

# Arctic Governance Research and the Green Transition: A Perspective on Interdisciplinary Work

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**Abstract:** *In June 2022, the Strategic Research Council (SRC) of the Academy of Finland proposed to the Finnish Government the need for "Just Green Transition" as the 2023 theme of strategic research programmes. In it, arises interest on adapting to societal changes in an ecologically sustainable manner, with purpose of shaping long-term developments in Finland and elsewhere, through evidence-informed decision-making and sound engagement with several actors and sectors in society. The ongoing proposal forwarded to the Finnish Government warrants further sight to mark the tenth anniversary of Current Developments in Arctic Law (CDAL). This paper builds on the above proposal, in perspective, to ponder on a*

*new normal, as to what connotations interdisciplinary lines of thinking about the green transition add to Arctic Governance. Using contributions from Researchers in varied disciplines living and working in the Arctic, this paper explores policy arrangements and related strategic elements, linked to sustaining the natural environment, with attention to Finland and the European Arctic. It concludes reflecting future implications of interdisciplinary work for research on Arctic Governance.*

**Keywords:** Arctic Governance Research, Interdisciplinary Work, UArctic Network, Just Green Transition, European Arctic, Law and the Social Sciences

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## 1 Introduction

To better understand what significance interdisciplinary work adds to the link between Arctic Governance Research and the Just Green Transition, it is worth revisiting some developments leading to the European Green Deal and recent additions to the Deal. The subsequent paragraphs will highlight the papers' specific objectives deliberating the future of research considering the proposal for "Just Green Transition" as the/a theme for strategic research in 2023. In so doing, this paper presents a joint authorship contribution, interdisciplinary in perspective, and to commemorate the tenth anniversary of the Current Developments in Arctic Law (CDAL) within the University of the Arctic (UARctic). Our hope is that the contributions here resonate in debates among researchers and scholars of Arctic Governance and Arctic Law, as well as, for those seeking new perspectives on interdisciplinary work and its role in studies about the Just Green Transition.

### *1.1 The European Green Deal: developments in perspective*

Early on, November 2019, the European Parliament acknowledged the climate emergency requesting the European Commission to adjust its proposals consistent with a 1.5 °C target to limit global warming and ensure a significant reduction in the emission of greenhouse gases (European Parliament 2022). The above notice on climate change is certainly

not the first, when we think of much earlier emphasis on other issues as conserving global biological diversity. The biological aspect came to light with policy arrangements as the World Conservation Strategy (WCS) in 1981 when four leading conservation agencies (the United Nations Environmental Programme, the International Union for the Conservation of Nature and Natural Resources, the Food and Agricultural Organisation of the United Nations, and the International Union for Conservation of Nature and Natural Resources) came together at a press conference in Washington. They had a common goal demonstrating how essential the conservation of living resources is for sustainable development (Mackinnon et al. 1986).

Also, the Convention on Biological Diversity, an international legal instrument, that was opened for signature in 1992 at the Earth Summit in Rio de Janeiro, entered into force in 1993 after receiving 168 signatures. This convention pinpoints the need for sustainability, fairness, and equitability in sharing benefits that arise from utilizing genetic resources, ecosystems, and species (Penchev 2022). Its underlining protocols as the Nagoya Protocol (adopted in 2010 and entered into force in 2014) and Cartagena Protocol serve as legally binding treaties and supplementary agreements to the Convention on Biological Diversity. Matters of negotiating climate change mitigation, adding to the existing agreements on

biological conservation, to advancing the implementation of the above Convention, has been the work of the Conference of Parties (COP). Later came the Paris Agreement—a legally binding international treaty on climate change adopted in 2015 at COP 21 in Paris by 196 Parties (UNFCCC 2022). Its goal, often described as a landmark in climate change practices that are multilateral involves most of the nations (as adopted by 196 parties at COP 21) on a common cause of limiting global warming to 1.5 degrees Celsius by committing to undertake ambitious efforts towards a climate neutral world.

In response and upon a European Parliamentary request, the European Commission developed the European Green Deal, a roadmap for Europe, including the European Arctic, becoming a climate-neutral continent by 2050. The EU's Climate Law creates a legally binding with a reduction target in emissions at 55% by 2030, thereby affirming the EU's position as leading the global fight on climate change. The law also provides grounds for EU nations to meet emission targets using policies and legislations (including national and inter-regional) that can bring about benefits such as: cleaner air, water and soil; reduced energy bill; improved public transport and more charging stations for e-cars; less waste; renovated homes; healthier food and better health for current and future generations, among other benefits (European Parliament 2022).

