TENSIONAL DREAMS:
Policy Options for a Sustainable Arctic

There is no one Arctic, nor a single sustainability imaginary of the Arctic. Different sustainability scenarios can share aims, but there are also tensional topics. This policy brief synthesizes the action points for balancing the tensions.

Many entangled SSP-scenarios make the present day (Figure 1). Within the realm of possible futures, there are SSP1-futures considered as sustainable; for example, "Chasing Green" emphasizes EU-level aims, and "Undergrowth" that builds on views of Indigenous peoples and local communities.

ARCTIC CONTEXT

Most of the Arctic is cultural landscape, not wilderness. Arctic biodiversity provides ecosystem services to people and livelihoods; also cultural ones. Land-based livelihoods (e.g. herding, fishing, small-scale forestry and agriculture) are important components of Arctic culture and tradition today; they also closely interact with the environment. Arctic land use links also to livelihoods like tourism and nature conservation, mining, forestry, and energy production. The Arctic region is warming two to four times faster than any other region in the world, putting stress on the environments and social-ecological systems adapted to cold conditions and seasonality. Arctic biodiversity is in transition. At the same time climatic changes provide economic opportunities by opening sea routes and resource extraction, to some, meaning also increasing infrastructure development. Livelihoods and communities are challenged by climatic changes and cumulative impacts of multiple land uses. These changes create new context for local nature-based livelihoods and ways of life. Other way round, Indigenous and local communities are not simply victims, but active drivers of change. Arctic land-use, communities, climate and biodiversity need to be seen as an interlinked whole.

SCENARIO APPROACH

A scenario approach helps to critically think how the future may unfold. We link to widely used Shared Socioeconomic Pathways (SSPs) which have five narrative lines: SSP1 (Sustainability), SSP2 (Business-as-usual), SSP3 (Regional Rivalry), SSP4 (Inequality) and SSP5 (Fossil-fuel Development). There is variability within any of the narratives. SSP1 future can emphasize EU-level aims, or locally defined dreams and needs.

CHASING GREEN

Balancing the aims found in recent policy documents and Arctic strategies, emphasizing green growth and EU-level solutions, and inclusion of needs of local and Indigenous peoples.

Reaching EU biodiversity goals for protecting fragile environments, while at the same time achieving green transition. Reaching EU climate goal, and managing global and glocal commons.

Increasing EU self-sufficiency in materials and energy in order to ensure economic prosperity and decreasing outside dependencies. Ensuring strong institutions and the rule based international order, and managing geopolitical tensions—negotiations, conflict management, and consensus building.
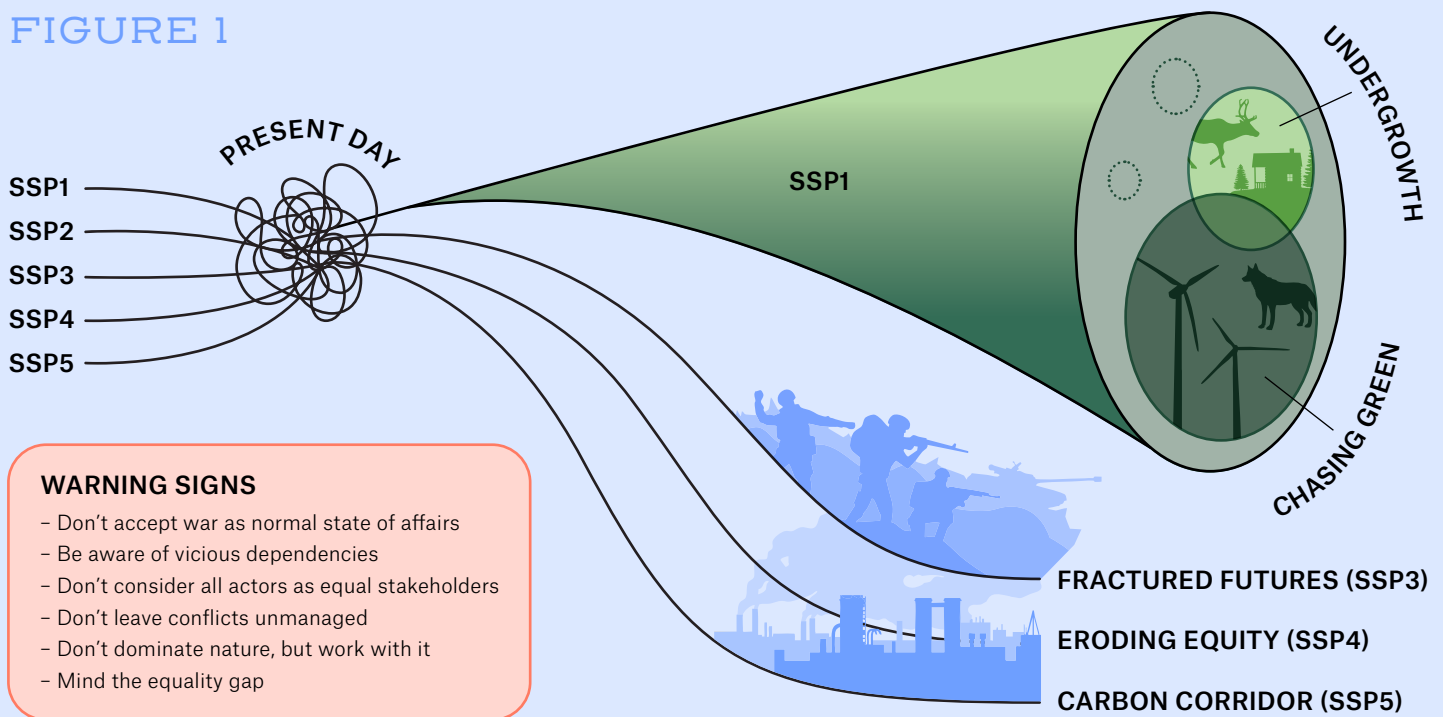
UNDERGROWTH

