

# THE ARCTIC GOVERNANCE PROJECT



## **Arctic Governance in an Era of Transformative Change: Critical Questions, Governance Principles, Ways Forward**

### **Report of the Arctic Governance Project**

**14 April 2010**

The Arctic Governance Project (AGP) is an unofficial initiative supported by a group of private funders and intended to bring together preeminent researchers, members of the policy community, and representatives of indigenous peoples in the interests of exploring ways to achieve a sustainable and just future for the Arctic. The term “we” in this report refers to the members of the AGP’s Steering Committee and the Executive Secretary. Committee members include: Hans Corell, Robert Corell, Udloriak Hanson, Paula Kankaanpää, Jacqueline McGlade, Tony Penikett, Stanley Senner, Nodari Simoniya, and Oran Young. The Executive Secretary is Else Grete Broderstad, at the Centre for Sami Studies, University of Tromsø. The H. John Heinz III Center for Science, Economics and the Environment serves as the fiscal agent for the project.

## **Executive summary**

The Arctic is experiencing a profound transformation driven by the forces of climate change and globalization and resulting in tighter economic and geopolitical links between the region and the rest of the world. This cascade of developments makes it timely to assess the adequacy of existing Arctic governance systems and to consider adjusting these systems or creating new ones to meet emerging needs for Arctic governance. Success in this endeavor requires the identification of critical questions regarding needs for governance, the formulation of normative guidelines or principles pertaining to governance, and the development of a perspective that emphasizes stewardship as an overarching goal. Foreseeable needs for governance in the Arctic center on building trust, enhancing regulatory frameworks, introducing holistic approaches, promoting adaptation, securing the Arctic as a zone of peace, achieving regional sustainability, strengthening policy mechanisms, and amplifying Arctic voices in global settings. Good governance will be best served, at least for now, by honoring, implementing, and enhancing the provisions of existing treaties and other governance arrangements. There are numerous opportunities to improve Arctic governance systems by strengthening the Arctic Council, establishing regulatory mechanisms to address sectoral issues through appropriate international bodies, institutionalizing the science/policy interface, and building trust through dialogue among key Arctic constituencies.

## **1. Introduction**

The Arctic is experiencing a profound transformation, driven largely by the interacting forces of climate change and globalization. The biophysical effects of these forces are increasingly familiar. Surface temperatures are rising rapidly in many parts of the Arctic; sea ice is receding and thinning; the depth of the active layer of the permafrost is increasing; snow conditions are changing; glaciers are retreating. These processes have triggered feedback mechanisms in such forms as a lowering of the albedo of the Arctic Ocean and the transition of tundra ecosystems from sinks to sources of greenhouse gases, which will affect the Earth's climate system as a whole as well as accelerating changes occurring in the Arctic itself.

One major consequence of these biophysical changes is a heightened interest in the Arctic on the part of global actors motivated by economic opportunities involving commercial shipping, oil and gas development, mining, fishing, and tourism. The result is a tightening of the economic and geopolitical links between the Arctic and the rest of the world. Some observers see this development as a source of growing conflict among those competing for control of the region's natural wealth. Others worry about the consequences of the increasing integration of the Arctic into the global system of advanced industrial societies whose current lifestyles are almost certainly unsustainable in the long run. What is clear is that the Arctic cannot go its own way, carving out a developmental path independent of global forces.

It is impossible to forecast the pace and trajectory of these developments precisely.<sup>1</sup> Yet there is every reason to conclude that the Arctic today is in the midst of a watershed change or what scientists often refer to as a state change. Will existing governance arrangements prove adequate to handle both the challenges and the opportunities arising from this transformation in such a way as to permit sustainable uses of the Arctic's resources, while providing for the well-being of the Arctic's indigenous peoples and other permanent residents and protecting the environment? As policymakers and outside observers have noted, the Arctic is not a blank slate when it comes to governance. Existing arrangements range from global frameworks, like the United Nations Convention on the Law of the Sea (UNCLOS) and the United Nations Framework Convention on Climate Change (UNFCCC), to regional agreements, such as those that established the Arctic Council and the Barents Euro-Arctic Council, and on to functionally specific regimes, like the guidelines for shipping developed under the auspices of the International Maritime Organization (IMO). Taken together, these arrangements provide substantial capacity to address challenges and opportunities relating to governance. But are they sufficient to meet the needs for governance arising in the wake of the watershed change now taking place in the Arctic?

The goals of the Arctic Governance Project (AGP) are to examine this question critically by evaluating existing arrangements in the light of changing needs and to suggest adjustments to these arrangements or the development of new arrangements that may be required to steer Arctic interactions toward outcomes that are sustainable, environmentally benign, and equitable both in the near future and over the long run. This report provides the background information and analytic perspectives needed to address this topic in a balanced and nuanced manner.<sup>2</sup> The final section, entitled *An Arctic Action Agenda*, sets forth policy recommendations that the members of the AGP's Steering Committee have developed in the course of this project.

