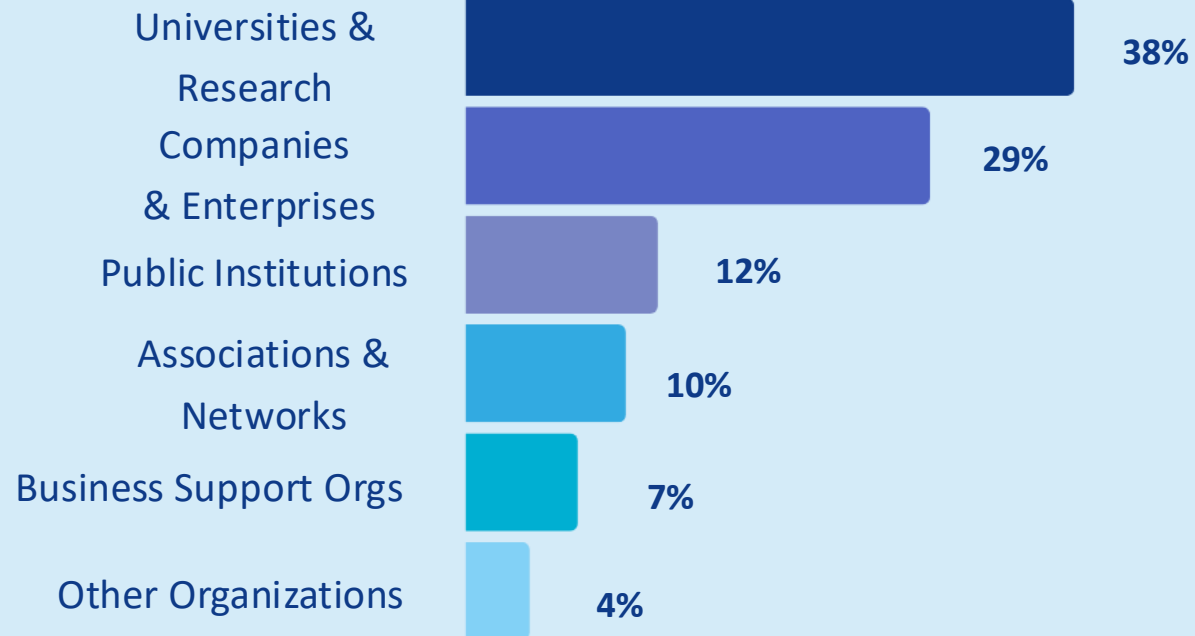
350+

Partner
Institutions



80+

Startups /
SMEs



7600+

Newsletter
Subscribers



1700+

Community
Platform Users

CONNECTING TO CREATE IMPACT

A large group of people, mostly men and women of various ages, are seated at round tables covered with white cloths. They are all looking towards the camera with expressions of joy and excitement. Many of them have their hands raised high in the air, some with fingers spread, as if they are cheering or participating in a group activity. They are wearing lanyards with badges, suggesting they are at a formal event or conference. The background shows a large hall with other tables and people, and a stage area with a screen.

How we do it:

Connect actors across the Baltic & North Sea region and beyond

Develop EU-funded projects and cluster them for joint outputs

Bridge science, policy, business, society towards implementation

Strengthen member capacity and visibility

CONNECTED ACROSS THE BLUE ECONOMY



SUBMARINER & s.Pro in Europe's key frameworks, missions, and networks

BANOS REGION



Flagship initiative of the 'Innovation' Policy Area within the EU Strategy for the Baltic Sea Region



BANOS Lighthouse: Lead Partner of the EU Mission Coordination and Support Action for the Baltic and North Sea Lighthouse Area



Supporting the EU Mission Restore our Ocean & Waters in the Baltic and North Sea



Funding Coordinator for community-led actions that scale MO solutions and transition agendas



Industry association fostering cooperation and advocacy across the European algae sector



EIT KIC accelerating European water innovation. SUBMARINER hosts the Central and Baltic Co-Location Centre.



