



LAPIN YLIOPISTO
UNIVERSITY OF LAPLAND



University of Lapland

This is a self-archived version of an original article. This version usually differs somewhat from the publisher's final version, if the self-archived version is the accepted author manuscript.

Evaluating institutional effectiveness

Smieszek, Malgorzata (Gosia)

Published in:
The Polar Journal

DOI:
[10.1080/2154896X.2019.1618554](https://doi.org/10.1080/2154896X.2019.1618554)

Published: 10.06.2019

Document Version
Peer reviewed version

Citation for published version (APA):
Smieszek, M. G. (2019). Evaluating institutional effectiveness: the case of the Arctic Council. *The Polar Journal*, 9(1), 3-26. <https://doi.org/10.1080/2154896X.2019.1618554>

Document License
CC BY-NC-ND

Publisher Rights
The Version of Record of this manuscript has been published and is available in Polar Journal, 10th June 2019, <http://www.tandfonline.com/10.1080/2154896X.2019.1618554>

Evaluating Institutional Effectiveness: The Case of the Arctic Council

Malgorzata (Gosia) Smieszek

Arctic Centre, University of Lapland

Rovaniemi, Finland

Email: Malgorzata.smieszek@ulapland.fi

Twitter: @gosiasmieszek

Abstract

The 20th anniversary of the Arctic Council in 2016 provided an excellent opportunity for evaluating the council's performance over its two decades in operation. Along the AC's appraisals, various commentators – both from within and without the council's circles - put forward proposals to reform the AC in order to, arguably, strengthen it and enhance its effectiveness vis-à-vis new challenges facing the Arctic. Interestingly, most of those accounts have only tenuous, if any, connection with the general literature on international environmental regimes and their effectiveness. As a result, they do not draw from the insights flowing from this literature and, in reverse, they miss an opportunity to contribute to the broader body of knowledge about international environmental institutions. The lack of systematic inquiry also hampers our ability to accumulate knowledge about the performance of the Arctic Council itself. To address that matter, this article draws up a basic framework through which future assessments of the AC's effectiveness could be grounded in the general literature on international regimes. The study treats the AC as an institution or regime as these terms are used in the broader literature on international relations. It adopts the political definition of institutional effectiveness and is based on literature reviews related to international regimes and the Arctic Council as well as, whenever relevant, on the subject of Arctic governance at large. Overall, the article underlines the critical importance of systematic inquiry and transparency in producing insights regarding the AC's effectiveness – as of any other institution – to allow for accumulation of our comprehension of what makes the Arctic Council work.

Keywords: Arctic Council; effectiveness; international environmental regimes; soft-law; Arctic governance

Introduction

The 20th anniversary of the Arctic Council (AC) in 2016 presented an excellent opportunity for assessing the council's performance over its two decades in operation. Scholars, practitioners and observers of northern affairs praised the AC's achievements, commented on the council's contributions to Arctic and international relations and reflected on this forum's remarkable evolution from its inauspicious beginning in 1996. The AC has been celebrated,

among other accomplishments, for increasing the prominence of the concerns of Arctic indigenous peoples, producing influential scientific assessments, for providing a venue for the negotiations of first circumpolar legally binding agreements and finally for promoting peace in the region, which previously served as one of the main theatres of the Cold War.¹ Simultaneously, many authors, both from within and without the academic community, put forward proposals for the council's reform and proposed ways for strengthening the AC vis-à-vis contemporary challenges related to consequences of climate change and prospects of increased human activity in the Arctic; however, from a historical perspective, those accounts are nothing new. Instead, they represent a continuation of a trend visible almost from the council's foundation. Almost from the establishment of the AC, commentators floated numerous reform proposals to attempt to, arguably, enhance the council's effectiveness. While considering those proposals in detail lies beyond the scope of this paper, it is interesting that what many of those accounts have in common is their tenuous, if any, connection with the general literature on international environmental regimes, specifically with the theoretical part of this literature related to the institutional effectiveness. Even if there is no consensus among scholars over a single definition of institutional effectiveness or its determinants, the efforts of academics in the field have nonetheless produced a very solid body of knowledge that might serve as a valuable basis for our analysis of the Arctic Council. Treating the AC as an institution or regime as these terms are used in the broader literature on international relations² allows us to tap into that body and make use of the scholarship on regime effectiveness to structure our thinking about the AC.³ While this knowledge has been occasionally used to examine various

¹ Koivurova and Heinämäki, "The Participation of Indigenous Peoples."; Keskitalo, "Negotiating the Arctic." Nilsson, "Knowing the Arctic."; Kankaanpää and Young, "The Effectiveness of the Arctic Council."; Young, "Arctic State Changes."; Koivurova, "Limits and Possibilities of the Arctic Council."; Exner-Pirot, "The Arctic Council."

² See the definition of an institution/regime in the next part of the article pp.5-6.

³ Treatment of the AC as a regime/institution is not a novelty in the field of Arctic studies and the Council has been analyzed in those terms already previously, the point that further validates the

aspects of Arctic governance, I propose in this article that its more systematic application to the case of the Arctic Council – even if challenging in methodological terms – is vital to advancing our understanding of the AC. In addition, such approach raises new questions of a general nature about the effectiveness of international regimes, in which the Arctic Council could serve as a useful case for future studies.

Among various definitions of institutional effectiveness, this paper adopts the political one, concerned with the extent to which a regime contributes to solving or mitigating the problems that led to its creation. In that approach the focus rests on observable changes in the behaviour of actors that can be convincingly attributed to the operation of a regime and that are responsible for the improved environment. The study is based on the literature review related to effectiveness of international environmental regimes and to the effectiveness and performance of the Arctic Council, both in a general sense as well as regarding examination of specific AC issues. Whenever relevant, it refers also to literature on the subject of Arctic governance at large.

The paper proceeds in five parts. Firstly, it begins with the overview of general literature on the effectiveness of international environmental regimes, including the most important factors to look for in understanding the performance of institutions and the challenges posed by the inquiry into institutional effectiveness. Secondly, it provides a brief history of the establishment and the evolution of the Arctic Council up to the present day. Third, based primarily on the factors related to the effectiveness of international environmental regimes and listed in the first part, the paper explores five elements that bear importance for the systematic analysis of the council's effectiveness. In doing so, it refers both to existing studies of the AC as well as points out some misconceptions and areas worth closer attention

approach used in this paper. See Stokke, "Regime Interplay in Arctic."; Young, "Creating Regimes: Arctic Accords"; Young, "The Structure of Arctic Cooperation."

in future examination regarding the council's effectiveness. At the same time, the application of the central ideas of the broader literature raises new questions about analysing the performance of international regimes in general, where the Arctic Council could serve as a useful case study, as outlined in part four. The paper concludes with results that might be of practical relevance to policy makers, in particular at a time when the AC is working on its first strategic plan to optimise its work and prioritise its efforts and activities over the next decade.

On a theoretical front, the article aims to contribute to accumulating knowledge about the AC and its effectiveness – the rate of which, so far, appears to be rather low. While some reasons behind this situation are obvious (for instance, a lack of common conceptual framework or transparency in conducted research), it is important to move beyond this stage and beyond the “impressionistic commentaries on the effectiveness of the AC.”⁴ By looking at the Arctic Council through the lens of general literature on international environmental regimes, this paper constitutes a step in this direction. Concurrently, it needs to be underlined that a presented material is not a study of the AC's effectiveness itself. Instead, it devises a basic framework through which the next studies of the Arctic Council could be better grounded in the general literature on international environmental regimes and their effectiveness – benefitting both our comprehension of the AC and the general body of knowledge on international institutions.

International environmental institutions and their effectiveness

The importance of international institutions as possible drivers of change that can guide and affect the behaviour of actors is today well recognised and established.⁵ Institutions consist of “agreed upon principles, norms, rules, procedures, and programs that govern the interactions

⁴ Kankaanpää and Young, “The Effectiveness of the Arctic Council,” 1.

⁵ Young, “Regime Effectiveness: Taking Stock.”

of actors in specific issue areas”⁶, and international environmental regimes constitute their subset that is concerned with behaviour within areas related to the natural environment, its protection and management of natural resources.⁷ Regimes take shape as devices that groups of actors create to avoid or ameliorate the collective-action problems, and they can perform various tasks and functions.⁸ Despite the tendency to think of regimes mainly in terms of their regulatory roles, it is important to stress that they also frequently perform other functions, including playing procedural, programmatic and generative roles, and the differentiation between these roles matters when considering regime effectiveness.⁹ In other words, regimes might be viewed as tools – and as with any tools, they can be evaluated in terms of their usefulness in helping to carry out particular functions.¹⁰ Regardless of the type of regime and undertaken tasks, the effectiveness of international environmental regimes is one of the most fundamental criteria for their evaluation; it involves the contributions they make to solve the problems that led to their creation in the first place.¹¹ While intuitively simple, effectiveness can mean a number of different things and as such has been approached in various manners. This paper adopts a political definition of institutional effectiveness, which focuses on changes in behaviour of actors that can be convincingly attributed to the operation of a regime and that are responsible for the improved state of environment. After all, a regime cannot improve the state of the environment without changing relevant human behaviour¹² – even if there is no

⁶ Levy, Young and Zuern, "Study of International Regimes," in Young, "Effectiveness of International Environmental Regimes: Causal Connections."

⁷ Kratochwil and Ruggie, "International Organization,"; Keohane, "Neoliberal Institutionalism," in: Stokke, "Disaggregating International Regimes." It should be stressed that a term 'regime' refers here to a broader understanding of international environmental institutions than a narrower reading of it as encompassing solely legally-binding or regulatory arrangements, as sometimes implied in the literature.