For the above transition to come by, it is worth examining knowledge on approaches shaping legal arrangements in response to global challenges – a practice that can equally benefit Arctic Governance Research. For instances, modulating (the practice of regulating, adjusting, and finding options) seems to be a typical example, i.e., adopting newer, flexible, transformative elements to combat the global ecological crisis. Even more obvious, when we think of the unfolding EU energy crisis of 2022, triggered by the global economic recovery from COVID-19 and later the dramatic inflation in gas and electricity (Homeyer et al. 2022). In this example, modulating involves periodic alterations to the European Green Deal. In this example, modulating involved periodic alterations to the European Green Deal and its provisions, a blueprint for transformational change with the commitment of 27 EU Member States (July 2021). This process followed with new proposals to halt deforestation and introduce innovative sustainable waste management (November 2021), towards decarbonising gas markets and reducing methane emissions (December 2021); to restoring Europe's ecosystems (June 2022) are some examples from the second half of 2021 (European Parliament 2022).

### *1.2 Interest in the European Arctic*

Thus, marking the tenth anniversary of the Current Developments in Arctic Law (CDAL) within the University of the UArctic's Law Thematic Network, and, in light of/in line

with the Strategic Research Council's (SRC) proposal to the Finnish Government on "Just Green Transition" as a theme for strategic research in 2023 - there is a need to deliberate on the future of research within this context. The European Arctic, for this matter, continues to be a significant region with a growing global interest on decision-making among Arctic and non-Arctic actors. With the Arctic said to be warming four times faster than the global average (Rantanen et al. 2022), interdisciplinary work will be needed in Arctic Governance Research as developments of climate change go by with a growing interest among non-Arctic actors wishing to be involved in decision-making with regards to utilizing its rich genetic resources and species in both terrestrial and marine ecosystems. Thus, governing ecosystems will for a long-term be central in Arctic Governance and Arctic Law, especially for the northernmost regions of Finland, Sweden, and Norway that is home to the Indigenous Sámi people and several local groups that coincide with activities by stakeholders from elsewhere. For instance, access to natural resources is often contested through economic activities such as mining, hunting, reindeer herding, and tourism, that overlap with Indigenous lands and areas of spiritual importance (Ayonghe & Francisco 2021; Kirchner et al. 2022). The European Arctic also has a long history of environmental cooperation since the 1980s, when we think of the Arctic Environmental Protection Strategy (AEPS),

the Arctic Council (AC), and later, the Nordic Council of Ministers and the Barents Euro-Arctic Council—all vital for cooperation on sustainable development in the region. In the face of influential global actors' interests in the Arctic, such as in international climate policy (Kopra 2018), as well as EU policies (the 2016 EU Strategy for Low-Emission Mobility and the 2019 European Green Deal) applicable to the Arctic (Koivurova et al. 2021), there will be a growing interest in multidisciplinary work approaches capable to safeguarding the Arctic's natural environment.

### *1.3 Specific objectives*

This paper shares the hope to inspire a debate among researchers of Arctic Governance on the modalities of applying interdisciplinary practices in Arctic Governance, and its meaningfulness for promoting knowledge on cleaner (environmentally friendly, safe, and sustainable) ways of living in the European Arctic. Our premise sets out with examples aligned with each author's disciplinary expertise, including consolidating interdisciplinary practice in research; towards holistic approaches to cross-border environmental governance; introducing greener policies on climate migration; understanding the link between climate change policy and strategic research; enabling inclusive governance of marine protected areas in the Arctic; exploring good practices for research ethics and heritage in Arctic Law. As observed in current-day policy

developments of adapting timelines to combat present and future challenges in the EU (European Parliament 2022), it is likely such way of modulating can be applied in Arctic Governance Research essential to the Just Green Transition. The authors of this paper therefore share the following objectives:

- (a) To develop a perspective on interdisciplinary work (and its modulating practice) and significance for Arctic Governance Research on the Just Green Transition.
- (b) To support the above objective with case examples using interdisciplinary topical issues in law and the social sciences, relevant for research on environmental sustainability in the Arctic.
- (c) To conclude with suggestions as to what present and future implications exist for Arctic Governance when incorporated with interdisciplinary work on the Just Green Transition?

## **2 The interdisciplinary approach: knowledge sharing**

The use of interdisciplinary theories and approaches to studying society and the environment has been debated as a productive way of bridging across the social and natural sciences in the development of new tools and theoretical frameworks for environmental problem-solving (Janssen et al. 2006). Also, defined as “the synthesis of two or more disciplines,

establishing a new level of discourse and integration of knowledge” (Klein 1990). How will it be useful when adapted in the context of Arctic Governance Research linked to the Just Green Transition? Turning to an earlier publication, Raymond Miller’s (1982) work “Varieties of Interdisciplinary approaches in the social sciences: a 1981 overview”, shares thoughts on the practice of interdisciplinary approaches in academia. In Miller’s overview, he recalls the basis for creating the Social Science Research Council organized in the United States, 1920’s, that was aimed at providing a forum to promote integration across disciplines. One of its purposes was bridging gaps in the Social Sciences as the inadequacies of integrating several responsibilities in ways that could relate what he called the ‘analysis of parts’ to the ‘analysis of the whole’. The 1960s turmoil (tensions between global powers) made multidisciplinary work a need, with disciplines and sub-disciplines becoming more numerous in academia.