Centralised network for MPA projects & initiatives across Europe



CBE-JU initiative connecting marine biomass actors to EU markets

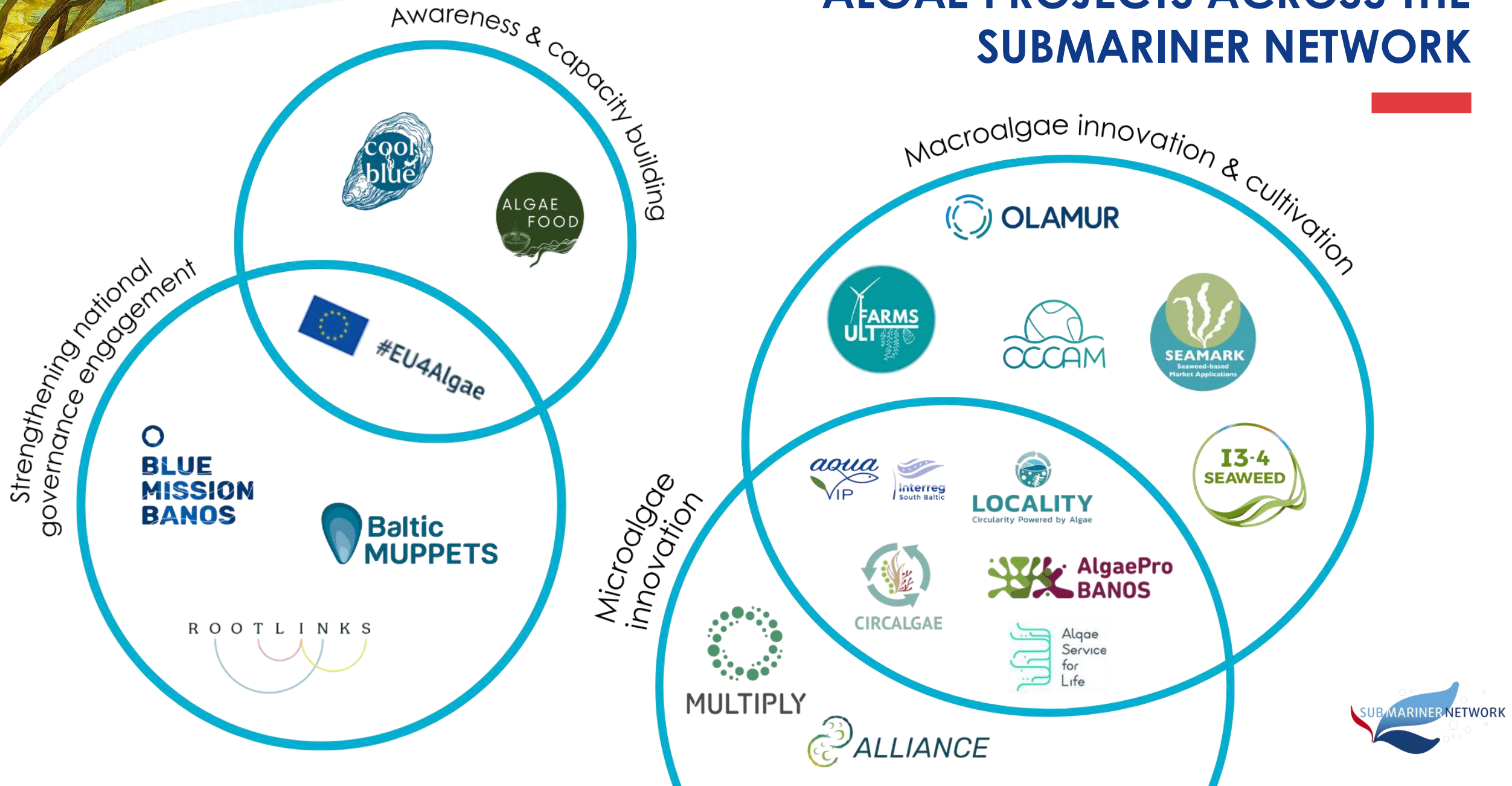


#EU4Algae

EC-led initiative accelerating the development of the algae sector in Europe

EUROPE

ALGAE PROJECTS ACROSS THE SUBMARINER NETWORK





BLUEBIOMATCH

A community hub that brings together startups, researchers, companies, and policymakers to connect, share knowledge, and collaborate on innovations in the blue bioeconomy.

1700+
Activated users

546
Working in algae
aquaculture

91
Algae-focused
aquaculturists

826
Working in Blue
Bioeconomy

137
Self-identified
aquaculturists



MISSION OCEAN AND WATERS

SUBMARINER is the BANOS lighthouse coordinator and involved in projects across the region, steering the EU Mission "Restore our Ocean & Waters" toward a carbon-neutral, circular blue economy.



1. Protect and restore marine and freshwater ecosystems and biodiversity
2. Prevent and eliminate pollution of our ocean, seas and waters
3. Make the sustainable blue economy carbon-neutral and circular

Develop zero-carbon and low-impact aquaculture



EU MISSIONS

RESTORE OUR OCEAN & WATERS



ATLANTIC - ARCTIC



BLUE MISSION BANOS

BLUE ACTION BANOS

2030
BLUE MISSION BANOS

BALTIC & NORTH SEA



DANUBE-BLACK SEA



MEDITERRANEAN

Accelerator and Capacity Building for Algae Startups



OPEN CALL 1: March 2025 to February 2026

Closed

46

Mentors in the Pool

5

Workshops for
Mentees

Biopharmia NO

Microalgae supplements from waste CO₂

AlgaPhos4X LV

Microalgae for wastewater treatment

Anaula IE

Microalgae for distillery by-products

Amelia Space Technologies GB

Monitoring algae blooms

ER LAB FR

Leather & rubber alternatives from seaweed

L'Eautelier BE

Algae-based materials for hospitality

CLASH Algaeproducts BE

Chlorella-based food products

Jordà Food Group BE

Microalgae-based crunchy toppings

PALGAE TR

Algae-based biopolymers

Kybele's Garden TR

Microalgae fermentation for food products

OPEN CALL 2: October 2025 to October 2026

Ongoing

63

Mentors in the Pool



Providing the
training & Capacity
Building

Pack Away AB SE

Seaweed packaging

Sea & Believe IE

High-value seaweed extracts

BioBright GB

Maritime infrastructure

MariCura Ltd GB

Seaweed feed & fertilizers

Blue2 FR

Biotechnology research

UAB Sirputis LT

Seaweed farming technology

AlgMighty B.V. NL

Food-tech business

Vertical Green SL ES

Modular farming systems

QBDynamics Corp EE

Algae biomass valorisation

SeaGreen Solutions Ltd CA

Sustainable seaweed products



OPEN CALL: August 2025 to October 2026

Closed



25 Projects
funded



€1.8M Funding
€60K per project



12 Month
Program

PT **Seaclops**
Digital twinning
ALGOTEX
Hatchery for high-commercial value seaweed species and compounds
TOTS
Food industry
IT **ReBrown**
Biofertilizers/biostimulants industry
Green Greener srl (SEACIRCLE)
Biofertilizers/biostimulants industry
ES **MACRAME**
Biofertilizers/biostimulants industry
3D-FloSea
Biofertilizers/biostimulants industry
SEA-CHAR
Biofertilizers/biostimulants industry
FUTURALGA-PACK
Food industry

