GOAL OF SUREAQUA

To advance the transition to the bioeconomy

by contributing to new knowledge and delivering social, economic, and environmental benefits. The Centre's focus is on marketable innovations, increased resource efficiency, and environmental, social, and economic sustainability through close collaboration with both the private and public sectors.

WHAT IS THE BIOECONOMY?

Innovative use of renewable biological resources

The bio-economy presents alternatives to over-exploitation of natural resources, focusing on efficient and innovative use of renewable biological resources with fewer inputs, less environmental impact, and reduced greenhouse gas emissions.

Innovative alternatives in food, feed, bio-based products, and bioenergy will be developed from renewable biological resources across industries like agriculture, forestry, fisheries and aquaculture, pulp, paper and more.





Nordic Centre of Excellence for Sustainable and Resilient Aquatic Production

PARTNERS

Research Partners:

Centre for Applied Research, SNF-NHH (NO) European Centre for Environment & Human Health (UK) Fiskaaling (FO) International Research Institute of Stavanger - IRIS (NO) NOFIMA (NO) Norwegian University of Life Sciences - NMBU (NO) RORUM ehf (IS) Technical University of Denmark - Aqua (DK) Technical University of Denmark - Nanotech (DK) University of Eastern Finland (FI) University of Gothenburg (SE) University of Iceland (IS) University of Stavanger (NO)

Industry Partners:

Akva Group (NO) AM Nutrition (NO) ApEHR (DK) Arnarlax (IS) Bakkafrost (FO) Biosentrum (NO) Eco Inhibitors (NO) ENWA (NO) Marine Harvest (FO/ NO) Martak (IS) P/F Luna (FO) Raisioagro (FI) SansOx (FI) Seafarm Development (NO) Sea Farms Nutrition Ltd. (UK) Skretting ARC (NO) Tari spf (FO)

Affiliations:

Bellona (NO) Bergen Næringsråd (NO) BioSC (DE) Blue Planet (NO) Environment Agency of the Faroe Islands (FO) Icelandic Ocean Cluster (IS) Innovation Center Iceland (IS) NCE Aquatech Cluster (NO) Research Network for Sustainable Energy at UIS and IRIS (NO) Rogaland Fylkeskommune (NO) Validé (NO) Water Footprint Network (NL)

Contact:

Fiona Provan, Centre Leader (+47) 51 900 69 052 fipr@norceresearch.no Elisa Ravagnan, Centre Co-Leader (+47) 469 02 255 elra@norceresearch.no Coordinated by Norwegian Research Centre





NORDIC CENTRE OF EXCELLENCE IN BIOECONOMY

Knowledge and Solutions for Sustainable and Resilient Aquatic Production

coordinated by the Norwegian Research Centre



Funded by NordForsk

KNOWLEDGE AND SOLUTIONS FOR SUSTAINABLE AND RESILIENT AQUATIC PRODUCTION



SECURING LONG-TERM SUSTAINABLE DEVELOPMENT

Growing the Nordic Bioeconomy

The Nordic bioeconomy currently represents about 10% of the total EU bioeconomy and the unified ambition of the Nordic countries is to expand this share.

Global Food and Nutrient Security

The potential of aquatic production to contribute to improved global food and nutrient security has been well documented.

Value Added Products and Energy

Furthermore, the potential for bio-refinement of byproducts, waste-streams or alternative aquatic resources to produce value added products and energy is significant.

Employment and Value Creation

The EU's bioeconomy sectors have an annual turnover of € 2 trillion and account for more than 22 million jobs, thus being important contributors to employment and value creation.



SUREAQUA FOCUS ON KNOWLEDGE SHARING AND COLLABORATION

The SUREAQUA Centre of Excellence, coordinated by the International Research Institute of Stavanger, will serve as a common platform to facilitate collaboration across sectors in the Nordic bioeconomy community.



DRIVING FORCES OF SUREAQUA

Facilitating interdisciplinary collaboration

- Make significant contributions to food and nutrient security and efficient use of resources.
- Enhance innovative technology and biorefinery solutions, aquatic production, profitability, and job creation.
- Identify opportunities and mitigate barriers for commercialisation of new products, services, and processes.
- Use of social, economic and environmental assessments to ensure proposed technology developments and biorefinery approaches are sustainable and add resilience to the industry.

FOUR THEMES OF SUREAQUA

Technology and biorefinery

Developing and benchmarking technology and biorefinery approaches, from proof of concept to market implementation.

Environmental quality and sustainability

Assessing environmental sustainability of proposed solutions for transitioning to a bioeconomy, including novel approaches and technologies.

Social and economic sustainability

Assessing social and economic factors, bioeconomic models, and market acceptance of existing and novel aquatic production chains.

Governance and communication

Fostering an integrated cross sectoral approach to facilitate efficient knowledge sharing, develop regulatory frameworks and incentive tools based in a comprehensive understanding of beliefs and attitudes towards aquatic production and its novel technologies.

