

ARCTIC RESILIENCE FORUM 2020

REPORT

MAY 2021



Sustainable
Development
Working
Group



HARVARD Kennedy School

BELFER CENTER

for Science and International Affairs

Arctic Initiative

Arctic Resilience Forum 2020

This document exists in 1 version.
ISBN 978-82-93600-61-9 - A4, digital (PDF)

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Suggested citation

Sustainable Development Working Group. Arctic Resilience Forum 2020. Tromsø: Arctic Council Secretariat, 2021.

Published by

Arctic Council Secretariat

Cover photograph

Traditional mukluks on the ice of Great Slave Lake, Canada. Photo: RyersonClark / iStock

Funding and support

Icelandic Chairmanship, Sustainable Development Working Group, and the Harvard Kennedy School Belfer Centre Arctic Initiative.

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OVERVIEW: WHAT WE LEARNED

INTRODUCTION

The Arctic is facing a climate crisis as it transforms into a warmer, wetter climate state. This transformation is stressing communities and the ecosystems they depend upon like never before.

In 2017, the Arctic Council adopted the Arctic Resilience Action Framework, the world's first regional resilience framework, to track priorities, initiate action, and coordinate efforts to advance resilience. The Framework also proposed that the Council host an Arctic Resilience Forum every two years to take stock of progress, identify crucial gaps, and build on successes. The first Arctic Resilience Forum (ARF) was hosted by the Finnish Chairmanship and held in Rovaniemi, Finland in 2018. The Icelandic Chairmanship assumed responsibility for hosting the ARF in 2020.

While the Covid-19 pandemic created challenges for hosting ARF2020, it also amplified the importance and urgency of addressing resilience. As a result, the Icelandic Chairmanship and organizers from the Sustainable

Development Working Group and the Harvard Kennedy School's Arctic Initiative transformed the ARF2020 into a series of interactive virtual events over the course of ten weeks. Each session addressed a thematic area of concern and included speakers and participants from across the Arctic. Topics included Indigenous youth leadership, food security, gender, renewable energy, human health and pandemics, social-ecological systems, broadband connectivity, infrastructure, finance, and Indigenous knowledge. What transpired was a resounding success – 1500 participants from 39 countries tuned in from their home offices, couches, and kitchens. ARF2020 featured 85 speakers from every Arctic state and elsewhere around the world. In recognition of the key role of the Indigenous Peoples of the region in advancing resilience, nearly half (40) of the 85



speakers were Indigenous. With close to 850 of the participants tuning in to more than one session, the ten-week series drew together communities and fostered rich, ongoing conversations around Arctic resilience.

Each of the ten sessions covered a remarkable amount of material, explored new ideas and led to important collaborations. However, the most striking aspect was how the sessions were so interconnected – both in terms of content, findings, and enabling conditions for success. This interconnectedness reinforces the hallmarks of resilience, which is a platform to examine the intersection of important issues and explore the enabling conditions, influential actors, and investments to bring change across multiple sectors. The ARF2020 demonstrated how to navigate that complexity, and in the process built a community of practice that spanned the entire Arctic region.

This report summarizes some of the key findings of ARF2020 and proposes a series of next steps to build on the momentum through action.

FINDINGS

HOLISTIC APPROACH / INTERCONNECTEDNESS

As the Forum progressed through the sessions, it became evident that issues impacting Arctic resilience are inherently interconnected. Examples of the linkages described in ARF2020 sessions include:

- Environment, socio-economics and politics
- Decolonization, reconciliation, and revitalization
- Health, infrastructure, and food security
- Finance, energy, and connectivity
- Youth empowerment, gender equity, and honoring Indigenous knowledge

THE IMPORTANCE OF COMMUNITY

Despite the ten diverse topics that were covered, the importance of community quickly emerged as a core theme. Strength is drawn from the community, community is critical to driving towards more effective and inclusive decision making, and community consultation and a deep understanding of community needs are required elements of successful resilience initiatives.

A strong focus on community helps to create an enabling environment for strengthening:

- Education, training, and capacity building
- Indigenous knowledge
- Resource sharing and networks
- Co-management and co-production



BROADBAND CONNECTIVITY

One way to support communities across the Arctic is through secure and reliable broadband connectivity. Greater investment in enhanced connectivity is an enabling condition for resilience by facilitating:

- Access to larger economies
- Access to education, networks, and resource sharing
- Access to health care
- Access to financing

There are substantial gaps in connectivity in the Arctic. As a result, projects are affected, health suffers, and communities face greater barriers to success. When pre-existing silos can be bridged through education, network building, and resource sharing, communities are able to bounce back and thrive in the face of challenges.

INFRASTRUCTURE

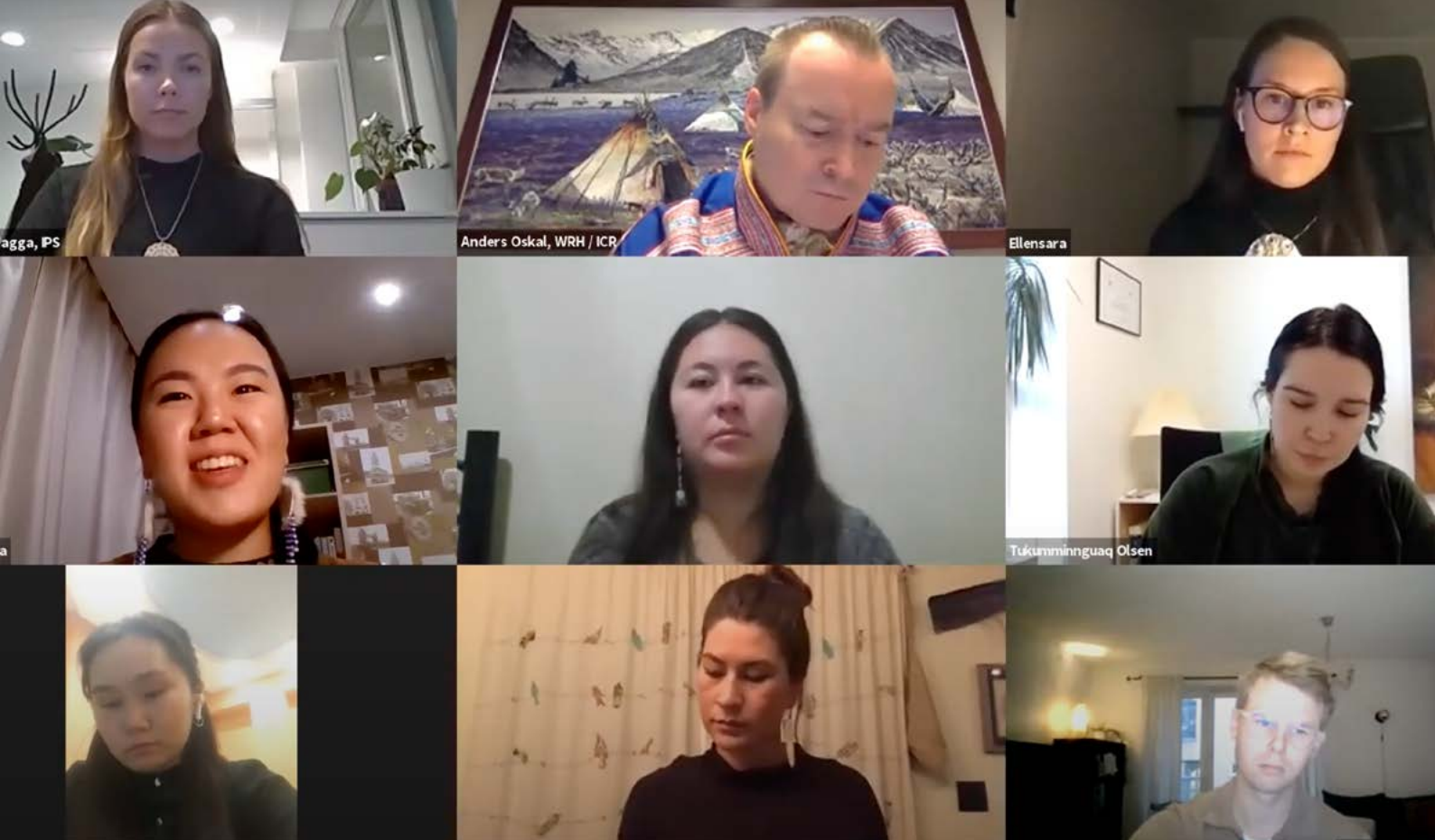
A continued obstacle to resilience in the Arctic is infrastructure. Large distances and remoteness are distinguishing characteristics of Arctic communities. There are challenges to building and designing for the some-

times-extreme conditions. This is coupled with the uncertainties and risks that arise as the region transforms due to a changing climate. However, without access to affordable and secure energy, food, water, and health and social services, communities find themselves lacking the basic conditions for increased and diversified economic activity.