⁸ Young, "Governance in World Affairs."

⁹ Young; Young, "Effectiveness of International Environmental Regimes: Existing Knowledge."

¹⁰ Underdal, "Methodological Challenges."

¹¹ Underdal, "Methodological Challenges." It is worth noting that in adopting this perspective, studies of regime effectiveness concentrate only on a part of regime consequences, notably those that are pertinent to the function of a regime in focus.

¹² Underdal, "Methodological Challenges," 34.

necessary relationship between behavioural adaptation fostered by a regime and impacts observed in its problem domain. To explain, part of the reason behind this situation is that international environmental regimes almost always constitute only one element of a much more complex setting in which various political, economic, technological and social changes and developments take place simultaneously. Accordingly, while the change in behaviour triggered by a regime can be a necessary condition to improve the state of environment, it is not always a sufficient one.¹³ Moreover, when it comes to our expectations regarding environmental regimes, it is worth remembering that “institutions can be a significant factor only insofar as human activities count as an important cause of environmental change”, not if the environmental change has its roots elsewhere.¹⁴

Because regimes are not actors in their own rights, but instead provide rules of the game under which actors pursue their individual goals, the effectiveness of a regime can be understood as the extent to which that regime channels behaviours to eliminate or ameliorate the problem that led to its formation.¹⁵ Empirical and theoretical studies of international environmental regimes identified several factors that should be borne in mind when assessing the performance of any regime.

First, it is important to specify the problem addressed by that regime, the one that prompted its creation. As straightforward as it seems, reaching an agreement on a definition of that problem can be tricky¹⁶, and unless specific effort is dedicated to it, various analysts can differently regard the nature of a problem targeted by a regime. Things to consider here include, for instance, next to explicit institutional goals, hidden agendas and tacit understandings of the participants of international negotiations that led to formation of a regime. Likewise, also

¹³ Stokke, “Determining the Effectiveness of International Regimes”; Young, “Regime Effectiveness: Taking Stock”.

¹⁴ Underdal, “Determining the Causal Significance,” 64.

¹⁵ Young, “Governance in World Affairs.”

¹⁶ Breitmeier, Young, and Zürn, “Analyzing International Environmental Regimes.”

informal elements that regimes frequently acquire over time and that become important to the success of the resultant social practices – all those aspects might affect understanding of a problem targeted by a regime. Finally, it is through the practice and impact of external developments that initial understanding of the institution's goals and problems, which prompted its creation might evolve with time among its participants.¹⁷

Second, regimes impact the behaviour of regime members and other relevant actors, and in consequence affect the content of collective outcomes in international society, via various causal mechanisms that can be generally captured under three categories: cognition, obligation and utility maximisation. Broadly speaking, these categories correspond to main categories of drivers known from political science and important to regime formation and performance: knowledge, power and interests. In a case of cognitive mechanism, a regime may affect the actors' behaviour by influencing their awareness of certain problems, ways to address them and pros and cons of various mitigation options. In the case of normative mechanism, a regime may affect perceptions of the actors about what is right and desirable, or about a proper conduct within an issue area, by making certain norms more compelling. Lastly, the utilitarian mechanism draws our attention to how regimes may affect behaviour by altering the utility that actors assign to behavioural options within an issue area – for instance, by providing incentives for rule adherence or adding costs to noncompliance.¹⁸

Third, whichever mechanism is at play, there needs to be a clear standard against which we measure and evaluate the effectiveness of a regime. From a methodological perspective, assessing the effectiveness of any regime means comparing its observed or predicted performance against some standard of "success".¹⁹ One response to address this issue has been,

¹⁷ Stokke, "Determining the Effectiveness of International Regimes"; Young, "Creating Regimes: Arctic Accords".

¹⁸ Stokke, "Examining the Consequences,"; Stokke, "Interplay of International Regimes."

¹⁹ Underdal, "Methodological Challenges."

such as in the domain of public policy, to introduce to examining the effectiveness of international environmental regimes a distinction among outputs, outcomes and impacts of a regime. Consequently, the study of outputs focuses on ratification, development of policy instruments and other formal steps of implementation taken by actors, usually national governments. The study of outcomes focuses, in turn, on measurable changes in the behaviour of regime members and those subject to their jurisdiction, whereas the study of impacts considers the consequences of a regime defined in terms of change in the biophysical environment itself.²⁰ At the same time, it is important to note that assessing the effectiveness of an institution becomes increasingly demanding the further we move along this chain. Not only do the scores tend to decline in assessment further down we go, but it also becomes more challenging to distinguish effects caused by the regime from the “noise” caused by other factors.²¹

Fourth, next to previously pronounced focus on the structure of a problem addressed by a regime as a variable critical to the effectiveness of this regime,²² today it is broadly accepted that the effectiveness of specific institutions depends oftentimes not only on their own characteristics but also on their interplay with other institutions²³, especially in the increasingly dense landscape of international institutions and instruments. This, in addition, directs our attention also to the fact that while international environmental regimes can shape and guide the behaviour of actors in the international and domestic arenas in a number of ways, their

²⁰ Young, “Consequences of International Regimes.”

²¹ Young, “Effectiveness of International Environmental Regimes: Existing knowledge.”

²² Mitchell, “Evaluating the Performance,” Underdal, “One Question, Two Answers.” In addition, as stated by Young, “[i]t is important not to confine the analysis of issue area consequences to problem solving in any narrow sense of that term” (“Consequences of International Regimes,” 6). Whereas some problems (e.g. resolving jurisdictional disputes relating to areas like Svalbard or Antarctica) are solvable in the sense that the results are generally accepted and the issues are unlikely to be reopened under any foreseeable circumstances, other problems (e.g. managing consumptive uses of living marine or terrestrial resources) cannot be solved in any ordinary sense of the term and require instead the ongoing efforts and periodic adjustments in their governing arrangements.

²³ Young, “Institutional Linkages”; Stokke, “Introduction”. The interplay between the institutions means that one institution affects the contents, operations or consequences of another.

effectiveness in doing so is not fixed. On the contrary, regimes change continually in response to both endogenous forces and exogenous pressures, and many institutions work better during some stages of their operation than others.²⁴

Before concluding this section, it is important to mention the methodological challenges faced by analysts measuring the effectiveness of international regimes. With respect to the political definition of regime effectiveness, those challenges include: making the concept of problem-solving operational and thus identifying the empirical evidence that would constitute such problem solving; substantiating that the regime in question is actually causally related to any change in problem solving in a given issue area; evaluating other factors that may also produce those changes in problem-solving; and finally, measuring any observed regime's effects according to an appropriate yardstick.²⁵ As demanding as they are, those steps cannot be skipped if one wishes to validate a regime-effectiveness claim, and various analytical techniques have been devised to meet this challenge.²⁶ Usually, though, the main problem in studies of regime effectiveness appears to be not a lack of appropriate tools (as much as there is a considerable scope for further development also in this respect), but a "lack of *transparency*; [where] too often we simply cannot determine *how* a particular conclusion [about regime effectiveness] has been derived."²⁷ To address this matter, explicit and transparent specifications of standards and procedures used to assess regime effectiveness are advisable in all exercises of this kind.

In summation, the scholarship on the effectiveness of international environmental regimes is abundant, and efforts of scholars in the field produced a very solid body of literature, examining and explaining sources of regimes' effectiveness. It is against this background that

²⁴ Young, Levy, (with Gail Osherenko), "The Effectiveness of International Environmental Regimes."

²⁵ Stokke, "Determining the Effectiveness of International Regimes."

²⁶ Underdal and Young, "Regimes Consequences."

²⁷ Underdal, "Methodological Challenges," 37.

the subsequent parts of this article draw up a framework for future systematic studies of the Council's effectiveness and look at the existing literature on the Arctic Council's effectiveness. Before this examination, a brief introduction to the council and a short overview of its evolution are first presented.

A short overview of the history of the Arctic Council

The Arctic Council (AC) was established by eight Arctic states in September 1996 as a high-level forum to promote “cooperation, coordination and interaction among the Arctic states, with the involvement of the Arctic indigenous communities and other Arctic inhabitants on common Arctic issues, in particular issues of sustainable development and environmental protection in the Arctic”²⁸. Its formation marked the second phase²⁹ in the region-wide collaboration, launched with the Arctic Environmental Protection Strategy (AEPS), signed in 1991 and effectively subsumed as one of the pillars of the AC.³⁰ Like the strategy, the council was adopted by means of a declaration rather than a treaty, thus reflecting a political – but not a legal – commitment of its members to circumpolar cooperation. Furthermore, upon the insistence of the United States to keep the council void of any features of an international organisation, the council emerged as an institution small in scale, without a permanent secretariat or budget and with a chair rotating on a biennial basis among members of the council. Next to the category of the members of the council – reserved exclusively for Canada, Denmark³¹, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States

²⁸ "Declaration on the Establishment of the Arctic Council," hereinafter the Ottawa Declaration.

²⁹ Koivurova and VanderZwaag, “The Arctic Council and 10 Years.”

³⁰ While the formation of the council marked a shift in focus from the environmentally oriented AEPS toward a broader sustainable development agenda for the North, there was no agreement among eight Arctic states on the meaning of the concept of sustainable development. The Arctic eight could not agree to a list of priorities for the new institution, much less to its comprehensive sustainable development program.

³¹ The original wording of the Ottawa Declaration.

