

## The Precautionary Principle in Arctic Environmental Governance

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The precautionary principle is one of the fundamental principles of international environmental law. In simplest terms, the principle reads as follows: if an action or a policy carries a potential risk of causing severe threats or irreversible damage to the environment or human health, a lack of scientific certainty cannot be a justification for postponing cost-effective measures to prevent environmental damage. The point is that all possible measures should be undertaken in the absence of scientific consensus on the likelihood of risk to the public good and environment. In other words, if there are reasonable grounds for concern about potential harm, precautionary measures should be taken, even if cause-and-effect relationships are not fully understood or established. The burden of proof that an action is not harmful falls on the party carrying it out. The principle has become a powerful tool in international environmental law and policy.

A reference to the precautionary principle can be found in policy documents in the 1980s, but it was not popularized until it appeared in Principle 15 of the Rio Declaration on Environment and Development (1992). It has been widely incorporated into most multilateral environmental agreements from 1990 onward. The principle has been one of the bases of the European Union's environmental policy under the 1992 Maastricht Treaty and the 1997 Amsterdam Treaty. The main idea of precaution is avoidance of ecological harm; it is also to be applied when the consequences of non-action can be particularly serious or irreversible, as in the case of large-scale degradation of the environment or the extinction of a species.

Following are some key features of the precautionary principle:

- **Proactive Action:** It encourages decision-makers to take preventive measures to avoid or minimize potential harm rather than waiting for conclusive scientific evidence.
- **Science-Based Decision-Making:** While lack of scientific certainty should not be used as a barrier to action, decisions should be based on the best available scientific knowledge and evidence.

- Risk Assessment: The principle emphasizes assessing the potential risks and uncertainties associated with an activity or substance before taking any action.
- Cost-Effectiveness: Decisions should also consider the costs and benefits of different courses of action and the potential impacts on various stakeholders.
- Participation and Transparency: The principle promotes public participation in decision-making processes and the dissemination of information to ensure transparency and accountability.

For the Arctic, the implications of the precautionary principle unquestionably lie in its value for the region's fragile environment and climatic conditions, which are susceptible to changes. Climate change impacts in the Arctic are not confined to the plainly vulnerable region: they have widespread consequences for the rest of the world and planetary processes. All relevant developments and human activities in the Arctic, such as resource exploitation and onshore and offshore transportation, must be guided by the spirit of the precautionary principle. The preservation of the Arctic's rich biodiversity, including marine biodiversity within and beyond national jurisdiction, must be considered.

The Arctic ecosystems are complex and often poorly understood. Hence, irreversible damage can occur if unsustainable practices continue unchecked. As they stand, environmental policy and regulations applicable in the Arctic rather exhaustively incorporate the precautionary principle. Following are some examples:

One of the first agreements negotiated by the Arctic states was the International Agreement on the Conservation of Polar Bears (the Polar Bear Agreement) of 1973. The treaty was designed to protect polar bears and conserve their environment to ensure their long-term survival in their natural habitats. Given the vulnerability of polar bear populations to climate change, habitat loss and other stressors threaten their survival. The Polar Bear Agreement reflects the spirit of the precautionary principle, as it prohibits or restricts hunting, capturing, and killing of bears except for subsistence

purposes or the protection of human life. Additionally, the emphasis placed on sustainable management of the bear population through monitoring, information exchange, and enforcement of laws and regulations to combat illegal trade and poaching exemplifies precautionary measures designed to guide conservation efforts.

The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR) is an international agreement adopted in 1992. The Agreement aims to protect and conserve the marine environment the North-East Atlantic region, which includes part of the Arctic Ocean. As part of the OSPAR Convention, the precautionary principle is applied to managing and protecting the marine environment. It recognizes that marine ecosystems can be vulnerable to potential impacts of human activities, such as pollution, habitat destruction, and overfishing. Accordingly, the precautionary principle urges OSPAR Contracting Parties to take action to prevent or minimize harm, even when there is limited scientific knowledge or a measure of uncertainty about the exact consequences of certain activities.

The Central Arctic Ocean Fisheries Agreement (CAOFA) is an international agreement that was adopted in 2018 and entered into force in 2021. The parties to the Agreement include Arctic and non-Arctic countries, as well as the EU, all of which have fishing interests in the Central Arctic Ocean region. The Agreement aims to prevent unregulated commercial fishing in the high seas portion of the Central Arctic Ocean until there is sufficient scientific knowledge about the region's ecosystems and fish populations. The Agreement recognizes the need for effective management and conservation measures as well as cooperation among states to ensure the long-term sustainability of any future fishing activities.

The Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic (MOSPA) is an international agreement that aims to enhance Arctic states' preparedness and response capabilities in addressing marine oil pollution incidents in the region. It was adopted in 2013 and entered into force in 2017. MOSPA recognizes the unique environmental sensitivity of the Arctic and the potential risks associated with oil spills in what is a fragile ecosystem. State parties to the Agreement must establish and maintain appropriate response capabilities – including the availability of equipment,

personnel, and resources – to effectively respond to oil spills. Such preparedness reflects the adoption of precautionary measures to minimize the risks associated with oil pollution in the Arctic and protect the region's delicate marine environment.

**For more on this, read...**

Calderwood C and F Ulmer, 'The Central Arctic Ocean fisheries moratorium: A rare example of the precautionary principle in fisheries management' (2023) 59 Polar Record <https://dx.doi.org/10.1017/S0032247422000389>