## **2. Defining the Arctic**

There is no universally accepted definition of the Arctic. We follow the practice of the Arctic Council in treating the Arctic as a circumpolar region encompassing both marine and terrestrial systems extending southward from the North Pole, covering about 8% of the Earth's surface, including areas located within the jurisdiction of eight States, providing a homeland for many indigenous peoples, and including altogether some 4 million residents. But this region is highly diverse in biophysical, socioeconomic, and cultural terms. The impacts of climate change and globalization have also intensified interactions between the Arctic and other parts of the planet.

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<sup>1</sup> Although journalistic depictions of the spread of a gold rush mentality and the prospect of armed clashes in the Arctic are highly exaggerated, worldwide interest in the Arctic has reached unprecedented levels.

<sup>2</sup> The AGP has also created an *Arctic Governance Compendium* accessible on the project's website ([www.arcticgovernance.org](http://www.arcticgovernance.org)) and containing an extensive collection of documents relating to all aspects of Arctic governance.

Although we follow the lead of the Arctic Council in approaching the Arctic as a policy-relevant region, we draw attention also to the need to exercise care in this regard. We pay particular attention to the links between Arctic governance and governance on a global scale.

### **3. Governing the Arctic**

Governance is a social function centered on efforts to steer human actions toward collective outcomes that are beneficial to society and away from harmful outcomes. Governance systems emerge to address a variety of societal needs, ranging from the production of public goods (e.g. maintaining healthy populations of living resources subject to human harvesting), to avoidance of public bads (e.g. preventing dangerous climate change or the degradation of large marine ecosystems), internalization of externalities (e.g. curbing the spread of contaminants across borders, avoiding the environmental impacts of oil spills), and protection of human rights (e.g. strengthening the right to self-determination of indigenous peoples). All societies have an interest in monitoring and evaluating the performance of governance systems in terms of a range of criteria like goal attainment, efficiency, legitimacy, and the pursuit of justice. They also have a need to review existing arrangements on a regular basis, reinforcing systems that have stood the test of time and adjusting or replacing those that are no longer adequate to meet the needs of changing circumstances.

The Arctic has a history of successful efforts to devise innovative responses to complex and difficult problems of governance. For centuries, indigenous peoples operating in a variety of marine and terrestrial environments have developed social practices allowing them to use renewable resources in a sustainable manner and to adapt nimbly to major changes in the biophysical systems with which they interact. Many of these practices remain relevant today.<sup>3</sup> The regime created under the 1920 Treaty of Spitsbergen, which is still in force, features an ingenious arrangement under which the parties recognize Norway's sovereignty over the Svalbard Archipelago in return for commitments by Norway to demilitarize the area, grant all parties equal access to the archipelago's natural resources, encourage scientific research, and establish an equitable administrative system. Since the 1970s, Norway and Russia have operated a joint management regime for the fisheries of the Barents Sea featuring parallel monitoring and enforcement procedures. In 1987, Canada and the United States entered into an agreement creating a co-management regime that establishes an international board that recommends management decisions relating to the migratory Porcupine Caribou Herd based on input from members of user communities as well as representatives of government agencies.

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<sup>3</sup> This topic is examined in a collection of papers prepared especially for the Arctic Governance Project entitled "Indigenous Governance in the Arctic" (available at: [www.arcticgovernance.org](http://www.arcticgovernance.org)).

The Arctic Council, established in 1996 as a successor to the Arctic Environmental Protection Strategy, is a high-level international forum that addresses a range of issues of interest to the eight Arctic States; it incorporates an innovative and largely unprecedented arrangement under which a number of Indigenous Peoples Organizations are recognized as Permanent Participants and have a strong voice in the Council's activities. These and other successful efforts to devise innovative responses to problems of governance attest to the role of the Arctic as a governance compass or, in other words, an area that can help to provide direction for those endeavoring to meet the challenges of governance for sustainable development in the world today.

At the same time, the Arctic has emerged as a governance barometer in the sense that it is an area generating early indications of the growing need for innovation in governance systems worldwide. Partly, this is due to the fact that climate change and a suite of related biophysical processes are manifesting themselves sooner and more dramatically in the Arctic than anywhere else on the planet. In part, the role of the Arctic as a governance barometer is a result of socioeconomic and geopolitical forces – often linked to the biophysical processes – that are beginning to transform the face of the Arctic and that many observers see as presaging the emergence of a “new” Arctic. Expectations regarding the prospect of dramatic growth in shipping, oil and gas production, mining, fishing, and tourism made possible by the recession and thinning of sea ice in the Arctic and by the development of new technologies offer dramatic examples.<sup>4</sup> More generally, the resultant watershed change in the Arctic is unfolding in a geopolitical setting that is remarkably dynamic. Once dominated by the entrenched Soviet-American rivalry associated with the Cold War, the Arctic today is a region of growing interest to a variety of influential actors, such as China, Japan, and the European Union.

Watershed changes of this sort are unsettling. Featuring developments that are often non-linear, sometimes abrupt, and frequently irreversible, they are apt to generate anxiety in the minds of those who are comfortable with the status quo. Some actors tend to cling to existing arrangements under such conditions, reinforcing a condition that analysts often describe as path dependence. But watershed changes also provide opportunities for innovation to overcome the limitations of entrenched governance systems. We believe such an opportunity is at hand in the Arctic today.

