



SMART BLUE REGIONS PROJECT CONFERENCE

The role of regions in fostering blue growth

Baltic Aqua Innovation Denmark – A new demonstration platform

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Berlin, 22.01.2019

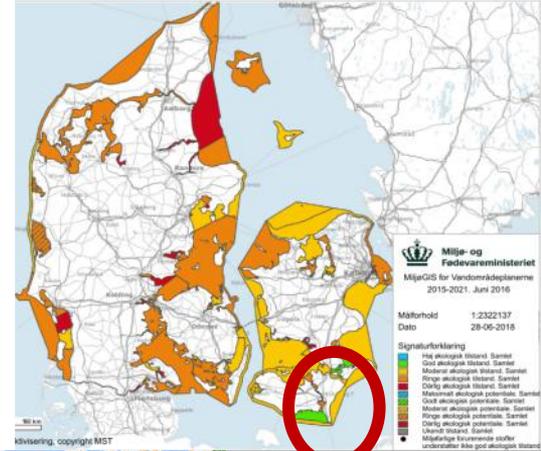
#SmartBlueRegions2019

You will hear about

- The Bioeconomy Hotspot Guldborgsund
- Invitation for cooperation
- Mapping the blue Bioeconomy potential in the Eastern part of Denmark.
- The vision for Baltic Aqua Innovation Denmark

Municipality of Guldborgsund

- Rural municipality
- 328 km coastline
- 8 mariculture fish farms in the area
- Richest soil – plant breeding expertise
- Good transport infrastructure
- Commitment to green transition through circular bioeconomy





Guldborgsund – a bioeconomy hotspot

Mette Jørgensen, Programme coordinator, mej@guldborgsund.dk



Partners in Projects and Collaboration Agreements



and many more...



Danish Bioeconomy Conference

2018: 180 participants

Representing the whole
value-chain:

PRIVATE BUSINESSES

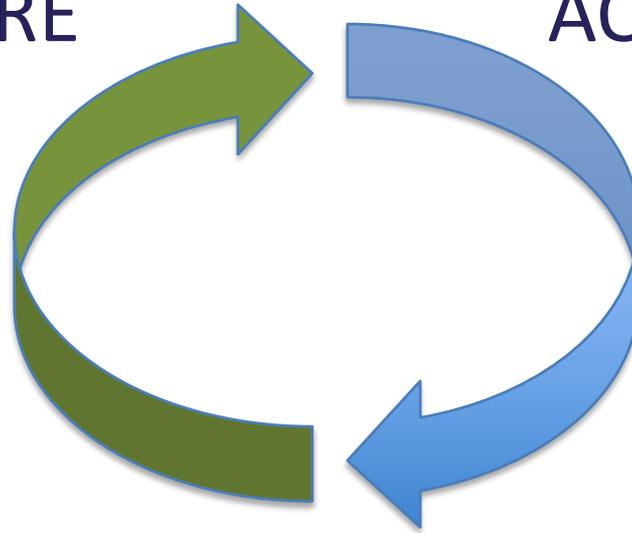
Universities, Research
institutes, Interest
organisations, Advisors,
Technology providers
and Politicians



A holistic approach to climate neutral production

AGRICULTURE

AQUACULTURE



Black Soldier Fly larvae bred on residue biomass – New sustainable protein source for fish?



Feed-screening and dietary experiments:

- Larval and frass production,
- Substrate reduction
- Feed conversion rate,
- Larval weight and survival rate (%)

Analysis of larvae and frass: protein, carbohydrate, lipid and ash (+Larvae: amino acids profile and chitin concentration. +Frass: NPK and sugar profile)