To Miller (1982), the discipline’s structure determines “what aspect of reality is studied, how it is understood, and the relative validity of the descriptive and explanatory statements derived therefrom” (p.4). In other words, disciplines do carry in them filter-interpreting principles. So, a given discipline carries a similar set of principles that direct the inquiries of that discipline. In this example, the Researcher observes specific facts out of a variety of possibilities. These facts, Miller defines as

organized by the "make-sense patterns" of the discipline that gives meaning to facts. Hence, interpretation of data also depends on principles of inquiry within a given discipline. In integrating interdisciplinary theories and approaches, it can be argued, it reveals benefits of working with several sets of principles and inquiries resulting to broader interpretations of facts.

On the example of the Just Green Transition and its connection to Arctic Governance Research, the Arctic, like other regions elsewhere, continues to experience novel changes that affect the natural environment. Arctic Governance Research and its contribution to combatting the global ecological crisis aided with relevant interdisciplinary theories and approaches would be valuable to reveal a wide range of information needed for sustaining the Arctic environment. In line with Miller (1982), applying interdisciplinary approaches enables keeping one's research together when involved in a holistic inquiry. Take the example on the interdisciplinary integration of the social-ecological network approach. Bodin et al. (2017) praised the works of David Bohan and Laura Dee for their studies demonstrating benefits of applying the interdisciplinary social-ecological network approach for studies on human-nature systems and ecosystem services. To Bohan and Dee, network approaches have greater chances of disclosing the interdependencies between the complex human and ecological changes that are

part of many environmental problems, providing a neutral and common ground for interdisciplinary integration. On the analytical side, the social-ecological network approach has been shown to empirically test hypotheses theoretically derived, thus providing practical insights about human-nature interactions and their social-ecological implications (Bodin and Tengö 2012; Guerrero et al. 2015). However, Bodin et al. (2017) cautioned against the possibility of interdisciplinary studies to make limited progress with imbalances across disciplines. This includes possibilities for delayed collaboration in research that involves working across the natural and social sciences with different epistemologies and research traditions.

A much more evident limitation concerns distinctions in the use and definition of "knowledges" between the Natural and Social Sciences vis-à-vis Scientific and Traditional. It would be hard to ignore the rapid changes in Arctic ecosystems and its knowledge-importance for combatting global climate change and other environmental problems. Arctic ecosystems are sensitive to chemical and biophysical changes brought by human activities and natural events but are also indicators of early warning for global greenhouse warming and what measures to take in response. As anthropologist, Pelliccioni (1998) puts it, "It affects the global climate directly through interactions between the atmosphere, ice cover and ocean, and through feedback processes"

(p.1). Knowledges about these changes in Arctic ecosystems, their identification, use, and exchange (through cross-disciplinary research, governance, policy implementation, multi-sectoral industrial activities, Indigenous livelihoods, and the everyday life of local residents in the Arctic), will remain crucial for efforts to combat ecological imbalances in the Arctic and elsewhere in the globe. Also, the growing complexity of not only knowledge about ecosystems but that of human systems comprised of multiple land users can be of risk in what Pelliccioni calls “knowledge confrontation” (on the biophysical, economic, social, cultural, and spiritual aspects of the environment). Nevertheless, other than the disciplines of Arctic Law and the Social Sciences

emphasized in this paper, there are lessons we can gather from earlier anthropological contributions that include holistic and cross-disciplinary inquiry on varied forms of knowledge (see: Pelliccioni 1998), that offer useful options for bridging current gaps in the use of distinct knowledges between ecological and human systems. Such as, adopting an interdisciplinary emphasis on what such knowledges convey regarding the ‘inter-relationships’ between components of the environment and their potential indicators for short and long-term solutions to environmental instabilities in the Arctic.

Comparing the above examples to our focus on Arctic Governance Research and the SRC proposal to theming Just Green

*Table 1: Modulating in research: assumptions and possible outcomes*

<b><i>Researchers’ goals</i></b>	<b><i>Possible assumptions</i></b>	<b><i>Possible outcomes (the example of Arctic Governance Research on the Just Green Transition)</i></b>
Identifying a given phenomenon impacting society	Higher chances for flexibility in action plans and implementation	Increase in the resilience-capacity to anticipate delicate societal challenges in the Arctic and respond accordingly
Bringing about clarity to different audiences about the phenomenon, making it meaningful or sensible to others	Enhances inclusive practices in decision-making and promotes knowledge-integration	Enhancing the agency displayed in legislative arrangements/ policies, making them more capable to combat environmental instabilities in the Arctic
Adjusting/planning in response to and consistent with circumstantial needs linked to the phenomenon in society	Facilitates changes or updating policies where (and when) needed	Creates greater space for debates and the generating of knowledge for long-term solutions on the ecological crisis
Finding alternative concepts applicable to diverse societal contexts that warrants short-term and/or long-term solutions	Brings about greater access to relevant information in society	Greater chances for co-producing knowledge and effort-sharing among various stakeholders towards greener ways of living
Evaluate/assess a given solution/plan/action for benefit of society and environment		Greater awareness in the public on urgent needs and possible solutions, inclusive of individual-based action against climate change

