14th Polar Law Symposium 2021
November 21-23 Kobe, Japan

Messages from Climate COP26 and Biodiversity COP15 to the Future of Arctic Governance

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SUMMARY

1. This paper summarizes the policy implications towards Arctic governance from the two milestone meetings on global environmental governance of 2021: COP26 to the United Nations Framework Convention on Climate Change (UNFCCC) in November, in Glasgow, United Kingdom, and COP15 to the Convention on Biodiversity (CBD) in October, in Kunming, China.
2. The main conclusion of the paper is that decisions made at these two global governance fora have only indirect implications to the Arctic. The Arctic region is affected by the global climate systems, hence decisions made at COPs for the global governance will have an effect on the Arctic.
3. Another finding is that Climate COP26 and Biodiversity COP15 have brought valuable opportunities for coordination and collaboration between the Arctic and global governance efforts tackling the effects of climate change and biodiversity loss. Now there is a momentum for Arctic governance to comply with messages from Glasgow and Kunming.

1. Global Environmental Conferences in 2021: Their Relevance to the Arctic

The Arctic change is rapid and widespread if measured by all key indicators - temperature, precipitation, snow cover, permafrost thaw, sea ice thickness and extent, which may also affect biodiversity conservation status in the region, with the conservation of polar bears being a prime example (Aars at al. 2015). However, the Arctic warming and its consequent biodiversity degradation are driven mainly by the developments happening outside of the region (Young 2019). In other words, the Arctic governance tackling the effects of climate change in the region will require close coordination and collaboration with relevant global governance efforts (Keil et al. 2017; Young 2012, 2014, 2019; Steinveg 2020).

The milestone global environmental conferences of 2021 – Conference of the Parties (COP) 26 to the UN Framework Convention on Climate Change (UNFCCC) in November, in Glasgow, United Kingdom, and the first part of COP15 to the Convention on Biological Diversity (CBD) in October, in Kunming, China, could have brought opportunities for such coordination and collaboration with the Arctic governance. This Policy Brief examines whether and to what extent such collaborative efforts were observed in the discussions and outcomes of those two conferences, and takes stock of their main messages for the Arctic governance.

2. Key implications of the Climate COP26 for the Arctic

(1) Stronger greenhouse gas commitments by Arctic states

Although there was no explicit mention of the Arctic in any of Climate COP26 official outcome documents, the Conference has indirect but important implications for the Arctic governance. According to the UK COP Presidency, the central result of the Climate COP26 is the global agreement to pursue efforts to limit the temperature increase to 1.5 degrees (UK Government 2021). This requires rapid, deep and sustained reductions in global greenhouse gas emissions, including reducing global CO^2 emissions by 45% by 2030 relative to the 2010 level and to net zero around mid-century (Glasgow Climate Pact 2021). If the goal is not met, the Arctic region will be among the most affected by climate change, in particular in terms of its impacts on critical infrastructure (Schweikert et al. 2014; Suter et al. 2019).

Ahead of COP26, AMAP's Arctic Climate Update reported that the Arctic would continue to warm rapidly, from 3.3 to 10 degrees before 2100, depending on future emissions (AMAP 2021). Probability of an ice-free summer is 10 times higher under 2-degrees global warming scenario (IPCC 2021). This means that the Arctic will be disproportionately negatively affected by the continuing climate warming. In light of this recognition, being officially pronounced in the Arctic Council official documents (e.g. Reykjavik Declaration 2021), the Arctic states and Permanent

Participants underline the need for enhanced action to reduce emissions of greenhouse gases and slow the rate of increase in average temperature at the global level and in the Arctic (Reykjavik Declaration 2021).

One of the means to reduce emissions is decarbonization of the global energy sector (Glasgow Climate Pact 2021). Ahead of COP26, all Arctic states, which mostly have carbon intensive economies, have delivered their NDCs and set clear energy transition targets (Heininen 2020). New low-carbon and carbon-neutral energy strategies of the Arctic states will help not only to reduce emissions, but also to preserve the fragile Arctic environment intact (Kimura 2021). Given that Russia's current Arctic Council Chairmanship makes climate change mitigation and ecology to one of its priorities (Arctic Council 2021), new climate strategies and targets will get a corresponding reflection on the Arctic energy sector and environment (Morgunova 2020).

