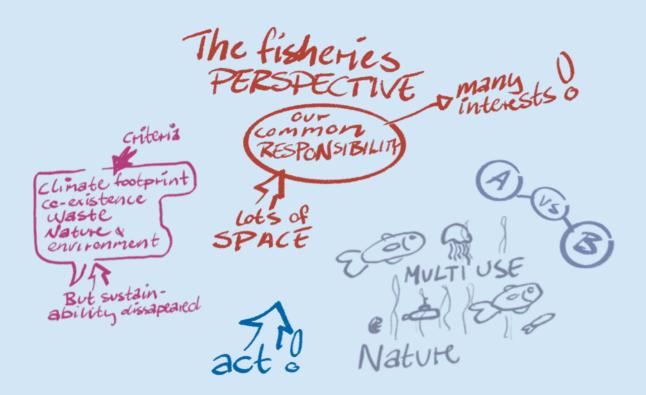


Nordic Climate Change Forum for Fisheries and Aquaculture

III NMTT-ICES WORKSHOP



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Introduction

This document has been produced under the auspices of an ICES Expert Group or Committee. The contents therein do not necessarily represent the view of the Council.

The event took place on 16 January 2025, Hotel Marine Plaza, Helsingborg, Sweden with financial support from the Nordic Council of Ministers.

Two previous and related ICES/NMTT workshops within the framework of "The Nordic Climate Change Forum for Fisheries and Aquaculture" took place in 2021 and 2023.

Reports can be found here:





Agenda

Nordic Climate Change Forum for Fisheries and Aquaculture

III NMTT-ICES Workshop

Consumers and Climate Change

16 January 2025, Hotel Marine Plaza, Helsingborg, Sweden

9:00 to 11:00

Session 1 Setting the Scene

Moderated by Carl-Christian Schmidt

This opening session will provide an update on the latest climate change science as it relates to the fisheries sector and a brief review of mitigation and adaptation policies. What are the implications for the fishing and aquaculture industries? The session will also look at the megatrends of food consumption and provide insights on the role of marketing law.

9:00–9:10	Opening, introductions and background by NMTT and ICES David Reid, Chair ICES Science Committee
9:10-9:35	Climate change, carbon budgets and fisheries: interacting effects David Reid, Chair ICES Science Committee
9:35–9:50	Climate impact of our diet and the role of seafood Professor Elinor Hallström, National Food Institute, DTU, Denmark
9:50–10:10	Megatrends in food consumption; perspectives from the FAO-OECD Agricultural Outlook Director Audun Lem, United Nation's Food and Agriculture Organization

10:10-11:00	Marketing sustainability, environmental and climate aspect – legal framework and enforcement practices Christian Poll and Anna Olesen, Danish Consumer Ombudsman Institution, Denmark
11.00	Summing-up
11:00–11:30	Coffee break

11:30 -14:25

Session 2 Life Cycle Assessment and carbon labelling in the Nordics

Moderated by Sara Hornborg, RISE, Sweden

The purpose of this session is to better understand the nature of life cycle assessment for seafood products and addressing the limitations and challenges in establishing an international comparative methodology. The session will also provide an overview of national relevant food labelling initiatives. Further, the role of the EU in ensuring a level playing field across the EU market for fish and fish products will be addressed.

11:30–12:00	Setting the scene: on harmonizing of LCAs, recent advances and further research needs for LCAs of seafood		
	Sara Hornborg, senior researcher, RISE Research Institutes of Sweden,		
	Sweden.		
12:00–12:20	Current status on Product Environmental Footprint Rules (PEFCR) for		
	marine fish for human consumption		
	Henrik Stenwig, Sjømat Norge, Norway.		
12:25–12:45	Life Cycle Assessment – The tool for environmental management in the		
	seafood chain; observations from the field		
	Erik Hognes, INAQ, Norway		
12:45–13:45	LUNCH BREAK		
13:45–14:15	Norway's New Tools project (project by Folkehelseinstituttet, Norway),		
	Developing scores for the environmental and social sustainability of foods		
	Rannvá Danielsen, senior researcher Norwegian Institute of Sustainability		
	Research, Norway		

14:15–14:35	Iceland Country Case: Carbon Footprint of Icelandic Food Birgir Örn Smárason Research Group Leader, MATIS, Iceland
14:35–15:00	Coffee break

15:00-16:45

Session 3 Understanding consumer awareness and changing buying habits

Moderated by David Reid, ICES

This session will focus on measures and initiatives taken by public authorities and private fisheries operators in underpinning consumers buying decisions for food, with a focus on fish and fish products. The session will also provide insights on consumer perceptions on climate change.