*Source: Authors’ illustration example (2022)*

Transition, worth mentioning, are the developments in 'research and science cooperation' that could play a central role to interdisciplinary work. The example of the UArctic Network, its sub-thematic networks, and institutions (UArctic 2022) that connect plenty of Universities and Research Institutions across Arctic States (including non-Arctic Member States). Through networking, researchers can benefit from cooperation across disciplines, and with various expertise and stakeholders for knowledge sharing. In such level of cooperation, are equally opportunities to advancing the frontiers of policy research in the Arctic as the complex nature of global environmental challenges often necessitate the need for cross-disciplinary inputs.

### **3 Modulating as a research practice**

Modulating generally refers to the practice of regulating, adjusting to certain measures, such as an action or a process, making it suitable for a given situation, such as softening or toning down the amplitude or frequency of an occurrence. Its use in behavioural, policy, and social science research, is not new. For instance, Scherer et al. (2014) in their study likens modulating to an unfolding articulative process that shapes different perceptions and the embodied involvement of people made meaningful through varied ways of grasping experiences. Modulating is also used in the context of evaluating social policy in response to an existing crisis – taking into consideration, aspects as;

directing resources, making assessments, gathering public support to enhance social policy and bring about societal benefit (Simone et al. 2022). In the work of Johnson-Bailey (2003), modulating shares interest in the narrative methodology, expressing communication with purpose of easy understanding - that appeals to experiences that are cognitive, affective, and conative in nature. Putting this practice in the research context of Arctic Governance and the Just Green Transition necessitates identifying possible hypothetical assumptions and outcomes with an example (Table 1).

Table 1 illustrates assumptions and possible outcomes of modulating in research, such as, when applied in situations of using interdisciplinary work to advance the Just Green Transition through Arctic Governance Research. To develop a perspective on interdisciplinary work, and its significance for Arctic Governance Research on the Just Green Transition, the subsequent paragraphs will further deliberate on the matter with case discussions.

### **4 Case examples: the European Arctic**

In this section, the authors, from disciplinary research areas of Law and the Social Sciences, discuss relevant topics in Arctic Governance and some considerations for research on the Just Green Transition.

#### *4.1 Holistic cross-border environmental governance: the European Arctic*

Environmental governance has to be holistic. This does not mean that localized, targeted protective governance action is not necessary (to the contrary), but it means that, in order to effectively protect the natural environment, it is not enough to look only at the situation in one place, disconnected from the rest of the region's environment. There are three fundamental aspects to the holistic approach in cross-border environmental governance in the European Arctic.

For this purpose of this part, the term European Arctic refers to the Arctic regions of Norway, Sweden, Finland, Iceland, and Greenland. While cross-border environmental governance is often perceived from a land-based perspective, the significance of marine spaces and of the marine environment for the Arctic makes it necessary to take marine governance into account as well when discussing cross-border environmental governance.

The first aspect of cross-border environmental governance in the European Arctic that is noteworthy is that the ecosystem approach is being utilized for cross-border environmental governance. Holism in cross-border environmental governance in the European Arctic can be inspired by experiences from marine environmental governance. This is the first dimension of holism: the ecosystem

approach that has been developed in marine environmental law can be transferred to the protection of the natural environment on land. In some cases, we see this already happening in Europe, including in the European Arctic. There is cooperation along borders, for example through the border rivers commissions at the borders of Finland and Sweden and of Finland and Norway, respectively. In the Finnish-Norwegian border area, we find protected areas on both sides of the border, like in the northernmost part of the Baltic Sea, where both Finland and Sweden have taken measures to protect the marine environment (Kirchner et al. 2022). The idea of the ecosystem approach is being transferred from marine environmental law to environmental protection on land already today. Indeed, this cooperation between the Nordic countries is hardly new and they have long served as role-models in this regard (although there remains, of course, some room for improvement).

The second noteworthy aspect is that the human dimension is increasingly recognized as playing a role in environmental protection. What the northern European States (apart from the Russian Federation) have in common is a clear commitment to human rights, democracy, and the rule of law. European Arctic States (Denmark, Iceland, Norway, Sweden, and Finland) are parties to the European Convention on Human Rights (ECHR 1950). The European Court of Human Rights (ECtHR) has long

emphasized the importance of the natural environment for human rights, particularly in the context of the right to a healthy environment. The Nordic countries have a particularly human rights-based approach to the protection of the natural environment, as is also evidenced by regional international treaties, such as the Espoo Convention (EspooConv 1991) that deals with environmental impact assessments, or the Aarhus Convention (AarhusConv 1998) that includes access to information and procedural rights. Beyond these treaties, the human dimension of environmental protection across borders can also be recognized through the improved implementation of Indigenous rights and the integration of concepts such as One Health in decision-making processes.

