

International Conference

# Growth in Blue Bio-economy

NORDIC HOUSE · TÓRSHAVN  
FAROE ISLANDS · **2-3 JUNE 2015**



Ministry of Fisheries



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NORDIC MARINE THINK TANK



# Growth in Blue Bio-economy



**Jacob Vestergaard**  
Minister of Fisheries

It is my pleasure to present the programme for the Faroese chairmanship of the Nordic Fisheries and Aquaculture Cooperation in 2015.

As chair, the Faroe Islands will provide a strong focus on growth in Blue bio-economy. The programme will be based on global processes related to economic growth based on marine resources, with a focus on thematic issues of importance for the North-east Atlantic and the Arctic.

Societies dependent on marine resources are facing big challenges in terms of increasing the value of their products and services. Traditional fisheries have proven to have limited growth potential. Finding new and more efficient ways to benefit from the enormous wealth of our ocean resources can contribute to the economic growth and welfare of coastal societies everywhere, not least in the Nordic region.

Bio-economic thinking and solutions can help us develop new and different approaches to realizing this growth potential. Bio-economy is about adopting a holistic approach with an emphasis on managing marine resources in a sustainable and innovative manner.

Innovative thinking is essential. We must examine the opportunities for using under-utilized resources and explore how we can combine the value chains and how this in return can provide us with greater value.

The programme focuses on the potential for growth in value of large pelagic and demersal fish stocks in the region, as well as unused or under-utilized resources such as seaweed. A focus on blue biotechnology will therefore be a natural part of the programme, as will current challenges relating to residual raw material from fisheries and aquaculture, and how these can be better utilized.

The political framework for addressing the challenges and potential for Blue Growth varies across the Northeast Atlantic and Arctic. The conditions for development and growth in bio-economy relate to the political development in the different countries in the region and will also be strongly influenced by the globalization of the fishing industry. The programme will also address these aspects.

International organizations have put Blue-economy on the agenda, precisely because it can realize the economic potential in marine resources. FAO has launched a "Blue Growth Initiative" as a follow up to Rio+20 and a way to help combat poverty in coastal societies. OECD is focusing on how "Green Growth" can also create growth in fisheries and aquaculture. Nordic bio-economy has also been launched as an over-arching focus area for the Nordic Council of Ministers. During the Icelandic presidency in 2014, this was dealt with under the title of "Nordbio". In Denmark's Nordic Presidency Programme for 2015, entitled "Growth, Welfare and Values", bio-economy is included as a priority area in the focus on growth.

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**We must examine the opportunities for using underutilized resources**

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As chair of the Nordic fisheries and aquaculture cooperation in 2015, the Faroe Islands will contribute to the growth of Blue bio-economy in the Northeast Atlantic and the Arctic. Through a number of projects, conferences, seminars and workshops, the opportunities, potential and as well as barriers to growth in blue bio-economy will be addressed.







# Programme

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Tuesday 2 June

**09:00-11:00 Theme I: Blue bio-economy at the global and regional level.**

*Moderator, Kjartan Hoydal, NMTT*

The keynote speakers at the session will describe the potential for blue growth in their respective areas and describe policy initiatives supporting blue growth.

**09.00 Blue bio-economy - unlocking the potential of seas and oceans.**

*Árni Mathiesen, ADG Fisheries and Aquaculture, FAO.*

**09.30 Barriers experienced by developing island countries and how partnerships could help.**

*The Minister for Environment and Energy, Wallace Cosgrow, Seychelles.*

**10.00 Blue bio-economy. Nordic countries and the Arctic.**

*Geir Oddsson, senior adviser Nordic Council of Ministers*

**10.30 Blue bio-economy in the Commonwealth of Nations.**

*Dr Julian Roberts, Senior Adviser (Ocean Governance).*

**11.00** *Coffee*

**11:30-17:00 Theme II: Potential growth in Marine Industries.**

*Moderator: Jesper Heldbo, NMTT*

This session will look at green growth and how it is measured, views from the industry on the potential in adding value from managing residue streams and on possible funding of research to bridge the innovation gap and the role of policy initiatives, action plans and deadlines, centres of excellence, stakeholder platforms in paving the way for growth in blue bioeconomy.

