



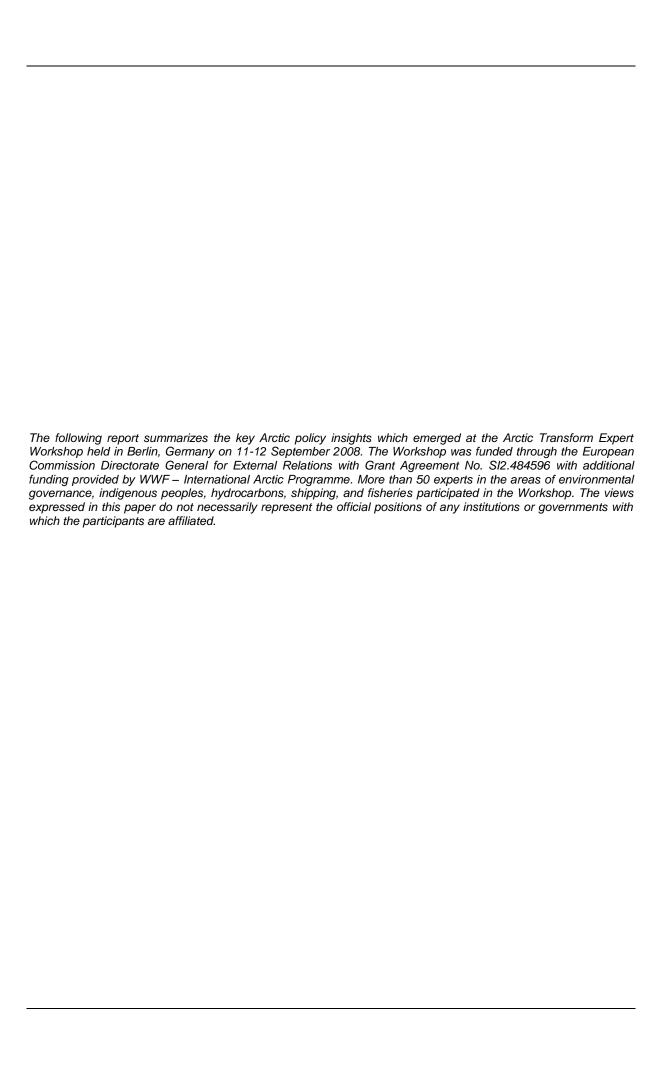




Transatlantic Policy Options for Supporting Adaptation in the Marine Arctic

Report of the Expert Workshop on 11 - 12 September 2008 Prepared by Mark Jariabka, Ecologic

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ARCTIC TRANSFORM

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On 11-12 September 2008 in Berlin, Germany, Arctic TRANSFORM held the Expert Workshop, which brought together more than 50 experts on Arctic policy in the areas of environmental governance, indigenous peoples, hydrocarbons, shipping, and fisheries. The workshop was designed to examine policy options for confronting the rapid changes occurring in the Arctic.

Key objectives of the project include:

- To promote mutual exchange among EU and US policy makers and stakeholders on policies and approaches in the Arctic in the stakeholder working groups;
- To provide a comparative analysis of existing policies and make recommendations with substantial buy-in as to how to strengthen co-operation between the EU and US; and
- To encourage dialogue and thus improve conditions for further transatlantic policy development and more effective protection of the Arctic marine environment.

The project includes two stakeholder-based workshops which culminate in a final conference in Brussels at which the policy options will be presented. Project reports (including a concise summary for policy makers) will be disseminated via the project website and to policy makers on both sides of the Atlantic. This synthesis report summarizes the key observations of the Arctic TRANSFORM Export Workshop held on 11-12 September 2008.

Arctic TRANSFORM is funded by the European Commission (DG External Relations) and is being carried out by four institutes: Ecologic (Germany; project lead), the Arctic Centre (Finland), the Netherlands Institute for the Law of the Sea (Netherlands), and the Heinz Center (USA).

Key Observations

The Arctic is among the regions most strongly affected by climate change. Average Arctic temperatures increased at almost twice the global average rate in the past 100 years. On 16 September 2007, Arctic sea ice reached its lowest extent on record and in the summer of 2008, both the Northwest Passage and the Northern Sea Route were open for navigation.

The Arctic is not just a bellwether of climate change, but also a source. The Arctic is likely approaching key *tipping points*, beyond which addressing dangerous anthropogenic climate change could become increasingly difficult if not impossible. One such tipping point comes from the melting of arctic permafrost and the concomitant release of additional carbon dioxide and methane into the atmosphere. Another comes from the retreat of sea ice and glaciers which decreases the surface albedo of the area.

Climate change is not the only driver of change in the Arctic. In addition, the Arctic is currently experiencing the interplay of a number of forces stemming from globalization, global economic development, and global resource scarcity.