Such processes happen on different levels of government. Across the Nordic countries, relatively similar governance structures can be found. In addition to existing international and cross-border institutions, these (relative) similarities can facilitate cross-border cooperation. Such cooperation does not require identical governance structures but an ability to communicate across political and organizational divides. As the third dimension of cross-border environmental governance, in the European Arctic, similarities in the legal cultures and administrative structures, strengthened also by the important role the law of the European Union plays for the protection of

the natural environment, play an important practical role in cross-border cooperation for environmental protection.

The practice of environmental protection in our region is one of interdisciplinarity. These dimensions show that effective cross-border environmental governance in the European Arctic will have to transcend not only borders but also traditional structures of work and knowledge sharing. Effectiveness is not only an important aspect of European human rights law, but it should also have a place in the protection of the natural environment on which we all depend.

#### *4.2 Climate migration: towards greener reforms?*

Climate migration might be seen as a reflection of how climate change can affect people's freedom to choose their own ways of living. First time as a separate definition and problem within the EU, climate migration received attention in 2011 when in the European Parliament resolution of 5 July 2011 on increasing the impact of EU development policy, the authors mentioned climate migration as a phenomenon that some estimate will cause 200 million people to leave their homes by 2050 as conditions in their lands gradually worsen (European Parliament 2011). In that resolution, the authors applied that the European Union must contribute through its development policy to aiding and reducing the number of refugees by investing in technologies, human resources

and financial aid (European Parliament 2011). By investing in technology improvements that would help mitigate potential causes applying to climate migration, the European Parliament hoped to limit the number of climate refugees. Still, even in 2011, it was clear that climate change would not be halted. In 2016, the authors of the European Parliament resolution (2016/2814(RSP)) on the implementation of the Paris Agreement and the 2016 UN Climate Change Conference in Marrakesh, Morocco, reiterated the issue and emphasised that it should be addressed globally because climate migration is a global issue (European Parliament 2016). Finally, in 2022, climate migration was listed as one of the causes of global migration, as important as global instability, conflicts, and state fragility in the Resolution of the European Committee of the Regions on the contribution of local and regional authorities to the Conference on the Future of Europe (European Union 2022). So, from 2011 to 2022, climate migration's relevance grew from a phenomenon that might lead to issues in the future to an already recognised global issue and a catalyst of global migration.

Today, the term "climate migration" deserves recognition and regulation in the domestic legal systems of the Arctic states. This is often still missing, which leads to a domestic protection gap in addition to the already existing international protection gap. In general, climate migrants have the

right to seek asylum in the EU and Schengen Zone countries (including states of the European Arctic, except Russia), but their chances of meeting the international protection criteria are slim (Prokkola et. al. 2021). The protection gap in international law can be seen in the lack of regulation of matters of climate-induced cross-border displacement (Prokkola et. al. 2021). The 1951 Refugee Convention or other international agreements do not protect people displaced for climate and environment-related reasons. Only if other factors amount to persecution or life-threatening conditions upon forced return can the national immigration services issue protection (Prokkola et. al. 2021). Further, in the case "Ioane Teitiota v. New Zealand", from the Supreme Court of New Zealand (Supreme Court of New Zealand 2015), the Human Rights Committee provided new criteria for the assessment of threats from climate change. This case shows, among other things, that paying attention to the national adaptation plans and actual protection measures of states affected by climate and environmental changes is relevant. Therefore, it is possible to draw the conclusion that the growing number of cases highlighting the current protection gaps gives hope that the term "climate migration" will be used more actively in domestic regulation of climate adaptation measures and the international regulations on refugees' protection, providing a clean-based foundation for the regulation of this crucial issue.

### *4.3 Climate change policies, biodiversity preservation, and strategic research*

Strategic research on Arctic Governance and efforts to promote the transition to greener ways of living presents useful options for climate change policies and reforms on preserving biodiversity that impact the everyday life of people in the Arctic. However, a retrospective analysis on how such policies transform over time to meet present and future needs of the Arctic environment would significantly benefit Arctic Governance Research. Examples could include international agreements and proposals, national reforms, strategic plans, as well as Voluntary Guidelines as the Akwé: Kon that matters for preserving sacred sites, lands and waters traditionally occupied or used by Indigenous and local communities in the Arctic and elsewhere.

The European Commission not so long-ago updated proposals of the European Green Deal in response to energy disruptions stressing EU Member States to increase their share of renewable energy consumed to 32% by 2030 (European Commission 2022). The Deal also shares proposals on the possibility for people to produce their own green energy. Finland, an EU Member State and the most forested country in Europe in terms of the proportional share of forest land, shares commitment to the Green Deal by means of a national climate change policy. This policy connects national reforms and strategies, international agreements and proposals, regional and municipal action plans. An

example, the Climate Change Act of 2015, aims at reducing the nation's greenhouse gas emissions by at least 80% by 2050 in comparison to levels in 1990 (Ministry of the Environment 2022a). The new Finnish Climate Change Act updated in 2022 targets emission reduction targets of -60% for 2030, -80% for 2040, and -95% by 2050 (Ministry of the Environment 2022a). Other components of the national climate change policy are those on energy and, the use and preservation of biodiversity. Examples include the 2008 National Climate and Energy Strategy (Kivimaa & Per 2011), the National Strategy for the Conservation and Sustainable Use of Biodiversity 2006-2016 (Heikkinen 2007), among others. Periodic developments surrounding these policy strategies and how they navigate the fair and equitable sharing of benefits arising from use of biodiversity and other genetic resources, would be an aspect to consider in Arctic Governance Research.

