

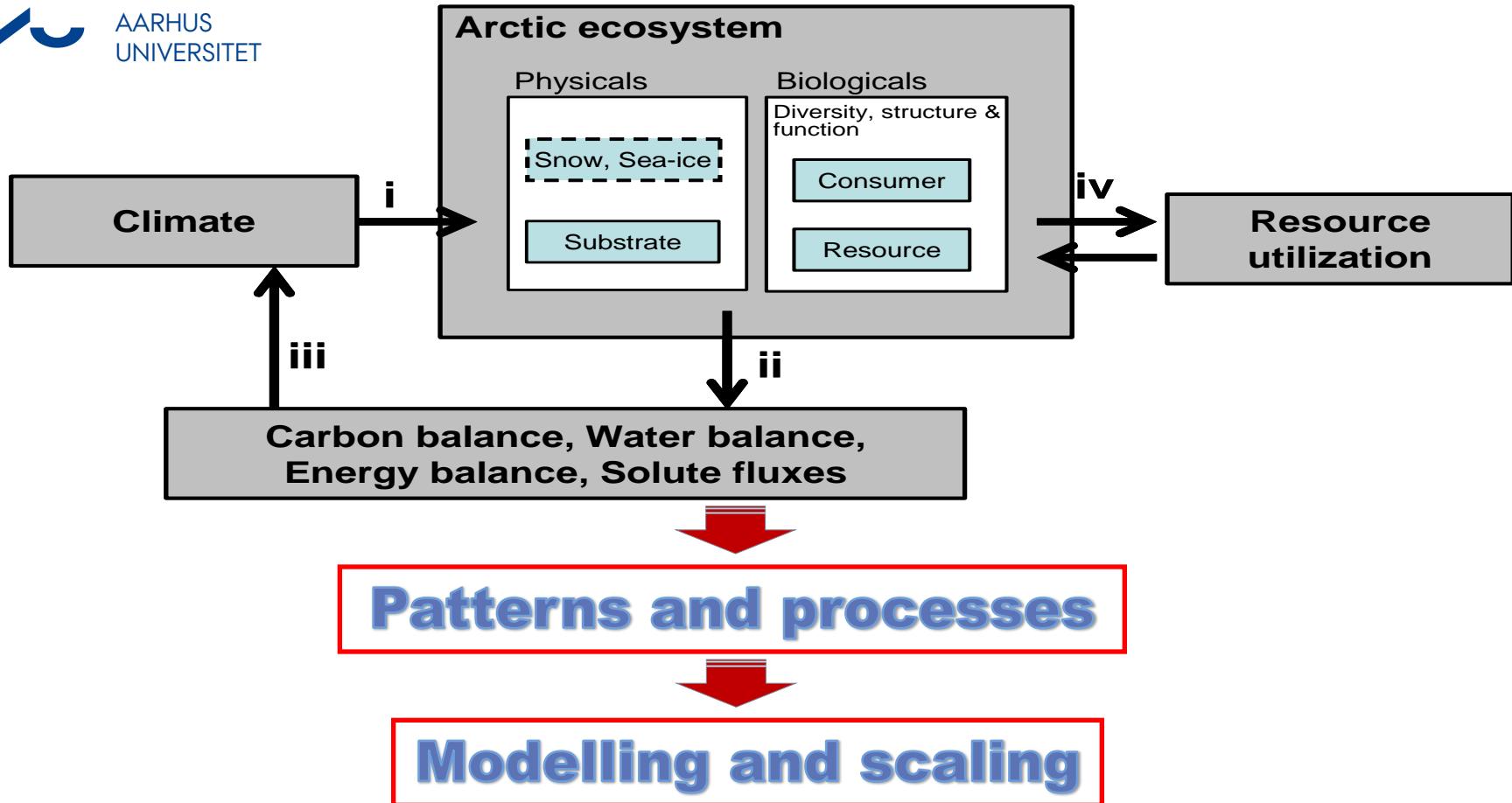
GREENLAND ECOSYSTEM MONITORING

AN INTER-DISCIPLINARY LONG-TERM MONITORING AND