(2) Enhancement of the Arctic climate action: permafrost, black carbon and methane

At COP26, the unprecedented attention was raised towards some issues particularly relevant for the Arctic (ICCI 2021). For example, for the first time in the history of climate change COPs, the term "cryosphere" was explicitly mentioned in the preamble of the COP26 final outcome (Sommerkorn et al. 2022). According to the World Meteorological Organization, the cryosphere is snow, sea ice, lake and river ice, icebergs, glaciers, ice caps, ice sheets and shelves and frozen ground, including permafrost (WMO 2022). An integral part of global cryosphere is permafrost, which is one of the key characteristics of the Arctic environment (Herrmann 2020). The alarming loss of permafrost has recently received global recognition and dedicated research, proved by the IPCC 6th Assessment Report (IPCC 2021). In the Glasgow Climate Pact, the Parties are noting "the importance of ensuring the integrity of the cryosphere" (Glasgow Climate Pact 2021). Also, at COP26, scientists have asked for a thematic day and dedicated dialogue on cryosphere set aside during the next round of UN climate talks (United Nations 2022). This implies the increase of monitoring and research efforts on permafrost territories from Arctic scientists and governance institutions, so that more data is available and meaningful actions are taken to slow down the permafrost degradation (ICCI 2021).

For other issues raised at COP26 and relevant for the Arctic governance, Article 19 of the Glasgow Climate Pact invited the countries to consider further actions to reduce by 2030 non-CO^2 greenhouse gas emissions, including methane (Glasgow Climate Pact 2021). In the Arctic Council, this issue has already been addressed in the framework of the short-lived climate forcers (SLCFs) program (Arctic Council 2011). According to an AMAP report, despite generating just 10% of global black carbon emissions, Arctic states are responsible for 30% of black carbon's warming effects in the region, due to the greater warming impact of local emission sources (AMAP 2015).

Having a global mandate from COP26, the Arctic Council has opportunities to strengthen its efforts to reduce emissions of SLCFs and mitigate their negative impacts (AMAP 2021). Action by non-Arctic states is also important, as black carbon emissions can be transported long distances from their source to the Arctic region (AMAP 2015).

In terms of methane, the Global Methane Pledge was adopted at COP26 by more than 100 countries, among them many Arctic states, to reduce 30% of emissions by 2030 (Global Methane Pledge 2021). Methane accounts for about half of the net rise in global average temperature since the pre-industrial era (UNFCCC 2021). What makes it particularly relevant for the Arctic is the degradation of permafrost, which may accelerate climate change by emitting even more methane (Schuur at al. 2015). The nexus between permafrost thaw and methane emissions is monitored to identify future solutions. Arctic Council's Framework for Action for Enhanced Black Carbon and Methane Emission Reductions includes a commitment from Arctic states to significantly reduce their overall methane emissions (TFBCM 2015). Meeting this commitment in the Arctic would demand applying best available technologies by all stakeholders in the region (AMAP 2021).

(3) Stronger Indigenous and Youth roles in the Arctic climate decision-making

In the Glasgow Climate Pact, the Indigenous Peoples are mentioned multiple times, being granted with an important role in effective action on climate change (Art.38, Art.55., Art.66). The document welcomes the use of Indigenous knowledge for adaptation and mitigation. Article 66 urges all countries to involve indigenous peoples in designing and implementing climate action (Glasgow Climate Pact 2021). A strong achievement and historic progress was made when COP26 brought the indigenous knowledge holders to the table to voice solutions and share with governments the experiences of Indigenous experts, including representatives of the Inuits, the Saami and the RAIPON (UNFCCC 2021).

In the Arctic governance institutions, the Indigenous knowledge and recommendations are applicable monitoring, research, mitigation, adaptation and planning of activities regarding climate change. Moreover, the Arctic Council already has tools to follow all relevant COP26 achievements (Arctic Council 2021). For example, the Circumpolar Local Environmental Observer (CLEO) Initiative shows that **different nature monitoring systems in the Arctic countries benefit from using indigenous knowledge (Arctic Council 2021). For scientists studying sea ice, traditional knowledge is used to back up corresponding research (SDWG 2016). The Arctic Resilience Action Framework (ARAF) by SDWG helps to share best practices and identify additional challenges to strengthen resilience and adaptability of local stakeholders in the Arctic region (SDWG 2016). The Arctic Adaptation Exchange portal is launched to discover and innovate**

new practical solutions to address the effects of climate change by showing regional decision-makers policies that are successful in other polar regions and adapt them (Johnson 2015).