In evaluating the merits of options for strengthening Arctic governance, we focus on stewardship as an overarching goal. What is needed to foster stewardship in the Arctic is a suite of distinct but interlocking arrangements that address a number of concerns simultaneously. To promote stewardship this suite of arrangements must respect the rights of those who have a unique and long-standing relationship with the

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<sup>4</sup> What is realistic regarding the pace of these developments is far from clear. But expectations regarding such matters have emerged as a driving force regarding the need for innovation in governance in the Arctic today.

region's natural environment; be sensitive to the interests of future generations; make good use of traditional as well as mainstream scientific knowledge, and apply holistic or integrative methods (e.g. ecosystem-based management, spatial planning, comprehensive environmental impact assessment) as a basis for making decisions about using the Arctic's natural resources in a responsible and sustainable manner. Approached in this way, the development of an innovative suite of governance arrangements for the Arctic can provide a basis for addressing both short-term and long-term concerns. It can also offer valuable lessons for those concerned with challenging problems of governance destined to come into focus in other parts of the world during the foreseeable future.

In responding to needs for Arctic governance in an era of transformative change, nation states remain critical players. That is why we focus attention on intergovernmental bodies like the Arctic Council in considering ways to address these needs. But it is essential to recognize that numerous other actors will play increasingly important roles in meeting this challenge. These include intergovernmental organizations, indigenous peoples' organizations, multinational corporations, environmental non-governmental organizations, and sub-national units of government, to name a few. The growing importance of these non-state actors calls for more nuanced thinking regarding a number of key concepts, including identity, citizenship, community, and sovereignty. An underlying theme in our examination of options is the proposition that success in promoting stewardship in the Arctic will depend on recognizing and respecting the importance of non-state actors and finding appropriate roles for them, while acknowledging the continuing role of States in establishing the rules of the game applicable to Arctic governance.

#### **4. Critical Questions – Identifying Governance Needs**

What needs for governance does the watershed change we have described engender? Are there critical questions that policymakers will have to answer in order to respond effectively? Policy processes are capable of dealing with only a limited number of issues at a time. This means that prioritization is critical. Much depends also on the framing of issues. This makes it essential to think hard about alternative ways to formulate key questions relating to Arctic governance. Timing is another critical factor. Issues that languish for some time in policy backwaters can become central concerns when the alignment of interests favors efforts to address them. Prominent issues can be overtaken by other urgent matters, whether or not the policy process has produced solutions for them. This means both that it is critical to move issues to the forefront at the right moment and that it is essential to be ready to come forward with innovative proposals when the time is ripe.

Bearing these considerations in mind, we have identified a series of critical questions that will require focused attention on the part of those seeking to enhance Arctic governance systems. We start with the need to build trust among key actors, because this is a necessary condition for making progress toward the development of effective governance systems. From there, we proceed to examine both familiar regulatory concerns and a range of less familiar concerns that are now emerging as priorities.

**(1) *Building trust.* How is it possible to alleviate tensions and adversarial interactions among major constituencies possessing legitimate interests in the Arctic (e.g. indigenous peoples, other Arctic residents, environmental organizations, businesses, governments), making use of procedures that can build trust and foster synergy as a basis for pursuing stewardship?**

Given the scale of the challenges arising in the Arctic, the pursuit of stewardship will require a common and collaborative effort on the part of all major constituencies in the region. Yet the existence of serious tensions among and within key groups, arising from troubled histories and exacerbated by insensitive actions on the part of some, is undeniable. Not only do these tensions sometimes set indigenous peoples against the interests of groups representing non-indigenous or mixed constituencies; there are also tensions within individual groups. It would be naïve to suppose that participants can find simple ways to alleviate these tensions and the adversarial perspectives that flow from them, even in an era in which the need to address collectively overriding issues like the impacts of climate change is great. But it is essential to build trust among these constituencies by encouraging participatory approaches and the use of dialogue to develop a shared vision for the Arctic. A failure to do so will leave the region vulnerable to pressures from those whose ultimate interests have little to do with the welfare of the Arctic and its residents.<sup>5</sup>

**(2) *Strengthening regulatory frameworks.* What is the way forward in enhancing existing regulatory regimes and creating new ones to deal with the anticipated growth of commercial shipping in the Arctic, the prospect of new oil and gas fields under Arctic waters, possible expansion of commercial fishing in the Arctic, projected growth of mining activities on land, expected increases in Arctic tourism, and ongoing releases of contaminants either directly into the Arctic or in other areas whence they make their way to the Arctic.**

As commercial activities expand in the Arctic, the need to develop regulatory measures in a number of areas (e.g. mandatory rules to govern commercial shipping, an effective code of conduct to govern the activities of tour operators) will grow.

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<sup>5</sup> For a discussion of this subject, see Tony Penikett, “At the intersection of indigenous and international treaties” (available at: [www.arcticgovernance.org](http://www.arcticgovernance.org)).