While these gaps may be persistent, several examples given across different ARF2020 sessions illustrated the opportunities available through thinking more holistically about how to meet these needs. For example, some solutions suggested linking projects, enabling more public-private partnerships, working more closely with investors interested in impact, and focusing on community-driven priorities. Taking a cross-sector approach is essential as we continue work related to resilience in the Arctic.

EDUCATION

A lack of educational opportunities may be one of the greatest obstacles to a resilient Arctic, though the needs vary depending upon region. In some areas, remote northern communities rarely have adequate resources to provide basic educational programs, let alone culturally relevant programs tailored to northern needs. As a result, some of the best and brightest head south, potential leaders lack opportunities to hone their skills, and the human capital of the North remains untapped.



Educational programs or training imported from the South may not be relevant to life in the Arctic. As a result, many Arctic peoples have to take lower-value jobs and far too many remain on the sidelines at a time when rapid change requires that all players take the field.

Many of the ARF sessions pointed to the need to nurture and capitalize on the unique human capital of the Arctic and develop educational programs that leverage local and Indigenous knowledge, with a focus on northern needs and economic opportunities.

SOCIAL-ECOLOGICAL SYSTEMS, LAND USE AND INTERDEPENDENCIES

There are few places on the planet where the interdependence of people and ecological systems is as clear as in the Arctic. The condition of the natural capital of the Arctic has a direct impact on the well-being and resilience of Arctic communities, where culture and livelihoods depend directly upon surrounding ecosystems. In the case of Arctic wetlands, the scale of ecosystem services range from local to regional to global. In a region where social and ecological systems are so deeply

intertwined, it's no surprise that many of the ARF2020 sessions made note of the role of nature, the importance of natural capital and ecosystem services, or the need to 'mainstream' biodiversity concerns.

Examples of the threats to biodiversity and the integrity of the land include developing or converting the land to other uses, mining and fossil fuel extraction in some areas, toxic contaminants in others, and rapid Arctic warming. In some areas the most vexing concerns relate to land use or sovereignty. These kinds of threats are deeply enmeshed in past colonial practices and should bear close scrutiny.

The pace and breadth of Arctic change magnifies the importance of taking actions that increase the resilience of essential community-supporting Arctic ecosystems, and slow global changes that may be approaching critical thresholds. These actions may include ecosystem conservation and restoration, Indigenous co-management, or preventing human encroachment where possible.

FOCUS ON THE FUTURE – AN ACTIONABLE BLUEPRINT

The ARF2020 laid a strong foundation for continued collaboration and conversation around Arctic resilience. By using communities as the launch point and recognizing that issues are interconnected, we can build a network that engages diverse experts and knowledge holders to continue discussions and integrate the ideas and perspectives of this community into activities and initiatives that support and advance Arctic resilience.

The incoming Arctic Council Russian Chairmanship has confirmed its commitment to host ARF2022 as part of its Chairmanship program. Recognizing the success of ARF2020 and the urgency of the issue, the community of organizers and speakers involved in delivering ARF2020 propose that the SDWG work with interested partners to develop a SDWG Arctic resilience project for its 2021-2023 work plan.

This project would include the delivery of ARF2022 and could include the following actions that would contribute to maintaining momentum:

- Based on issues and themes discussed at ARF2020, organize events and activities that break down the silos between issues, focus on fostering shared enabling conditions, and provide further guidance on practical and actionable steps to advance Arctic resilience.
- Expand and promote the ARF community of experts and knowledge holders by establishing a virtual forum to highlight successful adaptation and resilience strategies in the Arctic, many of which were featured in ARF sessions.
- Identify and champion opportunities to have the issues and ideas articulated during ARF2020 inform relevant projects and activities within the Arctic Council and beyond.
- Ground future Arctic resilience work by actively engaging Arctic communities and understanding the needs, interests and experiences of all genders and age groups within these communities.
- Encourage and support Arctic institutions that develop resilience training opportunities for Arctic communities, businesses, and individuals.
- Connect Arctic resilience work to other Arctic Council priorities (e.g. Sustainable Development Goals, youth engagement, Indigenous languages, biodiversity, gender, wetlands) and find ways to ensure that these priorities inform how the ARF2022 is organized and produced.
- Start now to establish an Arctic resilience 2021-2023 work plan that incorporates activities leading up to ARF2022 and provides a frame to identify gaps and monitor and assess progress.
- Maintain flexibility and openness to emerging issues, circumstances, and perspectives.

ARF 2020 HOST



Audience feedback from the sessions noted some key highlights:

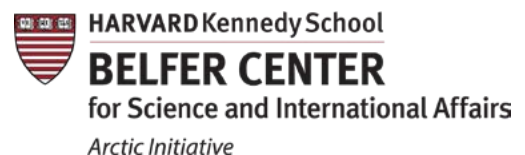
“Appreciated having translation available to include native Russian speakers more easily.”

“The meeting was very interesting and motivating. It’s great to see people working together on common ground!”

“The diverse range of presentations was fantastic. I enjoyed how the panelists included Indigenous and local folk alongside researchers.”

“Very glad you have these sessions, and they are fully virtual to ensure maximum participation. The time is well chosen to accommodate North America and Europe.”

ARF 2020 ORGANIZERS





ARCTIC RESILIENCE FORUM SESSIONS



INDIGENOUS YOUTH LEADERSHIP SESSION

A powerful new generation is emerging in the Arctic. A generation that is strong and full of new ideas, a generation that is ready to tackle issues head on. Indigenous youth are the future of Arctic communities, and many are already making their voices heard.

The Indigenous Youth Leadership session explored the challenges that Indigenous youth face, and what crises are affecting them. The session discussed how Indigenous youth are stepping into leadership roles, and how they can be enabled to capture new opportunities for their communities. The session also examined some of the existing efforts to empower young people to take on leadership roles.

Initiatives

[Conservation of Arctic Flora and Fauna \(CAFF\) Working Group Programs for Arctic Youth](#)

[Arctic Indigenous Youth Leaders \(AIYL\)](#)

[Arctic Youth Network](#)

[Circumpolar Resilience, Engagement & Action Through Story \(CREATeS\)](#)

[Indigenous Youth, Food Knowledge & Arctic Change \(EALLU\)](#)

[Permanent Participant Youth Network, Arctic Council](#)

KEY THEMES

- Challenges Indigenous youth leaders face including climate change, preservation of Indigenous culture, racial injustice, self-determination, sovereignty, gender equity, mental/spiritual health and wellbeing, and COVID-19.
- Existing efforts to empower Indigenous youth to take on leadership roles to help address challenges in their communities.
- The meaning of Indigenous Youth Leadership in the circumpolar region, and the importance of Indigenous traditional knowledge and culture in developing and supporting strong leaders.

The youth panel participants discussed some of their priorities, and the opportunities they saw to increase Arctic resiliency through an integrated approach. The issues raised by the youth panel include:



Focusing on the Future – What can we do to empower Indigenous Youth Leaders?

1. Involve youth in all aspects of strategy, planning, development, implementation, and evaluation at every level.
2. Create safe spaces and platforms for youth to connect and collaborate.
3. Highlight young Indigenous leaders on local, national, and global stages to promote inclusive representation.
4. Challenge young leaders with the opportunities and the authority to make real life decisions.
5. Promote culturally appropriate leadership and crisis management learning opportunities.
6. Dedicate resources and mentors to establishing youth initiatives.
7. Challenge youth to explore different issues to find where they'll make strong leaders.
8. Hold young leaders to high standards.

Simulation of Leadership through Crisis

- 1 hour per day (4 days total)
- Tasks with points
- Unpredictable events in the game
- Senior Arctic experts as mentors and judges
- Team with most points wins this friendly competition!

Objectives

- train negotiation, communication and leadership skills among indigenous youth
- teaching herders to n



Photo credit: ICR. Nenets reindeer herders during Biodiversity Course in Kautokeino (Norway)



Alena Gerasimova



Climate change and extreme weather events during winter are an unavoidable crisis that creates a lot of anxiety and depression among reindeer herding youth.

PER JONAS PARTAPUOLI, BOARD MEMBER, INTERNATIONAL CENTRE FOR REINDEER HUSBANDRY

Reindeer herding has been done for hundreds of years, without ever leaving a mark on nature. Now it is difficult because the fragmentation of the landscape. Protection of grazing land will be the most important climate change adaptation for reindeer herders.

OLGA NIKOLAEVA, CHAIR OF RAIPON YOUTH COUNCIL



When we have an increase in population, we also see increased pressure on our land and animals, which impacts Indigenous people who rely on the land and nonhuman kin to provide and practice our traditional way of life.

