

## The blue and the green Bioeconomy: Use of land and marine resources for competitive, resilient and inclusive rural regions

How to ensure that a competitive bioindustry contribute to rural development, to sustainable resource management, to resilient and diverse ecosystems and to inclusive economic development?

You should attend this session because:

*“The bioeconomy is of fundamental importance to the national economies of the Nordic countries, and especially important for rural development in large parts of the Region<sup>1</sup>”. It is an economy based on land and marine-based natural resources producing vital goods and services. The area has vast potential for the entire Nordic Region. The Nordic Region is a major producer of primary biomass – approximately 30% of Europe’s forest production and more than 50% of the total marine harvest in Europe, but differ widely between areas from fish, aquaculture and macroalgae being abundant in the West Nordic countries, forests being of main importance in Sweden, and Finland and animal manure of main importance in Denmark. The opportunities for their use are vast, ranging from food to fibre, from medicines to energy to tourism. However, all of these are dependent upon a sustainable management of biological resources and a fair distribution of economic benefits<sup>2</sup>. The newly developed Nordic Strategy for Bioeconomy from 2018 combines environmental, social and economic ambitions for a more sustainable Region. The vision is based on four points:*

- Competitive bio-based industries
- Sustainable resource management
- Resilient and diverse ecosystems
- Inclusive economic development

As land and marine areas are key for these biological and human activities increasing competition between uses are likely to occur<sup>3</sup>. The areas are also integral parts of ecosystems and indispensable for biodiversity and the carbon cycle. The regulation of ownership and management of land and sea, and user rights to the land, the sea and freshwater resources, or to the key products and services arising from them, is therefore crucial for their sustainable development potential. Such rights, their allocation and distribution, taxation and associated rules, determine productivity and the distribution of costs and benefits, including related public goods and “bads”

### Session Bioeconomy, 28. November, 16-17:30

Four presentations of each 10 minutes, followed by 10 minutes discussion. Each presenter prepare two key questions for the audience in order to engage and to focus.

- A) Competitiveness and rural development: The economic sustainability at local level
- B) Sustainable resource management: economic-social-environmental sustainable considering property rights, user rights, access etc.
- C) Resilient and diverse ecosystems: they differ and provide different opportunities
- D) Inclusive economic development: How to ensure involvement and how to ensure economic benefit to the included

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<sup>1</sup> The Nordic Strategy for Bioeconomy, 2018

<sup>2</sup> Smaradottir et al. 2014

<sup>3</sup> Bryden et al. 2017

**1600 – 1605 Introduction to the topic by Karen Refsgaard, Research and Deputy Director at Nordregio**

**1610 – 1620 Who have the rights to own and access the bioresources on land and in the sea? By David Langlet, Professor at Göteborg Universitet, SE**

- Has the bio-economy made public access to private land and certain resources on that land (“allemannsrätt”) problematic by making new resources valuable to the landowner and/or other commercial actors?
- Should a landowner have a right to genetic resources derived from organisms found on the property?

**1630 – 1640 Value Creation in Rural Areas – restrictions and incentives: Sveinn Margeirsson, CEO Matis, IS**

- What are the most regulatory restrictions inhibiting value creation in rural areas?
- What are the most important incentives for value creation in rural areas?

**1650 – 1700 Governance of big Bio Clusters: Cooperation with local ownership, knowledge and resources and global investments to kick-off the new bio by Thea Lyng Thomsen, at GreenLab Skive in Region Midtjylland, DK**

- How do we move from ideas and visions to real life change and impacts?
- How do we humanise our innovation system which is been to technologized?

**1710 – 1720 Competitive advantages in the Nordic region for the future of the blue bioeconomy and how to kick-off innovative businesses: The successful Ocean Rainforest in the Faroe Islands by Urd Grandorf Bak and Olavur Gregersen, CEO at Ocean Rainforest, FO**

- How can the Nordic coastal areas utilise the opportunities in the blue economy?
- How can we put value on the marine ecosystem services provided by low tropic aquaculture (e.g. seaweed and mussels)?

