
The International Institute for Applied Systems Analysis (IIASA) will participate in a number of events at the Arctic Circle Assembly detailed below.

Plenary Session: The Arctic Futures Initiative

10:35-11:05 Saturday 14 October 2017

This plenary session will introduce the inclusive, integrated, and holistic approach of the Arctic Futures Initiative (AFI), led by IIASA in partnership with the Arctic Circle. The new initiative will bring a systems analysis perspective to the future of the Arctic, providing decision makers with options that balance environmental protection, economic prosperity, and societal wellbeing for the rapidly changing Arctic.

Speakers: IIASA Director General and CEO Professor Dr. Pavel Kabat and the honorable Ólafur Ragnar Grímsson, chair of the Arctic Circle and former president of Iceland.

Breakout Session: A systems analysis perspective on the plausible futures of the Arctic

11:20-12:20 Saturday 14 October 2017, in Skarósheiði

This breakout session will present the AFI's systems perspective and approach. This will be illustrated through two science highlights and a presentation on stakeholder contributions. There will be an interactive discussion with participants of the Arctic Circle Assembly, representing diverse communities drawn from science, policy, business, and civil society.

Speakers: Kaarle Kupiainen, IIASA Air Quality and Greenhouse Gases program; Thomas Gasser, IIASA Ecosystem Services and Management Program; Lassi Heininen, University of Lapland and IIASA. **Chaired by** Anni Reissell, IIASA and University of Helsinki.

Breakout Session: Northern Sea Route and its impact on global trade

16:00-17:30 Saturday 14 October 2017, in Rima A

About 80% of global trade relies on maritime transport. Once the Northern Sea Route (NSR) becomes a viable transportation corridor to connect Europe and Asia, it may significantly re-shape existing trade flows and impact the global political landscape. This session will present and discuss research investigating the effects of an enhanced NSR on global trade against a backdrop of market, geopolitical and climate uncertainty. The research analyzes plausible pathways, identifies winners and losers, and suggests scenarios which will maximize benefits for as many stakeholders as possible.

Speakers: Yuriy Kostin, Deputy Head of Federal Agency for Maritime and River Transportation, Russian Federation; Sampo Viheriälehto Master Mariner, Chartering Manager, Arctia Ltd; Elena Rovenskaya, IIASA Advanced Systems Analysis Program; Lawson W. Brigham, University of Alaska Fairbanks; Dmitry Yumashev, Pentland Center for Sustainability in Business, Lancaster University and Cambridge Center for Climate Change Mitigation Research, University of Cambridge. **Moderated by** Ambassador Hannu Halinen, IIASA.

Breakout Session: Toward a holistic bio-socio-economic pan-Arctic fisheries assessment

17:30 -19:00 Saturday 14 October 2017, in Akrafjall

Many of the world's largest fisheries border the Arctic Ocean in the Barents Sea, the Nordic Seas, and the Bering Sea. With the anticipated warming of the Arctic region, many commercially important fish and shellfish species are predicted to become established. Understanding and managing Arctic fisheries requires highly integrated approaches spanning multiple biological and societal objectives, diverse stakeholder interests, and sectors and regions. This session will highlight how these challenges to contemporary fisheries science can be tackled.

Speakers: Ambassador David A. Balton, Deputy Assistant Secretary for Oceans and Fisheries, US Department of State; Ulf Dieckmann and Mikko Heino, IIASA Evolution and Ecology Program; Petr Havlik, IIASA Ecosystem Services and Management Program; and Rachel Tiller, Research Scientist, SINTEF. **Moderated by** Rector Eyjólfur Guðmundsson, University of Akureyri, Iceland.