





# Future challenges of blue biotechnology in the Baltic Sea Region

Anne-Mari Luhtanen, SYKE 24.8.2018, Blue Biotechnology in the Baltic Sea Region conference

www.balticbluebioalliance.eu



## One of the ALLIANCE project tasks is to give:

"Recommendations and guidelines for future actions needed by research institutes to enhance blue biotechnology development in the Baltic Sea Region"

For policy and decision makers, funding programmes, investors and research institutes





### Report will be based on:

- The experience gained from the Alliance mentoring program
- Overall mapping of institutions, research, facilities and biomaterial available in BSR
- Analysis of the future strategies of funding programmes and projects
- Interviews and surveys undertaken with blue biotechnology actors

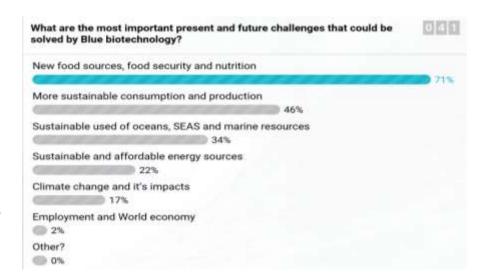




## Most prospective future research needs

#### Some preliminary results:

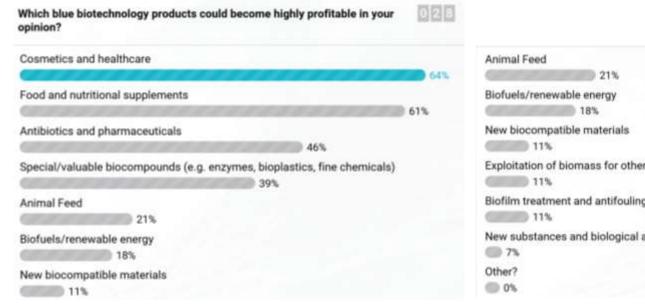
- New food and feed products, especially from algae
- Cosmetics and nutritional supplements
- New pharmaceuticals and antibiotics
- Production of biocompatible materials
- New substances and enzymes for industrial processes
- Bioremediation, nutrient circulation
- Technologies for handling and processing biomass

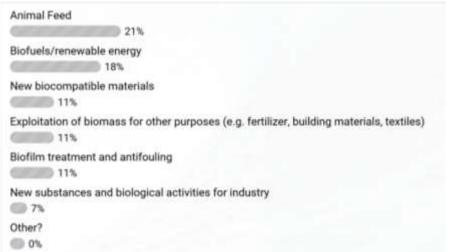






# Most prospective future research needs



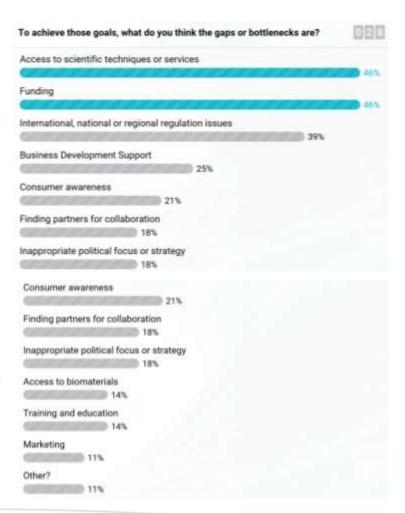






# **Identified problems**

- Technical problems with cultivation, harvesting and processing biomass
- Where to find the biomass? (monitoring)
- Legislation and regulation issues
- Cooperation challenges between companies and research institutes
- Upscaling the processes
- Monitoring issues (what parameters and how)
- Finding right partners
- Business skills







# **Preliminary recommendations**

- Access to marine bioresources has to be ensured (legislation, technical)
- Sustainable use of organisms should be paid attention to
- Transnational cross-sectoral cooperation needs to be enforced and mechanisms developed further
- More education is needed for the sector

The final report will be published by February 2019

- will be available online in Alliance web-pages
- and in printed version







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