## About the participants

### **Professor David Langlet, Göteborg Universitet**

Since August 2015 I am the holder of the newly established chair in Ocean governance law at the School of Business, Economics and Law. The chair, which is partly funded by donations, has its background in the rapid growth of partially competing claims on the sea and its resources, and the attendant need for legal governance towards a sustainable management of the sea and its resources. The aim is to build a leading research and teaching environment that brings together disciplines such as law of the sea, environmental law and administrative law in order to be able to adequately deal with challenges related to planning and management of the sea in an international, regional and national context.

I am a member of the steering committee of the Swedish Mariculture Research Center (SWEMARC) and Ambassador / Coordinator of Maritime governance in the Maritime Cluster of West Sweden.

I have previously worked as senior lecturer and subject-director of environmental law at the Department of Law, Stockholm University. During 2013/2014 I was a research fellow at the Faculty of Law at Oxford University and Christ Church.

My research has touched on a wide range of topics in the fields of environmental law, law of the sea, energy law, and international economic law.



### **Sveinn Margeirsson, Director at MATIS, IS**

Mr Margeirsson was born and raised on a farm in Skagafjordur, Iceland. He obtained a BSc in Food Science, a PhD in Industrial Engineering and graduated from the Harvard Business School General Management Program in 2015. Since 2010, he is the CEO of Matis.

Mr Margeirsson's research experience includes working with several seafood companies, farmers, IT companies and universities, in Iceland and internationally. He has supervised MSc and PhD students and played an active role in science and innovation policy making in Iceland and Bioeconomy policy making in Europe.



**Ms Thea Lyng Thomsen, Development Consultant at GreenLab Skive, DK**

One of the driving forces behind initiative and development of the business park, GreenLab, located in Skive Municipality, Central Region Denmark.

GreenLab is a green business park build upon a full-scale, integrated, intelligent net. The integrated infrastructure enables a symbiotic industrial network between the entities located in GreenLab, which balances and optimizes supply and demand of energy and resources among the participants.

Ms Thea Lyng Thomsen works as a business platform driver with a focus on culture, innovation and impact. In the GreenLab setting it is essential to secure trust, local ownership and support to have global perspective and local impact work together in a business environment.

She has previously worked with the development of circular economy in a data driven perspective within construction and recycling of building materials in full-scale from a public position. As well as she has been engaged in the pre-phase of GreenLab identifying and enhancing local advantages in the culture to implement the common goal for both local and global partner: to become the centre for integrated green energy, intelligent grid and sustainable production.

With a degree in human science Ms Thea Lyng Thomsen has worked with culture and social innovation and methods for securing optimal inter-relations, trust building in a business development perspective.



**Ólavur Gregersen, MSc. Business Administration & Economics, CEO at Ocean Rainforest, FO**

Ólavur Gregersen has more than 30 years of experience as an entrepreneur and international consultant as well as non-executive Director in several innovative companies and projects. He is the founding partner of Syntesa Partners & Associates which provides research and innovation services within business development, project management and socio-economic impact analysis. Furthermore, he has been the coordinator of the European FP7 project ALL-SMART-PIGS, the Nordic Innovation project WhiteFishMaLL and MacroValue; and the NORA project MacroBiotech and TaraTekstil. He is the Dissemination and Exploitation Manager of the European H2020 BioBased Industry project “Macro Cascade”, and the Technical Director of the US ARPA-E funded project “MacroSystems”.

Ólavur is frequently invited as a speaker at international conferences on seaweed cultivation and growth in the blue bioeconomy. He is a member of the Nordic Bioeconomy Panel and the West Nordic Bioeconomy Panel representing the Government of the Faroe Islands. Also, he is a member of the European Blue Bioeconomy Forum Steering Group working for DG Mare in EU.

**Urd Grandorf Bak** is **Research and Innovation Manager** at Ocean Rainforest since 2015. She has a M.Sc. Environmental biology and geography. Urd is currently doing an industrial PhD on seaweed breeding and cultivation and is connected to the National Food Institute at Technical University of Denmark (DTU). According to the project plan she will finish her PhD in January 2019.