("the Arctic States") – the Ottawa Declaration provided also for categories of permanent participants and observers. The former has been an innovative and mostly unprecedented arrangement under which selected organisations of Arctic indigenous peoples have their representatives sit alongside ministers and Senior Arctic Officials (SAOs)³² to ensure their "active participation and full consultation" on the council's activities³³. The latter category, in turn, has been created for non-Arctic states, global and regional intergovernmental and interparliamentary organisations and nongovernmental organisations "that the Council determines can contribute to its work".³⁴ In accordance with the AC rules of procedure, the primary role of observers is to observe the work of the Arctic Council, and observers are expected to contribute and engage predominantly at the level of AC working groups.³⁵ All decisions of the AC and its subsidiary bodies are taken by consensus of all eight Arctic states.³⁶

Since its beginning, the bulk of the council's work revolved around the conduct of scientific assessments on the state and change of Arctic environment and human development in the region. The assessments –such as the Arctic Climate Impact Assessment (ACIA), the Arctic Human Development Report (AHDR), reports on persistent organic pollutants (POPs),

³² Senior Arctic Officials (SAOs) are the high-ranking officials (usually at the ambassador level) designated by each Arctic state who meet at least twice a year. Their main task is to oversee the work of AC working groups and its other subsidiary bodies in order to ensure implementation of the mandates issued by Arctic ministers at the biennial AC ministerial meetings.

³³ "Declaration on the Establishment of the Arctic Council"; Arctic Governance Project, "Arctic Governance,"; Bloom, "Establishment of the Arctic Council,"; Fenge and Funston, "The Practice and Promise," 10.

³⁴ "Declaration on the Establishment of the Arctic Council." Originally, 14 observers were present at the signing ceremony of the declaration in Ottawa in 1996 – today there are 39, including actors such as China, India and Japan; and organisations such as the International Council for the Exploration of the Sea (ICES), the National Geographic Society and WWF. In addition, the group encompasses also the European Union (EU), which is recognised as the de facto observer of the AC.

³⁵ Arctic Council, Arctic Council Rules of Procedure. Revised by the Arctic Council at the Eight Arctic Council Ministerial Meeting, Kiruna, Sweden, May 15, 2013.

³⁶ "Declaration on the Establishment of the Arctic Council." Even though, technically speaking, only eight Arctic states are considered to determine whether consensus on any given matter has been reached, such is the status and moral authority of permanent participants that in most discussions, they take part in the same manner as states. They have been also occasionally able to influence the course of taken resolutions (Fenge and Funston, "The Practice and Promise.").

the Arctic Marine Shipping Assessment (AMSA) and the Arctic Biodiversity Assessment (ABA) – have become the hallmarks of the Arctic Council, filling an important niche of generating knowledge on the region, raising awareness of changes in the Arctic in the outside world and, in some instances, even influencing broader regulatory developments, as in the case of the Stockholm Convention on Persistent Organic Pollutants or the IMO Polar Code.³⁷ Among them, the ACIA not only contributed to ground-breaking understanding of the transformative implications of climate change for the Arctic³⁸, but its broadly publicised results played a part in raising awareness of Arctic issues and of the region, which remained largely disconnected from the global context after the end of the Cold War.³⁹ The grave findings of the ACIA were further confirmed when the Arctic sea ice extent marked a record-breaking shrinkage in the summer of 2007⁴⁰, followed by estimates that the Arctic Ocean could become ice free in summers as early as between 2030 and 2100⁴¹ and that the region might hold up to 30% of the world’s undiscovered oil and gas reserves.⁴² Those events, together with the widely reported planting of the Russian flag on the seafloor at the North Pole in August of 2007, drew unprecedented public attention to the region. It was further escalated by the media frenzy and speculations about possible jurisdictional conflicts, growing geopolitical tensions and prospects of armed clashes over energy and mineral resources in the Arctic.⁴³ It has also stirred a surge of interest in Arctic affairs among many non-Arctic state- and nonstate actors, exemplified mainly by their applications for observer status to the Arctic Council, outlining their own Arctic policies and laying out proposals for redefining the existing Arctic-governance

³⁷ Young, “The Arctic Council at Twenty.”; Downie and Fenge, “Northern Lights against POPs.”

³⁸ Rogne et al., “IASC after 25 Years.”; Duyck, “What Role for the Arctic.”

³⁹ Fenge and Funston, “The Practice and Promise”; Young, “Arctic State Changes.”; Koivurova, “Limits and Possibilities of the Arctic Council.”

⁴⁰ NSIDC, “Arctic Sea Ice Shatters.”

⁴¹ NSIDC, “Arctic Sea Ice Extent.”

⁴² U.S. Geological Survey, “Circum-Arctic Resource Appraisal.”

⁴³ Borgerson, “Arctic Meltdown.”; Graff, “Fight for the Top of the World.”

structures. Collectively, all those developments presented new challenges to the AC and the Arctic states responded to this interest with a series of council reforms and adjustments. They included expanding the criteria for the admission of new observers in 2011, admitting new states and organisations as observers at the ministerial meetings in 2013 and in 2017, opening a permanent secretariat in Tromsø in 2013 and catalysing the establishment of new regional bodies: the Arctic Economic Council, the Arctic Offshore Regulators Forum and the Arctic Coast Guard Forum. Furthermore, the AC began to assign time-limited task forces to target specific matters, and three of them provided venues for the negotiation of the first circumpolar legally binding international agreements: on cooperation on aeronautical and maritime search and rescue in the Arctic, signed in 2011; on marine oil pollution preparedness and response, adopted in 2013; and on enhancing international scientific cooperation in the region, concluded in 2017.⁴⁴ Finally, the council at present is in the process of developing its first long-term strategic plan.⁴⁵

Twenty years after its establishment, the Arctic Council is today generally considered the primary forum for matters pertaining to the Arctic. Whereas not everyone agrees that it is “the principal arena for efforts to address needs for governance arising in the Arctic”⁴⁶, much less for their management, over the course of its lifetime, the council has undoubtedly exceeded

⁴⁴ Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic (signed in Nuuk on 12 May 2011, entered into force 19 January 2013); 50 ILM 1119 (2011) (SAR Agreement); Agreement on Cooperation on Marine Oil Pollution, Preparedness and Response in the Arctic (signed in Kiruna on 15 May 2013) <www.arctic-council.org/eppr> accessed 15 January 2017 (Oil Spills Agreement); Agreement on Enhancing International Arctic Scientific Cooperation (signed in Fairbanks on 11 May 2017) <https://oarchive.arctic-council.org/handle/11374/1916> accessed 24 April 2018. In addition, it should be noted that because the Arctic Council has no independent legal personality, all agreements are between the eight Arctic states rather than being ‘Arctic Council agreements’. At the same time, even if the council served primarily as the catalyst for their negotiations and signatures, the agreements marked an evolution of the AC from a body “set up to discuss, inform and potentially shape decisions by national governments” toward more of a decision-making one. Fenge and Funston, “The Practice and Promise,” 10.

⁴⁵ Arctic Council, “Fairbanks Declaration.”

⁴⁶ Young, “The Shifting Landscape,” 1.

expectations of those who observed its convoluted and unpromising beginnings.⁴⁷ At the same time, almost from the start, the AC has been subject to commentary, criticism and reform proposals, both from within and from outside its circles. Interestingly, in the course of time, the number of the council's reform proposals appears to have largely outgrown the number of actual studies of the AC's effectiveness – understood here as the extent to which the council has been able to alleviate or solve the problems that led to its creation and as the mechanisms via which it has been able to generate those effects.⁴⁸ Moreover, it seems that a significant share of the AC's reform proposals and examinations have been largely detached from the general theoretical literature on the effectiveness of international environmental regimes. As the first section showed, the scholarship on this topic has been abundant, and even if there is still much room for advancement in the field, there is also much substance in it and a very strong foundation from which to build a framework for future systematic examinations of the Council's effectiveness. The next section delves into this topic.

Setting up a framework for evaluating the effectiveness of the Arctic Council

As previously mentioned, the general literature on international regimes does not have a single, clear-cut definition of 'institutional effectiveness', nor is there a consensus among all scholars in the field regarding its determinants. Nonetheless, as shown in the first part of this paper, there are also some general findings about the factors that matter for evaluating the effectiveness of international institutions that arise from the research carried out thus far. Based on those general findings, this section focuses on five elements that bear importance for the council's analysis. They include the following: definitions and natures of problems addressed

⁴⁷ Scrivener, "Arctic Environmental Cooperation,"; Koivurova and VanderZwaag, "The Arctic Council and 10 Years,"; Kankaanpää and Young, "The Effectiveness of the Arctic Council."

⁴⁸ Stokke, "Examining the Consequences of Arctic Institutions."

by the council; a matter of yardstick to gauge the effectiveness of the AC; a question of institutional interplay; causal mechanisms behind the council's influence; and finally, consideration of the council's soft-law basis. Whereas four of the factors refer explicitly to those described in the first part of this paper and identified in the general literature on international regimes, the last one addresses specifically an aspect that has been oftentimes raised in discussions about the Council's (in)effectiveness – the AC's lack of stronger legal foundation. It is through the adoption of those factors from the general literature that this paper devises a framework and lays ground for better grounding of the future studies of the Arctic Council's effectiveness within a broader field of scholarly inquiry on international regimes.

Definitions and natures of problems addressed by the Arctic Council

Defining and specifying problems addressed by an institution bears important consequences for the evaluation of effectiveness of this institution; yet quite often, it appears to be a step overlooked by the analysts. When we examine the formal goals of the Arctic Council, we see that the Ottawa Declaration equipped it with a very broad mandate, which in principle excludes no facet of international relations other than explicitly kept out “matters related to military security.”⁴⁹ In practice, however, the work of the council has focused primarily on two pillars highlighted in its founding document – the environmental protection and sustainable development of the Arctic.⁵⁰ Even if both fields are very broad and thus might be understood differently by various audiences, it is in particular the latter that illustrates well the merit of the clarity of a problem targeted by an institution – at least for the purposes of scholarly inquiry and assessment – and for several reasons.