The broad outlines of what will be required to address such concerns are already visible. The proposed Polar Code to be developed into a legally binding regime covering all aspects of commercial shipping (including search and rescue and emergency responses to accidents) under the auspices of the IMO makes sense. The experience of the International Association of Antarctic Tour Operators (IAATO) is suggestive regarding ways to regulate Arctic tourism. Similar issues arise with regard to oil and gas development, mining, fishing, and pollution control. Although it is difficult to predict specific patterns of growth in this realm, there is much to be said for anticipating such developments in regulatory terms and putting in place suitable regimes today rather than struggling to react once commercial activities become entrenched. In cases where too little is known to formulate suitable regulatory arrangements or technology does not exist to protect the environment, it may make sense to suspend resource use until adequate knowledge and capacity become available.

**(3) *Enhancing holistic or systems approaches. How is it possible to encourage holistic thinking in such forms as ecosystem-based management, spatial planning, and comprehensive impact assessment to foster management of terrestrial and especially marine systems in an integrative manner and, in the process, to make the Arctic an exemplar for holistic management of human-environment interactions in the 21<sup>st</sup> century?***

The center of gravity in thinking about the governance of socio-ecological systems is moving toward greater reliance on holistic and integrative methods or what scientists often characterize as systems thinking. This is not an argument for ignoring sectoral concerns relating to shipping, fishing, oil and gas development, and so forth. But the linkages among the various components of both marine and terrestrial systems have become so extensive and so strong that sectoral approaches to governance are no longer adequate. It is increasingly important to address ocean management, for instance, in ways that encompass areas within as well as beyond national jurisdictions, that address interactions among multiple uses of marine resources, and that are alert to the role of non-linear and sometimes abrupt changes in large and dynamic systems. Norway's recent experience with the use of ecosystem-based management in marine areas is an encouraging step in this direction. So is the Canada-US pilot program dealing with the Beaufort Sea as a large marine ecosystem, initiated under the auspices of the Arctic Council's Working Group on the Protection of the Arctic Marine Environment. But it is important to supplement these sub-regional initiatives with efforts to think of the Arctic Ocean together with its coastal areas as a whole in systemic terms. Because similar challenges arise elsewhere, there is an opportunity for the Arctic to become an arena for both innovative and broadly influential institutional initiatives regarding such matters.



**(4) *Promoting adaptation.* What is the way forward in adapting to the impacts of climate change and related developments on biophysical and socioeconomic systems in the Arctic, taking advantage of opportunities when and where they arise, while minimizing adverse effects when they are unavoidable?**

Climate change is a reality rather than a future prospect in the Arctic. Serious impacts are occurring already; more are expected. These impacts take such diverse forms as the thinning and receding of sea ice; melting of glaciers, ice sheets and permafrost; altering of snow conditions; intensifying storm surges and coastal erosion; and declining populations of migratory animals. Some adaptive measures will take place entirely within the confines of national jurisdictions and be handled through domestic programs. But political and legal boundaries do not shape the impacts of climate change; transboundary impacts constitute a common occurrence. Individual countries have much to learn from each other's experiences in identifying best practices and developing cost effective measures to maintain the resilience of biophysical and socioeconomic systems in the face of climate change.

**(5) *Enhancing the Arctic as a zone of peace.* How it is possible to avoid tensions in the High North arising from broader geopolitical developments affecting international peace and security? Could the Arctic serve as a model for enhancing confidence-building measures in other areas?**

The Arctic is not itself a source of conflict likely to precipitate armed clashes. Even disagreements over matters like the delimitation of coastal state jurisdiction over the outer continental shelves of the region are being handled in an orderly fashion under the provisions of applicable international law. Still, the Arctic remains a theater of operations for powerful military systems, including nuclear-powered submarines and sophisticated aircraft equipped with nuclear-armed cruise missiles. Although demilitarization is not a realistic option for the Arctic at this time, a variety of confidence-building measures, devised initially during the cold war, are in place.<sup>6</sup> It makes sense to review these measures, to enhance them in ways that will minimize the danger of unintended military incidents in the Arctic, and to embed the consideration of these issues in broader frameworks like those associated with the concepts of environmental security and human security.<sup>7</sup>

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<sup>6</sup> See Thomas S. Axworthy and Sara French, "A Proposal for an Arctic Nuclear-Weapon-Free Zone," paper prepared for presentation to the International Council Expert Meeting on "Achieving a World Free of Nuclear Weapons," April 15-16 2010 Hiroshima, Japan (available at: [www.arcticgovernance.org](http://www.arcticgovernance.org)).

<sup>7</sup> See Hans Corell, "The Arctic: An Opportunity to Cooperate and to Demonstrate Statesmanship," *Vanderbilt Journal of Transnational Law*, 42 (2009): 1065-1079 (available at: [www.arcticgovernance.org](http://www.arcticgovernance.org)).