DEENAALEE HODGDON, EXECUTIVE DIRECTOR AT ON THE LAND MEDIA, ARCTIC ATHABASKAN COUNCIL YOUTH REPRESENTATIVE

SPEAKERS

Darling Anderson

Aleut International Association PP
Youth Network Representative

Joel Clement

Senior Fellow, Arctic Initiative at the
Harvard Kennedy School's Belfer
Center for Science and International
Affairs

Alena Gerasimova

International Center of Reindeer
Husbandry

Einar Gunnarsson

Chair of the Senior Arctic Officials
(SAO) during Iceland's Chairmanship
of the Arctic Council

Deenaalee Hodgdon

Arctic Athabaskan Council PP Youth
Network Representative

Rosa-Máren Magga

Advisor, Indigenous Peoples'
Secretariat at the Arctic Council

Svein Mathiesen

Head of Institute of Circumpolar
Reindeer Husbandry, University of the
Arctic

Olga Nikolaeva

Russian Association of Indigenous
Peoples of the Norther PP Youth
Network Representative

Marta Okotetto

Institute of the Peoples of the North

Tukumminnguaq Olsen

Inuit Circumpolar Council - Greenland

Anders Oskal

Secretary General at the Association
of World Reindeer Herders

Per Jonas Partapuoli

Executive Board Member of the
International Centre for Reindeer
Husbandry

Jordan Peterson

Gwich'in Council International

Stefán Skjaldarson

Chair of the Sustainable Development
Working Group of the Arctic Council

Ellen-Sara Sparrok

Council and Youth Group Member
at the Association of World Reindeer
Herders

Jennifer Spence

Executive Secretary, Sustainable
Development Working Group, Arctic
Council

Ellen Inga Turi

Chair of the board of the Arctic
Council Indigenous Peoples
Secretariat and board member of the
Saami Council

SESSION ORGANIZERS





FOOD SECURITY SESSION

Many imagine the Arctic as a place of harsh climate and scarcity, but the region is home to a strong food culture built on 10,000 years of knowledge and experience.

Arctic food industries are challenged by a plethora of rapidly changing climatic, social, economic, and logistical constraints. But the Arctic – a region characterized by constant change – shapes inherently resilient peoples. Innovation is ripe throughout the region; the right links just need to be made.

Initiatives

[Russia's Food Security Doctrine](#)

[Arctic as a Food Producing Region](#)

[Indigenous Youth, Food Knowledge & Arctic Change \(EALLU\)](#)

[Arctic Food Innovation Cluster](#)

[Arctic Biomonitoring Laboratory, Northern Arctic Federal University](#)

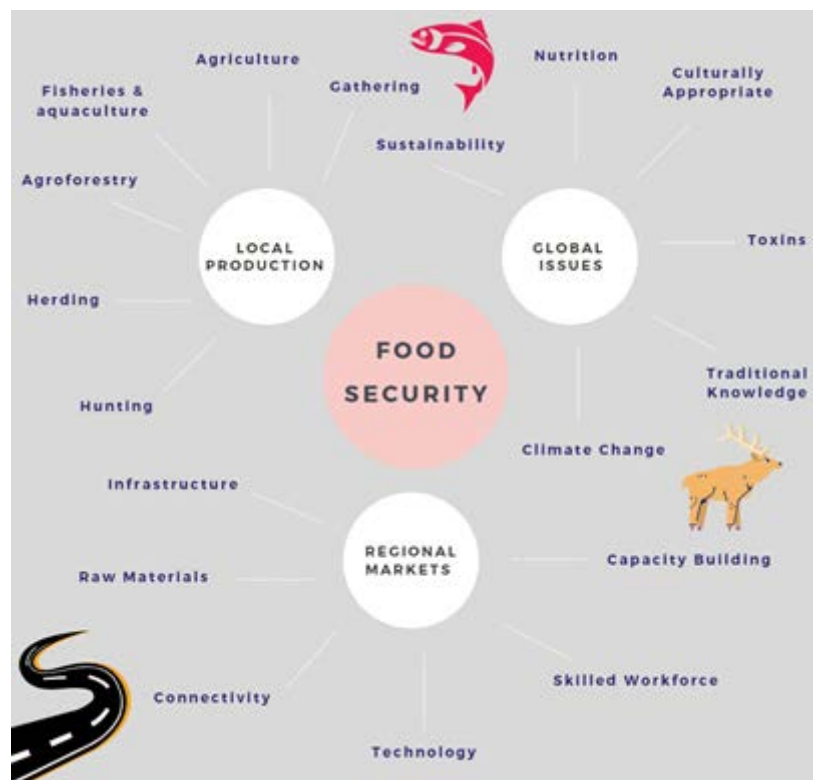
[Sustained Coordinated Observations of Arctic Change](#)

Food security is important to all eight Arctic nations, and all of the people of the Arctic. In a time when global tensions are flaring, it's especially important to strengthen cooperation on topics of shared concern.

- MARISOL MADDOX, ARCTIC ANALYST, WOODROW WILSON CENTER

KEY THEMES

- Role of national policy in diversifying food systems and increasing bio-monitoring.
- Regional approach to infrastructure challenges.
- Developing business capacity and skills to increase export capabilities.
- Incorporate food processing technology into traditional food systems to increase efficiency.



FOCUSING ON THE FUTURE – BUILDING RESILIENT FOOD SYSTEMS

1. Build on the existing strengths in local food systems and preserve traditional food knowledge.
2. Invest in infrastructure and technology to connect local food systems to global markets.
3. Provide education and training opportunities to increase business capacity.
4. Strengthen circumpolar food systems to create more diversified regional food environments.
5. Increase research into more efficient techniques and technology for harvesting and food processing.
6. Increase collaboration in human health bio-monitoring to better understand the environmental impact on nutrition and toxins.

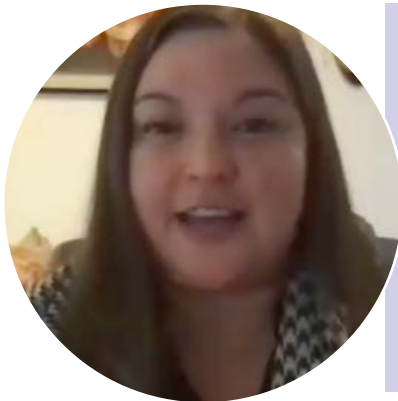


We believe the northern sea route can become a market channel for products from Arctic Indigenous communities, thereby bridging Indigenous products to larger markets.

-ANDERS OSKAL, SECRETARY GENERAL, ASSOCIATION OF WORLD REINDEER HERDERS

Food systems are influenced by different drivers: infrastructure, society, culture, politics, profit margins, energy, environmental factors, research development and innovation.

-DELE RAHEEM, ADJUNCT PROFESSOR, SENIOR RESEARCHER, ARCTIC CENTRE OF THE UNIVERSITY OF LAPLAND, FINLAND



Aleut people have lived here, in the islands that stretch from Alaska to Russia for thousands of years. Our culture is based on the ocean. Aleut actually means 'people of the sea'. Our food sources are based on all things in the ocean. We've hunted and fished and harvested here forever.

-LIZA MACK, DIRECTOR, ALEUT INTERNATIONAL ASSOCIATION

To ensure the life of people, it is important that their diet is healthy, not polluted, and provides a full set of essential vitamins and elements. In the severe climate of the Arctic, this is a requirement for human survival. Food security is one of the most important measures to ensure Arctic resilience.

-TATYANA SOROKINA, HEAD OF ARCTIC BIOMONITORING LABORATORY, NORTHERN ARCTIC FEDERAL UNIVERSITY



SPEAKERS

Irina Bazhanova

Minister for Agriculture and Trade,
Arkhangelsk, Russian Federation
(Video message)

Joel Clement

Senior Fellow, Arctic Initiative at the
Harvard Kennedy School's Belfer
Center for Science and International
Affairs

Liza Mack

Director, Aleut International
Association

Marisol Maddox

Arctic Analyst, Polar Institute,
Woodrow Wilson Center

Petri Juhana Muje

AGROFORE Project Manager, Lapland
University of Applied Sciences

Anders Oskal

Secretary General, Association of
World Reindeer Herders

Vladimir Pushkarev

Deputy of the State Duma of
the Federal Assembly of the
Russian Federation of the Seventh
Convocation; Deputy Chairman, The
State Duma Committee for Regional
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East

Dele Raheem

Senior Researcher, Arctic Centre,
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Tatiana Sorokina

PhD, Head of the Arctic
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Jennifer Spence

Executive Secretary, Sustainable
Development Working Group, Arctic
Council

Georgiy Sukhanov, PhD

Northern Arctic Federal University
(NArFU) Business School; Russian
Legislation and Governmental Support
of Food Industry Sector/RF Food
Security Doctrine

Kelley Uhlig

Project Coordinator, Arctic CoObs

SESSION ORGANIZERS





RENEWABLE ENERGY SESSION

Energy: a constraint to growth or a means to greater prosperity? Arctic communities, researchers, policy makers, and governments approach energy with different priorities, but agree that sustainable clean energy is essential to the development of resilient Arctic communities.