⁴⁹ “Declaration on the Establishment of the Arctic Council.”

⁵⁰ Young, “The Arctic Council at Twenty.” Some scholars consider such specification of the Council's remit – with division between environmental protection and sustainable development – as a category error, where the environmental protection program, instead of being considered as a separate and equal, should rather operate within the overall framework of sustainable development.

Firstly, the concept of sustainable development is open to a variety of interpretations. While it succeeded in cementing the importance of considering economic, social and environmental dimensions of sustainable development as interdependent, it continues to prove challenging to measure, given the ambiguity in how to interpret it when applied to concrete policy.⁵¹ In the case of the AC, defining the concept of sustainable development was not only a matter of academic debate; the discord over its meaning hampered the negotiations of the Ottawa Declaration⁵² and did not allow the concept to provide a single directive regarding future works of the Arctic Council.⁵³ As a result, from the onset, work explicitly directed at sustainable development was confined to the Sustainable Development Working Group, which, in the absence of any strategic framework or long-term plan, operated primarily through small, locally oriented projects rather than major circumpolar initiatives.⁵⁴

Secondly, not only could the Arctic states not initially agree to the actual substance of the term of sustainable development, but due to the openness for interpretation of the concept, we can observe how the meaning of this broad umbrella-term – one of the pillars and goals of the AC – has evolved over time. Such an evolution, to be clear, is nothing unusual, and the understanding of the notion of sustainable development often reflects actors' specific concerns

⁵¹ Kanie et al., "Introduction: Global Governance." Moreover, the openness for interpretation of the concept of sustainable development has been a feature as much praised as criticised - see Adger , "Sustainability: Exploring the Processes."

⁵² Young, "Effectiveness of International Environmental Regimes: Existing Knowledge," 1985. This observation also confirms findings from other studies, which showed that regime's participants may differ both in the importance they attach to the problem and in the way that they frame it for consideration in policy forums.

⁵³ Keskitalo, "Negotiating the Arctic." According to Keskitalo, the debate related primarily to a question of conservation vs. utilisation of Arctic marine resources, as framed by the most active actors in the process. The main line of conflict, mostly over whaling and seal hunting, was running between the U.S. on the one hand and Canada on the other, with the former being a strong proponent of wilderness conservation, the latter speaking strongly in favour of traditional indigenous utilisation and the other Arctic states placing themselves somewhat around this spectrum.

⁵⁴ Among the exceptions to this have been the Arctic Human Development Reports I and II, which came out of the SDWG and embraced the circumpolar perspective to consider state and changes to human development in the region. Moreover, in March 2017, Senior Arctic Officials approved the first SDWG strategic framework for the period 2017-2030 (SDWG, "Strategic Framework 2017.")

and objectives, as well as broader political and economic contexts and their changes.⁵⁵ When it comes to the Arctic Council, this evolution has been particularly visible with regard to growing focus on economic matters and business opportunities. As noted by Wehrmann, “although similar concerns have recurred prominently on the Arctic Council chairmanship agendas . . . their meanings (and relations) have changed.”⁵⁶ For example, while the Russian chairmanship program argued for “sustainable development of the Arctic indigenous peoples” and focused on the pollution impacts on their health as well as demand to preserve their ethnic identities and cultural and historic heritages, Swedish chairmanship program spoke of “environmentally sustainable development”, and Canada, in its agenda for its second term (2013-2015), prioritised “sustainable circumpolar communities”, envisioning economic development of the North.⁵⁷ While it might be unnecessary, if at all possible, to always seek to define precisely the meaning prescribed to the concept of sustainable development, the analysts delving into evaluation of the council’s effectiveness vis-à-vis its stated goals should bear in mind this changing meaning of the term.

Finally, as previously discussed, not all types of problems addressed by a regime can be solved in any ordinary sense of the term, and arguably, many of those within the council’s remit – be it in the environmental protection or sustainable-development domain – belong to this category. Not only can efforts to design and operate environmental regimes succeed “only to the limit of the causal roles that institutions play in steering human-environment relations in the relevant issue areas”⁵⁸, but also the pace of changes in the social-ecological systems might

⁵⁵ Kanie et al., “Introduction: Global Governance.”

⁵⁶ Wehrmann, “Shaping Changing Circumpolar Agendas,” 7.

⁵⁷ Accordingly, under one of its chairmanship themes, “Development for the people of the North”, Canada designated as a main priority the establishment of the Arctic Economic Council. At the same time, in 2013, Arctic ministers recognised in the Kiruna Declaration “the central role of business in the development of the Arctic” (Arctic Council, “Kiruna Declaration”). They further reiterated this in their statement “Vision for the Arctic”, in which, among other items, they declared that “economic cooperation will be on top of our agenda”.

⁵⁸ Young, “Building Regimes for Socioecological Systems”, 118.

be exceeding the pace of improvements induced by an institution. Moreover, many problems will require ongoing efforts and periodic adjustments in their governing arrangements, rather than one-time solutions, to ensure that the undertaken actions account for observed changes and deeper comprehension of issues at stake. What is clear is that the unprecedented pace and scale of changes in the Arctic biophysical environment makes attaining goals of sustainable development and environmental protection even more challenging; at the same time, progressing toward them is increasingly pressing. What this means for the evaluation of the effectiveness of the Arctic Council is that a need for standard against which it could be compared – and making such a standard explicit – becomes even more important from the perspective of scientific inquiry and prospects for cumulative research about “what makes the Council work”.

A yardstick to gauge the effectiveness of the AC

Even though it is clear from theoretical literature on regime effectiveness that any attempts to evaluate regimes require explicit yardsticks for such exercises, it seems that with very few exceptions⁵⁹, most of the studies of the Arctic Council did not use any. To advance our understanding of the council with regard to this particular matter, two aspects call here for consideration: the distinction between various forms of the AC’s effects and the variety and number of issue areas that the council has been covering. With regard to the former, one way to structure our thinking about the effectiveness of the council would be to introduce more systematically the differentiation between the council’s outputs, outcomes and impacts, and ask about the council’s achievements in those terms – following this useful distinction from public policy and adopted to the international environmental regimes. In this perspective, the council’s outputs would be its material products, such as scientific assessments, technical

⁵⁹ For example, Stokke, “Regime Interplay in Arctic Shipping.”

reports and summaries for policy makers as well as ministerial declarations and other documents produced by Arctic ministers that set direction and provide guidance for the work of the council. To anyone familiar with work of the AC, it is clear how prolific it has been with those and with generating knowledge and documenting the state of and changes in the Arctic. However, when it comes to demonstrating the causality at the level of outputs – the occurrence of some cause-and-effect relationships between the council’s products and respective national outputs (e.g. official statements referring to the AC’s work, guidelines or regulations due to the findings or recommendations of the council) – the state of our knowledge is very limited and presents an important area worth further investigation. What is known and serves as a point of criticism against the council is that there is no follow-up mechanism to oversee how the council’s recommendations and guidelines are implemented, even if many government agencies involved with the AC agree that it would be useful to have some type of such a reporting mechanism.⁶⁰

Still, it is clear that focusing only on the outputs in examining the effectiveness of the council is not sufficient. While we should aim at increasing our understanding of the effects the AC has on the behaviour of key actors relevant to challenges of sustainable development and environmental protection of the Arctic, it is the extent to which the council has been able

⁶⁰ Supreme Audit Institutions of Denmark, Norway, The Russian Federation, “The Arctic Council.” WWF, “WWF Arctic Council Conservation Scorecard.” As the first study of this type has shown, when it comes to biodiversity and conservation-related measures, all eight Arctic states rarely live up to the commitments they made through the Arctic Council. The WWF’s AC scorecard could also be considered an important step in the direction of filling the gap in the existing scholarship on the performance of the council and the eight Arctic states. It is an important contribution with a clear explanation of its methodology and, equally as important, explanation of what the study did not include or did not consider, to avoid any confusion. The scorecard falls short, however, in one aspect that is critical from the perspective of academic inquiry: it does not prove causality between the outputs and recommendations of the council and the actions undertaken by Arctic states; in other words, it does not prove that the recommendations of the council led to effects observed in Arctic states. To address this matter, the scholarly community could build from the effort of the WWF and continue research along those lines, as proposed also by Prip, “The Arctic Council and Biodiversity.”

to solve or alleviate the problems it was set up to deal with that constitutes our ultimate – and extremely challenging – question.

At the same time, it could be argued that with the number of issue areas that the council covers, there might be a need for more than one yardstick for measuring its effectiveness and for separately measuring the distinct areas of the AC's activity. With its broad mandate, the council has been dealing with matters as varied as pollutants, hazardous waste, climate change, biodiversity, shipping safety, oil and gas development, education, mental health and indigenous languages. Not only do those issues present very different challenges, but the scale adequate to address them also varies; whereas some can be tackled successfully solely by local or national actors, others require action at regional, international and even global levels. Hence, by default, we could expect that the council's effectiveness might not be the same across all those issue areas, that some of those matters will be more difficult to solve than others (if at all possible in any ordinary sense of a term) and that consequently the council's "scores" across those fields might vary. Perhaps, following the path in the general effectiveness studies, the approach to studying the AC has developed to the point where we could systematically split the council into particular units of analysis or into different phases⁶¹ and study effectiveness across them. Arguably, such an exercise – together with defining reference points and explicit yardsticks⁶² for selected areas of the council's activity – could tell us how well the AC has been doing in various domains and could help generate a more solid basis for the overall assessment of the council. It could also possibly identify the factors that influenced the observed results, be them "successes" or not.

