

# Innovation in the Nordic and arctic Bioeconomy

Dr. Sveinn Margeirsson, CEO, Matís Sigrún Elsa Smáradóttir, Research group leader, Matís

#### **Matís**

Matís is a state-owned, independent R&I company which strives toward value creation in the food and biotech industries, food safety and public health

Matís provides consultancy and services to companies in the seafood industry and agriculture as well as governmental agencies

www.matis.is/english

**Twitter: @matisohf** 



#### Let's not be afraid to make mistakes





# The bioeconomy – Brussels way

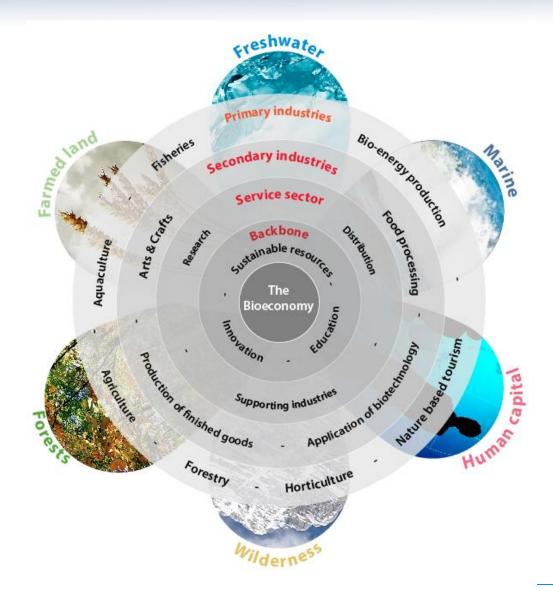






### **Nordic view**







# Why is human capital important for innovation in the bioeconomy?













**Aquaculture** 





**Software** 



**Transportation** 





**Marine research** 

KER9CIS

Fishing gear

**Biotech** 

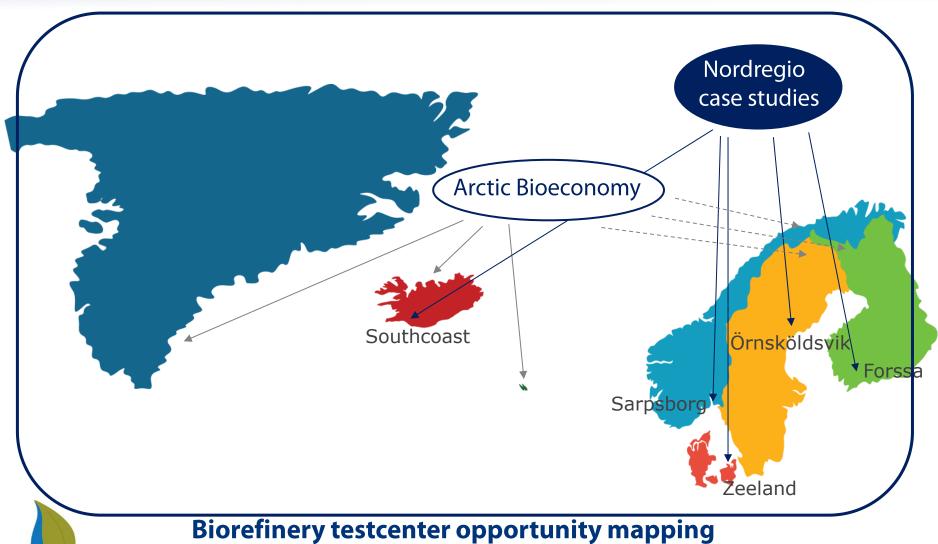
MARINOX

**Marketing** 

#### To navigate, you need a map

Arctic Bioeconomy





# **Future opportunities for bioeconomy**



#### in the West Nordic countries



# The project Arctic Bioeconomy

#### **Focus on West Nordic countries**



#### **Discussions and conclusions**

- Regional policy forum and strategy setting, West Nordic Bioeconomy forum / West Nordic bioeconomy stakeholder platform
- Rural development and infrastructure to support innovation,
   Centre of excellence
- How to create synergy between (West) Nordic and EU H2020 funding
- The Blue Bioeconomy
- Underutilized resources and new opportunities
- Opportunities across sectors



# Fish skin to valuable products





Arctic Bioeconomy
Focus on West-Nordic Countries



Fashion clothing



Skin and Tissue Repair with Fish Skin Transplants

# **High value (co-)products**



**Organic acids** 

**Polyphenols** 

**Fatty acids** 

**Polysaccharides** 

Monosaccharides

**Trace elements** 









**Biofuel** 

Platform chemicals

Cartilage compounds

Secondary metabolites

**Proteins** 

**Peptides** 

**Enzymes** 



# Multiple use of (co-)products



#### **Food ingredients**

**Aquaculture** 

**Agriculture** 

Medicine

**Research products** 









**Supplements** 

**Process aids** 

**Cosmetics** 

**Medical products** 



# **West Nordic innovation projects 2014**





#### Wholesome berry products

The Strandaber line of wild berry products originates from Strandasysia county in North West Icoland. The berries are either cold-pressed or pressed after heating to produce bilberry juice (BLÁMI).

The remainder (MASSI) is used for production of other foods (e.g. boosts) or sweetened and dried for snacks. The fresh products are preserved by freezing. No preserva-



tives and artificial sweeteners and colours are used.

Strandasysla county is known for its wild berries. The county is sparsely populated and only a small fraction of the berries is picked and used for food. The Strandaber products are made from berries which are hand-picked in the wild so the vegetation is not spoiled. The land should be a sustainable resource of wild berries.

The wild berries of Iceland have a strong health image and people have used them for centuries. Now, antioxidants (polyphenols) and antioxidant activity in Icelandic bilberries have been measured. Both the polyphenols and the activity were higher than in imported blueberries. The wholesomeness is

the driving force for marketing of Strandaber berry products. They will be marketed in health markets and sold as local products to fourists.

Signy Ólafsdóttri sithe initiator of Strandsber products. She grew up at the farm Sandnes in Strandasyfal county where bilberries can be picked in wide open spaces. The berries were used for traditional sweetened juice and jam which were used through the winter months. After working in the fish industry and the banking sector, Signy decided to develop the traditional berry products for the health conscious people.

Further information: Signý Ólafsdóttir, benpet@simnet.is