This session explored the challenges Arctic communities face as they reduce their diesel dependency, including climate change, infrastructure, competing land use, funding and health. However, the session also explored various tools, methods, and factors that will enable and support communities in their energy transition. Participants in the session highlighted the role of Indigenous leaders and policy in advancing and implementing innovative energy projects in the Arctic.

Initiatives

Old Crow Solar Energy Project:

The Snowflake International
Arctic Station

Smart Senja

The Arctic Remote Energy
Networks Academy (ARENA)

[Learn more about these
initiatives](#)



KEY THEMES

Participants discussed the implementation of renewable energy in Arctic communities and innovative approaches to unique integrated systems. The session emphasized:

- A community first approach to project design and promoted adaptive systems to enable resilience and sustainability.
- The importance of enabling factors, such as policy, concrete tools, and funding to encourage and mainstream renewable energy solutions.
- Continued collaboration, a multidisciplinary approach, and increased knowledge sharing.

FOCUSING ON THE FUTURE

1. Community first approach to the design and implementation of energy systems.
2. Collaborative and flexible approach to maximize integrated systems.
3. Encourage governments to support energy systems that meet community needs.
4. Increase energy infrastructure to connect local grids to larger regional grids.
5. Create smart energy systems that can adapt to changing circumstances and future needs.
6. Further examine and encourage enabling factors (policy, tools, funding, etc.) to advance implementation of renewable energy solutions.
7. Increase efficiency and usability in energy use data collection, sharing of energy toolkits, resources, clean energy planning, best management practices, and knowledge sharing.

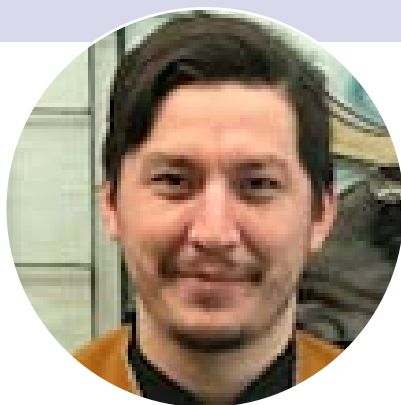
“Having access to our history, I constantly ask myself how people were able to thrive in such an inhospitable environment. When we speak about energy, there are opportunities to engage Indigenous values and ideas. Our solar energy project is an application of modern technology unlocking our economic and energy sovereignty in our community.”

— CHIEF DANA TIZYA-TRAMM, VUNTUT GWITCHIN FIRST NATION



“Technology is only half the puzzle. We need to work together. In the first year, and pre-project, the first thing we did was involve the schools. We also have energy cafes twice a year to teach people about energy and how they can get involved in the project.”

- BERIT KRISTOFFERSEN, ASSOCIATE PROFESSOR, UIT THE ARCTIC UNIVERSITY OF NORWAY, ARCTIC CENTRE FOR SUSTAINABLE ENERGY



Renewable Energy Initiatives

Old Crow Solar Energy Project: Vuntut Gwitchin First Nation owns the 480-kilowatt solar array installed in Old Crow, Yukon, Canada. The renewable energy system will displace the use of diesel to generate electricity in the off-grid community.

Smart Senja: is a large-scale demo-project that kicked off in January 2020, that is set to create a hybrid and smart energy system for coastal communities in Arctic Norway. In collaboration with local communities (including businesses and schools), the grid company Troms Kraft (project owner), Ishavskraft (power company), technology companies and UiT – the Arctic University of Norway, new energy solutions are co-created. Those solutions will form both the future energy system and provide local energy security.

The Arctic Remote Energy Networks Academy (ARENA): is a unique circumpolar knowledge sharing program about isolated power systems integration held in partnership with Canada, Gwich'in Council International, the U.S. and Iceland and endorsed by the Sustainable Development Working Group (SDWG) of the Arctic Council.

The Snowflake International Arctic Station: a new Russian year-round research station that will be fully powered by renewables endorsed by the Sustainable Development Working Group (SDWG) of the Arctic Council.

SPEAKERS

Kristín Linda Árnadóttir

Chair of the Arctic Council's Expert Group on Black Carbon and Methane

Joel Clement

Senior Fellow, Arctic Initiative at the Harvard Kennedy School's Belfer Center for Science and International Affairs

Devlin Fernandes

Executive Director, Gwich'in Council International

Karoline Ingebrigsten

Research Fellow, UiT The Arctic University of Norway

Berit Kristoffersen

Associate Professor, UiT The Arctic University of Norway, Arctic Centre for Sustainable Energy

Oskar Njaa

General Manager for International Affairs, The Bellona Foundation

Guðmundur Haukur Sigurðarson

General Manager of Vistorka

Jennifer Spence

Executive Secretary, Sustainable Development Working Group, Arctic Council

Chief Dana Tizya-Tramm

Vuntut Gwich'in First Nation

Yury Vasiliev

Executive Director, Institute of Arctic Technologies, Moscow Institute of Physics and Technology

SESSION ORGANIZERS





HUMAN HEALTH & PANDEMIC SESSION

The COVID-19 pandemic has been a resilience challenge across the Arctic, particularly for the health and wellbeing of Northerners.

While the Arctic's remoteness has shielded some communities from the worst impacts, it has hindered readiness and response in various times and places. Around the region we've heard stories of both resilience and vulnerability. This session explored lessons learned and how resilience can grow stronger moving forward. It discussed some of the ways Indigenous and western knowledge systems have interacted in crisis, and described some longstanding vulnerabilities exposed by the pandemic.

Initiatives

[Arctic Council Briefing Document to Senior Arctic Officials on COVID-19 in the Arctic](#)

[Arctic COVID-19 Project, University of Northern Iowa](#)

[Inuit Circumpolar Council's Circumpolar Waves Interview on COVID-19 in Arctic with Minnie Grey](#)



KEY THEMES

The participants discussed the different regional impacts and approaches of the COVID-19 pandemic across the Arctic. The session emphasized:

- The need to integrate Indigenous and Western knowledge systems in order to approach community health in a culturally appropriate manner.
- Exploring different local initiatives and recommended using a wide policy lens to include community well-being in pandemic responses.
- Identifying opportunities to use the pandemic to address longstanding vulnerabilities and by reminding participants that difficult circumstances can bring out the best in people.

FOCUSING ON THE FUTURE

1. Integrate Indigenous and Western knowledge and approaches for better health outcomes.
2. Mobilize the pandemic as an opportunity to address long standing issues.
3. Promote consistent and systematic data collection.
4. Tailor local health efforts to community demographics and needs.
5. Support community well-being, mental health, and at-risk populations.
6. Leverage international organizations for resource sharing, data collections, and best management practices.
7. Encourage land-based practices to prepare for supply chain disruptions

COVID-19 in the Arctic: *Real Time*



ARCTIC Center COVID19 CONFIRMED CASES IN THE ARCTIC

Date to display: 10/26/2020

Confirmed cases by region

Khanty-Mansi
Cases: 27,481
Deaths: 232

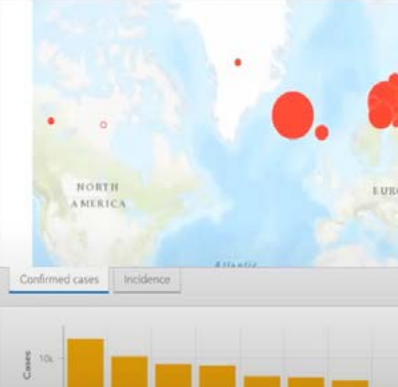
Krasnoyarsk
Cases: 25,293
Deaths: 640

Yamal-Nenets
Cases: 19,825
Deaths: 130

Arkhangelsk
Cases: 19,285
Deaths: 286

Murmansk
Cases: 19,067
Deaths: 280

Sakha
Cases: 12,917



"The bottom line is science and Indigenous knowledge must work together to develop knowledge-based policies addressing COVID-19 that are based on all knowledge systems working together both short and long term."

- ANDREY PETROV, ASSOCIATE PROFESSOR OF GEOGRAPHY, ARCTIC CENTER DIRECTOR AND ACADEMIC DIRECTOR OF GEOTREE CENTER AT THE UNIVERSITY OF NORTHERN IOWA



"We have the world's eyes and ears for now, now is the time to advance things we always thought were important."

— MIKE SFRAGA, DIRECTOR, POLAR INSTITUTE, WILSON CENTRE

"What has been demonstrated is the ability to collaborate and connect the dots between many different initiatives, because the reality is in a shock situation like this, many organizations will mobilize, and the question is how do we work collectively to tackle the issues we face as opposed to working independently and perhaps overlapping."

