

Environmental Impact Assessments and the Arctic

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The Environmental Impact Assessment (EIA) is a key principle of environmental law. From the 1960s onward, the growing awareness of the negative environmental consequences of industrial activities, infrastructure projects, and large-scale development has spawned environmental movements calling for environmental considerations to be incorporated in decision-making processes. The concepts of environmental assessment and environmental impact statement were initially introduced in the United States in its National Environmental Policy Act (NEPA) of 1969. Thereafter, other countries – Australia, Canada and many European nations among them – adopted similar frameworks for assessing environmental impacts in connection with developmental activities. At the same time, financial institutions, such as the World Bank, embraced a requirement that an EIA be carried out before funding could be granted for major development projects.

The point of EIA is to evaluate and mitigate the potential impacts of human activities on the environment. It is a systematic process carried out before a project is begun that involves identification, prediction, evaluation and eventually communication of the likely effects of the project on the environment. It involves the assessment of both direct and indirect effects and both short- and long-term impacts. EIAs help to adopt measures necessary to mitigate environmental harm. Environmental issues often have economic and social impacts, and EIAs thus also contribute to measures needed in these sectors. Following are the concrete objectives of EIA:

Prediction and Evaluation: EIA assesses the nature and magnitude of potential impacts of a proposed activity and its significance. The process helps analyze potential harm to the environment affecting air, water, land, flora, fauna, ecosystems, human health, and cultural heritage, or to socio-economic factors.

Mitigation and Exploration of Alternatives: EIA encourages the identification of measures to avoid, minimize, or mitigate adverse impacts. It also urges exploration of alternative project designs or locations that may have lesser environmental consequences.

Public Participation: EIA emphasizes the importance of public involvement in the decision-making process. It provides opportunities for concerned individuals, communities, and organizations to participate, express their views, and contribute to the assessment of potential impacts.

Informed Decision Making: EIA provides relevant information and analyses to decision-makers such as government agencies and regulatory bodies, enabling them to make informed decisions about approving, imposing conditions on, or rejecting projects. EIA ensures that environmental considerations are integrated into the decision-making process.

Monitoring and Follow-up: EIA includes provisions for monitoring the implementation and effectiveness of mitigation measures during project construction, operation, and decommissioning. This helps ensure that the predicted impacts are being taken into consideration and the proposed mitigation measures are being adhered to, making it possible to take appropriate actions if necessary.

Today, EIA is a widely recognized concept in environmental law, where it serves as a tool to promote sustainable development. Indeed, many international regulatory mechanisms incorporate provisions related to EIA, examples being the United Nations Framework Convention on Climate Change (UNFCCC) of 1992, the Convention on Biological Diversity (CBD) of 1992, and the World Heritage Convention of 1972. These obligate state parties to conduct EIAs for activities that may undermine climate mitigation, biodiversity, and cultural heritage, respectively. The regulatory frameworks most explicitly setting EIA as the legal norm are the Convention on Environmental Impact Assessment in a Transboundary Context (the Espoo Convention of 1991) and the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (the Aarhus Convention of 1998). The former aims to prevent, mitigate, and control significant adverse transboundary environmental impacts arising from proposed activities, and requires parties to conduct transboundary EIAs to provide opportunities for affected stakeholders to participate in the decision-making process. The latter establishes rights and obligations relating to public participation in environmental decision-making

by emphasizing the importance of public access to information, including EIAs.

Where the Arctic is concerned, EIA plays a crucial role given the region's unique characteristics and vulnerability, which make it more susceptible than others to significant changes driven by climate change impacts. The rise in temperature, the melting of glaciers and sea ice, and the resulting open and easy access to the Arctic through sea routes offer opportunities for extraction and transportation of natural resources. Given that the Arctic is home to diverse ecosystems, including sea ice, permafrost, tundra, and unique wildlife species such as polar bears, seals, and whales, human activities entail adverse consequences for the region and its population. Accordingly, oil and gas exploration, shipping, fishing, tourism, and infrastructure development, must be counterbalanced by EIA. Particular consideration must be given to potential impacts such as biodiversity loss, destruction of or disturbance to habitats, oil spills, introduction of invasive species, increased noise pollution, and disruption of traditional Indigenous livelihoods.

EIA for Arctic projects often involves close collaboration among scientific experts, Indigenous communities, governments, and other stakeholders. The initiatives put forward by the Arctic Council offer significant input enabling assessment of the region's environmental conditions on a constant basis. For example, the AC Working Group – the Arctic Monitoring and Assessment Programme (AMAP) – produces scientific reports that provide assessments, evaluations, and recommendations relating to the Arctic's environmental conditions.

As regards regulatory processes, all the Arctic states are either parties or signatories to the Espoo Convention and thereby, in principle, accept or must comply with the requirements for conducting an EIA to assess transboundary environmental impacts. Such assessments help identify potential long-term environmental damage. Other instruments embodying the spirit of EIA include the 2018 Agreement on Enhancing International Arctic Scientific Cooperation; the 2013 Agreement on Cooperation on Marine Oil Pollution Preparedness Response in the Arctic; the 2011 Arctic Search and Rescue Agreement; the Polar Code, effective from 2017; and the 2018 Central Arctic Ocean Fisheries Agreement.

For more on this, read...

Bram N, and K Hanna, 'Environmental Assessment in the Arctic: A Gap Analysis and Research Agenda' (2015) 68 Arctic 341 <http://www.jstor.org/stable/43872253>