NL **HIMAN**
Cultivation, application & process optimisation
SEASEEDER
Hatchery & seeding innovations
SHADES
Application and improvement of procedures
NeuraSkin+ Radiance
Application and improvement of procedures
SEA-SENSE
Digital twinning
R **S.E.A.**
Cosmetics industry
IE **CANISEA**
Food industry

DE **OH-MAMI**
Food industry
AlgaeFeed
Food industry
SEAMASK
Cosmetics industry
BE **OAP**
Cultivation, application & process optimisation
SEA.SONING
Food industry
LT **SP-BIOACT**
Biofertilizers/biostimulants industry
GR **PureSea**
Food industry
FR **SARGASS'INNOV**
Scale-up
Alpacos
Cosmetics industry

ALGAE KNOWLEDGE BASE



AI-Powered

Conversational Knowledge
access and intelligent retrieval



26,000+

Indexed and Curated
Scientific Documents

Ensures answers are supported by
identifiable knowledge sources.



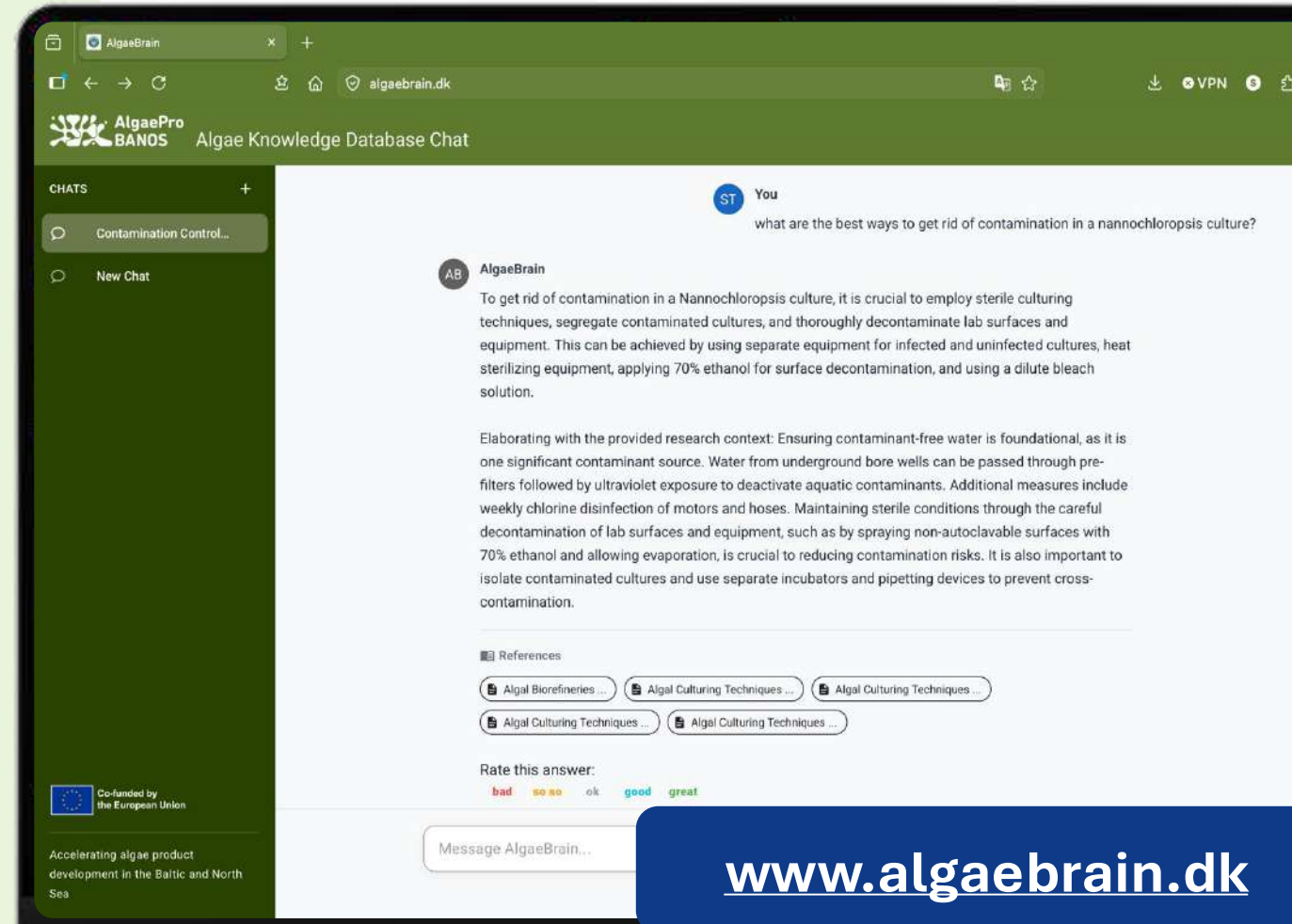
Multi-Source

From scientific publications,
patents, projects, tenders, and
databases



RAG-based

Retrieval-Augmented Generation
for domain-specific information



MOOCs



5 free, award winning interactive online courses



MOOCs



‘Algae Innovation and Entrepreneurship’ course



SUBMARINER Network for
Blue Growth,
AlgaeProBANOS, Ghent
University & Blue Gent



NEW

**Algae Innovation and
Entrepreneurship**

Syllabus

- Week 1 Foundations of Sustainable Innovation in the Algae Sector
[Show weekly breakdown](#)
- Week 2 From Sustainable Algae Cultivation to Processing to Product Development
[Show weekly breakdown](#)
- Week 3 Innovation and Business Development in the Algae Sector
[Show weekly breakdown](#)
- Week 4 Making Your Algae Innovation Relevant: Engagement and Communication
[Show weekly breakdown](#)