Ensuring genuine opportunities for local communities and livelihoods to participate in land-use related decision-making. Green transition that is just; for example, addressing financial incentives driving land-use developments, emphasizing local needs in related legislation.

Fostering dialogue and knowledge transfer; having decision-makers who have gained good understanding on local realities. Strengthening local and regional governance and having local views in positions of policy leadership; fostering the ownership and agency in decision-making.

Securing the continuity of local livelihoods and cultures; increasing local livelihood opportunities. For reindeer herding this would mean adaptive co-management and improved environmental state of pasture lands, and interpreting nature conservation as inclusive for local people and livelihoods.

FIGURE 1

SSP1
SSP2
SSP3
SSP4
SSP5

PRESENT DAY

SSP1

UNDERGROWTH

CHASING GREEN

FRACTURED FUTURES (SSP3)

ERODING EQUITY (SSP4)

CARBON CORRIDOR (SSP5)

WARNING SIGNS
– Don't accept war as normal state of affairs
– Be aware of vicious dependencies
– Don't consider all actors as equal stakeholders
– Don't leave conflicts unmanaged
– Don't dominate nature, but work with it
– Mind the equality gap

SYNERGIES

– Holistic coordination of land-use to avoid cumulative impacts on environment and local livelihoods. This includes energy production, forestry, mining, tourism, infrastructure and related land-uses.

– Recognizing and strengthening the consideration of the impacts of multiple land-use developments in land-use planning and natural resources governance. Promoting co-existence between communities and natural resource users.

– Building adaptive capacity to cope with climate change and other pressures. Strengthening possibilities to act in diverse futures, by supporting learning, education, preparedness, increased resources (for example compensation schemes).

– Nexus approach in policy and governance to enable decision-making considering biodiversity, climate change, land use and local communities & livelihoods together. This includes dialogue and interaction between and within levels and sectors.

– Developing and managing multi-use landscapes and permeable borders.

– Respecting multiple knowledge systems to support the continuation of local culture, language and practical skills, and strengthening the knowledge base to cope in a changing environment, by co-creative research and adaptive co-management.

TENSIONS

Tensions between externally led "Chasing Green" and locally led "Undergrowth":

– Is the EU's Biodiversity Strategy 2030 implemented by decisions fixed at EU level or by locally flexible and participatory way? How is the restoration law implemented?

– What kind of imaginaries of biodiversity are put into practice (e.g. nature without people vs. safeguarding biocultural diversity)?

– What kind of land uses are advanced as part of green transition (e.g. wind energy; conservation of large carnivores, infrastructure)?

– Who bears the costs of climate change mitigation?

– To what direction are compensation and subsidy schemes driving Arctic developments?

Tensions within "Undergrowth" scenario:

– Conflicts and controversies between locally beneficial livelihoods (e.g. mining, forestry, tourism, reindeer herding).

– Questions about land ownership, management, and stewardship.

– Tensions between modern development and traditional ways of life.

– Tensions between people (e.g. newcomers and people with extensive histories inhabiting the Arctic).