Finland and other European Arctic States do share commitments to international agreements as the 2015 Paris Agreement and the Convention on Biological Diversity that entered into force in 1993, on combatting climate change. However, the effectiveness of international agreements in the Arctic is often aided by cooperation between European Arctic States. Finland for example, participates in the Nordic Council of Ministers, the Arctic Council, and the Barents Euro-Arctic Council, on matters promoting sustainability the Arctic environment. Its Northernmost region,

Lapland, recently drew interest of the European Commission selecting the region as one of the 118 European regions supported by the European Commission in adapting to climate change through the EU's new Horizon Europe tool (The Regional Council of Lapland 2022). At the municipal level, the Regional Council of Lapland's Climate Change Strategy for 2030 revealed climate change as a threat to nature-based livelihoods, and the measures being taken to preserve the region's nature (Mettiäinen 2013). A more up-to-date publication recognizes the risks associated with the above threat, from extreme weather events, increased urban flooding, to forest damage, requiring ever more both policy and practical measures among various actors in the region, to reduce, prepare for, and adapt to the impacts of climate change (Ministry of the Environment 2022a). Reviews on the strategy illustrate Lapland as a carbon sink attributed to its forest and snow cover. Also, a region perceived as producing more energy than what it uses locally. By impact, this creates more possibilities for producing renewable energy. In this example among others, Arctic Governance Research can be useful to addressing questions about risks to the natural environment and what options exist for risk-reduction in the Arctic. As European Arctic States shift towards greener living, such as the transition to renewable energy, it's likely there will be a growing need for clarity on what kind of mutual relations exist between climate change policies and

strategic research practices in the Arctic. Thus, the Strategic Research Council's (SRC) proposal for Just Green Transition as the 2023 theme for research programmes, presents possibilities for which Arctic Governance Research can contribute to long-term progress in combating the global ecological crisis, especially in the Arctic.

#### *4.4 Inclusive governance: marine protected areas in the Arctic*

One cannot exclude the Arctic Ocean when studying and working in the Arctic. While Finland and Sweden are not Arctic Coastal States, they are Arctic States and are linked to the Arctic Ocean through river inflows (Niemi 2009) and their contribution to the Arctic blue economy through the export of minerals, as well as providing expertise and support for marine operations (Kotilainen and Colpaert 2014; Lipponen 2015).

Rapid and unprecedented changes in the Arctic Ocean are affecting global processes, opening the area up for economic activities, and affecting coastal communities that are using the ocean to support their livelihoods, including commercial fishing, transportation, mineral and hydrocarbon extraction, as well as traditional practices of hunting, fishing, herding, and gathering (Huntington et al. 2022). Thus, ecological, cultural and social sustainability of the Arctic is required.

Also, the European Green Deal, which is also of relevance for Finland as an EU

member, recognizes the importance of the ocean and the blue economy, including the Arctic Ocean. More importantly, it acknowledges that a green transition cannot be achieved without a blue transition (Taylor 2021). This counts especially for the Arctic, where a strong land-ocean interface is present. Thereby, an integral part of achieving a sustainable blue economy is to safeguard and preserve Arctic marine biodiversity, which also generally reflected in the United Nations (UN) Sustainable Development Goal (SDG) 14 (Lee et al. 2020; Wenhai et al. 2019). To achieve sustainable use of the ocean, especially the increasingly exposed Arctic Ocean and its ecosystem, a balance between the development of economic activities and the effective protection of the environment, under consideration of climate changes impacts, needs to be ensured.

A key tool with the potential to enhance ecosystem resilience to climate change and achieve the SDGs are Marine Protected Areas (MPAs) (Pendleton et al. 2018; Sacha et al. 2021). However, in reality, the level of Arctic MPAs is low, leaving vulnerable marine ecosystems unprotected (PAME 2022; Wenzel et al. 2016). In addition, the MPAs' ability to dynamically adapt to rapid climatic changes is lacking (Sacha et al. 2021; Stephanie et al. 2021), and the establishment of MPAs in areas beyond national jurisdiction (ABNJ) remains unregulated and unclear.

