

# THE ARCTIC IS UNDERGOING RAPID, INTERDEPENDENT TRANSFORMATIONS

ts climate is changing: average Arctic temperatures have increased at almost twice the global average rate in the past 100 years. Consequently, the North Pole ice cap has shrunk by approximately 40 per cent since 1980, and scientists predict ice-free summers in the Arctic in 30 to 40 years. This rapid pace of change is putting stress on ecosystems, leading to biodiversity loss and diminishing food security for indigenous communities.

It also creates opportunities for greater economic activity.



CARGO SHIP TRANSITS THROUGH THE NORTHERN SEA ROUTE INCREASED FROM JUST FIVE IN 2009 TO 71 IN 2013

2009

2013

s the ice retreats and mineral resources are increasingly depleted in the rest of the world, industrial-scale shipping and resource extraction are becoming of greater interest to not just Arctic countries, but also new actors such as China, India and the European Union.

The Arctic is intertwined with the rest of the world through climate and water cycles, ecosystem linkages, growing trade and investment flows, and, of course, the people and their knowledge. Building a sustainable Arctic future can only occur through open, global and multi-actor cooperation.

Development of the Arctic is not short of challenging and interlinked questions. Finding solutions to adapt to the ongoing rapid transformations, and to benefit from them, is critical. This includes understanding what the Arctic can learn from the rest of the world, and what the rest of the world can learn from the Arctic. We all need to build knowledge, trust, policies, institutions and business models that promote cooperation toward a sustainable Arctic future.



## **OUR VISION**

ISD's vision is similar to that of many other organizations working for transformations to sustainability: equity and a healthy planet. We have identified the Arctic as an area of critical importance for this vision.

We envision an Arctic that respects and prioritizes the perspectives of the region's people, including indigenous peoples and societies; an Arctic with increased resilience and capacity to adapt to a changing climate; and an Arctic with a growing stream of sustainable local economic benefits.

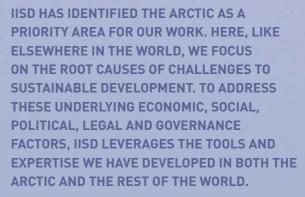
# **OUR APPROACH AND WORK**

hat distinguishes us is our approach. We address challenges to sustainable development rooted in economic, social, political and legal systems. We work together with governments, communities, businesses and other actors. We have worked with partners in and for all Arctic countries, as well as in China, India, the EU and many others.

IISD's teams have highly acclaimed expertise working on a diverse set of issues such as legal advice on trade agreements and investment contracts, taxation and pricing of fossil-fuel and renewable energy, public-private partnerships, public procurement, sustainable finance, community-based climate change adaptation and food security, knowledge management and indicators for integrated decisions, water management, and reporting on major international negotiations.

We have been developing our Arctic expertise since 1999, when we partnered with the Inuvialuit community of Sachs Harbour, Canada, to explore adaptive strategies on climate change. We have supported the implementation of the Arctic Council's work program on youth issues through the Circumpolar Young Leadership Program. We have conducted a series of evaluations and public discussions on taxation of oil, gas and mining projects in Canada, Norway and Russia. Through our flagship publication Earth Negotiations Bulletin, we cover intergovernmental decision-making on issues related to the Arctic. Our latest projects in the region include an assessment of the economic implications of climate change adaptation for mine access roads in Canada, and a mapping of opportunities and barriers to building and sharing transformative knowledge in the Arctic.

IISD has garnered a reputation as a convening authority for developing inclusive, sustainable solutions. We have facilitated a number of forums and dialogues among Arctic actors, for example, through the Hudson Bay Inland Sea Initiative.



Our Arctic Initiative supports bottom-up transformations to sustainability. We work with governments, communities, companies and other actors in the following four areas:

Climate change adaptation and food security.

IISD's specialized tools CRiSTAL, FIPAT,

ADAPTool and other well-proven solutions

help actors on the ground to identify preferred
adaptation interventions and future regional
development pathways.

**Extractive industries.** IISD offers independent evaluations and advice on extractive industries' potential contributions to local and national development through taxes, jobs, contracts, spillover effects and environmental impacts. This includes training for negotiators of mining contracts that provide sustainable opportunities for communities, governments and business.

Infrastructure and renewable energy
development. IISD brings lessons learned
in other remote communities to the Arctic
to support sustainable development of
infrastructure—including renewable energy and
housing—through investment incentives, publicprivate partnerships, public procurement and
sustainable finance.

Transformative knowledge. IISD's tested tools measure social, economic and environmental dynamics of Arctic transformations and combine these indicators as a platform for developing transparent, participatory dialogues about the Arctic's challenges and opportunities. An example of this work is our continued role as part of the Hudson Bay Inland Sea Initiative.



Source: Northern Sea Route Information Office

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Development (IISD)
undertakes policy analysis to
help governments, institutions
and companies make tangible
advances in the development and implementation
of environmental, economic and social policies
that promote equity and a healthy planet. It is an
independent, non-profit organization based in Canada,
with a global staff and offices located in Geneva,
Winnipeg, Ottawa, New York and Beijing.

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