

Arctic coasts and seas under global change: connecting knowledge for sustainable development – An international and cross-disciplinary project involving ecology, sociology, anthropology, economics and political science (CONNECTING-the-ARCTIC)

Nordic partners:

- Norway, University of Oslo (UiO):

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- Sweden, Stockholm Resilience Centre (SRC):

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- Iceland, University of Iceland:

Institute of Economic Studies (IoES) & Institute of Sustainability Studies (ISS), Brynhildur Davidsdottir (co-PI), Dadi Kristofersson, Jon Petursson, Þrann Eggertsson, Helga Ogmundardottir, Gisli Pálsson.

- Denmark, Aalborg University:

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- Finland, University of Eastern Finland (UEF):

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Non-Nordic partners:

- USA:

Princeton University (PU): Erol Ackay, Kristopher Ramsay, Adam Meirowitz, Dane Klinger, Astrid Dannenberg, Emma Fuller, George Hagström, Andrew Tilman, **Scott Barrett**, **Simon Levin**.

Rutgers University (RU): Malin Pinsky, Kevin StMartin, **Bonnie McCay**

- Russia:

Moscow State University (MSU): Elena Rovenskaya

Collaborating institutions:

- The Netherlands, Wageningen University (WU): Andries Richter, Katrine Soma, Kristina Raab.

- Austria, EU:

International Institute for Applied System Analysis (IIASA): Leena Ilmola, Elena Rovenskaya, Juuso Liesio

Industrial, political, educational and cultural partners and collaborators:

- International:

World Ocean Council, The Arctic Council (including CAFF - Conservation of Arctic Flora and Fauna, and PAME - Protection of the Arctic Marine Environment)

- Norway:

Havfisk ASA, Marine Harvest, WWF, DNB Savings Bank Foundation's capital ("Sparebankstiftelsen"), SALT, Arctic Frontiers

- Iceland:

Eimskip (shipping firm), Fisheries Iceland, Arctic Circle Assembly

- Sweden:

EAT Forum, World Business Council

Scientific advisory board: Georgina Mace (chair), Svein Jentoft (co-chair), Anastasios Xepapadeas, Karine Nyborg, Leonie Robinson

Mentoring team: Nils Chr. Stenseth (chair), Bonnie McCay (co-chair), Arild Underdal, Simon Levin, Scott Barrett, Carl Folke, Jesper Raakjær

Summary:

The overall aim of CONNECTING-the-ARCTIC is to contribute to a *sustainable, responsible, and inclusive development of Arctic coasts and seas* by identifying challenges and opportunities through scientific *research, education, stakeholder dialogue and public engagement*.

To achieve this, CONNECTING-the-ARCTIC will bring together:

- Different disciplines, *integrate* from natural to social sciences.
- An intense *cooperation between renowned Nordic and internationally* universities and research centres, with Arctic communities and stakeholders.
- Nordic Arctic research at the *cutting edge of international scholarship*, with direct relevance for communities depending on Arctic marine coastal regions.
- Involve three principles to organize work: 1) Interdisciplinary science; 2) Cross-scale science; and 3) Inclusive science.

CONNECTING-the-ARCTIC will:

- Be organised in four *mission tasks*: 1) Science & research; 2) Education & researcher mobility; 3) Public engagement & outreach; 4) Internationalization.
- Organize the scientific and research activities around *two central research clusters and two cross-cutting themes*.

- Utilize, integrate a *wide range of methods*, from global environmental change, on-ground assessments of communities, to economic experiments.
- Have *case studies to synthesise our wide disciplinary and methodological variety*: the *Barents Sea and its coasts, and the seas and coasts between Greenland and Iceland*.

- Combine and integrate *quantitative and qualitative* knowledge of long-term *social, ecological and physical dynamics* in and around the Arctic marine seas and coasts in ground-breaking ways, investigating across scales, *from global to local* levels.

- Educate a new generation of scholars, in total 17 researcher positions, being trained through workshops, courses and internships, being supervised by researchers and senior, established scientists who are world leaders in their fields

- Use knowledge to identify policy leverage points for the Arctic, for resilient environments while supporting Arctic communities

CONNECTING-the-ARCTIC will provide a platform for *rethinking the Nordic added value*. The Arctic (e.g., the environment) is affected by the rest of the world, but it also impacts the globe itself: this call provides an excellent platform for the Nordic countries to take the lead on Arctic research and policy development; fittingly, our research team will put Nordic nations in the lead over outside nations (e.g., the EU).