Enabling primary producers to thrive in the bioeconomy

Strengthening the role of primary producers in the circular blue bioeconomy by improving knowledge, connections, and access to practical pathways for biomass valorisation, and innovation. **Leading the Blue Working Group and co-creating actions to empower blue primary producers.**

Upskilling
blue primary
producers
and advisors

Blue biomass
knowledge
sharing and
matchmaking
activities

Blue Toolkit



EU4Algae Implementation Partner



Connect the Ecosystem

Bringing together players, ideas and resources to **build stronger connections.**



Structure the Dialogue

Facilitating conversations to **align priorities and co-create solutions.**



Activate the Sector

Driving sustainable growth and real-world impact by **turning solutions into actions.**

EU4Algae Publications

2022-2025



Bottlenecks limiting the sector's development

Overview of European Initiatives for a Safe and Sustainable Algae Industry

Protocol to apply for a Novel Food dossier

Developing a monitoring framework to assess bioremediation offered by algae in Europe

European data integrations in marine water landscaping maps for defining the bioremediation potential for Seaweed in Europe

Verification of high-potential algae products and possible criteria, labels, and tools (LCAs) to assess environmental footprint

Overview of Education, Youth & Business Support for the European Algae Sector

Business case & recommendations on developing regenerative ocean farming as bioremediation measure in Europe

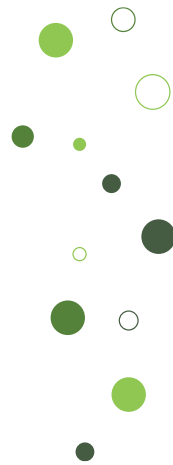
List of social aspects relevant to the growth of the European algae industry



#EU4Algae



Study: Environmental Credits for Seaweed Aquaculture and Marine Permaculture



Develop an overview of environmental credit schemes, assess the inclusion of seaweed aquaculture and marine permaculture outcomes within them, and **derive recommendations on whether and how algae could be included.**



Study Objectives and Progress

- ✓ Mapped and analysed **existing carbon, nutrient, and nature credit schemes.**
- ✓ **Reviewed monitoring frameworks** and highlighted key strengths and weaknesses.
- ✓ **Together with experts**, we made a synthesis of **existing evidence on basin-scale C–N–P excess** and implications for potential seaweed uptake.

Next Step

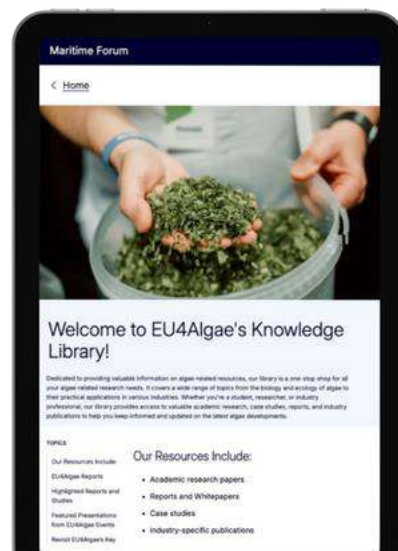
Deliver expert validated and actionable recommendations based on a multi-stakeholder focus group on how/if macroalgae outcomes can be potentially credited in the EU.

EU4Algae Maritime Forum (2025-2027)

Providing algae stakeholders with
**outputs & key results from the EU
project ecosystem.**



Business Corner

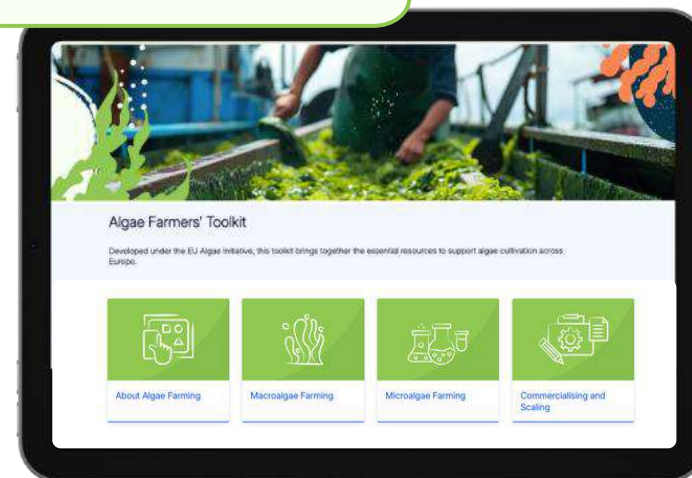


Knowledge Library



Scan to explore!

Farmers' Toolkit



The screenshot displays the 'EU4Algae Project Database' page. It features a header with the project name and a search bar. The main content area is a table listing various projects, including their start and end dates, acronyms, descriptions, microsites, species, topics, coordinators, countries, sea basins, cultivation types, and references. The table is organized into columns and rows, with a search bar at the top right.