**11.30 OECD green growth and how do we measure it.**

*Carl-Christian Schmidt, Head of the OECD Fisheries Policies Division.*

**12.00 New value chains to manufacture sustainable high end marine ingredients from residues.**

*Oddvar Skarbø, Project leader, The Norwegian biomarine business cluster LEGASEA™ Norway*

**12.30** *Lunch*

**14.00 Potential in the residues from the pelagic fisheries in the North East Atlantic.**

*Odd Eliassen, Managing Director Havsbrún, the Faroe Islands.*

**14.30 Potential growth in marine industries. Can we learn from Icelandic success and failure?**

*Sveinn Margeirsson, CEO Matís, Iceland*

**15.00** *Coffee*



- 15.30 **EU Research and Innovation strategy and funding of blue growth.**  
*Jacques Fuchs, Deputy Head of the Marine Resources Unit, Directorate-General for Research and Innovation.*
- 16.00 **Paving the way for growth in blue bioeconomy.**  
The role of policy initiatives, action plans and deadlines, centres of excellence, stakeholder platforms and others in promoting growth in blue bioeconomy.  
*Dr. Christian Paterman, Director (ret) European Commission, Germany*
- 17.00 *Refreshment*
- 17.30 **The Allocation report published by the Nordic Marine Think Tank**  
*is presented by NMTT*

## Wednesday 3 June

- 9:00 – 13:00 Theme III Obstacles to and promotion of Blue Bio-economy**  
*Moderator, Sten Sverdrup Jensen, NMTT,*
- This session will look at possibilities for replacing materials based on petroleum with biomass based products. Are there structures that are obstacles to blue growth? Are countries able to cooperate in these matters? Can countries agree on the allocation of the marine resources? Is there a consensus on how to share benefits arising from the use marine resources in a fair and equitable way? Is there a level playing field?
- 09.00 **Value adding from managing residue streams, and harvesting new species, especially algae.**  
*Lene Lange, Professor, Dr. scient., DTU, Denmark*
- 09.30 **From Coastal State cooperation to Coastal State conflict.**  
*Nils Torsvik, Fiskeribladet Fiskaren, Norway.*
- 10.00 **Who owns the marine resources?**  
*Peter Ørebech, Professor, UIT, Norges Arktiske Universitet*
- 10.30 **Is there a level playing field?**  
*Bogi Eliassen, Copenhagen Institute for Futures Studies.*
- 11.00 *Coffee*
- 11.30 **Minister's roundtable**
- 12.30 **Closure of the Conference**  
*Ásmundur Guðjónsson, Chair of the Nordic Fisheries Cooperation 2015*

# Speakers

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## **Árni Mathiesen**

Assistant Director-General, Fisheries and Aquaculture Department  
Food and Agriculture Organization of the United Nations (FAO)

After completing his studies, Árni Mathiesen worked as a veterinarian, specializing in fish diseases for ten years. Mr Mathiesen was a member of the board of the Icelandic Veterinary Association between 1986 and 1987. He also served as a member of the board for the Guarantee Division of Aquaculture Loans between 1990 and 1994 and consequently the board of the Agricultural Bank of Iceland and of the Agricultural Loan Fund until 1998. During this time he was also the Chairman of the Council for the Prevention of Cruelty to Animals. Mr Mathiesen was elected to the Icelandic Parliament and served as Minister for Fisheries from 1999 to 2005 and subsequently as Minister for Finance until 2009. Before joining FAO in 2010, he was a consultant for the Confederation of Icelandic Employers as well as working in a general veterinary practice in Iceland.



## **Wallace Cosgrow**

Minister for Fisheries and Agriculture

Mr. Wallace Cosgrow was appointed Minister for Fisheries and Agriculture on February 2nd this year. Under the purview of his ministry, are the departments of Fisheries and Agriculture. He is also responsible for 2 Agencies – SFA (Seychelles Fishing Authority) and SAA (Seychelles Agricultural Agency).

Before his ministerial appointment, Mr. Cosgrow was the Chief Executive Officer of the Agency for Social Protection, a post he held for 2 years.

From April 2012 to November 2012, he was holding the post of Director General in the Office of the President; responsible for Public Service Affairs.

Mr. Cosgrow holds a BA in Economics with the University of East London. He is the eldest of a family of three. He is married and has 2 children.

As Minister for Fisheries and Agriculture he wants to see the fisheries and agriculture sectors move to greater heights in the development of Seychelles economy and the involvement of more private investors in the two sectors.

In his spare time he enjoys doing voluntary works in his local community. This helps him to mingle with people in his neighborhood.

Minister Wallace Cosgrow is a very friendly, outgoing and open person



### **Geir Oddsson**

Senior adviser Nordic Council of Ministers

Geir Oddsson was born in Reykjavik, Iceland. Early on, he developed an interest in the ocean. The close relationship Icelanders have had with the ocean has instilled a healthy respect for the sea and an interest in the sustainability of its resources.

As an undergraduate, Geir studied biology at the University of Iceland (UI). At that time, he also had a part-time job at the Icelandic Marine Research Institute (MRI). With encouragement from the MRI director, upon graduation, he took a position as the head of MRI's laboratory on the west coast of Iceland.