RESEARCH IN GREENLAND

NIELS MARTIN SCHMIDT

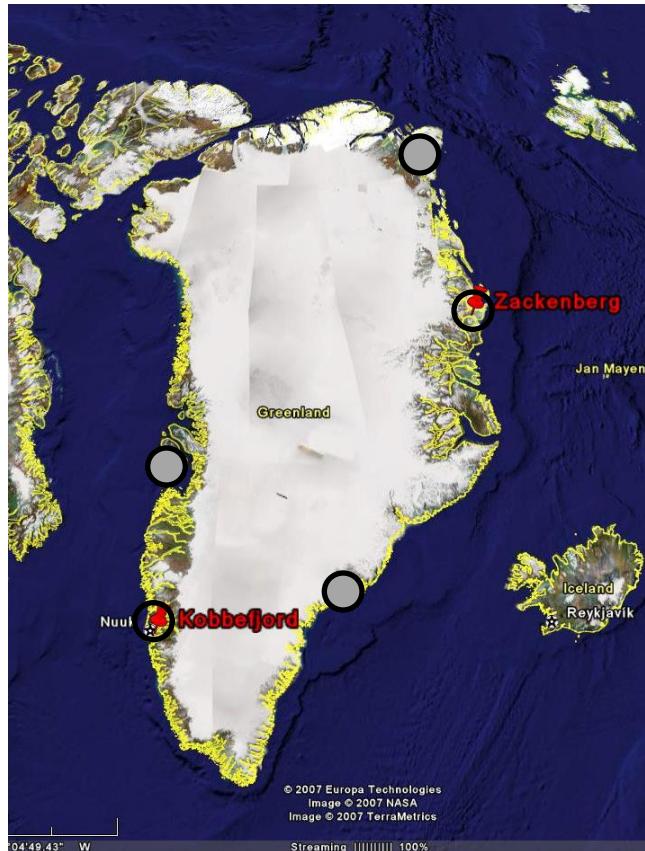
ARKTISK CENTER, INSTITUT