⁶¹ Spence, "Is a Melting Arctic."

⁶² The point about explicit yardsticks goes back to the methodological challenge of identifying the no-regime counterfactual and the collective optimum, required if one wishes to assess the effectiveness of any regime on a 0-1 scale. As much as such a solution and situation would be an ideal, it does not appear to be operationally useful.

Institutional interplay

Irrespective of how the yardsticks of the AC's effectiveness are constructed, next to the stated objectives of the council, they should "mirror the extent to which the behaviour that generates regional problems is within the reach of Arctic institutions."⁶³ Yet despite the previously mentioned and well-recognised interconnectedness of many Arctic challenges with activities that occur in other parts of the globe, with the exception of Stokke⁶⁴, not many authors systematically considered the interaction between the AC and other issue-specific regimes, while those who did carried out their analyses without reference to the findings on institutional effectiveness.⁶⁵ While the calls to consider the role of the council in a broader picture of Arctic governance have been regularly repeated since the early days of the AC⁶⁶, they have hardly been followed – neither in the majority of scholarly writings nor in the practices or deliberations within the council's circles – despite the recognised importance and impact of institutional interaction for the effectiveness of specific institutions. Such interactions could arguably have even greater significance for a body like the AC that, despite its lack of regulatory powers, might support the work of other international institutions – for example, with its scientific input and with complementary governance instruments, if their objectives align (see below on the Framework for Action on Enhanced Black Carbon and Methane Emission Reductions). Of particular importance here are the catalytic activities of the council – those efforts under the AC aimed at influencing the normative contents of other (usually broader) institutions, such as the case of persistent organic pollutants and the negotiations of the Stockholm Convention.⁶⁷

⁶³ Stokke, "Examining the Consequences."

⁶⁴ Stokke, "Regime Interplay in Arctic Shipping Governance"; Stokke, "Interplay Management."

⁶⁵ Downie and Fenge, "Northern Lights against POPs,"; Prip, "The Arctic Council and Biodiversity,"; Tesar et al., "Warming to the Subject."

⁶⁶ Young, "The Structure of Arctic Cooperation,"; Arctic Governance Project, "Arctic Governance."

⁶⁷ Strictly speaking, while it seems safe to observe that findings generated under AMAP formed a part of the scientific basis that substantiated the need for stricter regulations of POPs under CLRTAP and in a global arena, there is some discrepancy between views of those who see the council's impact on the negotiations as decisive (Downie and Fenge, "Northern Lights against POPs.") and those who caution

In a similar fashion, through the combination of influential knowledge building through the Arctic Marine Shipping Assessment (AMSA) and providing a forum in which Arctic states were able to discuss and develop common positions regarding various shipping-related measures, the council played a supportive role to the development of the mandatory Polar Code under the IMO.⁶⁸ At the same time, both examples illustrate that to effectively address some of the most paramount Arctic challenges, such as pollution, environmental protection from threats of increased human activities in the Arctic Ocean and loss of biodiversity, the council, due to its limited membership, is not the right forum to develop stronger international regulations. Instead, its role and contributions depend on the constructive interplay⁶⁹ with other international bodies, and thus far, our understanding of those interactions remains limited. There is also the possibility of exploiting the full potential for synergistic interaction between the AC and other institutions, rather than remaining satisfied only with the lack of disruption between them. Drawing from examples of other regimes, it also appears that in the AC, such potential for improvement might be frequently neglected where “[p]ositive effects of institutional interaction are commonly “consumed” without further action”⁷⁰, notwithstanding the scope for advancement that may exist.

Causal mechanisms and legal basis of the Council

If we applied to the Arctic Council a distinction between three sources of institutional effectiveness (cognition, obligation and utility maximisation) – or, in other words, we

against overstating its influence on the adoption and final outcome of both processes (Stokke, “Pollution and Conservation.”).

⁶⁸ Stokke, “Regime Interplay in Arctic Shipping”; Molenaar, “Governance of Arctic Shipping.”

⁶⁹ As much as going into details of examining a constructive interplay between and among various international institutions lies beyond the scope of this paper, in principle a constructive interplay refers to situations where the interactions between two or more institutions help them mutually advance their goals, rather than – oftentimes unintentionally – undermine realization of their objectives. Oberthür, “Managing Institutional Complexity.”

⁷⁰ (Ibid.), 32.

considered causal mechanisms behind the council's influence – there appears to be consensus in the literature that, despite the recent excitement about the first legally binding agreements negotiated under the auspices of the AC (normative impact), those are scientific assessments of the council that have been among its most effective products (cognitive impact).⁷¹ The council has been named the “cognitive forerunner” for its role as a fact finder and consensus builder on Arctic environmental challenges⁷² and according to results of a large survey, it has proven particularly successful in identifying emerging issues, framing them for consideration in policy venues and structuring Arctic policy agenda.⁷³ As the studies of Stokke have shown, the AC has been well equipped to occupy this cognitive function thanks to its distinctive features that ensure high saliency, credibility and legitimacy of the council's scientific products, which enabled it to inform some of the relevant international processes described above.⁷⁴ Next to the POPs and the Polar Code, the AC also provided input in the negotiations of the Minamata Convention on Mercury⁷⁵, and according to Prip, the same mechanism has been visible in work of CAFF that has helped to draw international attention to issues of Arctic biodiversity, as reflected in several documents of the Convention on Biological Diversity (CBD) and a resolution of cooperation between the CBD and CAFF.⁷⁶

As illustrated in these catalytic activities, “although consensual knowledge and political awareness are important ingredients in problem solving”⁷⁷, it is only when they trigger action

⁷¹ Kankaanpää and Young, “The Effectiveness of the Arctic Council,”; Koivurova, Kankaanpää, and Stepien, “Innovative Environmental Protection,”; Nilsson, “Knowing the Arctic.”

⁷² Nilsson and Koivurova, “Shared Decision-Making,”; Nilsson, “Knowing the Arctic.”

⁷³ Kankaanpää and Young, “The Effectiveness of the Arctic Council.”

⁷⁴ Stokke, “Interplay Management.” Those features include powerful membership of the AC with Russia and the United States on board, a collaborative research vehicle, mostly in the form of AMAP, and the highly prominent roles of representatives of indigenous peoples. Regarding the effects that recent developments and moving the council from a policy-shaping toward a policy-making entity have had on the AC's ability to produce highly salient, credible and legitimate knowledge, see Spence, “Is a Melting Arctic.”

⁷⁵ Koivurova, “Innovative Environmental Protection.”

⁷⁶ Prip, “The Arctic Council and Biodiversity.”

⁷⁷ Stokke, “Pollution and Conservation,” 92.

that targets the source of the problem that we may speak about effectiveness. Some of these actions or utilitarian mechanisms have been undertaken by the Arctic Council in a form of the Arctic Contaminants Action Program (ACAP) working group's projects aimed at eliminating, for example, hazardous waste and obsolete pesticides.⁷⁸ Some projects of the Sustainable Development Working Group (SDWG) could too be counted into this category as the focus of this working group centres on providing practical knowledge and contributing to the building capacity of Arctic indigenous peoples and Arctic communities. As much as those initiatives do not necessarily involve financial or technological transfers, they also include sharing experience and best practices in areas as critical for northern inhabitants as mental health and suicide prevention.⁷⁹

Interestingly, it is also largely in terms of capacity enhancement and of practical problem-solving – more than of normative influence – that Stokke views the first legally binding agreement negotiated under the auspices of the council: the Arctic SAR Agreement, adopted in 2011. Such an assessment appears to be justified since the agreement concerns provision of maritime infrastructure, not vessel operation⁸⁰, and it primarily reaffirms the commitments of Arctic states to the conventions they have been parties to, rather than imposing on them any new legal obligations.⁸¹ Like the Oil Spill Agreement concluded in 2013, which shares many similarities with SAR, it can be considered mainly an agreement on collaboration and coordination.⁸² Regardless of those aspects, the successful negotiation (but not adoption)

⁷⁸ Stokke, "Pollution and Conservation." ; Oberthür, "Managing Institutional Complexity," ; ACAP, "Arctic Contaminants Action Program." For an overview of features that make an institution predisposed for an effective occupation of particular governance niches, see Stokke, "Interplay Management."

⁷⁹ SDWG, "SDWG Projects 2015-2017." See, for example, Reducing the Incidence of Suicide in Indigenous Groups – Strengths United through Networks (RISING-SUN).

⁸⁰ Stokke, "Regime Interplay in Arctic."

⁸¹ Kao, Pearre, and Firestone, "Adoption of the Arctic Search and Rescue Agreement."

⁸² Rottem, "A Note on the Arctic Council Agreements." In addition, Rottem notes that neither the SAR nor MOSPA agreements generate or specify any resources that their parties are obliged to provide, which conceivably weakens the impact of both agreements (ibid.). At the same time, as this article was being written, the EPPR AC WG, tasked with the overview of both agreements, has facilitated a series

of those agreements under the AC, followed by the third on Arctic international scientific cooperation signed in 2017, certainly bore symbolic importance and served to strengthen perceptions of the Arctic Council as a vital forum for cooperation in the region. The agreements also received much attention from scholars, who pondered over opportunities for enhancing the AC and debated further expansion of its role from a policy-shaping into policy-making body, as reaffirmed by Arctic ministers in their “Vision of the Arctic”.⁸³

At the same time, much less attention was given to another novel instrument that the council adopted at the Iqaluit Ministerial meeting in 2015. While, in general, soft-law⁸⁴ products of the council, such as the Arctic Offshore Oil and Gas Guidelines⁸⁵ and the early Guidelines for Environmental Impact Assessment in the Arctic⁸⁶, have seen hardly any follow-up by Arctic states⁸⁷, arguably, the Framework for Action on Enhanced Black Carbon and Methane Emission Reductions⁸⁸ represents a different form of the council’s output and is the one that might exert a greater normative and behavioural pull than previous tools. Even if the framework does not create any legally binding obligations for Arctic states to reduce their emissions of black carbon (BC) and methane, the AC members committed themselves to establishing BC inventories, enhancing information exchange on BC and methane emissions and adopting a quantitative collective goal on black carbon by the AC ministerial meeting in

of successful exercises targeted both at search and rescue and oil-spill response. Also, regarding the creation of new commitments for the Arctic states, it has been argued that the agreement on enhancing Arctic international scientific cooperation differs from two previous instruments, as it formulates a new set of obligations for the Arctic states that were not codified in the previously existing international agreements on scientific cooperation (Smieszek, “The Agreement on Enhancing Cooperation.”).