He then became affiliated with the School's Fisheries Research Institute (FRI), University of Washington. Coming from the North Atlantic, Geir jumped at the chance to do field research in the North Pacific. For his MS research, Geir investigated the physical and physiological parameters that could predict the survival of Pacific halibut as bycatch in the Alaskan trawl fisheries.

After completing his MS, he participated in launching the Marine Protection Program at the Wildlife Conservation Society. In 1998, Geir took a position at the University of Iceland, Reykjavik, as the director of the new Environmental Research Institute, which included overseeing an interdisciplinary MS program on environment and natural resources.

While at UI, Geir also consulted for the FAO and the World Bank, built a successful IT start-up business focusing on location-based technology solutions for the mobile industry and, between 1999 and 2001, served as the secretary of the Icelandic Parliament's Committee on Natural Resources. In 2006, he was recruited to the Icelandic International Development Agency, where he served as head of several departments and programs that focused on missions in Central America and Uganda.

Currently, Geir lives in Copenhagen, where he is senior policy advisor at the Nordic Council of Ministers, comprising Denmark, Finland, Iceland, Norway, and Sweden, as well as Åland, Greenland, and the Faroe Islands. He is responsible for Nordic cooperation, regional policy, and strategy development on marine resources, fisheries, and aquaculture as well as the bio based economy."

Geir's job entails supporting political processes at a regional level based on national and international policies and strategies. In his own words: "Fisheries and aquaculture are prominent industries in the Nordic countries and profiling sustainable Nordic solutions to the European Union and to international institutions is a big part of my job."



### **Dr Julian Roberts**

Senior Adviser (Ocean Governance)

Dr Julian Roberts is a senior adviser in the Commonwealth's Oceans and Natural Resources Advisory Division where he provides advice on planning and management of marine resources to Commonwealth member Governments. He has worked widely across the Commonwealth including in the Pacific and Indian Ocean Regions and the Caribbean Sea.

Dr Roberts was awarded his PhD in International Maritime Policy in 2006. Over the last 20 years Julian has worked on a broad range of marine issues including, coastal zone management, pollution control, dredging and disposal of waste at sea, regulation of ship sourced pollution and vessel routeing, off-shore exploration and production, oil spill planning & response and marine spatial planning.



### **Carl-Christian Schmidt**

Head of the OECD Fisheries Policies Division

Carl-Christian SCHMIDT is the Head of the Fisheries Policies Division in the Directorate for Trade and Agriculture of the OECD.

Recent work of the Fisheries Policies Division includes green growth in fisheries and aquaculture, ocean economy and innovation.

Mr. Schmidt holds a Master's degree in Economics and Political Science from Copenhagen School of Economics and Business Administration and a postgraduate Certificate of Advanced European Studies from the College of Europe, Bruges, Belgium.



### **Oddvar Skarbø**

Project manager, LEGASEA™

Oddvar Skarbo is project manager of the biomarine business cluster Legasea™, within the innovation organization Alesund Knowledgepark, who also is running the maritime cluster Global Center of Expertize Blue Maritime. Both clusters are representing the business cluster program of the Norwegian authorities. LEGASEA's vision is to become a global industrial leader of sustainable and profitable use of marine bioresources and trimmings. Mr. Skarbo held a wide range of professional positions, e.g. section manager in a mineral oil research organization (SINTEF), CEO of Alesund University College, development director in Norway's leading seafood company, and responsible of three business startups.



### **Odd Eliassen**

Managing Director Havsbrún, the Faroe Islands

Mr. Eliassen (born 1965) is responsible for the Havsbrún activities (Feed, meal and oil). From 1988 to 1995 Mr. Eliassen was sales manager at Havsbrún and from 1995 Director of the Feed Department. In addition to this Mr. Eliassen was a board member of Bakkafröst from 2006 to 2012. Odd Eliassen is part of the Group Management.



### **Sveinn Margeirsson**

CEO Matís, Iceland

Born and raised on a farm in Skagafjörður, Iceland. BSc in Food Science and PhD in Industrial Engineering. CEO of Matis since 2010 and finished the Harvard Business School General Management Program in 2015. Research experience includes working with several seafood companies, IT companies and universities, in Iceland and internationally. Has supervised MSc and PhD students and plays an active role in science and innovation policy making in Iceland.



### **Jacques Fuchs**

Deputy Head of Unit Marine Resources - Directorate for Bioeconomy  
DG Research and Innovation – European Commission

Jacques Fuchs is currently Deputy Head of the newly created Marine Resources Unit of the Bioeconomy Directorate in DG Research and Innovation. He is in charge of following the implementing of Horizon 2020 programme in support to the Blue Growth agenda with a focus on unlocking the potential of aquatic resources and marine and maritime cross-cutting research between different parts of Horizon 2020. As Deputy HoU, he also contributes to the definition and implementation of strategic research policy initiatives on innovation, sea basin strategies and engagement with citizens.