— JENNIFER SPENCE, EXECUTIVE SECRETARY, SUSTAINABLE DEVELOPMENT WORKING GROUP, ARCTIC COUNCIL



SPEAKERS

Joel Clement

Senior Fellow, Arctic Initiative at the Harvard Kennedy School's Belfer Center for Science and International Affairs

Gary Ferguson

Faculty and Director of Outreach & Engagement at Washington State University's Institute for Research and Education to Advance Community Health (IREACH), Elson S. Floyd College of Medicine

Stuart Harris

Founder and Chief of the Massachusetts General Hospital Division of Wilderness Medicine; Director of the MGH Wilderness Medicine Fellowship

Christina Henriksen

President of the Saami Council

Grigory Ledkov

President of the Russian Association of the Indigenous Peoples of the North

Gert Mulvad MD, GP, PhD h.c.

Greenland Center for Health Research, Ilisimatusarfik, University of Greenland

Embla Eir Oddsdóttir

Director of Icelandic Arctic Cooperation Network

Andrey Petrov

Associate Professor of Geography, ARCTICenter Director, Academic Director of GeoTREE Center at the University of Northern Iowa

Arja Rautio, MD, PhD, ERT (Eurotox)

VP Research University of the Arctic; Professor in Arctic Research, Thule Institute and Faculty of Medicine, University of Oulu, Finland

Stefan Skjaldarson

Chair of the Sustainable Development Working Group of the Arctic Council

Jennifer Spence

Executive Secretary, Sustainable Development Working Group, Arctic Council

SESSION ORGANIZERS



UNIVERSITY OF OULU



BROADBAND CONNECTIVITY SESSION

Broadband connectivity enables people and communities to connect, collaborate, and participate in commerce. Challenges to Arctic connectivity may be unique, but the need for connectivity is universal.

In order to survive and thrive generally and in times of crisis the Arctic must find a way to leverage technology to stay connected and in business. This panel featured technologists, telecom leaders, Arctic community leaders, and government officials working to improve connectivity. The discussions brought to the fore the opportunities that members of Arctic communities have gained from connectivity, and the continued challenges that they may be facing because of inadequate broadband access.

Initiatives

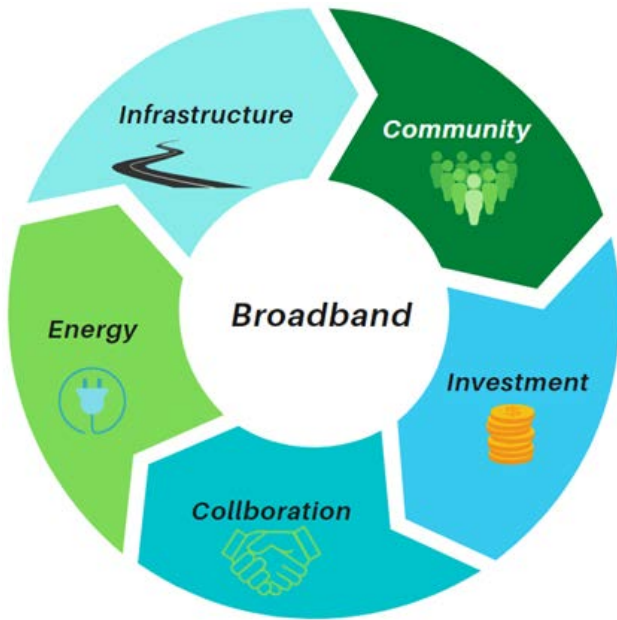
[Arctic Council's Taskforce on Improved Connectivity in the Arctic Report](#)

[Arctic Economic Council Working Group on Connectivity](#)

[Arctic Economic Council 2017 Broadband Report](#)

KEY THEMES

Community leaders noted that redundant internet connection is unaffordable in many parts of the Arctic, costing \$429 USD per month in Kotzebue, Alaska. Large distances and inadequate infrastructure are challenges to providing connectivity around the circumpolar North, especially in Indigenous peoples' traditional lands. Yet panelists asserted that internet connection allows work from home to reduce risk of COVID-19 community spread, provides economic and social opportunity in geographically remote places, and facilitates cultural expression and community ties among youth.



Panelists in this session focused on opportunities to make internet more accessible and affordable in the Arctic, including policy concepts such as technology neutral funding. Network redundancy was a key recommendation, and occurs when there are multiple connectivity options, including fibre optic and satellite, both of which enables more abundant and robust LTE availability. Panelists also talked about improvements to broadband and the arrival of unlimited data plans to some communities. The session also discussed the importance of anchor clients, like governments, hospitals, or research stations who have a considerable demand for connectivity.

FOCUSING ON THE FUTURE

1. Prioritize public-private partnerships.
2. Leverage anchor clients.
3. Create flexible systems to repurpose occupational broadband in off hours.
4. Invest in telecommunication system inputs, like infrastructure and energy.
5. Promote technology neutral funding.
6. Encourage short- and long-term industry investment.
7. Enable a sustainable investment environment.
8. Promote northern adaptations to technology.

"In the midst of this global pandemic, broadband is sustaining our most basic and significant needs, enabling distance education, allowing many to continue working to keep our economy afloat and supporting public health efforts."

- TINA PIDGEON, WILSON CENTER GLOBAL FELLOW FOR THE POLAR INSTITUTE, PRINCIPAL, TINA PIDGEON STRATEGIES



"Improving sustainability and reliability may mean overengineering the network with duplicate or triplicate power redundancy and making sure there's redundant paths in case something breaks or is impacted by extreme weather."

- CURTIS SHAW, PRESIDENT, NORTHWESTEL



"After suffering through a bunch of loss in my life directly related to the harshness of living in Alaska — I lost 16 of my basketball teammates and classmates to alcohol-related deaths and suicides — I thought there wasn't really any options for me either. And that was until an 8th grader showed me a video of American Ninja Warrior on YouTube... Now I'm a 6-time American Ninja Warrior. I've used that platform and Internet has been huge for me."

— NICK HANSON, ATHLETE AND INSPIRATIONAL SPEAKER



SPEAKERS

Joel Clement

Senior Fellow, Arctic Initiative at the Harvard Kennedy School's Belfer Center for Science and International Affairs

Nick Hansen

Athlete and Inspirational Speaker
"The Eskimo Ninja"

Pam Lloyd

Vice President of Government Healthcare and Education, GCI

Maija Katak Lukin

Superintendent at the National Park Service's Western Arctic National Parklands

Tina Pidgeon

Wilson Center Global Fellow for the Polar Initiative, Principal, Tina Pidgeon Strategies

Mikhail Pogodaev

Deputy Minister for Development of the Arctic and the Peoples of the North of the Republic of Sakha (Yakutia)

Curtis Shaw

President, Northwestel

Jennifer Spence

Executive Secretary, Sustainable Development Working Group, Arctic Council

Tim Stelzig

Federal Regulatory Attorney, GCI

Alexander Vlasov

Director Carrier Services and Roaming in Megafon

Laura Way

Manager, Strategic Policy at Canadian Northern Economic Development Agency

SESSION ORGANIZERS





GENDER EQUALITY SESSION

Enabling gender equality by empowering all genders to effectively participate and contribute is one of the most important advances towards the sustainable development and resilience of Arctic communities.

Unequal structures, practices and norms must be identified, made visible and addressed through policy. This requires understanding of both the existing capacities and specific vulnerabilities of women and men and calls for developing context specific, win-win solutions to foster capacities, agency and leadership.

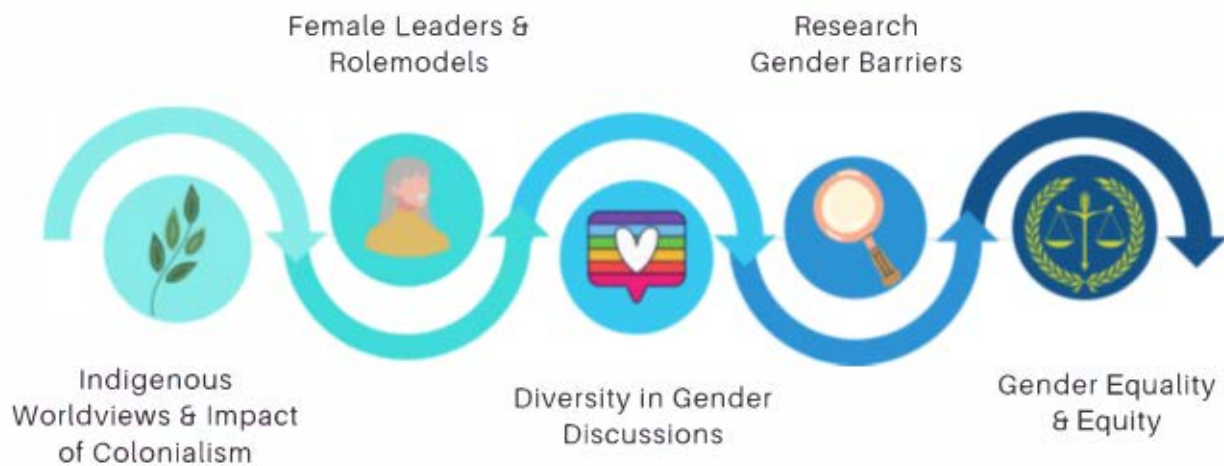
Initiatives

[Gender Equality in the Arctic, Phase III](#)

[Campaign School for Women, Government of Northwest Territories](#)

[Girls For Girls](#)

["Our Trailblazers" campaign, Government of Yellowknife](#)



KEY THEMES

The session discussed the current gender gaps in the Arctic and the initiatives that address political, social and economic gender barriers.