**(6) *Achieving regional sustainability.* What can be done to achieve sustainability on a regional scale in the Arctic, even as outside forces draw the region into a tighter embrace with advanced industrial systems on a global scale?**

Modernization has produced many benefits but it has also led to the energy-intensive systems responsible for climate change, high levels of inequality on a global scale, and materialistic lifestyles that are not sustainable over the long term. The watershed change occurring in the Arctic is a linking development, raising the profile of global actors (e.g. multinational corporations, large environmental organizations) in addressing issues of importance to the Arctic. The Arctic cannot disengage from the forces of globalization. Yet the need to maintain the Arctic as a homeland for indigenous peoples and as a satisfying place of residence for other northerners is critical. The challenge here centers on sustainability at a regional scale. Can the Arctic develop a developmental path of its own rather than becoming an appendage of global processes that have given rise to major problems like climate change? Are there ways to protect the cultural and biophysical systems of the Arctic from the onslaught of global forces that are insensitive to and apparently disconnected from the impacts of their actions on Arctic systems?

**(7) *Strengthening policy mechanisms.* What is the best way to combine hard and soft law arrangements along with more informal social practices into governance systems capable of addressing emerging issues of governance in the Arctic in an integrative and adaptable manner?**

Although there is little prospect that an integrated system of Arctic governance based on a comprehensive and legally binding treaty will emerge, at least during the foreseeable future, a complex array of governance arrangements already exists in the Arctic. What is needed is a strategy that builds on success and features a suitable division of labor in which individual bodies do what they are able to do best, functional overlaps are addressed, and gaps in the existing architecture of governance are filled. This is partly a matter of strengthening the Arctic Council (including the capacity of the Permanent Participants) as a policy-shaping body providing support for decision-making in both national and international settings. But just as important is the need to clarify and adjust the roles of a variety of other bodies, including those responsive to constituencies not well-represented in the Arctic Council (e.g. the Northern Forum) and those emphasizing various forms of multilevel governance (e.g. the Barents Euro-Arctic Region).

**(8) *Amplifying Arctic voices.* What means are available to amplify the voices of the Arctic in outside arenas where matters of governance affecting the Arctic are addressed?**

What happens in the Arctic is heavily affected by decisions made elsewhere. Prominent examples include decisions made under the provisions of intergovernmental agreements, like the Montreal Protocol on Substances that Deplete the Ozone Layer, the UN Framework Convention on Climate Change and related measures relating to emissions of greenhouse gases, the Stockholm Convention on Persistent Organic Pollutants, World Trade Organization agreements dealing with issues relating to commerce, and the World Heritage Convention concerning sites of exceptional natural and cultural significance. But Arctic voices – including those of peoples for whom the Arctic is a homeland as well as those of other permanent residents – are often faint or even unheard in such settings. This is due in part to the fact that the Arctic encompasses sparsely populated and remote areas within the borders of the Arctic States. What happens in the Arctic has significant implications for the outside world. There is some propensity on the part of outsiders to pay attention to the Arctic as a “climate canary,” and awareness is growing regarding possible impacts of Arctic geophysical processes (e.g. melting of the Greenland ice sheet) on global systems. But this is not equivalent to a concern for the welfare of the Arctic and its peoples in their own right. There is much to be said, in our view, for starting from an alternative vantage point, drawing the attention of the outside world to Arctic success stories and embracing the role of the Arctic as a region of dynamic and innovative governance.

## **5. Governance principles – Formulating normative guidelines**

Principles are guides to action rather than rules calling for mandatory conformance; they are common in many areas of endeavor. Commentators routinely speak of ethical principles, professional principles, principles of humane conduct, and so forth. A particularly important source of inspiration for this analysis of Arctic governance centers on the role of widely shared principles of indigenous governance in the Arctic emphasizing such matters as participatory decision-making, acknowledgement of diverse viewpoints, learning from experience, reliance on specialized leadership abilities, respect for all forms of life, and a concern for long-term consequences of current actions.<sup>8</sup>

We focus here on the identification of principles of interest to all those making decisions about governance in the Arctic that build on these values and that will prove conducive to the pursuit of stewardship during an era of transformative change. The challenge is to devise guidelines for Arctic governance that will prove helpful to decision-makers from the local level to the global level in developing convincing answers to the critical questions outlined in Section 4. In the course of this enquiry, we have identified six principles that we believe constitute a coherent and parsimonious set of normative guidelines.

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<sup>8</sup> See the accounts included in the collection of papers entitled “Indigenous Governance in the Arctic,” *op. cit.*

***Box A: Six principles for Arctic governance***

***(1) Interests, rights, and duties.*** Arctic governance systems should acknowledge the special interests of the Arctic States in such forms as the entitlements of sovereignty, rights to natural resources, and authority to regulate pollution as well as the rights of Arctic residents - especially indigenous peoples - regarding self-determination and local control. These systems should also recognize the rights and duties under applicable international law of other States and relevant non-state actors.

***(2) Multilevel governance.*** The performance of Arctic governance tasks should be handled by those bodies with the greatest capacity to do so, including local, regional, national, and international bodies as well as traditional and non-governmental bodies. Preference should be given where appropriate to those bodies closest to the problem.

***(3) Documented needs.*** Recommendations for reformed or new governance arrangements for the Arctic should reflect current and anticipated needs for governance that are clearly documented and that existing arrangements are not capable of meeting.

***(4) Best available information.*** Reformed or new governance systems for the Arctic should be based on the best available information, applying traditional as well as scientific knowledge. The results should be monitored and evaluated continuously.