⁸³ Arctic Council, “Vision for the Arctic.”

⁸⁴ While debate on soft law is far from settled within the legal scholarly community, here, “soft law” is understood to be the “legally non-binding norms” of the international system, which might take the forms of various instruments and arrangements (Shelton, “Introduction,”; also Abbott, “Hard and Soft Law.”).

⁸⁵ PAME. “Arctic Offshore Oil and Gas Guidelines,” further updated in 2009.

⁸⁶ With Finland’s second AC chairmanship, the matter of guidelines for the EIAs once again came into prominence, and the SDWG runs a project on this topic: “Good Practice Recommendations for Environmental Impact Assessment and Public Participation in the Arctic”.

⁸⁷ Koivurova, “The Limits of the Arctic Council,”; Offerdal, “Oil, Gas and the Environment.”

⁸⁸ Arctic Council, “Framework for Action.”

2017.⁸⁹ Furthermore, the framework established a two-year iterative review process⁹⁰ to strengthen Arctic states' respective national action plans and mitigation actions, and it calls upon the AC observer states to join its implementation, which, in result, could catalyse regulations of BC and methane not only in Arctic jurisdictions but also among other world's major GHG emitters that hold observer status to the council, such as China or India.⁹¹ Finally, while creating linkages between existing relevant bodies of international law (Convention on Long-Range Transboundary Air Pollution, CLRTAP, and the United Nations Framework Convention on Climate Change, UNFCCC), the framework also promotes mechanisms that go beyond them to deliver concrete regulatory impacts on BC mitigation. In the words of Khan, "whether soft law or not, it may very well lead to a harder legal outcome than current international law"⁹², and this in the area of climate governance, which is of the highest importance to the Arctic.

This, in turn, brings us back to one of the most oft-repeated proposals for enhancing the effectiveness of the Arctic Council: turning it into a treaty-based organisation. Contrary to widely held beliefs, the legal foundation does not loom large in general literature on institutional effectiveness with respect to observed effects or impacts of regimes. Although most up-to-date studies of international environmental regimes focused on hard-law, legally binding arrangements⁹³, this under no circumstances should be interpreted that in order to be

⁸⁹ Arctic Council, "Fairbanks Declaration." The goal was defined by the Expert Group (EG) on BC and Methane that was also established by the framework. In its report to SAO and Arctic ministers the EG recommended that BC emissions be "further collectively reduced by at least 25-33 percent below 2013 by 2025" – the goal was adopted as "aspirational" by Arctic ministers in the 2017 Fairbanks Declaration.

⁹⁰ Stokke, "Interplay Management." With regard to effective norm building, the nonbinding character and lack of any reporting or review procedures have been considered the main deficiencies of AC recommendations and guidelines.

⁹¹ Khan, "The Global Commons."

⁹² (Ibid., 143)

⁹³ Young, "Effectiveness of International Environmental Regimes: Causal Connections,"; Andresen, "Science and Politics."

effective, regimes need to necessarily perform regulatory functions or have their foundations in treaties or other legally binding instruments.⁹⁴ To the contrary, as studies have shown, regimes can perform many other tasks than solely regulatory ones, and they can be effective – in a sense of contributing to or solving problems that led to their creation – in a variety of ways. Yet there appears to be a pronounced tendency to consider hard-law arrangements superior to soft-law ones and to view the development in the direction of legally binding norms as desirable and beneficial. Next to the previously mentioned appeal of such norms to many Arctic commentators and officials, we can also observe within the council some changes that are more gradual and incremental in nature⁹⁵, which in turn draws our attention to the idea of institutional dynamics and its potential effects on a regime’s effectiveness.⁹⁶ It is known that international environmental regimes, like other social institutions, change both in response to endogenous forces and exogenous pressures. Conceivably, in the case of the Arctic Council, seeing the rapidly and profoundly changing character of the socio-ecological setting in which it is operating, either or both can have major consequences for the AC’s effectiveness, giving credence to academic scrutiny of this aspect of the council. Again, considering the previous argument, changes in the external environment and the unprecedented interest in the Arctic they generate should not automatically result in a line of reasoning that perceives regulations and legally binding norms stemming from the Arctic Council as the ultimate and most functional solutions to Arctic challenges. Some scholars take contrary positions: “[T]he crisis of climate change requires a constant, critical re-evaluation of our international legal order, and thus of our framing of and hopes for international legal thought.”⁹⁷ From this perspective, much more important than promoting hard-law solutions becomes the consideration of the most

⁹⁴ Young, “Effectiveness of International Environmental Regimes: Existing Knowledge.”

⁹⁵ Spence, “Is a Melting Arctic.”

⁹⁶ Young, “Institutional Dynamics: Emergent Patterns.”

⁹⁷ Khan, “The Global Commons,” 148.

effective interplay between binding and nonbinding norms in regional and global governance, as well as continued inquiry into the effectiveness of soft-law instruments. Along with some other brief observations listed below, this presents an area in which the Arctic Council could serve as a very useful case study and potentially inform our general understanding of institutional effectiveness with new insights.

Directions for future research - from the case of the Arctic Council to general literature on regime effectiveness

While the application of the central ideas of the broader literature on institutional effectiveness served primarily to structure and illuminate our understanding of issues that should be addressed when speaking about and examining the effectiveness the Arctic Council, it also raised some new questions of a general nature about the performance of international environmental regimes. While it is beyond the scope and aim of this paper to consider them here in detail, they point to possible future directions for research for Arctic and IR scholars. Those questions include the previously mentioned interplay between binding and nonbinding norms and instruments in regional and global governance, further investigation into the cognitive causal mechanism and the relation between institutional dynamics and effectiveness – in particular, the effects of such dynamics on institutional interplay.

When it comes to the first issue, it appears that one of more interesting and potentially fruitful lines of inquiry lies at the intersection of IR and legal studies, where legal scholarship on legally nonbinding norms and compliance with them could inform analysis of international soft-law institutions such as the Arctic Council. After all, questions such as “Do states comply with soft law; what factors compel states to comply; do these factors differ depending on whether law is hard or soft; [and] do states respond to soft law in ways that look like responses

to hard law”⁹⁸ are debated in depth within the legal community concerned with the international normative order, at least to the same extent as among IR scholars. Moreover, perhaps the combination of legal and IR thought could also shed new light on the very idea of “compliance with international soft law”, questioned by some academics as potentially unproductive and backward looking⁹⁹ and could advance our understanding of the meaning of effectiveness of soft-law regimes in general terms.

Regarding further investigation into the cognitive causal mechanism, the Arctic Council presents an excellent case study, as the main forms of the council’s influence have been its scientific outputs and the dissemination of its scientific findings in various issue domains. Such inquiries could not only contribute to general literature on institutional effectiveness, but they could also potentially help respond to “the urgent need to shorten the time it takes to for scientific understanding to be translated into policy in the Arctic” and could address “a wide gap between what we know and how we act.”¹⁰⁰ At the same time, findings from this line of research could prove valuable for other international environmental cooperation mechanisms, where existing scientific knowledge often fails to translate into action. While methodologically challenging and difficult¹⁰¹, this important issue certainly appears worth further exploration.

The third question that arose in the context of the Arctic Council and that can also generate insights into our general understanding of institutional effectiveness concerns the institutional dynamics and with observing how changes within the institution (incremental in

⁹⁸ Shelton, “Introduction,” 3.

⁹⁹ Bilder, “Beyond Compliance.”

¹⁰⁰ Smith, Barry, and Katerås, “Arctic Biodiversity Congress. Co-Chairs Report.”

¹⁰¹ Haas, “Introduction: Epistemic Communities and International Policy Coordination.” Some attempts to address this matter and of the dissemination and influence of scientific knowledge on decision-making could be seen in Haas’ concept of “epistemic communities”; whereas some newer methods of inquiry – for example, social network analysis (SNA) – could prove helpful in meeting paramount methodological challenges related to it. I am grateful to Prof. Oran Young for pointing out this difficulty and for citing the SNA as one of the potential ways to address it.

the case of the AC) affect its interplay with other international bodies. For instance, whereas Stokke thoroughly examined various niches that the council has been able to fill with respect to Arctic shipping and pollution, he did not consider how dynamics and changes within the council might affect its ability to occupy those niches. To some extent this important question and the idea of the relationship between changes in the Arctic Council and its effectiveness has been undertaken by Spence; however, in her study built on the concept of boundary organisation, the focus was almost exclusively on the impact of changes observed in the council on the qualities of knowledge generated within the AC, without reference to consequences of those developments for the council's causal mechanisms of influence. Since neither the institutions nor their effectiveness is static (on the contrary, it fluctuates with time), this line of inquiry could significantly enrich our body of knowledge of international environmental regimes in general, and specifically with respect to the development and maturation of soft-law regimes.

