

# Innovation in the Nordic and arctic Bioeconomy

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### **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

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## Let's not be afraid to make mistakes





Arctic Bioeconomy

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# The bioeconomy – Brussels way



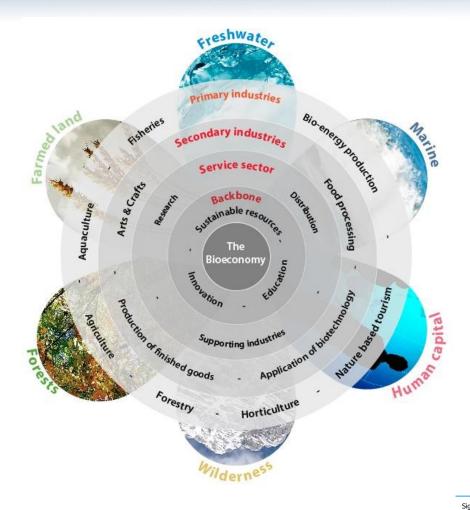




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## **Nordic view**







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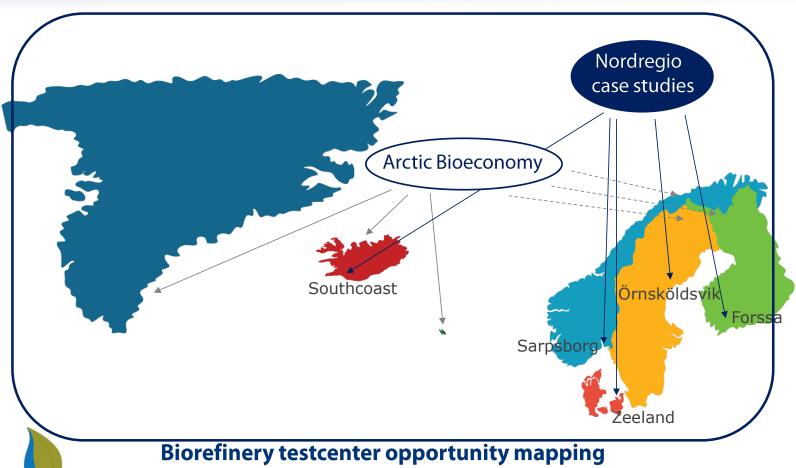
# Why is human capital important for innovation in the bioeconomy?



## To navigate, you need a map

Arctic Bioeconomy





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# 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



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# Fish skin to valuable products





Arctic Bioeconomy



Fashion clothing



Skin and Tissue Repair with Fish Skin Transplants

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



**Organic acids** 

**Polyphenols** 

**Fatty acids** 

**Polysaccharides** 

Monosaccharides

**Trace elements** 











Platform chemicals

Cartilage compounds

Secondary metabolites

**Proteins** 

**Peptides** 

**Enzymes** 

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# 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 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 preserved



The wild berries of Iceland have a strong health image and people have used them for centuries. Now, antioxidants (polyphenols) and antioxidant activity in lealand; billberries have been measured. Both the polyphenols and the both even being them in imported bilberries have been whether them is miported bilberries. 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 tourists.



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