***(5) Holistic or systems approaches.*** Arctic governance arrangements should encourage participatory and integrative thinking in such forms as ecosystem-based management, spatial planning, and comprehensive impact assessments.

***(6) Flexibility and adaptability.*** Governance arrangements dealing with complex and dynamic socio-ecological systems should place top priority on devising procedures that allow for flexibility and adaptability in the face of rapid change and high levels of uncertainty.

## **6. Ways forward – Distilling key findings**

Framing critical questions and crafting governance principles that may be helpful in seeking answers to them are important accomplishments. But policymakers must move from these general considerations to the identification of progressive measures to strengthen Arctic governance. We seek here to articulate a number of key findings and explore their implications for ways forward in addressing the needs for governance identified earlier in this report. Our specific recommendations follow in Section 7.

We do not recommend, at least for now, an effort to negotiate a single comprehensive agreement, much less a legally binding treaty, dealing with Arctic governance. The existing capacity to address matters of governance in the Arctic is substantial. An Arctic-specific agreement would not be capable of addressing effectively issues that are driven by global forces (e.g. climate change). The political obstacles to negotiating an Arctic treaty are profound; such an initiative would be time consuming and might well end in failure. Any agreement emerging from such an effort would suffer from inflexibility.

***Box B: Strengthening the suite of Arctic governance systems***

Many institutions and organizations are relevant to meeting the needs for governance in the Arctic. These range from global framework arrangements (e.g. the UNCLOS) through multilateral environmental agreements (e.g. the UNFCCC and the Stockholm Convention on POPs) and international economic arrangements (e.g. the WTO) to regional arrangements (e.g. the Arctic Council), sub-regional arrangements (e.g. the Norwegian/Russian fisheries regime for the Barents Sea, the Saami Parliamentary Council), national arrangements with transboundary effects (e.g. co-management regimes for wildlife management in Canada), and land claims agreements dealing with the rights of indigenous peoples. This, in turn, brings into play a wide range of administrative bodies, including UN agencies and programmes (e.g. IMO, WHO, UNEP, UNDP), regional bodies (e.g. regional fisheries management organizations), Arctic-specific bodies (e.g. the working groups of the Arctic Council), Indigenous Peoples Organizations, sub-national bodies (e.g. the Northern Forum), and non-governmental organizations (e.g. the International Council for Science, the International Association of Classification Societies, the International Council for the Exploration of the Sea). It is pointless to try and single out one or even a few of these entities as the key to success in meeting current needs for governance in the Arctic. Rather, the challenge is to strengthen this complex by ensuring that all these entities are joined together in a mutually supportive manner to form an interlocking suite of governance systems for the Arctic in which the idea of stewardship is central and the whole is greater than the sum of the parts.

While these considerations may change in the future, we believe it will be more productive to focus, for the time being, on a number of specific initiatives aimed at strengthening the suite of Arctic governance systems treated as a set of distinct but interlocking arrangements. This will allow those concerned to move forward as opportunities arise, without becoming enmeshed in the need to make progress on a number of fronts simultaneously. Against this background, we have identified the following key findings.

**(1) Meeting sectoral challenges.** As biophysical changes open the Arctic to enhanced human activities in a variety of areas, the need for improved regulatory arrangements is becoming apparent. There is a strong case for taking the initiative now, before major investments are made and interests harden, to articulate rules of the game covering these activities. An appealing strategy is to start with several concrete cases where prospects for success are favorable, building a positive track record that can be extended to other sectors over time. One promising initiative emerging under the auspices of the Arctic Council centers on development of an international instrument on search and rescue in the Arctic. Related to this is the broader effort to upgrade the 2002 voluntary *Guidelines for Ships Operating in Ice-Covered Waters* into a mandatory Polar Code under the auspices of the IMO.

**(2) Incorporating integrative and holistic perspectives.** Developing regulatory regimes to address sectoral or functional activities like shipping or fishing is an important step. By itself, however, this step is not sufficient to fulfill the requirements of stewardship in the Arctic. What is needed to complement these regimes is a capacity to make use of procedures like ecosystem-based management, spatial planning, and comprehensive environmental impact assessment to ensure that interactions among distinct activities are recognized or, in other words, to manage the Arctic as a large, complex and dynamic socio-ecological system. Efforts to address such matters in particular segments of the Arctic (e.g. the Beaufort Sea treated as a large marine ecosystem) are helpful, but they are not a substitute for looking at the Arctic Ocean and even the region as a whole in integrative or holistic terms. It may take some time to identify and agree on the best institutional mechanism to handle this task on an ongoing basis. But there is a need to make a prompt start in addressing these systemic issues. To get the ball rolling, we recommend asking the Arctic Council to take the initiative by investigating institutional options for handling ecosystem-based management, spatial planning, and comprehensive environmental impact assessment in the Arctic and collecting the data required to undertake such an effort on a sophisticated basis.

