

THE CONVENTION ON PLANETARY HYDROLOGICAL SECURITY AND CRYOSPHERE STABILITY

The Purpose of the Convention

The Convention on Planetary Hydrological Security and Cryosphere Stability is established to address a critical and increasingly urgent gap in international environmental governance: the absence of a comprehensive legal framework for the protection of the Earth's frozen freshwater systems and their integral role in the global hydrological cycle. The cryosphere—comprising glaciers, ice sheets, seasonal snowpack, permafrost, and sea ice—constitutes the largest reservoir of freshwater on the planet and regulates the hydrological systems upon which more than two billion people depend for drinking water, agriculture, energy production, and ecosystem integrity.

The Convention's primary purpose is to ensure the conservation, protection, and sustainable management of the cryosphere and the planetary hydrological system through international cooperation, scientific research, and the implementation of integrated policies. It recognizes that the cryosphere is not merely a collection of frozen phenomena but a critical component of the Earth's life support system that regulates temperature balance, influences sea levels, and sustains unique ecosystems. As glaciers and ice sheets retreat at unprecedented rates—threatening water security in the Himalayas, the Andes, and Central Asia—the Convention provides a framework for coordinated global action to prevent catastrophic consequences including droughts, floods, ecosystem collapse, and mass population displacement.

The Convention builds upon and strengthens existing international agreements, including the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity (CBD), and the United Nations Convention to Combat Desertification (UNCCD), by providing an integrated governance framework that recognizes the interconnected relationship between the cryosphere, freshwater resources, watersheds, groundwater, ecosystems, and climate. It serves as a bridge among these instruments, addressing the fragmentation that has long characterized international environmental law. As Mongolia's Prime Minister emphasized at the opening of UNCCD COP17, the Convention represents a shift from "discussion to action, from targets to implementation, from commitments to measurable outcomes".

By establishing common principles, institutional mechanisms, and cooperative obligations—including the Cryosphere Scientific Panel, the Conference of the Parties, and the Permanent Secretariat—the Convention seeks to transform the cryosphere from a peripheral scientific concern into a central pillar of international environmental governance. It affirms that safeguarding planetary hydrological security and cryosphere stability is not solely an environmental objective but a prerequisite for food security, energy security, public health, economic resilience, disaster risk reduction, biodiversity conservation, peace, and sustainable development.

Ultimately, the Convention is a commitment to present and future generations that the world's frozen freshwater systems will be protected as a global commons—not as resources to be extracted, but as life-sustaining systems to be preserved. It is introduced at UNCCD COP17 in Ulaanbaatar as a proposal from the global community of scientists, pastoralists, Indigenous Peoples, and environmental advocates who have witnessed firsthand the accelerating loss of the cryosphere and its devastating consequences. It is a call from the ground—from the steppes, the mountains, and the Arctic—to the international community, urging states to recognize that the cryosphere, like the atmosphere and the oceans, is a shared heritage requiring dedicated legal protection and coordinated stewardship.

The Structure of the Convention

The Convention on Planetary Hydrological Security and Cryosphere Stability is structured as a comprehensive multilateral legal instrument designed to address the integrated governance of the Earth's cryosphere and hydrological systems. Its architecture reflects the complexity of the subject matter, the diversity of stakeholders involved, and the need for coordination across existing international legal frameworks. The Convention is organized into 39 Articles and 14 Annexes, each serving a distinct function within the overall governance system. Its structure follows the established pattern of major multilateral environmental agreements while introducing innovations specific to the cryosphere-water nexus.

The Preamble and Core Articles

The Convention opens with a Preamble that establishes the normative and factual foundation for the entire instrument. It recognizes the cryosphere as a critical component of the Earth's life support system, acknowledges the governance gaps in existing international law, and affirms the principles of intergenerational equity, common but differentiated responsibilities, and the interdependence of ecological systems. The Preamble serves not only as an introduction but as a guide to the interpretation of the Convention's substantive provisions.

Article I provides essential definitions, establishing the key terms that give the Convention its operational meaning. These definitions are critical because they determine the scope of the Convention and the obligations it creates. The terms defined include "cryosphere," "hydrological security," "planetary hydrological system," "glacier," "ice sheet," "snowpack," "permafrost," "sea ice," "watercourse," "groundwater," "ecosystem," and "sustainable development." By defining these terms with precision, the Convention ensures that its provisions apply consistently across different legal systems and scientific contexts.

Article II establishes the Convention's central objective: to ensure the conservation, protection, and sustainable management of the cryosphere and the planetary hydrological system through international cooperation, scientific research, and the implementation of integrated policies. This objective is not merely aspirational; it is the organizing principle around which all other provisions are structured. The Convention is designed to move beyond fragmented governance toward a coherent framework that recognizes the interconnectedness of water in all its forms—solid, liquid, and gaseous.