15:00–15:30	Sweden's Mistra Sustainable Consumption project and how taxes can be used to change consumer behaviour Jörgen Larsson, Associate Professor, Chalmers University
15:30–15:50	A fish processors view on labelling for sustainability, food intake and CO ₂ Anna Elizabeth Jorgensen, Espersen A/S
15:50–16:15	Do consumers care about labelling for climate change? Anna Kristina Edenbrandt, Department of Economics, Swedish University of Agricultural Sciences, Sweden
16:15–16:35	A fisher organisation perspective on CO ₂ taxes and carbon labelling Ole Lundberg Larsen, Danish Fishermen's Organisation, Denmark
16:35–17:00	Questions and Answers, Summing up and Farewell

Summary The Essence of the Meeting

Introduction

The NMTT-ICES Nordic Climate Change Forum for Fisheries and Aquaculture serves as a sounding board and platform for industry stakeholders and governments to collaborate and advance our understanding in addressing the pressing challenges of climate change in fisheries and aquaculture. There are numerous aspects at the intersection of climate change and fisheries and aquaculture as developed at the First ICES-NMTT Forum meeting in 2021 (Elsinore, December 2021^[1]).

Food systems are responsible for a third of greenhouse gas emissions (GHG) according to Crippa et al. (2021).^[2] Therefore, reducing emissions across food value chains is crucial. Consumers play a pivotal role in this process by shifting their food demand toward products with lower GHG emissions and minimizing food waste. Given that seafood generally has lower GHG emissions compared to other foods^[3], the fisheries and aquaculture sectors have an important role to play.

The Nordic Climate Change Forum III focused on strategies to encourage consumers to choose food products with lower GHG emissions, emphasizing the benefits of increased fish consumption. In addition to its environmental advantages, seafood consumption also contributes to healthier and more balanced diets.

A total of 65 participants, including 10 online had signed up to attend the III Nordic Climate Change Forum for Fisheries and Aquaculture which took place in Helsingborg, Sweden on 16 January 2025. Participants exchanged views and ideas on how to nudge consumers into lowering the climate effects of their food consumption with a view to especially understand the role and possibilities offered by fish and fish products.

See ICES Scientific Report, Volume 4, Issue 7 at

https://www.nmtt.org/_files/ugd/ec7f32_84f500f9835646e8bb540bfd4227c76d.pdf

See https://www.nature.com/articles/s43016-021-00225-9
 See https://ourworldindata.org/food-choice-vs-eating-local

Suggestions for Action

Several suggestions for action were put forward for consideration by the meeting participants and around which a concluding discussion emerged:

- Educate consumers. Very much a shared responsibility between the public authorities and private sector, both as general food information campaigns and additional information on individual products
- But it is also imperative to provide consumers with information that makes it
 possible to choose food products with a known and verified CO₂ impact. This
 is presently not the case in most food markets
- While certain advances in analysing and understanding CO₂ implications of food production have been made, work remains to be done, both analytical and informational. At present, consumers are not able to direct their choices accordingly.
- Further advance on CO₂ labelling on food. Use easy-to-understand indicators (e.g., green for low CO₂, red for high CO₂) to guide purchasing decisions.
 While this has started as public sector initiatives in some of the Nordic countries, the private operators have been slow in opting for CO₂ food labelling, when available.
- It is crucial to ensure that labelling systems are trustworthy and backed up by verifiable third-party certification. Challenges of a legal nature exist but are there other obstacles, mainly concerning data and of a methodological/technical nature.
- Alternatives to labelling may include taxes on foods with a high CO₂
 footprint, and/or subsidies for those foods with a low CO₂ footprint. It was
 shown that taxes are a "hard" policy measure, but alone they are insufficient
 in moving consumers towards healthier foods with lower GHG emissions.
- Life Cycle Assessment (LCA) methodologies are difficult to compare across
 products and markets due partly to data availability, and partly to
 differences in methodologies. This is a particular concern for fish and fish
 products which are among the most traded food stuff in the world crossing
 borders several times before reaching the final place of consumption. In the
 Nordic region this is a major challenge as fish markets are highly integrated.

