

Shaping the Future of Polar Regions

How would we like the Arctic and Antarctica to be in the future?

Opportunities and constraints

The development of circumpolar regions is shaped by climate change and technological advances. A warmer climate affects the sensitive ecosystems of the Arctic and Antarctica by reducing sea ice and glaciers, thawing permafrost and increasing floods.

In the Arctic, less ice and new technologies could mean an increase of fishing, mining, hydrocarbon extraction and vessel transport activities, which could generate employment opportunities and migration, affecting the socio-economic structures of indigenous cultures and regional ecosystems.

Openings for human activities in Antarctica could lead to an increase in research, the development of new tourism demands, and the start of new economic activities, all of which could bring undesired effects to its pristine ecosystems and landscapes.

The challenge

Due to the existing and increasing development pressures on circumpolar regions, there is a need to design a sustainable and consensus-based future development for the Arctic and Antarctica.

A major challenge would then be to engage interested actors to establish open and strategic dialogues for the identification of the critical development issues of the Polar Regions.

Some of the questions that could be discussed in strategic dialogues for the Polar Regions could be: What activities should take place? How should these be carried out and for how long? How to best deal with new activities that we are not even aware of? What mitigation and monitoring measures should be considered?

Tools

Within the Arctic Council (AC) and the Antarctic Treaty System (ATS) close cooperation has generated substantial knowledge and development of tools for analysing the consequences of human activities on the environment of Polar Regions and their associated ecosystems.

One of these tools is Environmental Impact Assessment (EIA), which is an internationally accepted decision making support tool used to assess the impacts of projects on the environment. EIAs are carried out for activities that take place in the Polar Regions, and

they provide a framework for decisions on future development alternatives. However, EIAs do not take into account the long-term development of a multitude of activities and actions, including cumulative impacts on site, impact from adjacent areas and the long distance transport of pollutants.

Proposal

When discussing the future for the Arctic and Antarctica, Strategic Environmental Assessment (SEA) could play an important role.

SEA has been put forward as a process supporting strategic decision making and the analysis of environmental impacts of plans and programs, including the assessment of the long-term development of a multitude of activities and actions.

In Polar Regions, an SEA process could contribute to identify critical issues for the Arctic and Antarctica.

Moreover, in such an SEA the critical issues could be interlinked and brought together in visions and objectives, and illustrated with the use of scenarios.

Visions and objectives set the scope of environmental policy and management and related human activities.

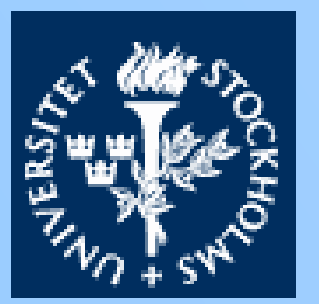
Scenarios outline future development options and assessments of the scenarios allow for predictions and relevant governance and adaptation measures.

Conclusion

The future of the Arctic and Antarctica is our choice.

Strategic decisions on how to manage the growing human activities in the Polar Regions must be taken to maintain a balance between development and the ecological conditions of the Polar Regions.

SEA can serve as a support process for strategic decision making, where enhanced participation, capacity building and transfer of knowledge, can lead to sound development visions to safeguard the sensitive ecosystems of the Arctic and Antarctica, and to direct development towards sustainability.



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