Finally, as Andresen points out, since the peak of empirical studies of international environmental regimes in the end of 1990s, analytical advances in the field have not been combined with new empirical research, which could see their significance reduced and potential for further refinement decreased. As he argues, diverging interests and focus on other issue areas are “no substitute for effectiveness studies”¹⁰²; and, as presented here, many aspects of regime effectiveness still remain unaddressed and deserve scholarly attention and efforts. Also seen from this much broader perspective, a deepened inquiry of the Arctic Council – an example of a soft-law institution and an innovative governance arrangement – appears worth pursuing and of significant value to our broader knowledge of international relations.

¹⁰² Steinar, “International Regime Effectiveness,” 316.

Conclusions

The Arctic Council's primary objective is to foster cooperation between its members and permanent participants on common Arctic issues – in particular, issues of sustainable development and environmental protection in the Arctic. Throughout its 20 years in existence, the AC, as a result of combined forces of globalisation and climate change, has moved from the peripheries of international relations to become the preeminent intergovernmental forum for the Arctic region, recognised as such by Arctic and non-Arctic states and nonstate actors alike. As it moves forward in an increasingly dynamic and globalised environment, the Arctic Council will continue facing numerous challenges, and the ways in which it can adapt to them will determine its prospects of remaining a relevant and respected forum for addressing Arctic issues. In all those efforts, the scholarly community may support the efforts of policy makers with a systematic inquiry of the AC's effectiveness as well as informing it with findings from studies of other regional and global environmental regimes. In order to support advancement along that path, this article put forward the framework for future assessments of the effectiveness of the council based on the broader discussion of effectiveness in the international environmental regime literature. While the article did not aim at an actual evaluation of the effectiveness of the Council and did not carry out such an assessment, the focus on elements such as causal mechanisms behind the Council's influence pointed out, among others, the AC's potential for increased normative impact over Arctic states and other actors with interests in the region. This impact could be stemming not only from, as often repeated, the recent legally binding agreements negotiated under the auspices of the Arctic Council but also from the Council's newly developed nonbinding framework on black carbon and methane – signalling areas that merit closer attention in future research and proving the value behind the systematic application of insights from general literature to our thinking about the AC. At the same time, the application of the general theory to the case study of the Arctic Council raised several

questions not yet fully answered in the IR literature on the effectiveness of international environmental regimes and worthy of closer examination. They concern the interplay between binding and nonbinding norms and instruments in regional and global governance, deepened understanding of the cognitive causal mechanism and the relation between institutional dynamics and effectiveness. Addressing them might prove helpful not only to enhancing our comprehension of the council but also of other regimes and sources of their influence.

In conclusion, one aspect regarding the council's effectiveness – as of any other institution - appears particularly worth stressing: its ability to perform effectively not only at any given moment in time but also to adjust agilely to changing conditions, and with that to remain effective on a long-term scale. It could be argued that just as the Arctic is on the leading edge regarding the progress of climate change, the Arctic Council could be considered on the leading edge of thinking about and innovating with procedures for achieving a high level of adaptiveness to future changes, without signing away its present accomplishments. In this realm the contributions from the academic community could prove particularly valuable under the condition that they are produced via means of systematic inquiry and in a transparent manner, allowing for accumulation of our knowledge of what makes the Arctic Council work.

Bibliography

- ACAP. "Arctic Contaminants Action Program," 2018. <https://www.arctic-council.org/index.php/en/acap-home>.
- Abbott, W. Kenneth, and Duncan Snidal. "Hard and Soft Law in International Governance." *International Organization* 54, no. 3 (2000): 421–456.
- Adger, W. Neil, and Andrew Jordan. "Sustainability: Exploring the Processes and Outcomes of Governance." In *Governing Sustainability*, edited by W. Neil Adger and Andrew Jordan, 3–31. Cambridge, United Kingdom: Cambridge University Press, 2009.
- Andresen, S. et al. *Science and Politics in International Environmental Regimes: Between Integrity and Involvement*. Manchester: Manchester University Press, 2000.
- Arctic Council. Arctic Council Rules of Procedure. Revised by the Arctic Council at the Eight Arctic Council Ministerial Meeting, Kiruna, Sweden, May 15, 2013 (2013).
- . "Fairbanks Declaration on the Occasion of the Tenth Ministerial Meeting of the Arctic Council. 11 May 2017, Fairbanks, Alaska, U.S.A.," 2017.
- . "Framework for Action on Enhanced Black Carbon and Methane Emission Reductions, Annex 4, Iqaluit [NU (Canada)] 2015 SAO Report to Ministers," 2015.
- . *Kiruna Declaration*, 2013.
- . *Vision for the Arctic*, 2013.
- Arctic Governance Project, ed. *Arctic Governance in an Era of Transformative Change: Critical Questions, Governance Principles, Ways Forward*, 2010.
- Bilder, Richard B. "Beyond Compliance: Helping Nations Cooperate." In *Commitment and Compliance: The Role of Non-Binding Norms in the International Legal System*, edited by Dinah L. Shelton, 65–74. Oxford: Oxford University Press, 2003.
- Bloom, ET. "Establishment of the Arctic Council." *American Journal of International Law* 93, no. 3 (1999): 712–22.

- Borgerson, Scott G. "Arctic Meltdown. The Economic and Security Implications of Global Warming." *Foreign Affairs* 87, no. 2 (2008): 63–77.
- Breitmeier, Helmut, Oran R. Young, and Michael Zürn. *Analyzing International Environmental Regimes. From Case Study to Database*. Cambridge, Massachusetts; London, England: The MIT Press, 2006.
- Declaration on the Establishment of the Arctic Council*. Ottawa, Canada, 1996.
- Downie, D.L., and T. Fenge, eds. *Northern Lights against POPs: Combating Toxic Threats in the Arctic*. Montreal and Kingston: McGill-Queen's University Press, 2003.
- Duyck, Sébastien. "What Role for the Arctic in the UN Paris Climate Conference (COP-21)?" In *Arctic Yearbook*, edited by Lassi Heininen, Heather Exner-Pirot, and Joel Plouffe, 2015.
- Exner-Pirot, Heather. "The Arctic Council, a Victory for Soft Law & Soft Security." *The UArctic Magazine Shared Voices. Special Issue. Arctic Council at 20*, 2016.
- Fenge, Terry, and Bernard Funston. "The Practice and Promise of the Arctic Council. Independent Report Commissioned by Greenpeace," 2015.
- Graff, J. "Fight for the Top of the World." *Time*, September 19, 2007.
- Haas, Peter M. "Introduction: Epistemic Communities and International Policy Coordination." *International Organization* 46, no. 1 (1992): 1–35.
- Kanie, Norichika, Steven Bernstein, Frank Biermann, and Peter M. Haas. "Introduction: Global Governance through Goal Setting." In *Governing through Goals. Sustainable Development Goals as Governance Innovation*, edited by Norichika Kanie and Frank Biermann, 1–27. Cambridge, Massachusetts; London, England: The MIT Press, 2017.
- Kankaanpää, Paula, and Oran R. Young. "The Effectiveness of the Arctic Council." *Polar Research* 31 (2012): 1–14.
- Kao, Shih Ming, Nathaniel S. Pearre, and Jeremy Firestone. "Adoption of the Arctic Search

- and Rescue Agreement: A Shift of the Arctic Regime toward a Hard Law Basis?”
Marine Policy 36, no. 3 (2012): 832–38.
- Keohane, Robert O. “Neoliberal Institutionalism: A Perspective on World Politics.” In
International Institutions and State Power: Essays in International Relations Theory,
edited by Robert O Keohane, 1–20. Boulder, CO: Westview Press, 1989.
- Keskitalo, E.C.H. *Negotiating the Arctic. The Construction of an International Region*. New
York, London: Routledge, 2004.
- Khan, Sabaa A. “The Global Commons through a Regional Lens: The Arctic Council on
Short-Lived Climate Pollutants.” *Transnational Environmental Law* 6, no. 01 (March 9,
2017): 131–52.
- Koivurova, T., P. Kankaanpää, and A. Stepien. “Innovative Environmental Protection:
Lessons from the Arctic.” *Journal of Environmental Law*, no. 2013 (2015): 1–27.
- Koivurova, Timo. “Limits and Possibilities of the Arctic Council in a Rapidly Changing
Scene of Arctic Governance.” *Polar Record* 46, no. 02 (September 8, 2009): 146.
- . “The Limits of the Arctic Council,” 2003, 186–88.
[http://www.rha.is/static/files/NRF/OpenAssemblies/Oulu2006/project-
legal_koivurova.pdf](http://www.rha.is/static/files/NRF/OpenAssemblies/Oulu2006/project-legal_koivurova.pdf).
- Koivurova, Timo, and Leena Heinämäki. “The Participation of Indigenous Peoples in
International Norm-Making in the Arctic.” *Polar Record* 42, no. 221 (2006): 101–9.
- Koivurova, Timo, and David VanderZwaag. “The Arctic Council and 10 Years: Retrospect
and Prospects.” *University of British Columbia Law Review* 40, no. 1 (2007): 121–94.
- Kratochwil, Friedrich, and Gerard Ruggie. “International Organization: A State of the Art on
an Art of the State.” *International Organization* 40, no. 4 (1986): 753–75.
- Mitchell, Ronald B. “Evaluating the Performance of Environmental Institutions: What to
Evaluate and How to Evaluate It?” In *Institutions and Environmental Change. Principal*