Start	End	ACRONYM	DESCRIPTION	MICROSITE	SPECIES (if available)	TOPICS	COORDINATOR	COUNTRY	SEA BASIN	CULTIVATION TYPE	REFERENCE
2020/01/01	2020/12/31	ALGAE4M	In March 2020, the EU Parliament adopted a new carbon sink target that will reduce climate emissions by increasing the EU's carbon sink capacity by 10% by...	Marine		Carbon Capture	HEU	Germany	Baltic Sea	North Sea	★★★★
2020/01/01	2020/12/31	ALGAE4M	ALGAE4M will develop and evaluate several solutions for the sustainable commercialization of algal biofuels. The project will advance current state-of-the-art...	Marine		Carbon Capture	HEU	Norway	North Sea		★★★
2020/01/01	2020/12/31	ERCOPIRE	Marine algae fixing CO2 into organic matter is central to the global carbon cycle. While the food chain and marine bacteria consume roughly half of...	Marine	Enterococcus	Carbon Capture	HEU	Germany	Baltic Sea	North Sea	★★★★
2020/01/01	2020/12/31	CatalyM	The transport industry is going through a revolutionary moment in its quest to reduce its carbon footprint, with biofuels being one of the viable...	Marine		Carbon Capture	HEU	France	Atlantic Ocean	North Sea	★★★★
2020/01/01	2020/12/31	MarT	The MarT project aims to facilitate sustainable blue growth in the Baltic region by establishing Eutectic and Lactate marine and maritime innovation...	Marine		Carbon Capture	HEU	Latvia	Baltic Sea		★★
2020/01/01	2020/12/31	EPIC-SHIFT	The current food system is unsustainable and underperforming, having high environmental and socio-economic costs, while still failing to ensure...	Marine		Carbon Capture	HEU	Sweden	Baltic Sea		★★

Project Database

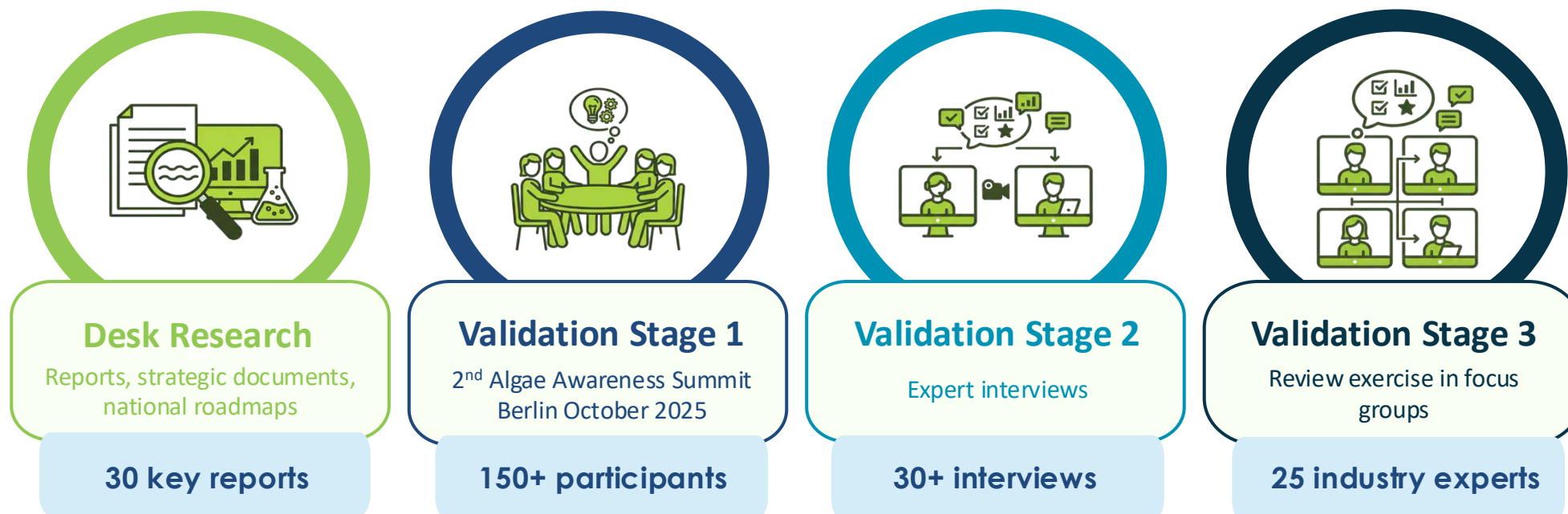


#EU4Algae

A Roadmap for the Algae Industry in Europe

A strategic, evidence-based path to scale the European Algae sector.

Developed and co-created alongside industry and national actors.



#EU4Algae

2nd EU Algae Awareness Summit

Berlin, October 2025



Six Objectives to Develop Our Industry

**Scale European
Production Capacity**

**Lower Production
Costs**

**Scale & Optimise
Processing Capacity**

**Mobilise & Create
Incentives for Investment**

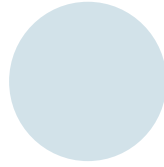
**Increase the Connection
Between Supply & Demand**

**Boost Demand
for Algae in Europe**



#EU4Algae

Scale European Production Capacity



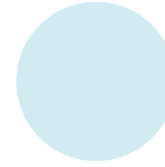
Algae's Place in Maritime and Land-Use Plans

Multi-Use Integration of Algae at Sea and on Land

Faster, Predictable Licensing for Algae Cultivation

Algae as a Livelihood Pathway for Fishing Communities

Lower Production Costs



Macroalgae Production Cost Reduction

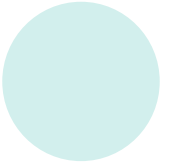
Locally Adapted Strain Selection for Macroalgae