As for the youth, the involvement of young diplomats, experts, scientists and indigenous leaders in the activities of Climate COP26 is pattern for the Arctic governance bodies, which can now follow the COP example on youth engagement (Crowley 2017). In the Glasgow Climate Pact, all countries were urged to ensure meaningful youth participation and representation in multilateral, national and local decision-making processes, which potentially includes the Arctic decision-making (Glasgow Climate Pact 2021, Art.55, 63-65). In the Arctic Coucnil, the process has accelarated with the introduction of Youth Envoy positions by the Russian Chairmanship in 2021. Youth engagement has been supported through such bodies approved by the Arctic Council as the Arctic Youth Network, the Permanent Participants Youth Network (Arctic Council 2019). Considering the COP26 achievements, the Arctic youth has a potential for a more active involvement in the issues that affect them and speak up as they see their future threatened by climate change (Indigenous Peoples' Secretariat 2020).

2 Key implications of the CBD COP15 for the Arctic governance

(1) Stronger biodiversity protection: Ecosystem approach and new protected areas

The CBD COP15 Kunming Declaration has introduced an ambitious and transformative post-2020 global biodiversity framework (Kunming Declaration 2021).

First, as said in the Kunming Declaration, the application of ecosystem-based approaches (hereinafter – EA) needs to be increased globally, including the Arctic, to address biodiversity loss, restore degraded ecosystems, boost resilience, mitigate and adapt to climate change, support sustainable food production, promote health, and contribute to addressing other challenges (Article 10). In the Arctic, EA addresses the interplay between resource managers, conservation agencies and Indigenous users. This also includes the Indigenous Peoples' concepts of nature management (Kunming Declaration 2021).

Second, in the final draft of the CBD COP15 final document, the "30 x 30 Target" was presented, aiming at conserving 30 per cent of Earth's land and sea areas by 2030 through well-connected systems of protected areas and other area-based conservation measures (Kunming Declaration 2021, PP13). The implication for the Arctic is that new protected zones are established and the existing ones expanded, covering marine and terrestrial areas, vulnerable wetlands and peatlands (Koperqualuk et al. 2022).

Finally, in the Arctic, largely covered by ocean, marine protected areas (MPAs) are another important tool for conserving species, habitats and ecosystems, and provide social and economic

benefits to Arctic communities. This has been articulated in the most recent MPA report by the Arctic Council's PAME Working Group (PAME 2021). The CBD Aichi Target 11 called for the protection of 10% of coastal and ocean waters by 2020 (while 2016, only 4.7% of marine waters in the Arctic and 7.4% globally were protected (Arctic Council 2021). The Post-2020 framework almost triples the corresponding Aichi target, so the action is expected to be drastic on this front (Bacon at al. 2019). With 61% of the world ocean falling under the category of international waters, it becomes clear that these areas are also meant to be protected under the new targets (Thakur 2021). The Arctic Fisheries Agreement, that entered into force in 2021, can be brought as an example of its timely implementation (Vylegzhanin at al. 2020). So, further expansion of MPA target areas means that MPAs are increasingly recognized as a valuable complement to traditional management strategies to protect the biological diversity and integrity of the world's oceans and seas, including in the Arctic (Lalonde 2013).

(2) Climate-Biodiversity nexus: More active interaction between the Arctic Council, the CBD and UNFCCC regimes

The Kunming Declaration acknowledges "with grave concern that the unprecedented and interrelated crises of biodiversity loss, climate change, land degradation and desertification, ocean degradation, and pollution, and increasing risks to human health and food security, pose an existential threat to our society, our culture, our prosperity and our planet". (Kunming Declaration 2021). Governments recognized "the global interlinked crises of climate change and biodiversity loss, and the critical role of nature-based solutions and ecosystem-based approaches in delivering benefits for climate adaptation and mitigation" (Thakur 2021). Scientifically, in a collective workshop by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) and IPCC, the necessity to converge on solving the dual crises of climate change and biodiversity loss is considered to be essential to support human well-being (Pörtner et al. 2020). In other words, both globally and in the Arctic region, climate-biodiversity nexus is increasingly emphasized (CBD 2018).

In the Arctic Council, the main body dealing with the biodiversity issues is CAFF working group, which has often worked in conjunction with the CBD (CAFF 2009). The CBD instruments and legal basis are crucial for CAFF, and CAFF's Arctic expertise is valuable for CBD (Strong et al. 2021). That is why its experts are regularly invited to Biodiversity COP meetings, for example in the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA). However, as the CBD regime and post-2020 targets become more ambitious and specific, they create opportunities to scale up interaction between CBD and CAFF (CBD 2021).