- A key issue is how the proposed LCA methods are compatible across markets or whether they might constitute a trade impediment. In this regard, it is important to ensure Nordic coherence, and perhaps interoperability/equivalence of such systems across the Nordic countries, due to the close links between the fisheries markets.
- Additional work and cooperation are needed to ensure a common level playing field. The EU Guidance on Environmental Footprint (PEFCR) for marine fish for human consumption is a welcome basis on which to start harmonisation.
- Access to food options with information on climate impact could be further enhanced by the food service industry.
- In schools, there is a need to increase learning about food and its climate impacts.
- Fish processors, distributors and industry organisations all have a role to play in advancing the climate change agenda and it is in their interest to do so.
 For fish and fish products their relatively low CO₂ impact compared to landbased food is an added advantage.
- This might be further helped by the way supermarkets display foods e.g., with low CO₂ foods at eye level within easy reach of consumers.
- In its dietary recommendations the Nordic Council of Ministers now include references to the environmental/climate impact of consuming specific food products, "Nordic Nutrition Recommendations"^[4] which is a solid reference for market players.
- Some fish processors are proactively working on better understanding their own CO₂ impacts and are developing strategies for how to communicate this to their clients.
- Public authorities can also play a more direct role through regulatory measures e.g. limiting CO₂ impacts of foods and by ensuring transparency through food supply chains (for example mandatory disclosure of data).
- Determining the release of CO₂ due to any activity such as fishing or
 aquaculture goes beyond simply fuel use. With wild catches, a CO₂ budget
 needs to include possible CO₂ release from the seabed, the CO₂
 sequestration roles of the fish caught (particularly their faecal products) as
 well as from fishing induced changes in the food web, e.g. fewer high trophic
 level species in the ecosystem.

Moving forward, a combination of regulatory and voluntary approaches is necessary to enhance consumer understanding and encourage sustainable food choices. Importantly, however, moving forward requires political momentum and risk taking. It also requires a multipronged approach to address this agenda, involving all fisheries and aquaculture stakeholders and working on several tactics to enhance consumer understanding. There is a need for policy makers to advance their thinking on how to meet consumer expectations. Food consumption is one of the areas where consumers can act; but without adequate signals from policy makers and public authorities, we are not likely to move forward.

Summary of Presentations

The overall objective of the Third Forum Workshop was to understand the role of fisheries stakeholders and how policies and private initiatives can leverage consumer influence and their buying power. The focus was on understanding the role of policies and practices (e.g. labelling, information campaigns, etc.) that can harness the power of consumers to make informed purchasing decisions.

Welcoming remarks were formulated by **Carl-Christian Schmidt (NMTT)** and **Dave Reid (ICES)**. Participants were introduced to the history of NMTT and ICES and on the outcomes of the previous two Forums. It was highlighted that working together as a team by joining forces on the Forum series had helped broaden the scope of the Forum initiative and ensured that the latest science was readily available. In their opening remarks it was also underscored that while climate change is a long-term phenomenon, identifying possible areas for action was needed now. This also includes actions on the consumer side, an often-forgotten part of the equation to ensure that climate change is addressed.

Session 1 Setting the Scene

The Workshop started with an update on the latest climate change science as it relates to fisheries and ocean issues.

The presentation by **Dave Reid (ICES)** gave an overview of the climate change impacts on fisheries including spatial distribution (including migration), productivity, growth and phenology dimensions. The impact of fisheries on climate change was also addressed in relation to the "Biological Carbon Pump", seabed carbon storage degradation and emissions from the use of fuel by fishing vessels. In his presentation Dave Reid highlighted that the present stock assessments of ICES are statistically stationary and do not directly take climate change variations into account. This may compromise our ability to model stock dynamics accurately. There is a need to find ways to help change management approaches to better incorporate known linkages with the impacts of climate change. This will necessarily involve more research and more data.

