O BLUE MISSION BANOS

1st MISSION ARENA

14-16 November 2023 | Gothenburg, SE

# The BlueRev Nordic case study: Estonia, Denmark and Greenland

Giovanna Ottaviani Aalmo

Norwegian Institute of Bioeconomy Research NIBIO

The BlueRev Nordic case study: Estonia, Denmark and Greenland

THEME: **CITIZEN ENGAGEMENT** 





# **BlueRev Nordic Pilot Region**

### **DENMARK-GREENLAND**

The uptake of blue bio-based economy value chains faces problems related to:



- Lack of skilled personnel
- Logistic infrastructures
- -Being an outermost region (Greenland)









# **BlueRev Nordic Pilot Region**

### **ESTONIA**

The uptake of blue bio-based economy value chains faces problems related to:

- Regulations
- Workforce
- Resources











# Challenges – related specifically to skills



- Workforce mobility
- Reliance on foreign labor due to high Danish labor costs
- Manpower shortage due to housing issues



Aging workforce







### **Driving Circular Bioeconomy: Actionable Solutions**







- Explore local employment solutions to address workforce shortages.
- Innovate waste management processes to utilize valuable sidestreams.
- Enhance communication and language skills for effective operations.

#### **Specific Recommendations for Companies:**

- Investigate local biomass utilization, consider processing locally.
- Invest in wastewater purification for circular water use.
- Explore alternative labor models and focus on skill development.
- Collaborate with the community to address housing shortages.

- Engage Young Talent: Develop initiatives for younger individuals, integrating modern technologies.
- Promote Community Involvement: Increase awareness through outreach programs and partnerships.

#### **Policy and Regulatory Suggestions:**

- Streamline Permitting Processes: Simplify to encourage investment.
- Enhance Inter-ministerial Coordination: Reduce bureaucratic fragmentation.

#### **Capacity Building and Collaboration:**

- Foster Industry-Academia Partnerships: Collaborate for innovation in product development.
- Expand R&D Infrastructure: Invest in research facilities for red algae applications.







# **Charting Paths for Future Growth**







### • Industry-Wide Prospects:

- Addressing labor shortages and skills development.
- Overcoming logistical challenges in transportation and distribution.

#### Innovation and Adaptation:

- Leveraging technology to enhance processing and reduce costs.
- Establishing robust partnerships for waste utilization and by-product valorization.

### Policy Considerations:

Advocacy for supportive regulations for circular bioeconomy.

O •
BLUE
MISSION
BANOS

 Collaboration with government bodies to streamline processes and overcome regulatory challenges.

### Industry-Wide Prospects:

- Sustainable employment model focusing on local employment and skills development.
- Innovation and Adaptation
- Encouraging innovative uses for red algae by-products.
- Facilitating community-driven development through local engagement.

### Policy Considerations

Developing strategic export market initiatives to leverage Estonia's unique position.







# Thank you for the attention





#### Giovanna Ottaviani Aalmo, PhD Forsker / Research Scientist

Dept. Økonomi og Samfunn / Economics and Society Div. Mat produksjon og Samfunn / Food Production and Society

NIBIO, Norsk institutt for bioøkonomi / Norwegian Institute of Bioeconomy Research P.O. Box 115, NO-1431 Ås, NORWAY NIBIO office in Pristina (Kosovo) E-mail: giovanna.ottaviani.aalmo@nibio.no (+47) 980 30 422; (+383) 49 893 913

www.nibio.no







#### **Agnes Isabella Dorich Master Student**

Dept. Økonomi og Samfunn / Economics and Society Div. Mat produksjon og Samfunn / Food Production and Society

NIBIO, Norsk institutt for bioøkonomi / Norwegian Institute of Bioeconomy Research P.O. Box 115, NO-1431 Ås, NORWAY

E-mail: agnes.isabella.dorich@nmbu.no