Microalgae Production Optimisation

Shared Coastal Infrastructure for Algae Producers

Intelligent Integration of Harvested and Cultivated Biomass

Scale & Optimise Processing Capacity



Regulatory Clarity for Algae Processing and Product Classification

Regional Post-Harvest Stabilisation through Co-Location

Regional Biomass Aggregation and Intermediate Processing

Shared and Flexible Biorefinery Capacity

Mobilise & Create Incentives for Investment



Voluntary Offtake Models and Buyer Commitments

Algae Investment Intelligence and Finance Matching

Demand-Led R&I Funding

Regulatory Sandboxes and Test-Site Licensing

Blended Debt Finance and Insurance De-Risking

Ecosystem Services Accounting and Crediting Pathways

Increase the Connection Between Supply & Demand



National Algae Coordination Infrastructure

Collective Advocacy and Producer Organisations

Operational Producer-Buyer Coordination Tools

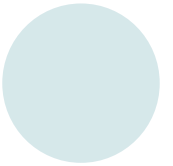
Shared Quality Assurance and EU-Standard Testing

Market Transparency and Shared Measurement Standard

Green Public Procurement and Demand Incentives

Level Playing Field for Imported Algae Products

Boost Demand for Algae in Europe



Demand-Led Market Intelligence

Demand-Led Product Development

Campaigns Built on What Algae Delivers

Algae in Education

Algae-Based Biostimulants and Soil Amendments

Microalgae Oil as a Minimum Blend-In in Aquaculture Feed

Scale European Production Capacity

Algae's Place in Maritime and Land-Use Plans
Multi-Use Integration of Algae at Sea and on Land
Faster, Predictable Licensing for Algae Cultivation
Algae as a Livelihood

Lower Production Costs

Macroalgae Production Cost Reduction
Locally Adapted Strain Selection for Macroalgae
Microalgae Production Optimisation

Scale & Optimise Processing Capacity

Regulatory Clarity for Algae Processing and Product Classification
Regional Post-Harvest Stabilisation through Co-Location

Intermediate

A Roadmap which is agreed across all stakeholders.

But how to turn this into action?

Mobilise & Incentivise

Voluntary Offtake
Algae Investment
Demand-Led R&I Funding
Regulatory Sandboxes and Test-Site Licensing
Blended Debt Finance and Insurance De-Risking
Ecosystem Services Accounting and Crediting Pathways

Operational Producer-Buyer Coordination Tools
Shared Quality Assurance and EU-Standard Testing
Market Transparency and Shared Measurement Standard
Green Public Procurement and Demand Incentives
Level Playing Field for Imported Algae Products

Campaigns Built on What Algae Delivers
Algae in Education
Algae-Based Biostimulants and Soil Amendments
Microalgae Oil as a Minimum Blend-In in Aquaculture Feed



GERMANY - Olaf Schäfer,
Head of Directorate "Climate Protection,
Biodiversity, Fisheries, Bioeconomy"
Federal Ministry of Agriculture, Food and
Regional Identity

BELGIUM - Patricia De Clercq,
Administrator-General
Agency for Agriculture and Fisheries
Flemish Government

GREECE - Dr. Alkistis Chrysanthi Parpoura,
Head of Directorate General for Fisheries
Hellenic Ministry of Rural Development &
Food

FINLAND - Pekka Pesonen
Permanent Secretary
Ministry of Agriculture and Forestry

SPAIN - Isabel Artime García,
Secretary-General for Fisheries
Ministry of Agriculture, Fisheries and Food

FRANCE - Eric Banel
Director General for Maritime Affairs,
Fisheries and Aquaculture

Algae Declaration

1. Welcome the adoption of the 2025 **UN Ocean Conference** political declaration
2. Welcome the recognition of algae under the **European Ocean Pact** as a **key enabler** for the future
3. Acknowledge the **European Commission leadership role** in advancing the algae sector, through the **EU Algae Initiative**
4. Recognise the importance of the **Algae Summit** to raise awareness and foster collaboration between Member States, and to **stimulate the knowledge-policy-society interface**
5. Look forward to the presentation of the **national strategies, initiatives, and success stories** at the Summit
6. Welcome the fact that the **2026 Global Forum for Food and Agriculture (GFFA)** will have a focus on strengthening the blue bioeconomy, including algae

WHAT ARE NMHs?

BLUE MISSION BANOS

National Focal Points
stakeholder networks
monitoring framework
Mission Arenas



NATIONAL MISSION HUBs

dedicated group of Mission Ocean experts connecting governments, funders, researchers, and civil society to coordinate and accelerate the EU Mission Ocean & Waters



BLUE ACTION BANOS

161 CLA/61 TA proposals
piloted solutions
Mission monitoring
technical assistance

NMH SECRETARIATS



BELGIUM

VLIZ, Blue Cluster



FINLAND

John Nurminen
Foundation, A'Pelago



LITHUANIA

Klaipeda University



POLAND

Gdynia Maritime University



DENMARK

University of Southern
Denmark, Danish Technical
University



GERMANY

Kiel University,
Forschungszentrum
Jülich



NETHERLANDS

Netherlands
Enterprise Agency



SWEDEN

Swedish Environmental
Research Institute



ESTONIA

University of Tartu



LATVIA

Latvian Institute of
Aquatic Ecology



NORWAY

Norwegian Institute for
Water Research

EIT WATER

We will innovate through collaboration –
amplifying regional excellence to
overcome fragmentation in the
WMM sectors!