Elinor Hallstrom (DTU) talked about the role of seafood in the diet. She started her presentation by highlighting that at least half of the world's population lives on an "unbalanced" diet, characterized by either inadequate or excessive food intake. In the Nordic countries, food consumption contributes approximately 2 tonnes of CO2 equivalents per person annually - three times more than suggested climate goals. Thus, food choices can play a major role in addressing climate change. Seafood consumption accounts for an estimated 3–12% of the total climate impact of Nordic diets. However, there is a considerable variation in climate impact between seafood species, with small pelagic fish having the lowest impact and crustaceans the highest. Currently, seafood consumption in most Nordic countries is below recommended levels from a health perspective, while red meat consumption exceeds maximum recommended intake. Research suggests that replacing red meat by seafood could substantially reduce dietary climate impact. The potential for combined health and climate benefits suggests that a "Blue Dietary Transition", based on sustainably sourced seafood, may be a worthwhile effort.

Christian Poll (the Danish Consumer Ombudsman Institution) provided an overview of the work of the Danish Ombudsman Institution as it relates to environmental and climate claims. The Institution has been an independent state authority for 50 years and has recently received a budget increase for a strengthened enforcement on green claims. Environmental marketing is a prioritised area of work in the Institution focussing on both information and enforcement. An updated recommendation guide on green marketing was issued during the autumn 2024. Christian Poll underscored that claims must be correct, precise, relevant and balanced. Furthermore, companies making the claims must be able to "substantiate" it and documentation must generally be supported by studies or statements from independent recognised professional bodies. The Consumer Ombudsman prioritises his cases independently and cooperates with other authorities within specific legal areas. He gave a few examples of how the Institution had pursued cases of misleading claims and the actions taken, including warnings and fines. The Institution can issue advance notices on companies' planned marketing as to whether the Institution finds the marketing to be legal. Key messages were to omit the use of general claims, like "environmentally friendly" and "sustainable" and instead use specific claims on outstanding actions and results that the company has carried out and obtained. Furthermore, climate compensation is a difficult area that is about to become more or less illegal in marketing by autumn 2026 due to new EU legislation.

Session 2 Life Cycle Assessment and CO₂ labelling in the Nordics

In Session 2 the Forum focussed on understanding the state of the art with respect to life cycle analysis across the Nordic fisheries and aquaculture sectors. Life cycle analysis (LCA), a sine quo non method for food climate labelling, captures the greenhouse gas emissions through the value chain and is thus the crux of the matter in identifying which food product has which level of greenhouse gas emission, measured from "capture to table". The Forum also identified data requirements, and the methodological challenges involved in establishing a comparative set of GHG measures for food products, with a focus on fish and fish products. This has implications for fisheries policy makers, fisher organisations, fish processors and supermarkets alike.

Sara Hornborg (RISE) gave a presentation dealing with the harmonisation of life cycle assessments (LCA) and looking into recent advances and further research needs for seafood LCAs. She highlighted that due to different decisions taken in LCA modelling, and different age and quality of underpinning data, it is imperative to apply caution when interpreting available LCA results across countries and products. She underscored the need for harmonizing these methodological decisions taken in individual LCAs when performing comparisons of foods in e.g., diet studies, and provided a couple of examples on how this may be done and insights gained. Furthermore, the LCA in its present form is inadequate in assessing impacts on biodiversity, but method development in rapidly taking place. One initiative in this respect is the Food Biodiversity Database at RISE. However, it is still open for discussion if LCA is the right approach to assess biodiversity impacts. Besides a lack of robust biodiversity assessment methods, in particular for seafood, another gap in the present LCA approach to assessing climate impacts of fisheries is lack of consideration of potential effects on carbon sequestration in the ocean. Moreover, biogenic emissions of aquaculture are gaining increased attention in LCA modelling. In conclusion she mentioned that improved GHG estimates for seafood in LCAs are needed, which calls for further research and data collection for a better understanding of basic ocean processes and how to accurately model them in LCAs, and that representative and harmonized LCAs are essential for informed decision-making.

The presentation by Henrik Stenwig (Norwegian Seafood Federation (Sjømat Norge)) provided an overview of the status of the product environmental footprint rules (EU-PEFCR) as they relate to marine fish for human consumption. The Product Environmental Footprint method (PEF) provides guidelines for modelling, calculating, and reporting life cycle environmental impacts of products and organisations. The PEF method, developed by the European Commission, are built upon established international practices and standards, such as ISO 14040/44. As such they provide a tool to make informed purchasing decisions. The original project started in 2014 and only finished recently covering both wild caught fish and farmed fish. The work is expected to be published shortly and will then be a useful, and (sine qua non) essential for LCA in fisheries, set of guidelines/reference document for how to assess the climate impact as well as fifteen additional environmental impacts of fish from both wild caught and farmed sources. Ultimately, this may then be the basis for consumer product information.