While efforts, on an international and regional scale, are increasingly related or established due to climate change impacts on the Arctic Ocean, they only marginally include climate change aspects and do not provide clear mechanisms that enable the adoption or use of management tools in a more adaptive way. These include the adoption of the Central Arctic Ocean Fisheries Agreement (CAOFA, 2021), the establishment of a non-legally binding Framework for a Pan-Arctic MPA Network by the Arctic Council (PAME 2022) as well as their research efforts related to the Arctic Ocean, and the negotiations on a new international legally binding instrument on the conservation of marine biological diversity beyond national jurisdiction (BBNJ) (UN 2022). Even though these instruments recognize ocean connectivity, the far-reaching impacts and consequences of changing ecosystems, and the need to utilize an ecosystem approach and protect marine biodiversity, uncertainties for the implementation of these frameworks remain. Thus, merely a basis for the effective conservation of marine biodiversity is provided.

Against this background, a strong legal framework that enables regional actors, such as the Arctic Council, for example, to establish dynamic and adaptive ocean management reflecting ecosystem changes, is needed in order to provide the effective conservation of marine ecosystems, which accommodate

ecosystem services and support a truly sustainable blue economy.

#### *4.5 Research ethics and heritage in Arctic Law: Adapting good practices*

The UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage defines cultural heritage as a legacy that is inherited from the past and bestowed for the future, but it is also a process, elaborated in present communities. Global policies such, as the UN Sustainable Development Goals that form the most comprehensive agenda for development, put culture at the center. In this context, questions related to the protection, access and management of also Indigenous cultural heritage have emerged. Article 31 of The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) states that "Indigenous peoples have the right to maintain, control, protect and develop their cultural heritage". This includes, for example, traditional knowledge and traditional cultural expressions. In the specific case of Sámi cultural heritage the ethical guidelines for responsible Sámi tourism define Sámi culture as including "among others, the Sámi language, Sámi cultural heritage, cultural expressions, Sámi art, traditional knowledge of the Sámi, the relationship of the Sámi with nature, traditional Sámi livelihoods and the modern ways of practicing them as well as other cultural customs and manifestations practiced by the Sámi as an Indigenous people" (Principles for Responsible and

Ethically Sustainable Sámi Tourism 2018, pp.4).

On the European Union level, there is no specific legislation relating to Sámi (as this is outside the competences of the EU) nor Indigenous cultural heritage. However, many issues related to cultural heritage fall within the scope of intellectual property rights (IPR), such as copyright, in the field of which the EU has currently 11 directives and 2 regulations in force. These harmonize the essential rights of authors, performers, producers and broadcasters. However, it has been noted that the Western framework of IPR's appears to be in many cases an insufficient legal regime to address the issues of Indigenous cultural heritage (see e.g., Ballardini – Härkönen – Kestilä 2021; Kestilä 2021).

One element of discussion about cultural heritage is, in addition to ways of managing and protecting said practices and materials, the question of research ethics. How can e.g., cultural heritage of Sámi people be researched, and that way also archived and preserved in an ethically sound manner? Currently, there are a number of ethical guidelines either in force or being developed in the Arctic. For example, the Sámi parliament in Norway has developed ethical guidelines for Sámi health research and research of Sámi human biological material (Sámi Parliament of Norway 2020). From the Sámi parliament of Sweden there is a policy document on traditional knowledge (Sámi Parliament of Sweden

2010). The Sámi parliament in Finland has developed a procedure for seeking the free, prior, and informed consent (FPIC) of the Sámi through the Sámi Parliament in Finland for research projects dealing with Sámi cultural heritage and traditional knowledge (Sámi Parliament of Finland 2019).

In 2018 there was a working group established in order to develop ethical guidelines for Sámi research in Finland. The working group mentions as its goal creating research ethical guidelines that will help researchers conduct sustainable research on the Sámi. The guidelines are drawn up in close cooperation with the research and Sámi communities. The participation of the Sámi communities already at the stage of drawing up the guidelines contributes to the realization of the Indigenous people's right to self-determination (University of Lapland 2022). The working group composes of the universities in Finland as well as representatives from Sámi institutions (ibid.).

Most of the ethical guidelines derive from a starting point that research has historically been rather exploitative and one-sided practice. Indigenous People are no longer objects but are increasingly seen as subjects and participants in the production of knowledge or materials. This has led to emergence of ethical guidelines globally as well. There are guidelines developed e.g. for the Aboriginal and

Torres Strait Islander peoples in Australia (AIATSIS Code of Ethics for Aboriginal and Torres Strait Islander Research 2020; Aboriginal Knowledge and Intellectual Property Protocol: Community Guide 2009), Maori in Aotearoa/New Zealand (Te Ara Tika Guidelines for Maori Research Ethics 2010) as well as First Nations, Inuit and Metis in Canada (see e.g. Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans 2018; Ethics in First Nations Research 2009).

While some variation is bound to exist, also central themes appear to emerge. These include, for example, principles of four R's: *responsibility, respect, reciprocity, and rights* or *respect, relevance, reciprocity and responsibility*. These serve often as a sort of guiding or general principles, although they may be not explicitly mentioned. These principles are in many cases concretised as more specific guidelines. They might have been manifested via principles such as *differences between knowledge-systems, benefit-sharing, questions about intellectual property rights, cultural sensitivity and free, prior and informed consent*. Similar observations have been made by Áslat Holmberg (2021) in the report drafted for the Sámi Council.