Climate change and its effects are a current and growing threat to Arctic indigenous communities. Decreasing ice threatens the traditional livelihoods of indigenous communities, for example, by making it increasingly difficult and dangerous to carry on subsistence hunting. Melting permafrost has undermined the foundations of buildings and other vital infrastructure, while the increasing prevalence of thunder storms and forest fires, largely unknown in the Arctic until recently, creates new hazards for local communities.



Some communities near the coast have had to be relocated, placing stress on both the moving and receiving communities. These changes also have the potential to upend traditional family dynamics, further testing the ability of indigenous communities to adapt.

The warming of the Arctic is expected to bring new economic opportunities to the region, most notably increased oil and gas extraction, shipping and fishing. Many of these activities are already taking place in the Arctic, though the retreat of sea ice will likely result in their expansion into previously undeveloped regions. These activities bring with them their own social and environmental impacts, affecting indigenous communities and marine and terrestrial ecosystems.

Non-Arctic states have a strong interest in the Arctic. This interest arises for several reasons. First and foremost, there is a vast area of international space at the center of the Arctic. Second, there are many migrating species for which the Arctic plays an important part in their lifecycle. Third, the Arctic is a potential source of positive feedback loops that could greatly increase the risk of catastrophic climate change. Fourth, the Arctic holds vast reserves of natural resources and may become a valuable international shipping route, making the region an important bulwark of global economic security.

Cross-Sectoral Synergies

Conference participants agreed that research and monitoring efforts require better coordination and funding. The Arctic is changing rapidly and current research and monitoring efforts are having a difficult time keeping pace. Much of the research taking place lacks a cross-sectoral approach and therefore does not always take account the linkages between different policy areas. Monitoring is too often inadequate, uncoordinated and underfunded. The piecemeal approach often results in inconsistent data sets across different countries and institutions, while poor coordination leads to troubling gaps in knowledge. International research and monitoring efforts like the Arctic Observing Network can help address these deficiencies and deserve more funding and political support from Arctic states.

Existing infrastructure in the Arctic needs to be upgraded in order to cope with the rapidly changing environment and increased human activity in the region. Melting permafrost is undermining existing civil and industrial infrastructure, much of which will need to be replaced. The Arctic largely lacks fundamental infrastructure for maritime activities and is suffering from the degradation of existing infrastructure through neglect, permafrost thawing and coastal erosion. Funding new infrastructure projects is a particularly difficult challenge. Novel funding models are needed to share costs for infrastructure – for example the charting of the Greenland coast – between coastal states and user states. In the maritime industry, good examples currently exist in the oil spill industry with a common surveillance industry. In theory, fees could be another option, but there is a reluctance to create a precedent that could serve as pretext for trade discrimination in other parts of the world.

An increased human presence in the Arctic requires cooperation among countries to provide for public safety and emergency response. Shipping, fishing, and tourism in the Arctic are expected to grow rapidly over the coming years, greatly increasing the number of people living and working in the region. Current emergency response infrastructures cannot adequately provide for the safety of the increasing numbers of people. Arctic countries must make public safety and emergency response a high policy priority.

Stakeholder Participation

Conference participants agreed that stakeholder inclusion in the policy-making process should be further improved. There have been some noteworthy improvements made on this front, notably the inclusion of Indigenous communities as permanent participants within the Arctic Council. However, challenges remain. For example, though Indigenous Peoples are represented at the Arctic Council, they are often unable to take advantage of their seat due to insufficient resources. Also, non-Arctic states are not eligible



to be full members of the Arctic Council. Important stakeholders are completely excluded from some forums. For example, NGOs rarely have any role within regional fisheries management organizations.

Arctic researchers should strive to be more responsive to the needs and values of indigenous communities. There is a general feeling among many Indigenous Peoples that environmental impact statements and other research efforts often ignore the effects of change on their communities. Many feel that their concerns are "run over" by government and industry. More research should be participatory or community based, incorporating the views of local people from the beginning during the design stage instead of integrating them into existing frameworks. Proper respect and consideration should be accorded to Indigenous knowledge. Currently participation varies widely depending on the country or region and the organizations involved. Researchers should also make a greater effort to make findings understandable and relevant for local people.

Policymakers need to revisit the definition of "adaptation" in the context of Indigenous communities. There is a tendency to view adaptation as being limited to the protection of physical and economic security, accomplished mainly through moving people to safer locations and providing jobs. Policymakers need to increase support for the social and cultural adaptation of these communities. It is important to remember that there is substantial variation among different communities.

Indigenous people should be seen as rights holders, not just stakeholders.

The role that non-Arctic states should have in setting Arctic policy needs to be considered. While most of the attention in the Arctic is focused on the eight Arctic states (and five Arctic coastal states), it is important to remember that there is a large zone of international waters at the center of the Arctic Ocean. It is reasonable to conclude that many non-Arctic states will have interest in policies that could affect their use of this area. This is already evidenced by China's request to be an observer at the Arctic Council and the EU's increasing focus on the region.