Article III articulates the principles that guide the Convention's interpretation and implementation. These include the precautionary principle, the principle of prevention, the principle that the cryosphere is a global commons, the principle of intergenerational equity, the principle of common but differentiated responsibilities, and the principle of integrated management. These principles are not simply rhetorical; they provide the legal and ethical framework for decision-making by the Conference of the Parties, the Secretariat, and individual State Parties.

The Institutional Framework and Obligations

Articles IV through VIII establish the general and differentiated obligations of State Parties. Article IV sets forth the general obligations applicable to all Parties, including the duty to take measures to protect the cryosphere, to integrate cryosphere and hydrological considerations into national planning, to cooperate internationally, and to provide information on implementation. Article V specifies the obligations of affected country Parties, recognizing that some States bear a disproportionate burden due to the presence of cryosphere systems within their territories or their vulnerability to cryosphere degradation. Article VI establishes the obligations of developed country Parties, including the provision of financial resources, technology transfer, and capacity-building support to affected developing countries. Article VII affirms the priority for affected developing country Parties in the allocation of support measures, recognizing the principle of common but differentiated responsibilities. Article VIII ensures coordination with other international agreements, affirming that the Convention complements rather than replaces existing legal instruments.

Articles IX through XI establish the framework for National, Subregional, and Regional Action Programmes. This tiered approach reflects the reality that cryosphere protection requires action at multiple scales. National Action Programmes, prepared by affected country Parties, set forth the domestic measures to be undertaken in accordance with the Convention's objectives. Subregional and Regional Action Programmes facilitate cooperation between States sharing common cryosphere systems or hydrological basins. This structure ensures that the Convention is implemented at the level most appropriate to the specific ecological and governance context.

Operational Mechanisms and Institutional Bodies

Articles XIII through XX establish the operational mechanisms that enable the Convention to function. Article XIII addresses support measures, including technical cooperation, capacity building, and financial assistance. Article XIV establishes coordination mechanisms among the relevant institutions and international organizations. Articles XV and XVI address research, systematic observation, and technical and scientific cooperation, recognizing that effective cryosphere governance depends on continuous scientific input. Article XVII establishes the framework for technology transfer, enabling the dissemination of technologies essential for cryosphere monitoring, adaptation, and protection. Articles XVIII and XIX address capacity building, education, public awareness, and technical and financial

cooperation, ensuring that the Convention's objectives can be implemented at all levels of capacity.

Article XX establishes the Financial Mechanism, which is essential for the Convention's implementation. This mechanism determines how financial resources are mobilized, managed, and distributed to support the Convention's objectives. It is designed to be both responsive to the needs of affected developing countries and accountable to the Conference of the Parties. The Financial Mechanism is supported by Annex VII, which provides detailed financial procedures.

Articles XXI through XXIV establish the Convention's core institutional bodies. Article XXI establishes the Conference of the Parties (COP), the supreme decision-making body responsible for reviewing implementation, adopting decisions, and providing strategic guidance. The COP is the central governance mechanism, where State Parties come together to assess progress, adopt amendments, and guide the Convention's evolution. Article XXII establishes the Permanent Secretariat, which supports the COP, facilitates cooperation, and ensures institutional continuity. Article XXIII establishes the Cryosphere Scientific Panel, a body of independent experts that provides the COP with scientific and technical advice. The Panel is composed of representatives from leading cryospheric research institutions, including the International Association of Cryospheric Sciences (IACS), the World Glacier Monitoring Service (WGMS), the International Permafrost Association (IPA), and the Climate and Cryosphere (CliC) project, ensuring that the Convention remains informed by the best available science. Article XXIV establishes the networking of institutions, promoting collaboration among the diverse organizations involved in cryosphere governance.

Articles XXV through XXVIII establish the monitoring, reporting, review, implementation, and dispute settlement mechanisms. These provisions ensure accountability, transparency, and compliance. The monitoring and reporting requirements obligate State Parties to provide regular reports on their implementation of the Convention, while the review process enables the COP to assess progress and identify areas requiring enhanced action. The dispute settlement provisions, elaborated in Annexes I and II, provide for arbitration and conciliation procedures to resolve disagreements between State Parties regarding the interpretation or application of the Convention.

Final Provisions and Annexes

Articles XXIX through XXXIX contain the final provisions governing the Convention's adoption, amendment, signature, ratification, entry into force, reservations, withdrawal, depositary, and authentic texts. These provisions are essential for the Convention's operation as a legal instrument. Article XXIX establishes the procedures for amending the Convention itself, ensuring that it can evolve in response to new scientific knowledge and changing circumstances. Article XXX addresses the adoption and amendment of Annexes, providing a more flexible procedure for technical, scientific, and procedural matters. Article XXXI establishes voting procedures, ensuring that decisions reflect the will of the Parties. Articles XXXII through XXXIX establish the procedural framework for signature, ratification,

acceptance, approval, accession, entry into force, reservations, withdrawal, depositary functions, and authentic texts—the technical but essential provisions that bring the Convention into legal existence.