Together we will secure a smart, resilient,
competitive water future for Europe!

#EITWater



Funded by the
European Union



KICs – Europe's Innovation Engines



2010

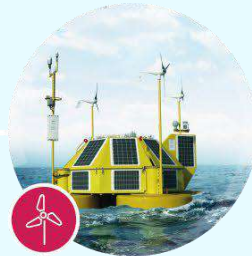
EIT Climate-KIC

Accelerate the transition to a zero-carbon economy



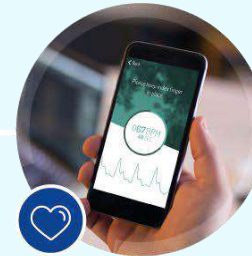
EIT Digital

Drive Europe's digital transformation



EIT InnoEnergy

Achieve a sustainable energy future for Europe



EIT Health

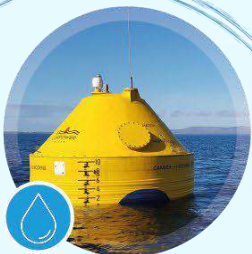
Give EU citizens greater opportunities for a healthy life



2015

EIT RawMaterials

Develop raw materials into a major strength for Europe



EIT Water

Contribute to a circular and sustainable water economy



2022

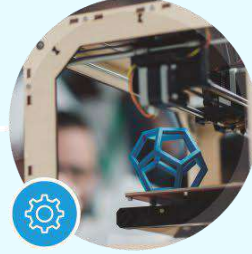
EIT Culture & Creativity

Unite Europe's creatives



EIT Urban Mobility

Smart, green and integrated transport



2019

EIT Manufacturing

Strengthen and increase the competitiveness of Europe's manufacturing industry



2017

EIT Food

Lead a global revolution in food innovation and production

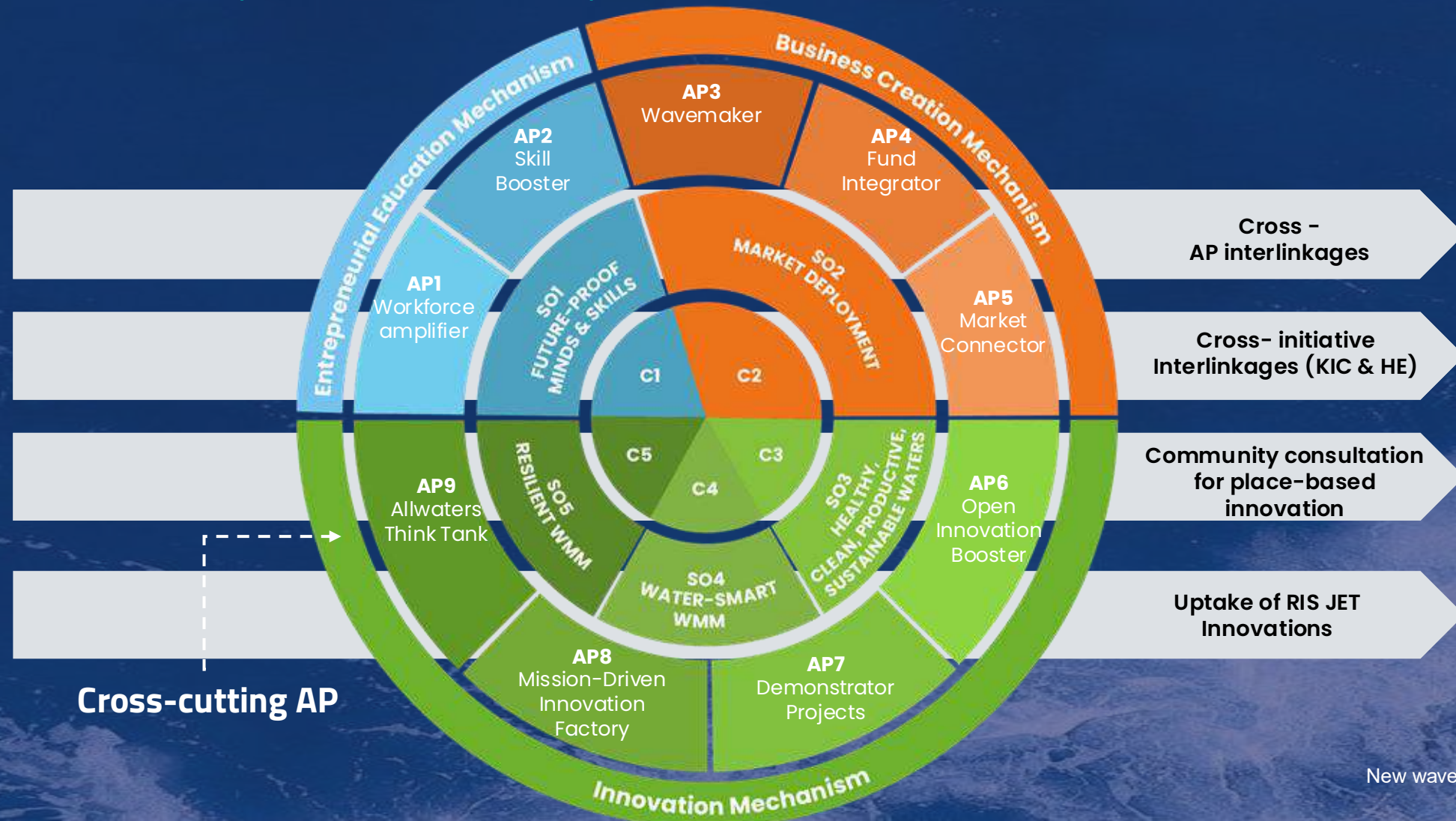
New waves of innovation

Key Water Challenges that EIT Water will Overcome

1. **Skills and capacity gaps** in water, marine, and maritime sectors slow growth.
2. Sector (water, marine, maritime) **fragmentation limits innovation**.
3. **Marine and freshwater ecosystem degradation and declining water quality**
4. **Limited water efficiency, recycling and resource circularity**
5. Vulnerability to **climate-related extreme events and external threats**

The EIT Water Systemic Innovation Engine (SIE)

Our integrated approach and vehicle to driving skills development, catalysing innovations and systemically translating them into market-ready businesses and scale-ups.