What can be gathered from these notions is that Indigenous peoples face globally similar challenges in terms of research ethics and use, as well as even appropriation, of cultural heritage elements. Indeed, comparison and analysis

of the existing guidelines can be a useful starting point when considering the guidelines for ethical guidelines concerning Sámi, the process which is already ongoing from this premise. Also ad hoc type of guidelines can benefit from this existing material. This type of work has been carried out in the project *Digital Access to Sámi Heritage Archives* (2022), where ethical guidelines were developed concerning use of the service that the project developed.

As was mentioned above, IPRs have sometimes been considered as inappropriate legal instruments in terms of protecting Indigenous cultural heritage. What ethical guidelines can possibly do in this regard, is to “close the gaps” within legislation. Ethical guidelines can be used to articulate the needs and wishes of Indigenous communities the cultural heritage elements are associated with. However, ethical guidelines are not binding in the similar sense as legislation and they cannot be easily enforced. Nevertheless, in many cases the ethical guidelines may be considered to have reached de facto binding status. For example, statements of Finnish National Board on Research Integrity (TENK) are usually followed and universities in Finland are committed to them. It is of primary importance that the work of developing ethical guidelines is done from the initiative and in cooperation with Sámi communities. Otherwise, there is a danger that the guidelines will only work as a cosmetic improvement.

## **5 Conclusion and outlook**

To commemorate the tenth volume of *Current Development in Arctic Law (CDAL)* and the 'new normal' of Arctic Governance, this paper has put together some of the latest outputs of Arctic Governance Research – an up-to-date perspective with attention to interdisciplinary work and its importance to the Just Green Transition. It does so, with the authors sharing interest in objectives that target: (a) Interdisciplinary work, its related research approaches, and importance for Arctic Governance Research on the Just Green Transition; (b) Illustrating examples with topical issues from the disciplines of Law and the Social Sciences appropriate for Arctic Governance; and (c) suggestions as to what interdisciplinary work adds to the present and future of Arctic Governance Research on the Just Green Transition. The authors used case examples with topics ranging from traditional in-depth Arctic Governance Research topics such as nature conservation and indigenous issues to emerging 'Arctic' issues such as climate migration and the role of IPR in Arctic law among others. In them, are evidence of an Arctic shaped by diversity not only in genetic resources, but, in the interplay between numerous actors, sectors, and stakeholders. So too, are the challenges that emerge during this diversity – a context that can be addressed with the aid of interdisciplinary work.

Strengthening Arctic resilience would continue to be one of those essential needs

which interdisciplinary work could contribute to, in shaping the present and future Arctic Governance Research and the Just Green Transition. An example, to developing such resilience, can be the practice of inspiring debates among Researchers of Arctic Governance on the modalities of applying interdisciplinary practices in Arctic Governance. Also, paying attention to case examples that arise with diverse perspectives and what meaning they indicate for improvements in Arctic Governance and the Just Green Transition. The authors have illustrated in this paper, the practical value of promoting knowledge in new ways. Topical examples underlined here, from holistic cross-border environmental governance, greener reforms on climate migration, inclusive governance for marine protected areas in the Arctic, to incorporating good practices through research ethics and heritage in Arctic Law. These are only a drop of topics among several indicative of the Arctic's diversity and the need for further resilience building in the vastly transforming European Arctic. They, nevertheless, are examples of the Just Green Transition's effects useful to revealing where additional capacity building is needed to strengthen Arctic resilience.

Also, linked to interdisciplinary work, are the transformation processes, and what they imply for regional resilience under the scope of Arctic Governance and research on the Just Green Transition. Analysis of case examples in this paper show that the

multiple ongoing transition(s) in the Arctic and outside the region are not separated. Instead, transformation processes are increasingly interlinked, and further attention is needed to focus on the new normal of Arctic Governance Research. While the local and global paradigms are transforming, Arctic governance and research should be able to develop its most valuable traditions while openly aiming to integrate emerging sectors and the best lessons learned.

Conclusively, the Just Green Transition is among the critical knots that current-day policy developments should continue analysing. In the European Arctic, EU politics and regulations are key drivers setting clear timelines to combat present and future challenges. In this regard, top-down coordination coupled with bottom-up flexibility are essential to developing regional resilience. While it is crucial to maintain flexibility to avoid possible collateral damages following strictly structured joint decision-making, shared action would also play a role to maintain the resilience of Arctic societies and the natural environment. This paper showed that despite the global ecological crisis, analysing the vastly transforming local and global dimensions of the Arctic with the aid of interdisciplinary practice, does add to strengthening the 'new normal' of Arctic Governance. It does even better, enhancing this 'new normal' if current policy developments emphasize on the role of the Just Green Transition in the Arctic.

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