Trained as a marine biologist, he has worked for more than 20 years on sustainable exploitation of marine living resources in France and abroad before joining the European Commission in 2001. In the EC, he first served as Scientific Officer in DG MARE before being appointed in 2009, Head of Sector Fisheries and Aquaculture in Directorate Food, Agriculture and Fisheries and Biotechnology in DG RTD. He received his Ph.D in aquaculture from the University of Marseille-Luminy, France





### **Dr. Christian Paterman**

Director (ret) European Commission, Germany

Up to August 2007 I was the responsible Director in the European Commission to elaborate the concept of the Knowledge Based Bioeconomy, KBBE, which was launched in Brussels in September 2005. In the 7th Framework Programme of the EU on RTD starting 2007 2 Billion € were allocated to do relevant research for it.

After my retirement I started upon the request of many stakeholders to advise national governments, local and regional institutions how to implement this new concept of the bioeconomy. In this context I also founded the German Bioökonomierat in 2009, which became the main advisory body for the German Government and later served as a model for the Bioeconomy Panel of the EU.

Last autumn I was invited to assist the Western Nordic Union States in their preparation of their Bioeconomy strategy, which I with pleasure still do.



### **Lene Lange**

Professor, Dr. scient., DTU, Denmark

Field of Research: Understanding fungal biomass conversion in nature; use such insight to discover new fungal proteins of relevance for generating increased value from agricultural and agroindustrial side streams and waste.

Methodology: Fungal experimental molecular biotechnology, meta-transcriptomics and secretomics, function targeted mining of sequence databases by the use of Peptide Pattern Recognition Technology platform.

Career path, in summary: Reached research director level positions in both academia and industry; has hereby acquired extensive experience from all parts of the knowledge-value-chain: research, technology, development, innovation and commercialization. She has a comprehensive portfolio of past and present positions in boards and advisory functions (incl several chair and vice chair positions) for both public and private R&D heavy organizations (global, European, Nordic, and Danish).



### **Nils Torsvik**

Fiskeribladet Fiskaren, Norway.

Education: Master of science, University of Tromsø

Since educated in 1982 I have been working with information in the Directorate of Fisheries, and in the Institute of Marine Research.

From 1992 and until 2011 I have been editor in chief in Fiskaren, and from 2001 managing director.

After 2011 I held the position of editor in Fiskeribladet Fiskaren.

Co-editor of the book "Fiskeribiologi" (1995), used for education in highschools.

I have also been a fisherman and an officer in the coastal artillery in the 1970s.



### **Peter Ørebech**

Professor, UIT, Norges Arktiske Universitet

#### Professional employment

2008-	Professor of jurisprudence, UIT Arctic University of Norway
2005-2007	Visiting scholar, Harvard Law School, Massachusetts
2003-2005	Director – Institute Marine Resources Management
2002-2005	Visiting professor of law, University of Zagreb, Croatia
2000-2003	Visiting professor of law, Chicago-Kent College of Law, Illinois
1999-2006	Visiting professor of law, University of Namibia,
1994-2005	lecturer, Norway Technical University, Trondheim
1989-1994	Advocate, Tromsø
1987-1989	Professor of law, University of Tromsø

#### Project most recent

2010-2014	EU 7th FP, Ecosystem-based Responsive Fisheries Management KBBE.2010.1.4-07: Team participant
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### **Bogi Eliassen**

Copenhagen Institute for Futures Studies.

Bogi is an expert in international relations and an experienced international consultant. He is an associated partner in the Non for Profit Think Tank, Copenhagen Institute for Future Studies. He comes from the Faroe Islands and is educated in Political Science from the University of Aarhus. He has been employed in the Faroe Business Affairs and Ministry of Foreign Affairs where he worked with the trade relations with EU and Free Trade Agreements with other countries, as well as developing a general framework for Faroese Development Aid.

He has co developed the FarGen concept and project to make use of human genomics to improve health services, treatment and prevention, The concept is based on broad international cooperation with cutting edge scientists and companies. The last year Bogi Eliassen has also focused on the uses of genetics in fishery for stock identification, stock management and traceability in an international project called Fish Gen.

He is also a course provider for world leading provider of training for the oil industry, Schlumberger Next, where he runs the course Geopolitics of Oil, which he has developed personally.

He is a member of the Strategic Council of Faroese Fish Policy and Negotiations, Ministry of Fishery.