The Annexes are an integral part of the Convention, providing detailed technical and procedural specifications that would be too cumbersome to include in the main body of the treaty. Annex I establishes arbitration procedures for dispute resolution. Annex II establishes conciliation procedures. Annex III sets forth Cryosphere Monitoring and Assessment Standards, ensuring consistency in data collection and reporting. Annex IV provides guidelines for National Cryosphere Protection Plans. Annex V establishes technical standards for distributed pond systems, reflecting the practical measures that contribute to cryosphere protection through hydrological stabilization. Annex VI sets forth early warning system protocols. Annex VII elaborates the financial mechanisms and procedures. Annex VIII addresses traditional knowledge protection and integration, ensuring that Indigenous and local knowledge is recognized and valued. Annex IX provides frameworks for technology transfer, capacity building, and educational knowledge. Annex X establishes reporting and review procedures. Annex XI sets forth procedures for the adoption and amendment of Annexes. Annex XII provides a list of affected areas and countries. Annex XIII establishes regional and subregional cooperation frameworks. Annex XIV establishes the institutional framework for the Global Institute of Drylands and Cryosphere (GIDC), a permanent institution for research, capacity building, and knowledge exchange.

General Introduction and Legal Basis

The General Introduction and Legal Basis section establishes the Convention's foundation in international law and practice. It explains that the Convention is based on well-established principles of international law and the institutional practice of the United Nations in the development of multilateral environmental agreements. The legal basis for negotiating such a convention derives from the Charter of the United Nations, which authorizes the United Nations General Assembly to consider matters relating to international cooperation, sustainable development, environmental protection, and the maintenance of international peace and security. The Introduction references the precedent of the United Nations Convention to Combat Desertification, which was negotiated following General Assembly Resolution 47/188 of 22 December 1992, establishing an Intergovernmental Negotiating Committee. This established process provides a proven institutional model for developing comprehensive multilateral environmental agreements.

The General Introduction emphasizes that the Convention builds upon existing international legal instruments and governance mechanisms rather than creating an entirely new legal architecture. It is designed to complement and strengthen the implementation of the UNFCCC, CBD, UNCCD, the UN Water Convention, the UN Watercourses Convention, the Ramsar Convention, and other relevant international instruments. By integrating these complementary legal frameworks, the Convention seeks to strengthen international cooperation for the protection of planetary hydrological security and cryosphere stability. The Introduction also addresses the increasingly recognized gap within the current system:

existing agreements regulate climate, biodiversity, desertification, wetlands, and transboundary water resources independently, yet none provides a comprehensive legal framework recognizing the planetary hydrological cycle and the cryosphere as a single interconnected Earth system.

For Mongolia, the Introduction notes that the proposed Convention represents a significant opportunity to contribute to the evolution of international environmental governance. As host of UNCCD COP17, Mongolia is uniquely positioned to facilitate international dialogue on strengthening global cooperation for cryosphere protection, water security, ecosystem restoration, and sustainable land management. By initiating this Convention, Mongolia has the opportunity to demonstrate constructive leadership grounded in peace, multilateralism, scientific cooperation, environmental stewardship, and sustainable development.

Conclusion: Act Now, Support Now, Spread the Word

The structure of the Convention on Planetary Hydrological Security and Cryosphere Stability reflects the complexity of its subject matter and the diversity of its stakeholders. It establishes a comprehensive governance framework that includes substantive obligations, institutional mechanisms, scientific advisory bodies, financial arrangements, and detailed technical annexes. The Convention is designed to be both comprehensive and flexible—comprehensive in its coverage of cryosphere and hydrological issues, and flexible in its ability to accommodate new scientific knowledge, changing circumstances, and the diverse capacities of State Parties. Its structure follows the proven model of major multilateral environmental agreements while introducing innovations specific to the cryosphere-water nexus. The Convention is not a theoretical exercise; it is a practical legal instrument ready for negotiation and implementation.

But a Convention alone is not enough. It is only as strong as the political will that supports it, the resources that sustain it, the partnerships that implement it, and the public that demands it. The cryosphere does not wait for diplomatic consensus. Glaciers do not pause their retreat while we deliberate. Permafrost does not refreeze while we negotiate. The science is clear. The governance gap is identified. The window for action is closing.

Restoring Land. Restoring Hope. By Restoring Water!

**The 0.01% Solutions–Green Web–Cryosphere Convention Initiative Team,
on behalf of Civil Society**