

Climate Change Law and the Arctic

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The impact of climate change on the Arctic has been drastic, primarily due to the increase in temperature, which in the Arctic has been much faster than the global average. The consequences include intensifying glacier melting, thawing permafrost, the loss of seasonal snow cover and sea ice, and increased risk of wildfires.

Latest estimates note that by 2030 the Arctic Ocean could become ice-free during the summer months (meaning an ice coverage below one million square kilometers). The loss of sea ice will have profound implications for Arctic ecosystems, wildlife, and Indigenous communities that rely on ice for transportation and hunting.

Ice loss in the Arctic will bring impacts beyond the region. An example often brought to the fore is the rise in sea levels. As ice on land, such as Greenland's ice sheet, melts and flows into the ocean, it adds to the overall volume of seawater, posing risks to coastal communities and low-lying areas worldwide. Yet this is only one of many challenges that could be cited. The Arctic's role in the global climate system, its influence on ocean circulation and its impacts on mid-latitude weather mean that the Arctic and climate change are very much intertwined. Hence, addressing climate change and its impacts in the Arctic requires a concerted global effort to reduce greenhouse gas emissions and mitigate further warming, for example, by promoting energy from renewable sources.

The primary aim of climate change law is to limit the global rise in temperatures and support adaptation measures for vulnerable regions such as the Arctic. While specific regional agreements and national laws are necessary, as a global phenomenon climate change requires coordinated action worldwide. Hence, to understand how climate change law affects the Arctic, we must understand the global climate law framework.

The primary international legal framework for climate change law is the 1992 United Nations Framework Convention on Climate Change (UNFCCC) and

subsequent legal instruments. Given its framework nature, the UNFCCC establishes the basic principles that recognize responsibility for international cooperation through global climate action, such as the commitment to stabilize greenhouse gas concentrations and promote sustainable development. Subsequent agreements under the UNFCCC provide more specific steps, for example, the emission reduction targets set under the 1997 Kyoto Protocol.

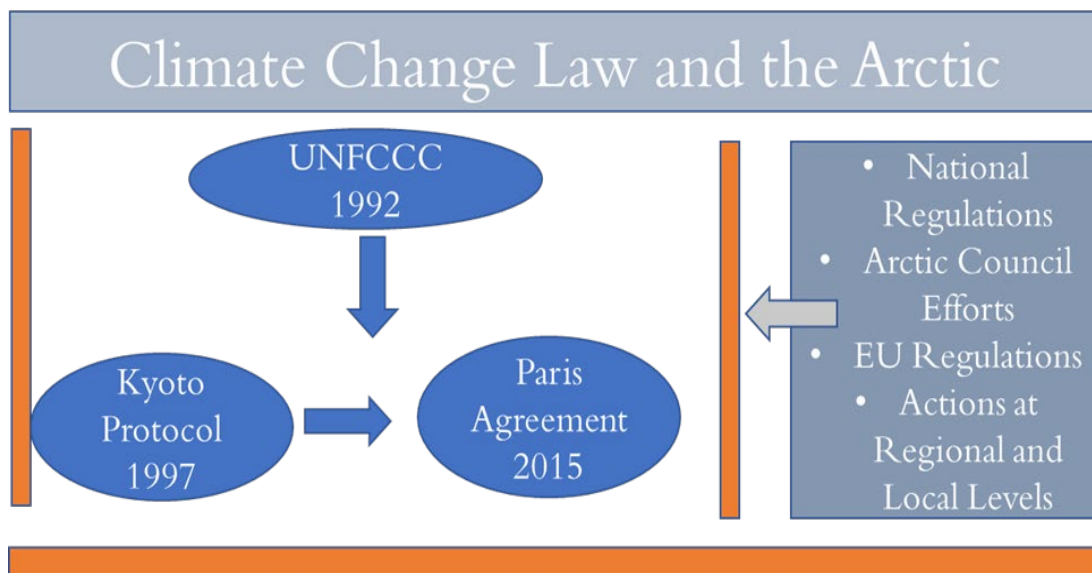
However, additional agreements must be ratified by each UNFCCC party for the agreements to become binding in that particular country, something that has not always happened (for instance, the US was not a party to the Kyoto Protocol), and which partly explains the Protocol's limited success. Moreover, some of the implementation tools under the Protocol, such as the *flexibility mechanisms*, were found to contain loopholes.

In 2015, at the UNFCCC's 21st Conference of the Parties – known as the Paris Climate Conference – the Paris Agreement was adopted, effectively superseding the Kyoto Protocol. Today, the Paris Agreement is the key instrument in international climate governance. It aims to limit global warming to “well below 2 degrees Celsius above pre-industrial levels” and to pursue efforts “to limit the temperature increase to 1.5 degrees Celsius.” To achieve these goals, the Agreement sets forth several key provisions:

- Nationally Determined Contributions (NDCs): Efforts undertaken by each country to design its own national climate action plans to reduce national emissions and adapt to the impacts of climate change.
- Global Stocktake: The Agreement establishes a process for reviewing and assessing collective progress toward achieving the Agreement's goals. The global stocktake occurs every five years and encourages countries to continuously enhance their efforts.
- Loss and Damage: The Agreement recognizes loss and damage associated with the adverse effects of climate change, including extreme events and slow-onset weather events, and recognizes the need to earmark the funds required to adapt to the climate crisis.

- **Climate Finance:** Developed countries are encouraged to provide financing to developing countries to mitigate climate change, strengthen resilience, and enhance their capacity to adapt to climate impacts.
- **Transparency and Accountability:** To ensure transparency and accountability, the Agreement emphasizes that countries should regularly report on their emissions, actions taken to reduce emissions, as well as all the support provided or received.

As of today, 198 countries are parties to the Paris Agreement. These include all the Arctic states as well as the Faroe Islands; Greenland is in the process of joining. In the Arctic, the actions to meet the goals set under international climate change law are achieved by several supplementary regulatory and governance mechanisms. While national regulatory tools include measures for climate actions to meet the goals, there are also Arctic-wide initiatives through various institutional mechanisms, such as the Arctic Council, which promote cooperation and coordination among the eight states in the fight against climate change.



One of the early initiatives by the Arctic Council was the Arctic Climate Impact Assessment (ACIA) Report, a landmark scientific document based on a comprehensive analysis of the Arctic climate system, including changes in temperature, sea ice extent, snow cover, and permafrost. The ACIA also

contemplated the potential consequences of climate change for ecosystems, wildlife, Indigenous communities, and socio-economic aspects of the region.

In addition, and to further climate action in and for the Arctic, the Arctic Council cooperates with the UNFCCC, as well as its subsidiary bodies and organizations, such as the Intergovernmental Panel on Climate Change (IPCC). Through its various working groups, the Arctic Council offers scientific research, assessments, monitoring, and policy developments, which combine to deepen our understanding of the complex interactions between climate change and the Arctic environment.

Actions at regional and local levels supplement the Arctic Council's initiatives. Arctic cities and regions adopt climate action initiatives, often more ambitious than national or international commitments. These include measures such as renewable energy mandates, building codes promoting energy efficiency, and public transportation improvements, all being steps designed to meet the goals of international climate change. In sum, climate change is a complex global issue and the related legal framework is continuously evolving to adapt to the challenges it poses in the Arctic and beyond.

For more on this, read...

Meyenhofer N, 'Law, climate change and the arctic: legal governance of climate change induced risks in the arctic ecosystems' (2014) University of Lucerne, Switzerland.