The panelists explored how Indigenous ways of knowing and the impacts of colonialism interact with gender issues in the Arctic. The session closed by emphasizing how gender equality is necessary for achieving sustainable resilience and thriving in the Arctic.

FOCUSING ON THE FUTURE

1. Enable female entrepreneurship.
2. Promote female leaders and support skills-based female mentorship programs.
3. Create safe spaces for all genders in gender equality discussions and policymaking.
4. Integrate Indigenous worldview and impacts of colonialization into gender discussions and political agendas.
5. Demonstrate the connections between gender, sustainability, resilience and thriving.
6. Encourage continued research into political, social, and economic gender barriers and exchange of best practices used to overcome them.
7. Promote male-oriented motivational programs to overcome existing path dependency in some remote Arctic communities.
8. Mainstreaming gender analysis and gender diversity policies across the Arctic regions.



"Gender political leadership gaps still persist in most Arctic communities. Women remain much less likely to participate in the political sphere than men across all the Arctic regions."

- MARYA ROZANOVA-SMITH PROFESSORIAL LECTURER, THE GEORGE WASHINGTON UNIVERSITY, AND VARVARA KORKINA RESEARCH PROGRAM ASSISTANT, INDIGENOUS INDEPENDENT SCHOLAR

"Through our work we have realized the importance of equality, diversity and justice when it comes to community viability, well-being and resilience. Especially in a time of astounding environmental change which is coupled with social and economic change."

— EMBLA EIR ODDSDÓTTIR, DIRECTOR ICELANDIC ARCTIC COOPERATION NETWORK, PROJECT LEAD, GENDER EQUALITY IN THE ARCTIC PHASE III



SPEAKERS

Juno Berthelson

Gender Equality in the Arctic Phase III Youth Advisory Group, Nuuk, Greenland

Elizabeth (Sabet) Biscaye

Special Advisor to the Minister Responsible for the Status of Women at Government of the Northwest Territories Canada.

Joel Clement

Senior Fellow, Arctic Initiative at the Harvard Kennedy School's Belfer Center for Science and International Affairs

Firouz Gaini

Professor, Faculty of History and Social Sciences, University of the Faroe Islands

Karla Jessen Williamson

Assistant Professor, Educational Foundations, University of Saskatchewan, Lead author Gender Equality in the Arctic Phase III Report, Chapter on Violence and Reconciliation

Tonje Margrete Winsnes Johansen

Saami Council Arctic and Environment Unit

Varvara Korkina

Research Program Assistant, Indigenous Independent Scholar

Bridget Larocque

Co-Vice Chair, Arctic Athabaskan Council, SDWG.

Halla Hrund Logadóttir

Adjunct Lecturer and Co-Founder and Director of the Arctic Initiative at Harvard Kennedy School.

Sören Stach Nielsen

Acting Greenland Projects Director for Oceans North, Independent Consultant, Greenland.

Embla Eir Oddsdóttir

Director Icelandic Arctic Cooperation Network, Project Lead, Gender Equality in the Arctic Phase III

Andrey Petrov

President of the International Arctic Social Sciences Association and Chair of the IASC Social & Human Working Group, Co-lead author Gender Equality in the Arctic Phase III Report

Marya Rozanova

Smith Professorial Lecturer, The George Washington University

SESSION ORGANIZERS



IASSA
INTERNATIONAL ARCTIC SOCIAL
SCIENCES ASSOCIATION



SOCIO-ECOLOGICAL RESILIENCE SESSION

Social-ecological resilience in the Arctic depends upon Arctic ecosystems; they are the life-support systems that make resilience in the North possible.

As the Arctic transforms, ecosystems are changing, and Arctic livelihoods that depend on food, water, and cultural practices linked to the land are threatened by those changes. Arctic wetland ecosystems play a central role in these processes; however, they are being damaged and degraded by human impacts that include land use, resource exploration, exploitation, and climate change.

Initiatives

[Resilience and Management of Arctic Wetlands](#)

[Arctic Wetlands Ecosystems — Resilience through Restoration and Stewardship \(Belmont Forum-funded project\)](#)

[Mainstreaming Biodiversity in Arctic Mining](#)

[Arctic Wetlands and Indigenous Peoples Study](#)

KEY THEMES

The panelists discussed how responsible land-use including stewardship, sustainability, and corporate responsibility can be built into project cycles.

The session continued by exploring methods to accelerate and strengthen wet-land restoration. The session ended by emphasizing the importance of Indigenous co-management and community ownership to turn conservation research and knowledge into action.



FOCUSING ON THE FUTURE

1. Prioritize Indigenous co-management and traditional knowledge.
2. Create community ownership of conservation projects.
3. Normalize conservation mainstreaming in natural resources projects.
4. Increase awareness about the potential of ecosystem services.
5. Continue education and awareness on the importance of biodiversity.
6. Promote actionable and effective corporate responsibility.



"Reindeer husbandry needs both summer and winter pastures, migration routes, calving areas, places for slaughter, rutting, round ups, water supply, rest and shelter. All these places are found on wetlands."

— ANNA-MARJA PERSSON, PROJECT MANAGER, ARCTIC AND ENVIRONMENTAL UNIT, SAAMI COUNCIL

"The challenge in front of us is therefore to ensure that at the same time as we use the land, we have to make certain that we maintain all the natural resources inherent in the land."

- DR. TATIANA MINAYEVA, CENTRE FOR THE CONSERVATION AND RESTORATION OF WETLAND ECOSYSTEMS IFS RAS (MOSCOW, RUSSIA), YUGRA STATE UNIVERSITY (KHANTY-MANSYJSK, RUSSIA) AND WETLANDS INTERNATIONAL (THE NETHERLANDS)



"I firmly believe that conservation is very much a social process, we know the science and have a lot of information. We know that we need to act but it is getting people engaged in these processes and transforming science into policy that creates change."

— VICTORIA BUSCHMAN, IŃUPIAQ (INUK) CONSERVATION BIOLOGIST



SPEAKERS

Tom Barry

Executive Secretary, CAFF, Arctic Council

Casey Burns

Wildlife Biologist, US Bureau of Land Management

Victoria Bushman

Iñupiaq (Inuk) Conservation Biologist

Marcus Carson

Senior Research Fellow at the Stockholm Institute; Senior Advisor for the Swedish International Center for Local Democracy

Stanislav Ksenofontov

Human Geographer and Indigenous Activist

Tatiana Minayeva

Founder and Director of Care for Ecosystems and Associate Expert of Wetlands International

Hlynur Oskarsson

Landscape Ecologist at the Agricultural University of Iceland

Anna-Marja Persson

Project Manager, Arctic and Environmental Unit, Saami Council

Jennifer Spence

Executive Secretary, Sustainable Development Working Group, Arctic Council

SESSION ORGANIZERS





FINANCING RESILIENCE SESSION

Whether it be economy, health, culture, or environment, a critical component for advancing Arctic resilience is funding. Though the Arctic is often seen as a region of untapped potential, there is no Arctic monetary fund or established investment agenda. Arctic communities often have innovative ideas and ambitious plans, but there are few, if any, mechanisms to connect them to investment partners.

Initiatives

[Arctic Council Project Support Instrument \(PSI\)](#)

[Arctic Resilience Accelerator](#)

[Arctic Investment Protocol](#)