Another Arctic Council's body that strengthens ties with global regimes is the AMAP working group. It serves as an important data and advise source for both CBD and UNFCCC, as well as for IPCC, which is a basis for many relevant UN Conventions (IPCC 2021). On the one hand, AMAP's peer-reviewed reports serve as a scientific background for the Arctic Council's Declarations. For instance, a strong climate message of the Reykjavik Declaration was based on AMAP's findings (Reykjavik Declaration 2021). On the other hand, AMAP scientific assessments with a peer-review also act as advice or data to international organs like the IPCC, the Stockholm Convention on Organic Pollutants, the Minamata Convention on Mercury and other international institutions (AMAP 2021).

So, the expectations from the Arctic Council are on the rise in terms of tackling climate change and biodiversity loss as a unified challenge (CBD Decision COP XI/6 2012; CAFF 2009; AMAP 2021). Arctic Council has already interacted with CBD and UNFCCC, and this cooperation is now expanding through CAFF, AMAP and other relevant Arctic governance bodies (Strong 2021). Due to a growing awareness of interconnections between the global climate and biodiversity regimes and the Arctic, a proactive collaboration between Arctic Council, CBD and UNFCCC is one way to effectively solve the climate-biodiversity challenges.

(3) Central role of the Indigenous knowledge in biodiversity conservation

The role of the Indigenous peoples has been broadly acknowledged in the 2021 Kunming documents. For example, in the first draft of the Post-2020 Global Biodiversity Framework, Target 21 calls to ensure "equitable and effective participation in decision-making related to biodiversity by indigenous peoples and local communities, and respect their rights over lands, territories and resources" (Post-2020 Framework 2021). As for the Kunming Declaration, apart from Article 15, where the need for effective indigenous participation is stressed, the role of traditional knowledge is recognized in the preamble (Kunming Declaration 2021, PP9).

The transformative biodiversity regime proclaimed in Kunming documents requires that the Indigenous peoples' role in biodiversity policy is lifted (Reyes-Garcia at al. 2022). The reason is that The Indigenous peoples have lived in harmony with nature for centuries, which sustains and manifests the CBD's 2050 Vision (Reyes-Garcia at al. 2022). Also, the Indigenous knowledge is essential for setting realistic and effective biodiversity targets that simultaneously improve local livelihoods. The indigenous knowledge is often more extensive than the scientific data, but combined they help to conserve biodiversity effectively (Koperqualuk 2021).

The Arctic Council is already a useful tool to achieve that goal in the Arctic and beyond. For example, with 83% of all permafrost wetlands traditionally inhabited by the Indigenous

Peoples, and their knowledge of the nature and management of these areas begins to be taken into consideration by planning wetlands conservation and restoration measures by CAFF, ACAP and AMAP experts (CAFF 2021). So, the Indigenous knowledge is considered as a valuable input in research and decision-making process.

3 Policy Recommendations

Having identified these policy implications, this Policy Brief emphasizes the opportunities to implement the decisions and ideas discussed at Climate COP26 and Biodiversity COP15 on the regional Arctic level. To ensure the positive effect of the milestone environmental conferences of 2021 on the Arctic governance, the authors highlight the potential to:

1. reduce greenhouse gas and short-lived climate forcers emissions by Arctic states and Permanent Participants;
2. enhance Arctic climate action, with the emphasis on permafrost, black carbon and methane;
3. scale up Indigenous and Youth participation in Arctic governance institutions, their research and assessment activities;
4. implement Indigenous Knowledge for Arctic adaptation and mitigation, as well as biodiversity preservation and restoration;
5. strengthen biodiversity protection by implementing ecosystem-based approach and new protected areas covering marine and terrestrial zones, wetlands and peatlands;
6. improve interaction between the Arctic Council, the CBD and UNFCCC regimes, emphasizing the deepening climate-biodiversity nexus.
7. bring the Arctic issues to the global environmental governance agenda in the UNFCCC and CBD to address the interconnectedness of the Arctic and global changes.

To conclude, Climate COP26 and Biodiversity COP15 have brought valuable opportunities for coordination and collaboration between the Arctic and global governance efforts tackling the effects of climate change and biodiversity loss. Now there is a momentum for Arctic governance to comply with messages from Glasgow and Kunming.

Relevant Information

14th Polar Law Symposium (November 2021) <https://2021polarlawsymposium.org>

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