LCA

Business model

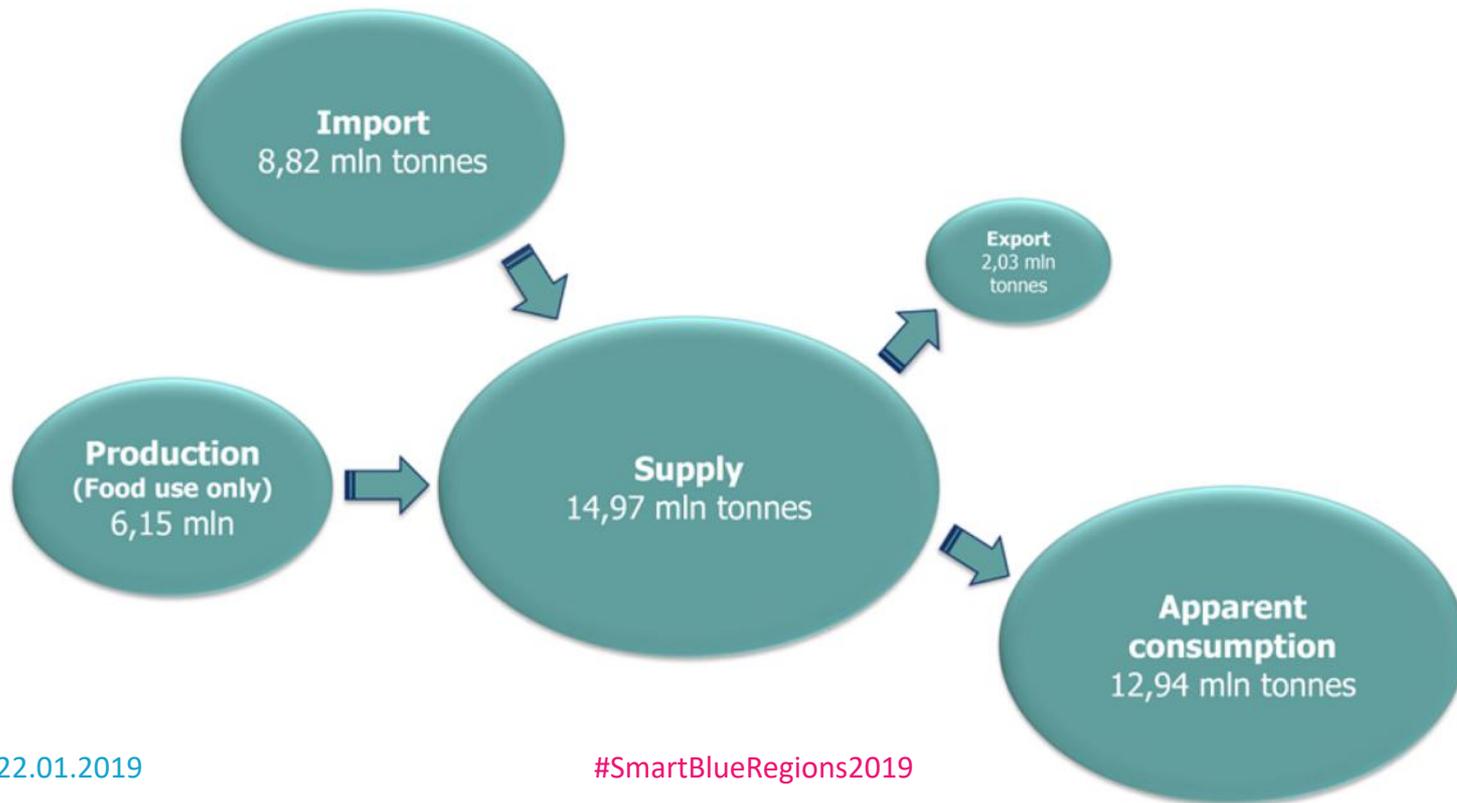
INVITATION



Join the Baltic Aqua Innovation Denmark team to bridge the gap between research and commercialization for sustainable fish production and related businesses?