Erik Hognes (INAQ) reflected on the practical lessons from the use of LCA in the seafood industry. He underlined that for LCA to have a real impact, management and board members of companies using it need to familiarise themselves with the intricacies of these methodologies and understand their scope and limitations. He also observed that a transition towards lower GHG emissions should be driven by companies internally and not by consumers. There is a close link between the requirements for reporting on cooperate sustainability (e.g. CSR Directive) and the use of LCA as a tool to help in doing so. In conclusion, Hognes highlighted that LCA is an important conceptual tool to help advance towards better reporting and understanding of climate impact and that this should be internally driven as a means for companies to help reduce their overall climate impact.

Rannvá Danielsen (NORSUS, Norway) provided an overview of the ongoing "New Tools" project which seeks to develop environmental and social scores for food products. This is a major project involving 28 partners from throughout the food value chain and a 40 million NKK. project over five years. The methodology for assessing environmental and social impacts is Life cycle assessment and Social life cycle assessment, respectively. In order to identify the most important environmental and social impacts for food products, stakeholders were consulted through surveys and workshops. Not all of these impacts were relevant for fisheries and aquaculture, and some impacts needed specific indicators for assessing impacts related to fisheries and aquaculture. Environmental and social indicators for fisheries and aquaculture are currently being tested for their suitability and feasibility. A major challenge is the weighting of these different indicators into a single score that can be used to communicate the overall environmental and social impact of food products.

The final presentation in this session 2 by Birgir Örn Smárason (MATIS) concerned an ongoing Icelandic project on measuring the carbon footprint of Icelandic food. A major challenge in establishing an LCA for Icelandic food is data availability. The aim of the project is to provide consumers, the government and stakeholders in Iceland with reliable, transparent and comparable information about the environmental impact of food. However, data are fragmented as very few primary food producers have solid organised records. The big Icelandic fish companies are an exception, and good and accessible data that can be used for LCAs are readily available. The Icelandic project uses internally agreed LCA methodologies as outlined by ISO standards 14044 and 14040 and the EU-PEFCR. The project has so far been able to calculate carbon footprint for lamb, milk, beef, potatoes and cucumbers. Principal conclusions from the first part of the project concern the challenges of data availability and that further joint effort across stakeholders is needed on data management. Two new projects were also presented on carbon footprint assessment and the development of a tool for calculations and data management of fisheries in Iceland.

Session 3 Alternatives to labelling: Business and policy initiatives to ensure consumer awareness and changing buying habit

Companies along the value chain (fisher organisations, processors, supermarkets) can play a key role in engaging and educating consumers about products they put onto the market. This was the focus of the third part of the Workshop. This may involve information campaigns, consumer guides, educational tools, nudging in shops and restaurants all the way through to establishing the groundwork for certification systems that can alert consumers to GHG contents of the food products they consider buying. Likewise, the public policy toolbox includes information campaigns and labelling, but taxes and subsidies as economic market instruments may also be considered. Which of such policies and private initiatives are most effective in improving food literacy and moving consumers towards climate friendly food products was a central issue addressed in Session 3.

Jorgen Larsson (Chalmers University) talked about the use of taxes and subsidies to change consumer demand towards healthier food with lower GHG emissions. He underscored that dietary habits are both an individual choice but also a social challenge insofar as many costs are associated with obesity and unhealthy diets more generally. He mentioned that the climate effect of food intake is more than double that of the traffic polluting effect on climate. The policy options available are dietary guidelines, voluntary labelling, marketing regulations and taxes and subsidies. The work carried out in his projects showed that taxes could be an instrument of choice in moving towards a healthier food intake with a positive effect on climate. A broad majority of respondents supports an increase in tax on sugar sweetened beverages and a reduced tax on fruits and vegetables and whole grain products. The support for taxing red meat is less straight forward; it is supported only if the tax revenue is used to lower taxes on healthy food.