FOR BIOSCIENCE





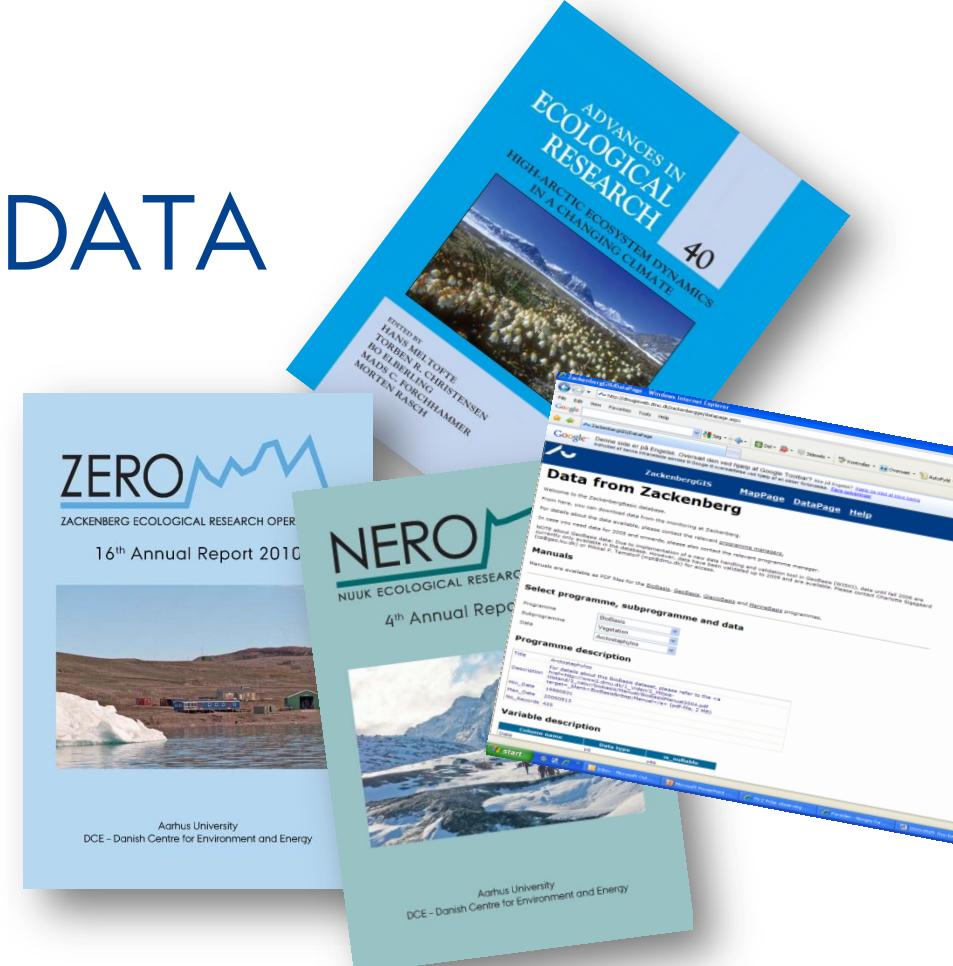
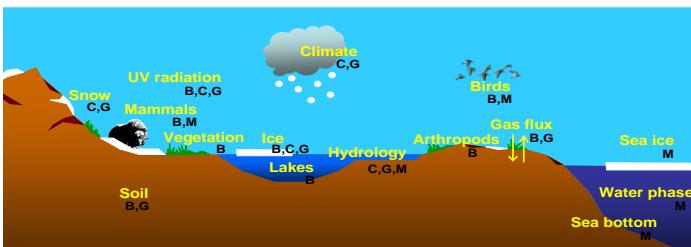
MAIN QUESTIONS