**(3) Respecting and honoring indigenous rights.** Progress in meeting needs for governance in the Arctic requires creative approaches to reconciling the rights – both individual and collective – of indigenous peoples and the interests of States as well as non-indigenous residents of the region. The Arctic Council has made an important contribution to this goal by establishing and enhancing the role of the Permanent Participants. But because the numbers of indigenous peoples are small, they are spread across multiple jurisdictions, and they are for the most part not wealthy, their legitimate concerns are easily overlooked or marginalized. It is therefore essential to devise procedures that will level the playing field and encourage development of more productive partnerships. The way forward, in our view, is to embrace the UN Declaration on the Rights of Indigenous Peoples as a progressive measure, to adopt a human rights perspective in weighing the relative merits of policy options relating to Arctic issues, and to ensure that representatives of indigenous peoples have the capacity to participate effectively in Arctic policy forums. Moving forward with regard to

economic and social development in the Arctic would then become a matter of building mutually beneficial coalitions and exploring the advantages of hybrid governance systems (e.g. the arrangements envisioned in the draft Saami Convention) rather than pursuing adversarial strategies intended to promote the interests of particular stakeholders.<sup>9</sup>

**(4) *Optimizing the role of the Arctic Council.*** The Arctic Council has succeeded beyond the expectations of most of those involved in its creation during the 1990s. It is a policy-shaping rather than decision-making body; it is not likely to acquire the authority to make binding decisions on matters of substance anytime soon. The Council has achieved striking results in identifying emerging issues, moving them onto policy agendas, and providing analyses needed to support consideration of these issues in relevant policy arenas. Yet the capacity of the Council to perform these important roles is constrained by a lack of human resources, dependable sources of funds, and visibility at local and regional levels. This limits the Council to initiatives supported on a voluntary basis by one or more of the member States. The time has come to take steps toward remedying this situation. There is a need to reconfirm the status of the Arctic Council as the principal forum for considering matters of regional Arctic policy. The member States, working with the Permanent Participants and in consultation with other stakeholders, should develop a strategy for enhancing the capacity of the Arctic Council and extending the Council's innovative features to other arenas, perhaps in conjunction with preparations for the North American chairmanships commencing in 2013.

**(5) *Reading the Arctic barometer in the climate arena.*** Although the Arctic is not referred to explicitly in the UNFCCC and related instruments, this region has an essential role to play in efforts to strengthen the climate regime. This is partly a consequence of the facts that the impacts of climate change are being felt already on a large scale in the circumpolar Arctic and that what happens in the Arctic affects the global climate system. In part, the role of the Arctic arises from pro-active efforts on the part of the Arctic Council and other Arctic bodies to address the issue of climate change constructively. Prominent examples include the Arctic Climate Impact Assessment (ACIA) submitted to the Council in 2004 as well as the Council's current Task Force on Short-lived Climate Forcers. We do not expect the UNFCCC to be amended formally to recognize the role of the Arctic barometer. But short of this, we believe that the Conference of the Parties could devise procedures to consider Arctic experience relating to adaptation as well as mitigation and that the UNFCCC Secretariat could establish a mechanism to ensure ongoing communication about such matters with the Arctic Council and other relevant Arctic bodies.

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<sup>9</sup> If adopted, the Nordic Saami Convention would commit Finland, Norway, and Sweden to acknowledging both Saami rights to self-determination and the authority of the Saami Parliaments (text available at: [www.arcticgovernance.org](http://www.arcticgovernance.org)).

**(6) *Enhancing Arctic voices in international and transnational settings.*** Many UN agencies and programs engage in activities relevant to Arctic governance. Although commentators tend to think initially of UNEP in this connection, other relevant bodies include UNDP, WHO, IMO, and WMO. The same is true of other intergovernmental bodies, such as the WTO and NAFTA as well as informal arrangements like the G20. Non-governmental bodies, including the Marine Stewardship Council and the International Association of Classification Societies, also engage in activities that have a bearing on Arctic governance. The result is a complex mosaic of groups pursuing their own agendas in a manner that can have important implications for the Arctic. There is no simple solution to the challenge of monitoring the activities of all these bodies and arranging to intervene where appropriate. But there is much to be said for the establishment of a mechanism, perhaps under the auspices of the Arctic Council, to follow the work of these bodies and to take the lead in devising ways to ensure that Arctic concerns, especially those pertinent to human development, are articulated clearly in these settings. The Standing Committee of Parliamentarians of the Arctic Region also may be able to play a constructive role in this context.

**(7) *Integrating scientific and traditional knowledge in support of decision-making.*** Recent work on Arctic governance has benefited from the growth of knowledge regarding biophysical and socioeconomic systems in the Arctic. The Arctic Council's Arctic Monitoring and Assessment Programme (AMAP) and the Working Groups on the Conservation of Arctic Flora and Fauna (CAFF) and Protection of the Arctic Marine Environment (PAME) have been vigorous and often effective participants in this realm. A particularly impressive effort was the ACIA report produced through the combined efforts of AMAP, CAFF, and the International Arctic Science Committee (IASC). But there is much to be done to improve the integration of knowledge in support of decision-making. For example, there is a need to create stronger links between the actions of the Arctic Council, activities carried out under the auspices of the International Council of Science (ICSU), such as the International Polar Year/International Polar Decade, and efforts of the international science community more generally. More collaboration between the natural sciences and the social sciences and better integration of traditional knowledge into decision support systems are also needed, especially as policymakers endeavor to address non-linear, abrupt, and irreversible changes in large-scale systems. One mechanism that can play a role in addressing these concerns is the emerging initiative on Sustaining Arctic Observing Networks (SAON). An important objective in this realm is the development of more extensive interactions between the policy community and the scientific community encompassing the formulation of research agendas as well as the delivery of scientific findings.