Governance Options

There was wide agreement that gaps exist in the current system of Arctic governance, however there remains disagreement as to how these gaps should be bridged. Human activity in the Arctic is currently regulated by a fragmented and overlapping collection of treaties, multilateral and bilateral agreements, international institutions, and supranational, national and local laws. Many of these instruments are of general applicability and are not specifically tailored to fit the unique characteristics of the Arctic. Additionally, few take into account the rapid environmental, social and environmental change currently taking place in the Arctic. The international community has four basic alternatives for addressing these shortcomings. They include:

- 1) The 'do nothing' option;
- 2) Fully implementing current regimes;
- 3) Improving the current system;
- 4) Shifting towards a comprehensive framework.

Arctic Transform participants largely agreed that the first two choices are not viable options.

Existing international agreements and institutions could form the basis of an improved Arctic governance regime. Many participants felt that existing agreements and statements, such as the May 2008 Ilulissat Declaration, could serve as a starting point for reform, given that they reflect a minimum consensus of the Arctic coastal states. The United Nations Convention on the Law of the Sea (UNCLOS) may also provide a good framework for improving Arctic governance. UNCLOS has advantages over other agreements and institutions. First, it is widely accepted by the international community. The five Arctic coastal states of Canada, Denmark, Norway, Russia, and the US all reiterated their support for the



Law of the Sea in the Illulissat Declaration (America's failure to ratify UNCLOS notwithstanding). Second, UNCLOS already contains a set of provisions that govern the high seas. The center of the Arctic Ocean contains a large expanse of international space, so any improved regime must protect the rights of non-Arctic states. One possible way forward would be to adopt a protocol under UNCLOS.

Several participants also mentioned the International Maritime Organization (IMO) as an appropriate forum for addressing many of the Arctic-specific issues relating to sea-going vessels. The IMO has well-established procedures for crafting and implementing regulations relating to environmental protection, public safety, and other maritime issues.

One other frequently mentioned institution was the Arctic Council. One option would be to broaden its mandate and grant it additional authority to issue binding resolutions in addition to its current responsibilities of research, advising on policy, and disseminating voluntary guidelines.

Any future governance regime must be more comprehensive and take into account the interrelated nature of the challenges facing the Arctic. An ecosystem-based management regime could provide the most effective approach for creating an integrated governance regime capable of efficiently managing economic expansion while at the same time protecting vulnerable marine ecosystems. There are examples of the successful implementation of ecosystem-based management at the international level (e.g. OSPAR Convention, Great Barrier Reef Marine Park); however the concept is poorly understood by most policymakers. The most effective implementation of ecosystem-based management in the Arctic would likely need to focus on large marine ecosystems (LMEs), which often cross political boundaries. Therefore, the cooperation of all Arctic states would be required.

The Arctic Council must become a higher priority for Arctic states if the forum is to strengthen its role in Arctic policy-making. Conference participants felt that "backbench" junior officials have replaced ministerial attendance at the Council and that stakeholder participation has remained limited (e.g. an initiative to strengthen the role of indigenous peoples became mere tokenism and failed due to a lack of resources).

Existing Arctic governance of shipping under the IMO is inadequate. IMO 'Arctic Guidelines' exclusively apply to transport in ice-covered water and hence do not cover cruise ships that sail in free Arctic waters. Coastal states can theoretically prohibit entry into certain waters on the basis that these waters are not charted. An IMO Polar Code is under development at the moment. The EU is not a member of the IMO. It has observer status, but the Commission hopes that member states like Finland and Sweden will carry EU initiatives forward at the IMO.

Surveillance of traffic and enforcement is a major problem. For example, Denmark does not have the resources to effectively patrol the shore of Eastern Greenland. Even if coastal nations are notified, their ability to provide comprehensive emergency assistance will remain limited. There is an acute need to establish special guidelines for cruise ships in the Arctic through the IMO. Increased maritime tourism in the Arctic poses serious threats for crews and passengers because the cruise ships often are not ice-strengthened and – in many cases – lack charts and adequate knowledge on Arctic conditions. Search and rescue systems do not exist in most parts of the Arctic and even where systems are in place, they are likely to be insufficient for dealing with the large number of passengers on a cruise ship. A duty for ships to go in pairs could be one effective regulation to increase safety. In the short-term, policy-makers should encourage ongoing collaboration of the national ice services to enhance availability and quality of ice information.

Next Steps

The results of the Expert Workshop will be incorporated into the final report of the partners. The sectoral and cross-sector policy options based on the extensive expert contributions will be presented at the Arctic Transform Final Conference, to be held in Brussels in March 2009.