- › How and why does climate variability influence the dynamics of high arctic ecosystems?
- › How do high arctic ecosystems affect climate?



PARAMETERS AND DATA

- › App. 3500 parameters
- › Data are public domain
- › Annual reports
- › Scientific publications



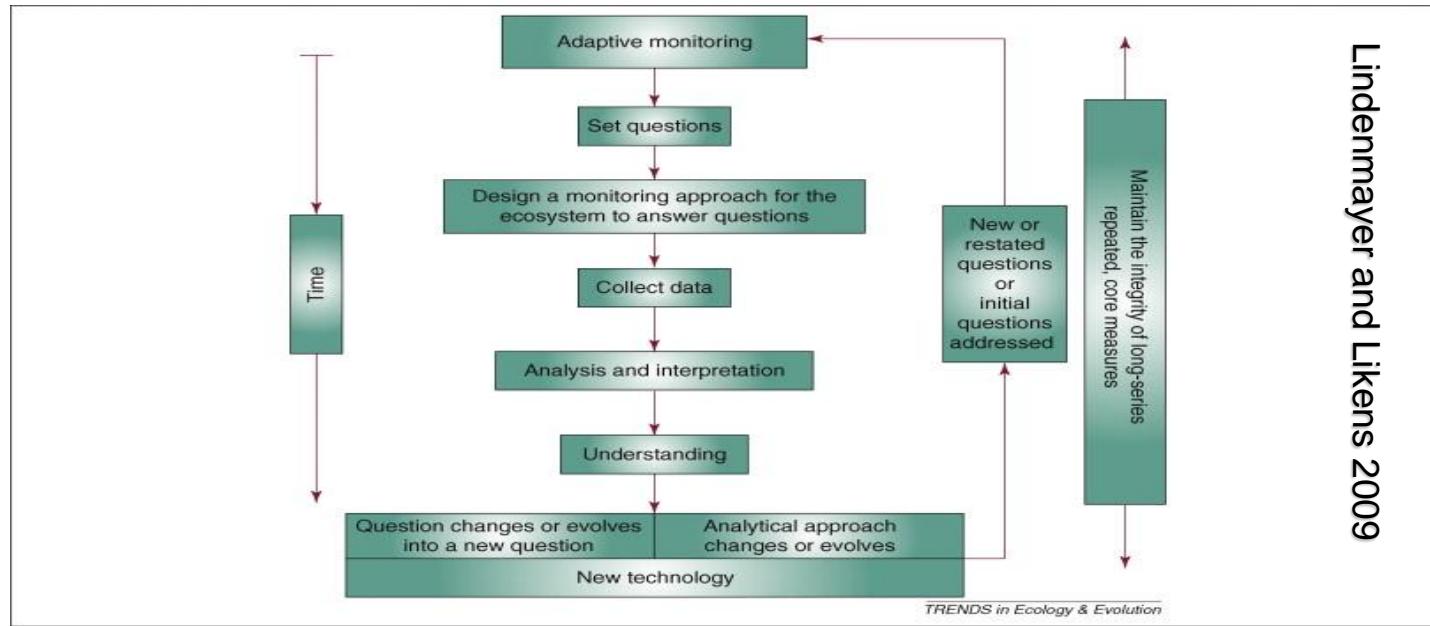
FUNDING

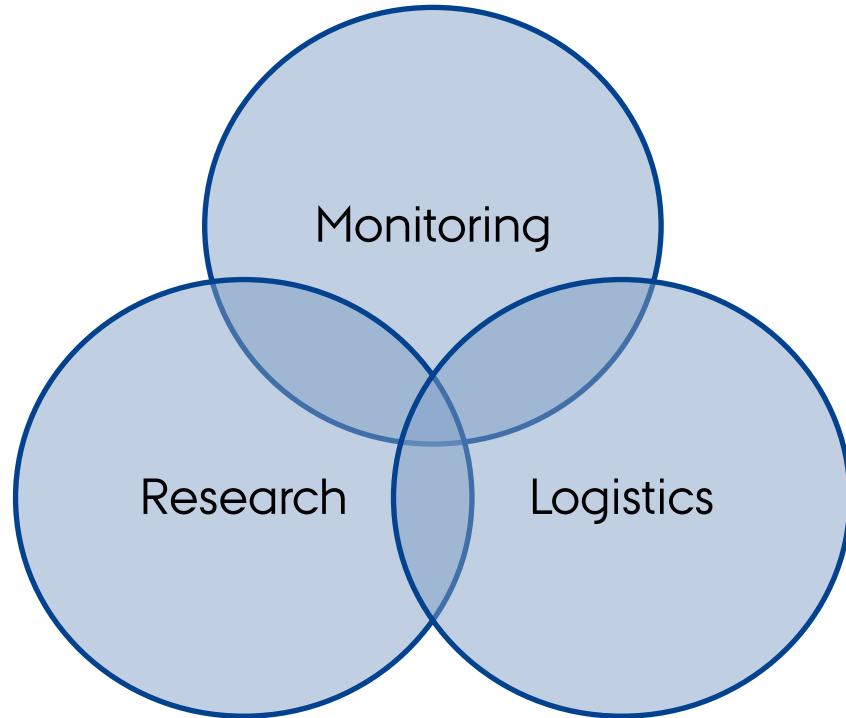
- › Danish Energy Agency, the Danish Environmental Protection Agency, the Danish Research Agency and the Greenland Government
- › Annual budget is c. 3.5M EURO
- › Establishment of infrastructure was mainly financed by Aage V. Jensen Charity Foundation
- › Operated as a center without-walls