## **7. Recommendations: Framing *An Arctic Action Agenda***

In closing, we offer the following specific recommendations for consideration by policymakers seeking to meet the needs for governance arising in conjunction with the transformative change now occurring in the Arctic.

### **(1) Honor, implement, and enhance existing Arctic governance systems**

Good governance in the Arctic will be best served, at least for now, by honoring, implementing, and enhancing existing treaties among nation states, e.g. the United Nations Convention on the Law of the Sea (UNCLOS) and the United Nations Framework Convention on Climate Change (UNFCCC), other intergovernmental agreements, treaties and other arrangements between States and indigenous peoples, and relevant practices that together constitute a living network of relationships designed to promote sustainability, environmental protection, social justice, and responsible economic development in the Arctic and to recognize the rights of indigenous peoples to participate in decision-making.

### **(2) Strengthen the Arctic Council.**

The Arctic Council has been remarkably successful as a policy-shaping body. But there are opportunities to strengthen its mission, scope, structure, and functions:

- a. Reaffirm the primacy of the Arctic Council as the principal forum for the consideration of Arctic policy issues.
- b. Reframe and broaden the mandate of the Arctic Council to include issues relating to security, health, and education and to highlight stewardship as the overarching objective of Arctic governance.
- c. Take steps to enable the full participation of the Permanent Participants in all Arctic Council activities, including providing a funding mechanism to cover the costs of such participation.
- d. Admit key non-Arctic States (e.g. China, Italy, Japan, Korea) as well as the European Commission to Permanent Observer status in the Arctic Council.
- e. Establish more systematic and efficient procedures for communicating with local and regional authorities and administrators in the Arctic.
- f. Create explicit mechanisms to provide regular input from the business community and environmental organizations in the deliberations of the Arctic Council.
- g. Institutionalize integrative and holistic perspectives in Arctic policy processes; assemble data and develop analytic tools needed to do so.

- h. Establish a reliable funding mechanism for the Arctic Council, so that the Council can select and launch projects without relying on the willingness of individual members to contribute to projects on a case-by-case basis.
- i. Establish a permanent secretariat for the Arctic Council located in a member state
- j. Hold a meeting of the Arctic Council at the level of heads of state and government at the first available opportunity.

**(3) Establish regulatory mechanisms to address proactively key functional and sectoral issues through appropriate international bodies.**

There are good reasons to establish regulatory mechanisms in anticipation of economic development and industrial activities in the Arctic along with the emergence of new issues of environmental protection. The way forward in this realm is to work through existing intergovernmental bodies where possible and to focus on the most important and promising areas first. Developing a legally binding Polar Code covering Arctic shipping and including strong environmental protection measures under the auspices of the IMO is a good place to start. Legally binding agreements on search and rescue (SAR) and emergency responses should be included as a part of this effort. Other areas, such as fishing and tourism, may require the development of free-standing bodies, much like the International Association of Antarctic Tour Operators (IAATO).

**(4) Institutionalize the science/policy interface in the Arctic.**

Science has played an important role in the development of Arctic policy. The work of the Arctic Monitoring and Assessment Programme (AMAP) is a clear case in point. But there is a need for a closer relationship between science and policy to ensure that research agendas focus on issues of clear relevance to policy and that scientific findings are conveyed on a regular basis to policymakers in a manner that emphasizes their implications for making and implementing policies. The Arctic Council provides an excellent forum for experimenting with procedures designed to achieve this goal. This should lead over time to the development of a broader Arctic science agreement to promote, on a cooperative and transparent basis, interactions between science and policy relating to the protection of ecosystem services, the pursuit of sustainable human-environment relations, and, more generally, the achievement of stewardship in the Arctic.

**(5) Create Arctic stakeholder forums or roundtables to build trust and stimulate dialogue on Arctic issues.**

There is a need for mechanisms to enhance interactions among individuals interested in the Arctic in off-the-record and relaxed settings to build trust among a wide range of actors, to facilitate knowledge exchange, to encourage innovative thinking, and to stimulate learning among those concerned with Arctic issues. The goal is to enrich the efforts of bodies like the Arctic Council rather than to dilute or detract from their efforts.

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**Members of the AGP Steering Committee**

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**The H. John Heinz III Center for Science, Economics and the Environment** serves as fiscal agent for the Arctic Governance Project. Established in 1995 to carry on the work of Senator John Heinz (1938-1991), The Heinz Center is a nonprofit, nonpartisan environmental organization working to improve the scientific and economic foundation for environmental policy. Its mission is to help foster a healthy environment while encouraging a robust economy. The Heinz Center engages leaders in government, business, academia and non-governmental sectors to advance the understanding of major environmental challenges that lead to the development of solutions. The Center also focuses on intended and unintended environmental consequences of important decisions and policies in the public and private sectors.

## Scientific Consultants

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