Anna Elizabeth Jorgensen (Espersen A/S) provided a view from the fish processors and their work on labelling for sustainability food intake and CO2. Espersen's sustainability strategy deals with net positive fishing, resource use, supply chain integrity and worker health and welfare. Insofar as Espersen's fish supplies are concerned almost 100 per cent of the fish is certified to standards such as MSC and ASC. That is also the case with other raw materials used in the production. Retailers are asking for additional information related to sustainability, and it is envisaged that information regarding climate impact will soon follow. However, it remains a challenge that production lines are not batch oriented and serves individual products and customers each with their requirements. In preparation for further labelling requirements Espersen has identified and agreed to carbon emission reduction targets while participating in a case study that seeks to strengthen data transparency of supply chains. This will help move toward greater transparency and product labelling for climate.

Do consumers care about labelling for climate change? was the central question posed by **Anna Kristina Edenbrandt (SLU)** in her presentation. She referred to a study undertaken with COOP Sweden and which analysed information from an online questionnaire and purchase data. This study concluded that the consumers with the heaviest emission pattern are also the same that know little about climate change; they are also those with the least interest in climate information on products. The study also revealed that climate labelling is a means to inform consumers and enable choice, but that this is highly dependent on the label and information design. Finally, it was observed that climate labels can inform consumers as well as producers and thus provide an incentive for processors to reduce their climate impact.

Ole Lundberg Larsen (Danish Fishermen's Organisation) provided an overview of the functioning and activities of the Danish Fisherman's Organisation. He highlighted that the CO2 emissions from the Danish fishing fleet have been reduced by 60 per cent since 1990. This has come about by changing fisheries management settings and resulted in fewer but bigger vessels. Additional reduction in CO2 emission is anticipated and zero emission to be reached by 2050 at the latest. He referred to an ambitious tax reform agreed to in 2022 which will introduce a CO2 tax; this will include the fisheries sector, but without a compensations arrangement decided. It is likely that this new arrangement will have consequences including that fishers will refuel abroad (where there is no CO2 tax). Green transition is not yet feasible due to technological issues and lack of innovation. The cost of the CO2 tax will be borne by the industry due to international competition and the fact that most fish is sold via auction. He then reviewed the work on the Danish climate label proposal of which the Fishermen's Organisation had been a partner. While not yet implemented, it has not been thoroughly shown if such a national, but voluntary labelling system will have the desired effect in nudging consumers towards a healthier diet with lower climate impact.

Annex 1 List of participants

Last Name	First Name	Affiliation/Institute	Country
Aanesen	Margrethe	Senior Researcher, Norges Handelshøyskole	Norway
Alias	Izabela	Aquaculture Coordinator, Swedish Board of Agriculture	Sweden
Arvens	Maria Pettersvik	Senior Advisor, Norges Fiskerlaget	Norway
Bachhaus	Liv	Head of Section, Fødevareministeriet	Denmark
Barazzetta	Francesca	EUROFISH , International Organisation	Denmark
Bastardie	Francois	Senior Researcher DTU Aqua	Denmark
Berg	Hilde Sofie	Advisor Norwegean, Directorate of Fisheries	Norway
Blasiak	Robert	Associate Professor, Stockholm Resilience Center	Sweden
Blomquist	Johan	PhD Associate Professor, AgriFood Economics Centre, SLU	Sweden
Both	Adrianus	Aqauculture Researcher, IVL Svenska Miljöinstituttet	Sweden
Bæk	Anne Mette	Maneging Director, European Fishmeal	Denmark
Clink	Lars	Nordic Marine Think Tank, Secretariat	Denmark
Dahlberg	Carl	PhD Swedish Rural Network	Sweden
Dalbúð	Øssur	Senior Advisor House of Industry	Faroe Islands
Feldthaus	Sonja	Nordic Marine Think Tank, Secretariat	Denmark
Ferjá	Sjúrður	Sustainable Energy Developer, Hiddenfjord	Faroe Islands