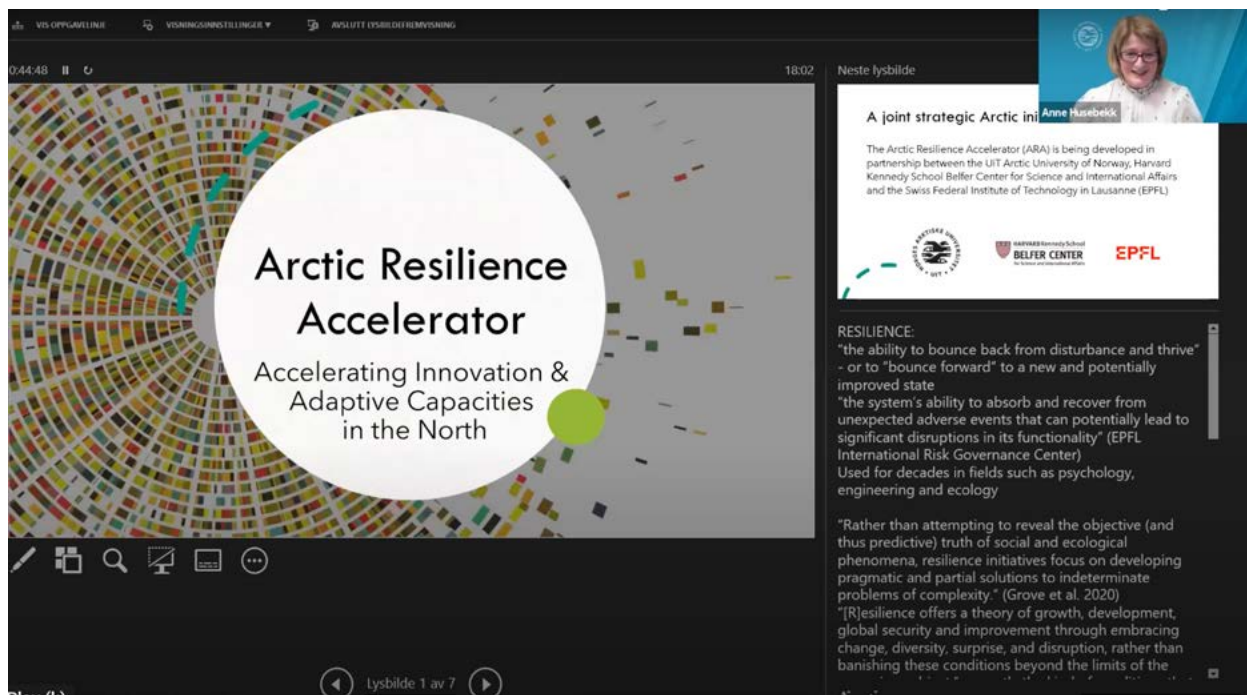
KEY THEMES

Investing in Arctic resilience is more than securing financing.

For effective sustainable development, funding must match community priorities, partnerships must be established, and enabling investment conditions encouraged. Sustainable and strategic long-term funding with government and private partnership must replace a short-term patchwork approach.

FOCUSING ON THE FUTURE

1. Create strategic international Arctic investment frameworks, protocols, and business indexes.
2. Develop innovative non-government sources of financing.
3. Enable and foster financial capacity in the north.
4. Encourage scalable funding, such as microlending.
5. Promote different forms of government support, such as tax breaks, subsidies and special regulations.
6. Focus funding for global climate regulation on Arctic resilience projects.
7. Use funding to mandate resilience components within projects.
8. Encourage financial instruments (institutions, rules, funding programmes) that contribute to the resilience of the Arctic communities.
9. Promote international networks that facilitate innovative financing opportunities and partnerships.
10. Develop training to increase capacity to access financing.
11. Continue to demonstrate the national and international benefits for Arctic investment.



"I'm excited. There was been demonstratable proof that investment in Arctic regions can be transformative. You can see development done in reasonable ways with greater benefits to communities."

- MADELEINE REDFORD, PRESIDENT AT NUVUJAG



"The overall thing that needs to be done to enable resilience is to mainstream it. If we do this, one day in the future Arctic investors will understand that for their projects to succeed it has to have an overall positive impact on socio-ecological systems."

- JOEL CLEMENT, SENIOR FELLOW, ARCTIC INITIATIVE AT THE HARVARD KENNEDY SCHOOL'S BELFER CENTER FOR SCIENCE AND INTERNATIONAL AFFAIRS

SPEAKERS

Joel Clement

Senior Fellow, Arctic Initiative at the Harvard Kennedy School's Belfer Center for Science and International Affairs

Anne Husebekk

Chancellor of UiT The Arctic University of Norway

Mikhail Pogodaev

Deputy Minister for Development of the Arctic and the Peoples of the North of the Republic of Sakha (Yakutia)

Madeleine Redfern

President at Nuvujaq

Jennifer Spence

Executive Secretary, Sustainable Development Working Group, Arctic Council

Annukka Valkeapää

Nordic Environment Finance Corporation

Julia Zvorykina

Co-Founder Northern Delivery Project Office

SESSION ORGANIZERS



UiT Norges arktiske universitet





INFRASTRUCTURE SESSION

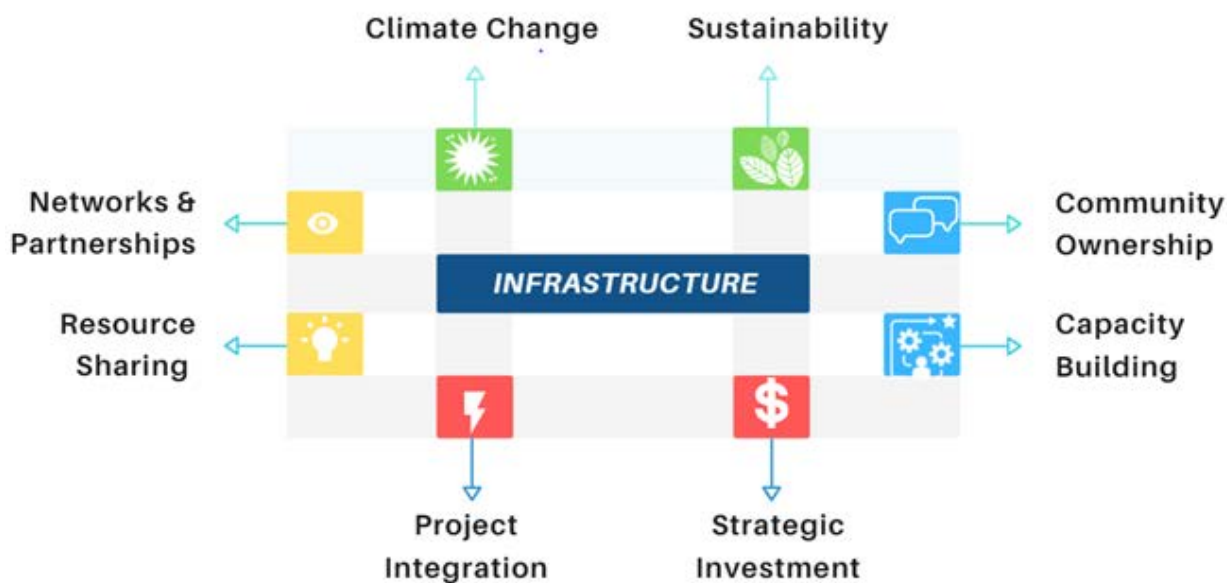
The Arctic has an infrastructure problem. Across much of the region, the basic assets that enable life in an integrated, globalized world—roads, ports, power grids, internet cables—are frequently inadequate, outdated, or nonexistent. As a result, Arctic communities often grapple with high costs and unreliable services, leaving them ill-prepared to address the realities of a warming climate and increased economic activity in the region.

Initiatives

[Arctic Infrastructure Inventory, Wilson Center](#)

[Enabling Infrastructure Projects, Sustainable Development Working Group](#)

[Investment and Infrastructure Working Group, Arctic Economic Council](#)



KEY THEMES

While discussions focused on physical infrastructure, participants also explored how social infrastructure like education, training, and capacity enables communities to more effectively participate in the development of their own physical infrastructure.

Participants discussed how infrastructure investments have transformative impacts on communities by enabling greater economic participation and increased resilience in food security, health, energy, and connectivity. Participants also explored how infrastructure can create resilience and be inherently resilient in design.

FOCUSING ON THE FUTURE

1. Incorporate climate change considerations into infrastructure designs to ensure sustainability.
2. Provide training to promote a better understanding of capital flows and funding mechanisms.
3. Use COVID-19 vaccine distribution to draw attention and funding to Arctic infrastructure deficits.
4. Highlight successful community owned and operated infrastructure projects.
5. Promote resource sharing, learning, and international networks to create new innovative partnerships and funding tools.
6. Ensure Indigenous peoples and communities have real decision-making power, involvement, and ownership in projects.
7. Use international infrastructure inventories to enable strategic investment and project bundling.

"In general, while we need to continue focusing on developing physical infrastructure, we also view the concept of infrastructure in a more general way. In Greenland, to develop our autonomy, we have and continue to develop our educational and scientific infrastructure because we need a human focused view to develop our societies."

- INUUTEQ HOLM OLSEN, MINISTER PLENIPOTENTIARY AND HEAD OF REPRESENTATION FOR GREENLAND IN THE DANISH EMBASSY IN THE UNITED STATES



"Looking across the board, a lot of the infrastructure that will be required to jump start innovation in local communities and build resilience through entrepreneurialism is relatively cheap overall. The price tag may look very expensive but in the grand scheme of things it's not. I think we're going to see a lot of smaller projects, coming online in the next five years, really create transformative change and jump start small business development in ways we've seen in other communities."

- TAYLOR DREW HOLSHOUSER, RESEARCH FELLOW, POLAR INSTITUTE, WILSON CENTER & BUSINESS DEVELOPMENT ANALYST, ALASKA OCEAN CLUSTER

"It's quite simple, we can use our built environment to make our lives easier and to protect us from climate change exacerbated weather conditions. We live right on the Bering Sea and in the past, we had shore fast ice to keep winter storms off of the coast. As climate change progressed, sea ice is being eroded back towards the lands and some years we don't have any shore fast ice, which means winter storms are falling directly on our coastlines."