Mapping the Blue bioeconomy potential





Analysis: Local potential for Blue bioeconomy

1. Production of mussels and seaweed



1. Production of mussels and seaweed

- Production of mussels and seaweed for feed
- Nutrients-extract cultures of nutrients from land or from aquaculture
- Use of seaweed as beach cast

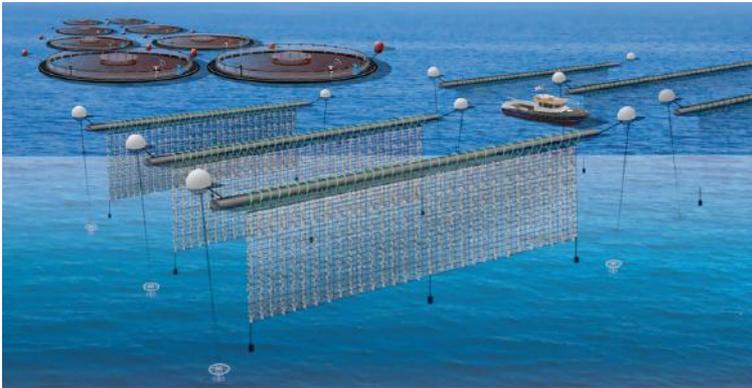
S: Local mariculture can be upgraded by new technology, longer valuechains, or added values from tourism. Growing marked for marine proteins. Activities on local harbours.

W: Low growth of mussels and seaweed. New technology?

O: Payment for nutrient extraction

T: Payment for nutrient extraction policy dependent. Environmental effect of mussel farming