Frithiof	Linda	Sjömatsfrämjandet	Norway
Fuller	Jessica	NMTT	Norway
Gillette	Maris	Professor of Anthropology, Univesity of Gothenburg	Sweden
Gunnarsdóttir	Steina	Doctoral student, Faculty of Food Science and Nutrition, University of Iceland	Iceland
Hammarlund	Cecilia	PhD AgriFood Economics, Lund University	Sweden
Hauksdóttir	Hildur	Sustainable Officer, Fisheries Iceland & Board Member, Nordic Marine Think Tank	Iceland
Heldbo	Jesper	Board Member, Nordic Marine Think Tank	Denmark
Henriksen	Anastatia	Stipendiat, NOFIMA	Norway
Hinchcliffe	James	Biologist, European Fishmeal	Denmark
Holmgren	Noel	Head of Department, Sveriges Lanbruksunivesitet	Sweden
Isaksen	Johan Roald	Scientist, NOFIMA	Norway
Jacobsen	Birgitte	Project Coordinator, Nordic Council of Ministers	Denmark
Johansen	Jógvan	Environmental Engineer, Bakkafrost	Faroe Islands
Langdahl	Andreas	Stipendiat, The Norwegian Fishery College - The Arctic University of Norway	Norge
Lange	David	Director, FSKPO	Denmark
Larsson	Jennie	Senior Policy Fellow, Stockholm Environmental Institute	Sweden
Meldgaard	Poul	Director, Danish Seafood Association	Denmark
Minter	Michael	Programme Director, CONSITO	Denmark
Morant	Anne Vinther	Chair of the Board, Kangamiut Group A/S	Denmark
Møller	Jens Henrik	Partner, GEMBA Seafood Consulting A/S	Denmark
Neimane	Leila	SEAS Postdoctoral Fellow, Univerity of Bergen	Norway

Nielsen	Max	Associate Professor, Københavns Universitet	Denmark
Nilsson	Fredric	Commercial Fisheries Coordinator, Swedish Board of Agriculture	Sweden
Pan	Sandra	Aqua 3000	Denmark
Poulsen	Katrin	Senior Advisor, Nordic Council of Ministers	Denmark
Rizzo	Natalie	PhD Student, DTU SUSTAIN	Denmark
Schmidt	Carl- Christian	Vice-Chair, Nordic Marine Think Tank	Denmark
Snåre	Mats William	Chief Advisor Industrial Ecology, Sjömat Norge	Norway
Sparholt	Henrik	Scientist	Denmark
Stefánsson	Jón	Special Advisor, Department of Fisheries	Iceland
Svensson	Mats	Director, Marine Management departement	Sweden
Teilmann	Kasper	Partner, GEMBA Seafood Consulting A/S	Denmark
Theodórsdóttir	Anna Bjørk	Founder and Managing Director, Oceans of Data	Iceland
Thomas	Behnan	EUROFISH International Organisation	Denmark
Unmack	Christian Philip	Senior Project Manager, EUROFISH	Denmark
Vásquez- Mejía	Clara	Doctoral Student, University of Iceland	Iceland
Voldens	Gøril	Senior Advisor, Norwegian Directorate of Fisheries	Norway
Waldo	Staffan	PhD, Department of Economics, Centre SLU	Sweden
Woodhouse	Anna	Research manager & Senior researcher, Norwegian Institute for Sustainability Research	Norway
Wυ	Xiurou	SNF, NHH	Norway

Annex 2 List of Speakers

Last Name	First name	Affiliation	Country
Danielsen	Ravanná	Senior Researcher, Norwegian Institute of Sustainability Research	Norway
Edenbrandt	Anna Kristina	Researcher, Swedish University of Agricultural Sciences	Sweden
Hallstrøm	Elinor	Professor, National Food Institute, DTU	Sweden
Hognes	Erik	Senior Advisor, INAQ A/S	Norway
Hornborg	Sara	Senior Scientist, RISE Research Institutes of Sweden	Sweden
Jörgensen	Anna Elizabeth	Sustainability Specialist, Espersen A/S	Denmark
Larsson	Jörgen	Associate Professor, Chalmars University of Technology	Sweden
Lundberg	Ole	Executive Director, Danmarks Fiskeriforening Producent Organisation (DFPO)	Denmark
Poll	Christian	Special Consultant, Danish Consumer Omudsman Institution	Denmark
Reid	David	Chair, ICES Science Committee	Denmark
Smárason	Birgir Ørn	Research Group Leader, MATIS	Iceland
Stenwig	Henrik	Director, Environment & Veterinary affairs, Norwegian Seafood Federation (NSF)	Norway

About this publication

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Nordic co-operation

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Nordic co-operation has firm traditions in politics, economics and culture and plays an important role in European and international forums. The Nordic community strives for a strong Nordic Region in a strong Europe.

Nordic co-operation promotes regional interests and values in a global world. The values shared by the Nordic countries help make the region one of the most innovative and competitive in the world.

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