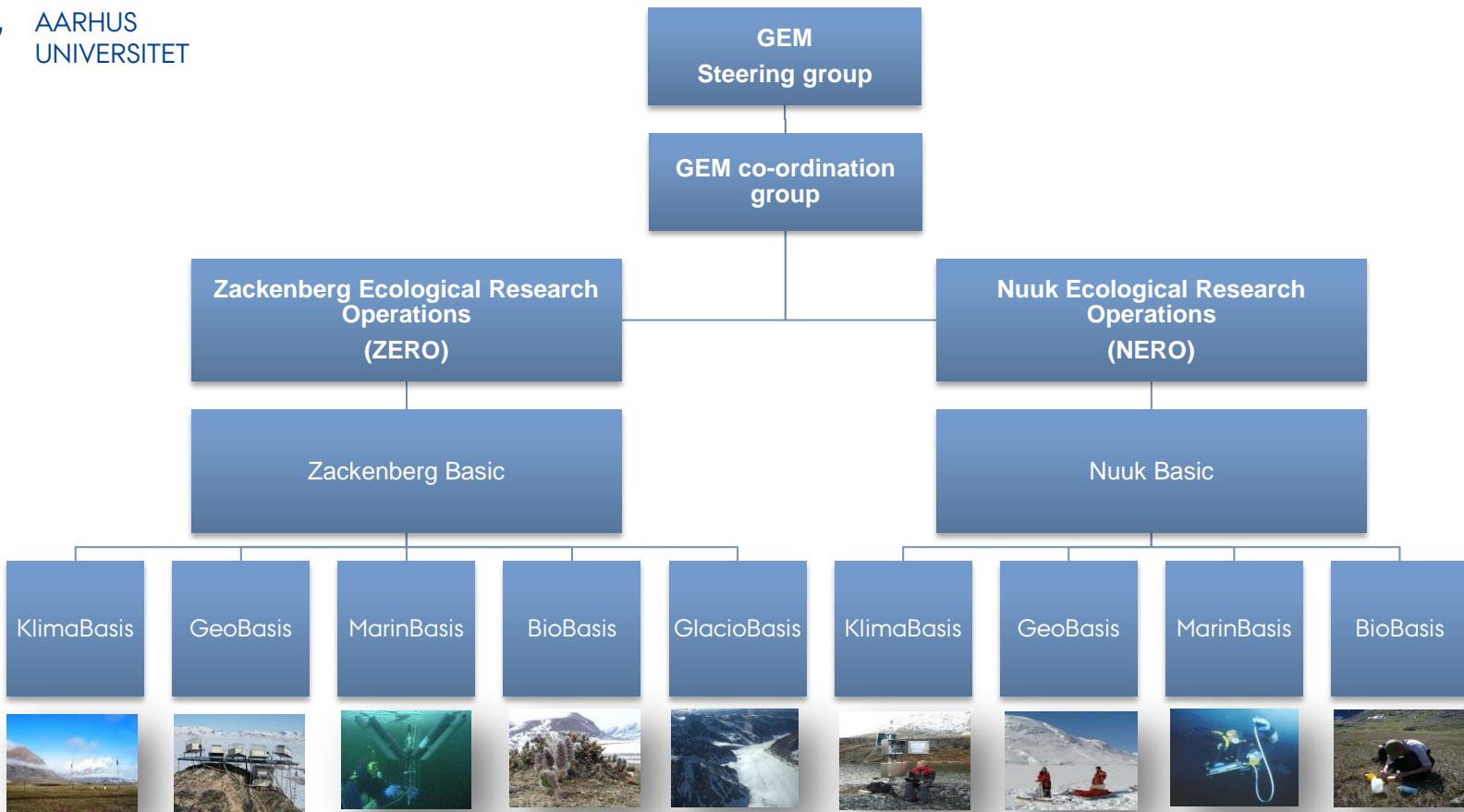
MONITORING APPROACH

- › Ecosystem approach
- › Question based
- › Regular evaluations of scientific questions and parameters
- › Involvement of relevant parties (stakeholders /political-administrative system, scientists etc.)