- SAM SCHIMMEL, INDIGENOUS YOUTH ADVOCATE AND ARCTIC YOUTH AMBASSADOR, STANFORD UNIVERSITY CLASS OF 2022



SPEAKERS

Joel Clement

Senior Fellow, Arctic Initiative at the Harvard Kennedy School's Belfer Center for Science and International Affairs

Jack Durkee

Program Associate, Polar Institute, Wilson Center; Manager, Arctic Infrastructure Inventory

Inuuteq Holm Olsen

Minister Plenipotentiary and Head of Representation for Greenland in the Danish Embassy in the United States

Taylor Drew Holshouser

Research Fellow, Polar Institute, Wilson Center; Business Development Analyst, Alaska Ocean Cluster

Sam Schimmel

Advisory Board Member Indigenous Youth Advocate and Arctic Youth Ambassador, Stanford University class of 2022

Jennifer Spence

Executive Secretary, Sustainable Development Working Group, Arctic Council

SESSION ORGANIZER





Damon on Road / Unsplash

WORKING TOGETHER IN THE ARCTIC

Respecting Indigenous Engagement, Equity and Sustainability of Knowledge Systems to Support Resilience in the Arctic

OVERVIEW

Arctic Indigenous peoples have sustained their cultures and livelihoods, while being the stewards of local social-ecological systems for millennia. To foster resilience in Arctic social-ecological systems, we must attain the equity and sustainability of Indigenous knowledge systems as they engage with western science and policy. This could be achieved through a collaborative process based on mutual understanding, trust, respect, and Indigenization that can guide knowledge co-production.

This Talking Circle session brought together a diverse panel of Indigenous knowledge holders and western scholars. It focused on the engagement of Indigenous knowledge systems to promote resilience in the Arctic, and practical ways in which such co-production could be successful. The session served as a follow-up to earlier discussions held at the Arctic Science Ministerials, ICASS IX, AAAS-2019, and other venues and focused on Indigenous knowledge and knowledge co-production. A brief report will be issued based on the Talking Circle contributions.

Profiling Co-Production
& Indigenous
Knowledge

[Video](#)

[Reading](#)

Organizing Group: Andrey Petrov (IASSA/ARCTICenter, Co-Lead), Norma Shorty (AAC, Co-Lead), Joel Clement, Kathrine Ivsett Johnsen, Evon Peter, Marcus Carson, Brittany Janis, Victoria Qutuuq Buschman, Anna Marja Persson, Gunn-Britt Retter, Katia Kontar, and Tatiana Degai.

Panelists: Gunn-Britt Retter (Saami Council), Vyacheslav Shadrin (RAI-PON-Yakutia), Norma Shorty (AAC), Colleen Strawhacker (NSF), and Evon Peter (GCI/UAF)

KEY THEMES

The panelists discussed how to enable and support the co-production of knowledge with Arctic communities, including appropriate research methodologies, approaches, and ethical principles. The session explored how to engage Indigenous wisdom and worldviews within curriculums and research agendas. Finally, the panelists discussed how promoting Indigenous-led research and sustaining Indigenous knowledge systems are important for decolonization of western constructs and the revitalization of Indigenous cultures.

FOCUSING ON THE FUTURE

1. Uplift and include Indigenous knowledge and Indigenous knowledge systems in all aspects of research and policy.
2. Prioritize funding to support research and documentation of Indigenous knowledge led by Indigenous scholars and knowledge bearers.
3. Promote meaningful co-production in Arctic research.
4. Lead with and include appropriate Indigenous research methodologies and ways of knowing.
5. Fund Arctic Indigenous research agendas, scholars, and projects.
6. Produce research and knowledge in Arctic languages.
7. Continue to develop and share Indigenous research protocols, guidelines, and ethics principles.
8. Create space for conversations about Indigenization and decolonization through knowledge production and co-production.
9. Respect the place-based nature of Indigenous knowledge by not generalizing.

Excerpts from a Statement by this Session's Organizers and Speakers on Indigenous Knowledge Systems and Knowledge Co-Production in the Arctic

"Arctic Indigenous Peoples have sustained their cultures and livelihoods for millennia, while being stewards of local social-ecological systems. Thus, resilience in the Arctic should be understood and accomplished in the context of Indigenous epistemologies and through collaboration between Indigenous knowledge systems and Western science. Indigenous knowledge has the potential to provide a foundation for individual and collective resilience of past, present, and future generations of Arctic Indigenous Peoples, and empower communities to make self-determined choices and define their own paths to sustainable development..."

"...Indigenous communities and knowledge holders are critical to advance our shared understanding of sustainability and resilience in the Arctic region. Therefore, to foster resilience in Arctic social-ecological systems we must attain equity and sustainability of the Indigenous knowledge systems as they engage with Western science and policy. This could be achieved through a collaborative process based on mutual understanding, trust, respect and decolonization that can guide knowledge co-production. This journey starts with respecting Indigenous knowledge systems and holders, followed by equitable investment in these knowledge systems that would lead to true co-production and will result in co-produced policy solutions for resilience, sustainability and thriving of Arctic social-ecological systems..."

SEE THE FULL STATEMENT HERE: <https://iassa.org/about-iassa/indigenous-knowledge/89-ik-arf-statement>



"[Indigenous] knowledge is tied to ownership, to the spirit, to seen and unseen, to known and unknown. While working with Indigenous communities, we have to be mindful of the systemic discrimination against indigenous communities and allowing time and channeling resources so that these communities can reconcile with their histories and languages which was disrupted due to long spells of colonization. [...] Contrary to the western education system, spirituality- and the belief that everything has a spirit- is an important component of individual constructs and the Indigenous way of life... Academic research should be viewed as supporting, and not replacing, the Indigenous holders of knowledge and why our institutions of learning need to do a better job at supporting these holders of knowledge."

- NORMA SHORTY, ARCTIC ATHABASKAN COUNCIL

"If we play by the rules imposed on us, we lose our way of life, territory, language, culture, economy and most importantly, we lose our worldview and traditional knowledge."

- CHIEF VYACHESLAV SHADRIN, CHAIRPERSON OF THE YUKAGHIR COUNCIL OF ELDERS, OF THE REPUBLIC OF SAKHA-YAKUTIA, IN RUSSIA



"All too often I'll see a proposal come in that may have one letter of support from an Indigenous organization and the scientist will call it co-produced. That is not my definition of co-produced."

—
-COLLEEN STRAWHACKER, PROGRAM DIRECTOR IN THE ARCTIC SCIENCES SECTION IN THE OFFICE OF POLAR PROGRAMS AT THE NATIONAL SCIENCE FOUNDATION



SPEAKERS

Victoria Bushman

Iñupiaq (Inuk) Conservation Biologist

Joel Clement

Senior Fellow, Arctic Initiative at the Harvard Kennedy School's Belfer Center for Science and International Affairs

Liza Mack

Executive Director of the Aleut International Association

Evon Peter

Neetsaii Gwich'in and Koyukon from Vashraii K'oo (Arctic Village), Alaska, Vice Chancellor for rural, community and Native education at the University of Alaska Fairbanks

Andrey Petrov

President of the International Arctic Social Sciences Association (IASSA); Chair of the Social and Human Sciences Working Group of the International Arctic Science Committee (IASC); Associate Professor of Geography, ARCTICenter Director and Academic Director of GeoTREE Center at the University of Northern Iowa

Julie Raymond-Yakoubian

Social Science Program Director for Kawerak, Inc

Gunn-Britt Retter

Head of Arctic and Environmental Unit of the Saami Council

Chief Vyacheslav Shadrin

Chairperson of the Yukaghir Council of Elders, of the Republic of Sakha-Yakutia, in Russia

Norma Shorty

PhD Indigenous Studies, University of Alaska Fairbanks

Collen Strawhacker

Program Director in the Arctic Sciences Section in the Office of Polar Programs at the National Science Foundation

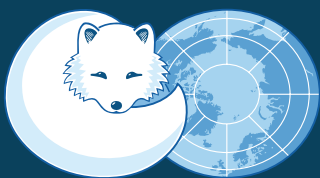


"Indigenous knowledge provides the foundation of which individual and collective wellbeing of past, present and future generations of Arctic Indigenous peoples. The lack of equitable engagement with Indigenous knowledge in the Arctic leads to distorted and unscientific understandings of the nature and social systems of the Arctic."

- DR. ANDREY PETROV, PRESIDENT OF THE INTERNATIONAL ARCTIC SOCIAL SCIENCES ASSOCIATION (IASSA)

SESSION ORGANIZERS





ARCTIC COUNCIL

ARCTIC COUNCIL SECRETARIAT

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