11 Innovation Themes

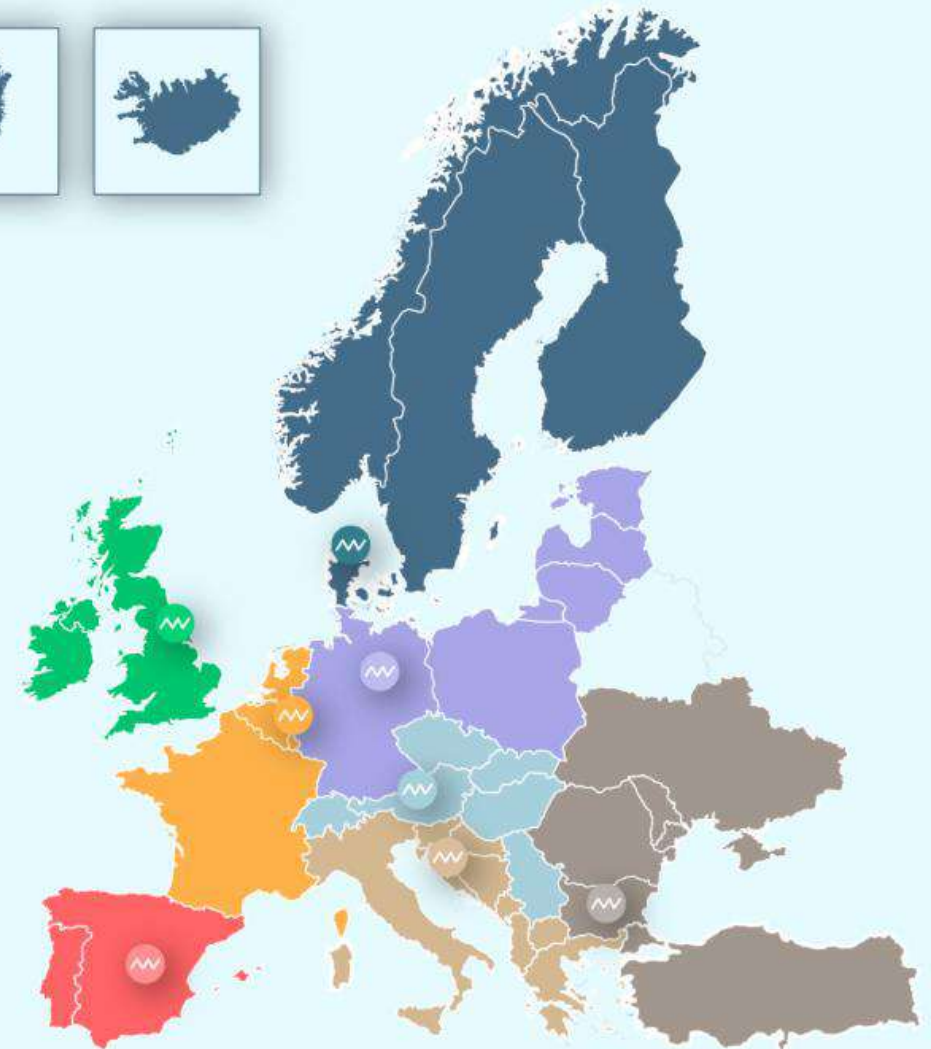
1. Pollution detection, removal and water quality protection
2. Water supply & alternative water resources
3. Industrial water efficiency, circularity and resource recovery
4. Urban water resilience and circularity
5. Nature based solutions for community wellbeing
6. Water monitoring, forecasting and early monitoring systems
7. Water governance, economics and transboundary management
8. Sustainable marine bio-resources
9. Water-smart agriculture
10. Ocean & sea basin environment technologies
11. Green shipping & smart ports

EIT Water Co-Location Centres

What will EIT Water achieve?

- **247 innovations** will be marketed by 2033
- **58 startups** will be created through innovation activities
- **26 created startups** will reach sales revenues of at least **€10 000**
- **126 marketed innovations** will be launched and reach sales revenues of at least **€10 000**
- **1 380** startups and scale-ups will be supported
- **€1.2 billion** on economic losses resulting from ecosystem degradation will be avoided

- CLC Central & Danube:
BOKU and TU Vienna
- CLC Iberian Peninsula:
Innova IRV
- CLC Black Sea:
Marine Cluster Bulgaria
- CLC South:
DIH Innovamare
- CLC North:
Water Valley Denmark
- CLC UK & Ireland:
University of Leeds
- CLC Central & Baltic:
SUBMARINER
- CLC West:
Blue Cluster



BEYOND PROJECTS: TOWARDS A SHARED SECTOR VOICE



#EU4Algae





Thank you!

Angela Schultz-Zehden
asz@submariner-network.eu



Sign up to the
network newsletter