ADAPTIVE MONITORING



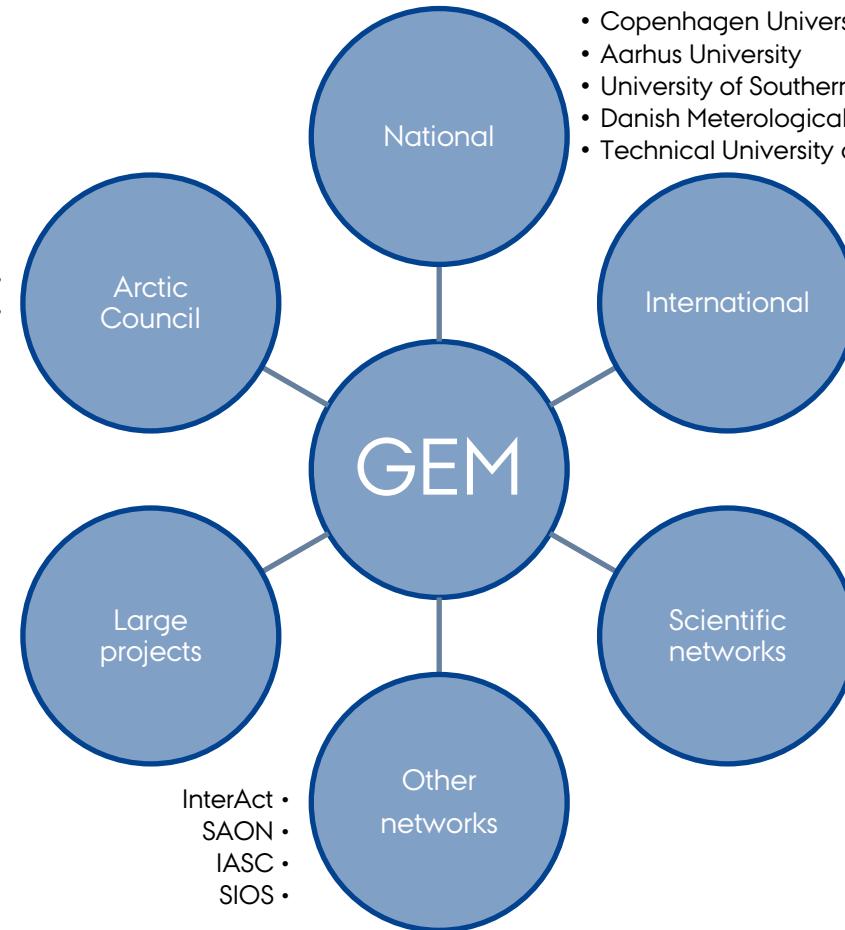




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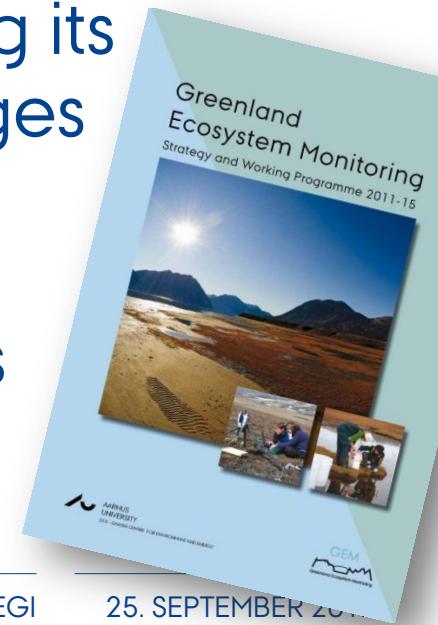


- Copenhagen University
 - Aarhus University
 - University of Southern Denmark
 - Danish Meteorological Institute
 - Technical University of Denmark
-
- Natursinstitutet, Greenland
 - Asiaq, Greenland
 - Lund Universitet, Sweden
 - Penn State Uni, USA
 - Colorado State University, USA
 - Sheffield University, UK
 - University of Manitoba, Canada
 - University of Laval, Canada
 - Tromsø University, Norway

- CALM
- European Flux Database
- ICOS
- ACD
- ITEX
- GLORIA
- ABBC

GEM STRATEGY 2011-15

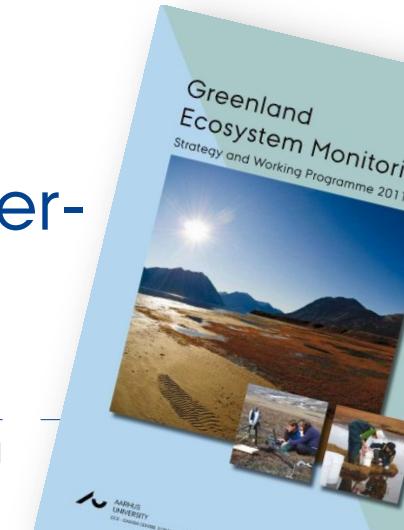
- 1) Coherent and scientific sound description of the state of the arctic environment, including its biodiversity, in relation to climatic changes
- 2) Focus on ecosystem responses and on global impacts related to the feedbacks processes



GEM STRATEGY 2011-15

- 3) To provide science-based input on the state of the environment in Greenland and the Arctic for Danish, Greenlandic and international policy development, adaptation and administration
- 4) To provide a platform for cutting-edge interdisciplinary research on the structure and function of arctic ecosystem

INITIATIVER I ARKTISK RÅDS REGI
NIELS MARTIN SCHMIDT



Thank you!

