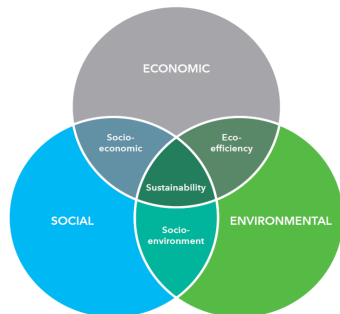


Three pillars of sustainable development



Courtesy: Ø Endresen DNV-GL

Climate change and its impact in the Arctic represents threats as well as new opportunities for economic development related to exploration of natural resources, tourism, transport, and other economic activities. An Arctic Common Practice System will be an important tool for planning and decision-making based on scientific and economic data, local community knowledge, assessments and predictions.

The Arctic Common Practice System

CAPARDUS will explore common processes and standards in ongoing processes in a number of topics of relevance for the Arctic. Focus will be on scientific research including data from observing systems, modelling systems, community planning, natural resource management and other services.



Buildings in Longyearbyen threatened by thawing permafrost. Photo: L. Iversen, NERSC

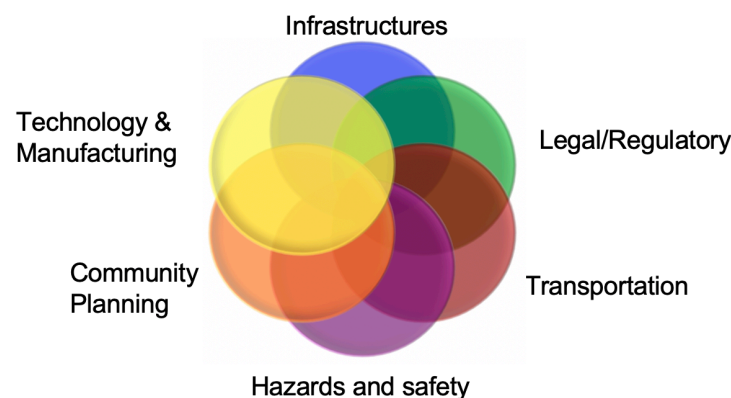
The objectives of CAPARDUS are to:

- Establish a comprehensive framework for development, understanding and implementation of Arctic standards related to climate change adaptation, environmental management and sustainable development
- Identify and document common practices as basis for development and standardization in the Arctic, building on the Ocean Best Practice System (www.oceanbestpractices.org)
- Engage Arctic communities including Indigenous and local communities, commercial operators and governance bodies in defining Arctic Common Practice System

Develop Best Practices from Common Practices

Developing best practices for observing systems, data management and applications means that we focus on:

- Quality and consistency of observations
- Efficiency, learning from others
- Transparency, traceability and reproducibility
- Connections between data, models and applications
- Resources for training and capacity development
- Informed consent agreement with participants



Community-based monitoring programmes

Community based monitoring (CBM) programs may contribute to better-informed decisions and better-documented processes in key economic sectors in the Arctic (e.g. hunting, herding, fisheries, forestry). Moreover, CBM programs have strong potential for linking environmental monitoring to awareness-raising, capacity development, and enhanced decision-making at all levels of resource management. To achieve this, there is however need for further developing and disseminating 'common practice' guidelines and standards for CBM. CAPARDUS will play a central role in this effort by looking at specific use cases and then developing processes that demonstrate ways that this can be done effectively in a local to global context.

Case studies in Greenland, Svalbard, Alaska and Russia



Fisheries is the most important economic activity and food source for local communities in Greenland. The photo is from Akunnaaq, taken by Gerth Nielsen

Adaptation to climate and societal changes in Svalbard

In the Svalbard case study, we will address development of guidelines and standards related to providing data and technologies for the safety of inhabitants and tourists as well as for marine activities in the area around Svalbard. Work will include dialogue meetings to identify community needs for more research-based knowledge to support preparedness and adaptation to the effects of the dramatic climate change in the region.



Longyearbyen, 2005. iStockPhoto

CAPARDUS is a three-year CSA project (2020-2022) with focus on organizing workshops, research schools, training and other events between the project partners, sub-contractors and participants in the case studies.

Partners

- Nansen Environmental and Remote Sensing Center (NERSC)
 - Nordic Agency for Development and Ecology (NORDECO)
 - Ilisimatusarfik, University of Greenland (UoG)
 - Alfred-Wegener-Institute Helmholtz Centre for Polar and Marine Research (AWI)
 - IEEE France Section
 - Norwegian Institute for Nature Research (NINA)
 - University of Copenhagen (UCPH)
 - Nansen International Environmental and Remote Sensing Centre (NIERSC)
 - Hokkaido University – Arctic Research Center
- Subcontractors
- Exchange for Local Observations and Knowledge of the Arctic (ELOKA)
 - University of Alaska Fairbanks/ International Arctic Research Center (UAF/IARC)
 - Center for Support of Indigenous Peoples of the North (CSIPN)