- Findings, Applications, and Research Frontiers*, edited by Oran R. Young, Leslie A. King, and Heike Schroeder, 79–114. Cambridge, Massachusetts; London, England: The MIT Press, 2008.
- Molenaar, Erik J. “Governance of Arctic Shipping. Balancing Rights and Interests of Arctic States and User States.” In *Governance of Arctic Shipping. Balancing Rights and Interests of Arctic States and User States*, edited by Robert C. Beckman, Tore Henriksen, Kristine Dalaker Kraabel, Erik J. Molenaar, and J. Ashley Roach, 24–67. Leiden, Boston: Brill Nijhoff, 2017.
- Nilsson, Annika E. “Knowing the Arctic: The Arctic Council as a Cognitive Forerunner.” In *The Arctic Council: Its Place in the Future of Arctic Governance*, edited by Thomas S. Axworthy, Timo Koivurova, and Waliul Hasanat, 190–224. Munk-Gordon Arctic Security Program, 2012.
- Nilsson, Annika E., and Timo Koivurova. “Shared Decision-Making in a Changing Arctic Political Landscape.” In *Arctic Resilience Report*, edited by Marcus Carson and Gary Peterson, 128–46. Stockholm: Stockholm Environment Institute and Stockholm Resilience Centre, 2016.
- NSIDC. “Arctic Sea Ice Extent Remains Low; 2009 Sees Third-Lowest Mark,” October 6, 2009. https://nsidc.org/news/newsroom/20091005_minimumpr.html.
- . “Arctic Sea Ice Shatters All Previous Record Lows,” October 1, 2007. https://nsidc.org/news/newsroom/2007_seaiceminimum/20071001_pressrelease.html.
- Oberthür, Sebastian, and Thomas Gehring. “Institutional Interaction. Ten Years of Scholarly Development.” In *Managing Institutional Complexity: Regime Interplay and Global Environmental Change*, edited by Sebastian Oberthür and Olav Schram Stokke, 25–58. Cambridge, Massachusetts; London, England: The MIT Press, 2011.
- Oberthür, Sebastian, and Olav Schram Stokke, eds. *Managing Institutional Complexity*.

- Regime Interplay and Global Environmental Change*. Cambridge, Massachusetts; London, England: MIT Press, 2011.
- Offerdal, Kristine. "Oil, Gas and the Environment." In *International Cooperation and Arctic Governance. Regime Effectiveness and Northern Region Building*, edited by Olav Schram Stokke and Geir Honneland, 138–63. London and New York: Routledge, 2007.
- Prip, Christian. "The Arctic Council and Biodiversity - Need for a Stronger Management Framework?" *Nordic Environmental Law Journal* 2 (2016): 37–53.
- Rogne, Odd, Volker Rachold, Louwrens Hacquebord, and Robert Corell. *IASC after 25 Years. Special Issue of the IASC Bulletin*, 2015. <http://iasc25.iasc.info>.
- Rottem, Svein Vigeland. "A Note on the Arctic Council Agreements." *Ocean Development & International Law* 46, no. 1 (2015): 50–59.
- Scrivener, David. "Arctic Environmental Cooperation in Transition." *Polar Record* 35, no. \
- SDWG. "SDWG Projects 2015-2017," 2016. <http://www.sdwg.org/activities/current-projects/>.
- . "Strategic Framework 2017," 2017. <http://arctic-council.org/index.php/en/about-us/working-groups/sdwg>.
- Shelton, Dinah L. "Introduction. Law, Non-Law and the Problem of 'Soft Law.'" In *Commitment and Compliance: The Role of Non-Binding Norms in the International Legal System*, edited by Dinah L Shelton, 1–18. Oxford University Press, 2000.
- Smieszek, Malgorzata. "The Agreement on Enhancing International Arctic Scientific Cooperation: From Paper to Practice." In *Arctic Yearbook*, edited by Lassi Heininen, Heather Exner-Pirot, and Joel Plouffe, 2017.
- Smith, R., Tom Barry, and F. Katerås. *Arctic Biodiversity Congress. Co-Chairs Report*. Akureyri, Iceland: Conservation of Arctic Flora and Fauna, 2014.
- Spence, Jennifer. "Is a Melting Arctic Making the Arctic Council Too Cool? Exploring the

Limits of the Effectiveness of a Boundary Organization.” *Review of Policy Research*, 2017.

Stokke, Olav Schram. “Determining the Effectiveness of International Regimes.”

Svt.Ntnu.No, 2007.

<http://www.svt.ntnu.no/iss/fagkonferanse2007/intern/papers/olav.s.stokke@fni.noStokkeDetermRegimeEffectiveness.PDF>.

———. *Disaggregating International Regimes. A New Approach to Evaluation and Comparison*. Cambridge, Massachusetts; London, England: MIT Press, 2012.

———. “Examining the Consequences of Arctic Institutions.” In *International Cooperation and Arctic Governance. Regime Effectiveness and Northern Region Building*, edited by Olav Schram Stokke and Geir Honneland. London and New York: Routledge, 2007.

———. “Interplay Management, Niche Selection, and Arctic Environmental Governance.” In *Managing Institutional Complexity: Regime Interplay and Global Environmental Change*, 143–70. Cambridge, Massachusetts; London, England: MIT Press, 2011.

———. “Regime Interplay in Arctic Shipping Governance: Explaining Regional Niche Selection.” *International Environmental Agreements: Politics, Law and Economics* 13, no. 123 (2013): 65–85.

———. “The Interplay of International Regimes: Putting Effectiveness Theory to Work.” *FNI Report 4/01*. Norway, 2001.

Stokke, Olav Schram, Geir Honneland, and Peter Johan Schei. “Pollution and Conservation.” In *International Cooperation and Arctic Governance. Regime Effectiveness and Northern Region Building*, edited by Olav Schram Stokke and Geir Honneland, 78–111. London and New York: Routledge, 2007.

Stokke, Olav Schram, and Sebastian Oberthür. “Introduction. Institutional Interaction in Global Environmental Change.” In *Managing Institutional Complexity: Regime*

Interplay and Global Environmental Change, 1–24. Cambridge, Massachusetts; London, England: MIT Press, 2011.

Supreme Audit Institutions of Denmark, Norway, The Russian Federation, Sweden and the United States of America. “The Arctic Council: Perspectives on a Changing Arctic, The Council’s Work, and Key Challenges. A Joint Memorandum of a Multilateral Audit on the Arctic States’ National Authorities’ Work with the Arctic Council,” 2015.

Tennberg, Monica. *Arctic Environmental Cooperation. A Study in Governmentality*. Rovaniemi: University of Lapland, 1999.

Tesar, Clive, Marc Andre Dubois, Martin Sommerkorn, and Alexander Shestakov. “Warming to the Subject: The Arctic Council and Climate Change.” *Polar Journal* 6, no. 2 (2016): 417–29.

U.S. Geological Survey, USGS. “Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle.” Vol. 2000, 2008.

Underdal, Arild. “Methodological Challenges in the Study of Regime Effectiveness.” In *Regime Consequences. Methodological Challenges and Research Strategies*, edited by Arild Underdal and Oran R. Young, 27–48. Dordrecht: Kluwer Academic Publishers, 2004.

Underdal, Arild, and Oran R. Young, eds. *Regimes Consequences. Methodological Challenges and Research Strategies*. Dordrecht: Kluwer Academic Publishers, 2004.

Wehrmann, Dorothea. “Shaping Changing Circumpolar Agendas: The Identification and Significance of ‘Emerging Issues’ Addressed in the Arctic Council.” In *Arctic Yearbook*, edited by Lassi Heininen, Heather Exner-Pirot, and Joel Plouffe, 2016.

Young, Oran R. “Arctic State Changes: Implications for Governance,” 2009.

———. “Building Regimes for Socioecological Systems.” In *Institutions and Environmental Change. Principal Findings, Applications, and Research Frontiers*, edited by Oran R.

- Young, Leslie A. King, and Heike Schroeder, 115–44. Cambridge, Massachusetts; London, England: The MIT Press, 2008.
- . *Creating Regimes: Arctic Accords and International Governance*. Ithaca and London: Cornell University Press, 1998.
- , ed. *The Effectiveness of International Environmental Regimes. Causal Connections and Behavioral Mechanisms*. Cambridge, Massachusetts; London, England: MIT Press, 1999.
- . *Governance in World Affairs*. Ithaca and London: Cornell University Press, 1999.
- . *Institutional Dynamics: Emergent Patterns in International Environmental Governance*. Cambridge, MA: MIT Press, 2010.
- . “Institutional Linkages in International Society: Polar Perspectives.” *Global Governance* 2, no. 1 (1996): 1–24.
- . “Regime Effectiveness: Taking Stock.” In *The Effectiveness of International Environmental Regimes. Causal Connections and Behavioral Mechanisms*, edited by Oran R. Young, 249–79. Cambridge, Massachusetts; London, England: MIT Press, 1999.
- . “The Arctic Council at Twenty: How to Remain Effective in a Rapidly Changing Environment.” *UC Irvine Law Review* 6, no. 99 (2016): 99–120.
- . “The Consequences of International Regimes. A Framework for Analysis.” In *Regime Consequences. Methodological Challenges and Research Strategies*, edited by Arild Underdal and Oran R. Young. Dordrecht: Kluwer Academic Publishers, 2004.
- . “The Structure of Arctic Cooperation: Solving Problems/ Seizing Opportunities.” In *A Paper Prepared for the Fourth Conference of Parliamentarians of the Arctic Region, Rovaniemi, 27-29 August 2000.*, 1–22, 2000.
- Young, Oran R. “Effectiveness of International Environmental Regimes: Existing

Knowledge, Cutting-Edge Themes, and Research Strategies.” *Proceedings of the National Academy of Sciences of the United States of America* 108, no. 50 (December 13, 2011): 19853–60.