2. Sustainable marine fish farming



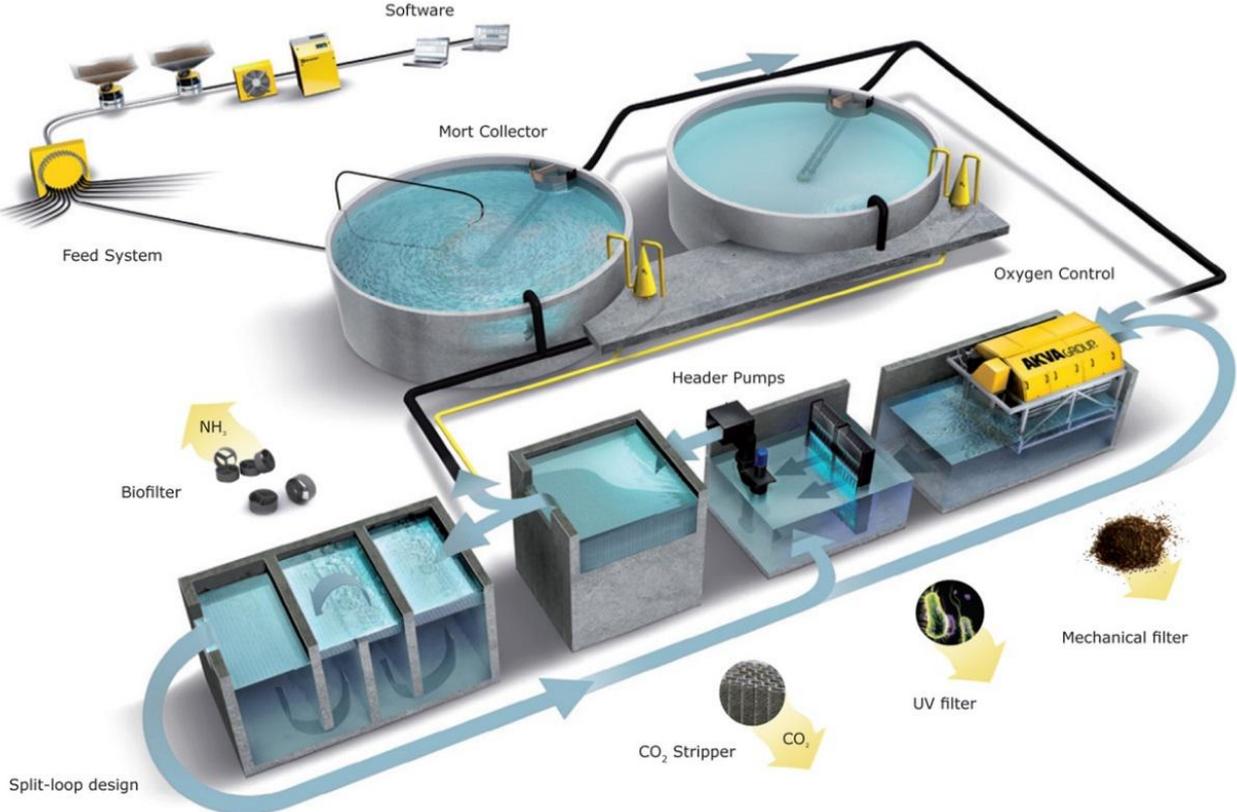
Closed containment systemer



2. Sustainable marine fish farming

- Fish farms in the area and applications for new fish farms are in process.
- The establishment of a new hub create lot of jobs.
- Environmental impact and consumer perception are critical parametres.
- **S:** Development og new jobs and logistic as service harbours. Use oof sidestreams for feed. Development of turism
- **W:** Impact on the environment
- **O:** Low salinity – good growth condition. Constant high price for salmon
- **T:** Impact on the environment is very critical. There is a risk, that growth in maryculture will be in another area.

3. Fishfarming in RAS



3. Farming of saltwater fish in RAS

- Recommended by green organisation.
- Technology is expensive and not mature for saltwater production
- Need of educated staff.
- Growth of marine fish farming will require increased production of smolt.
- **S:** Development of new jobs and logistic as service harbours. Use of sidestreams for feed. Development of tourism
- **W:** attraction of competent staff
- **O:** High price for salmon can pay for development of new technology
- **T:** Price and level of maturity of technology

4. Organic production of Vannamei



6. Alternative proteins

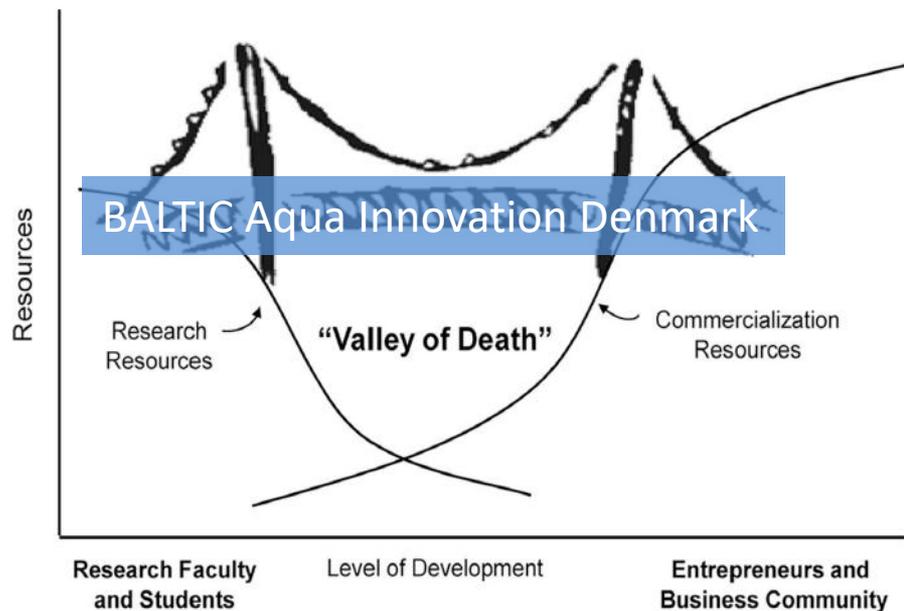


6. Tourism



Vision for BALTIC Aqua Innovation Denmark

Demonstration platform
Business development
Communication
Education



Feasibility of BALTIC Aqua Innovation Denmark -

- Map relevant network, potential partners and focus areas.
- Analyse how to supply relevant and science based and independent communication and identify need for education and training.
- Feasibility studie for the center. Develope business case
- Models and specific strategies for the first 3-5 years af the center

Thank you for your attention!

– we hope to keep in touch:

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