

Local to Global: Research and Action



Second International Symposium on Plastics in the Arctic and Sub-Arctic

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Polar Knowledge
Canada

Savoir polaire
Canada

Canada

Cambridge Bay, Nunavut







Canadian High Arctic Research Station (CHARS)

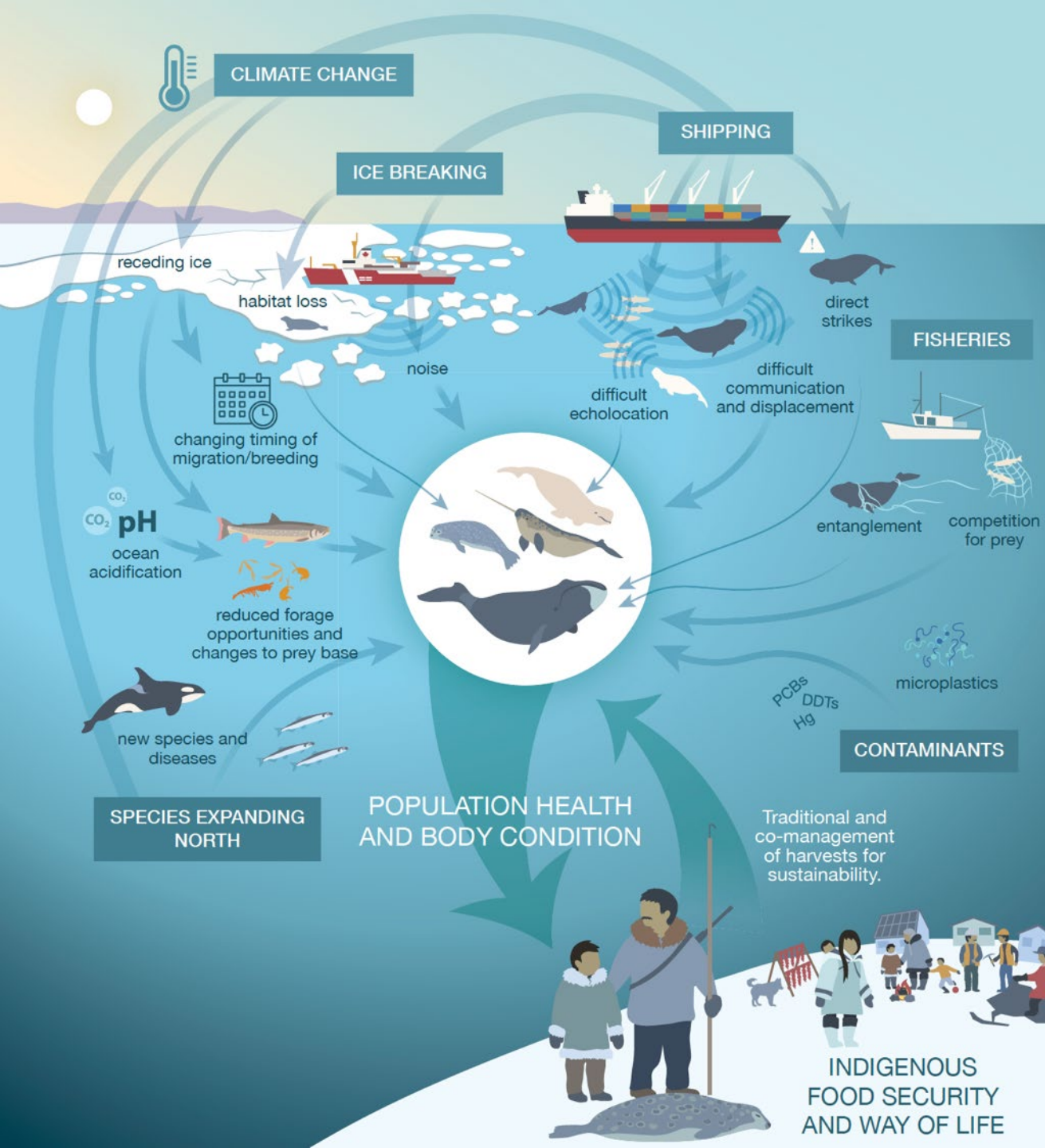






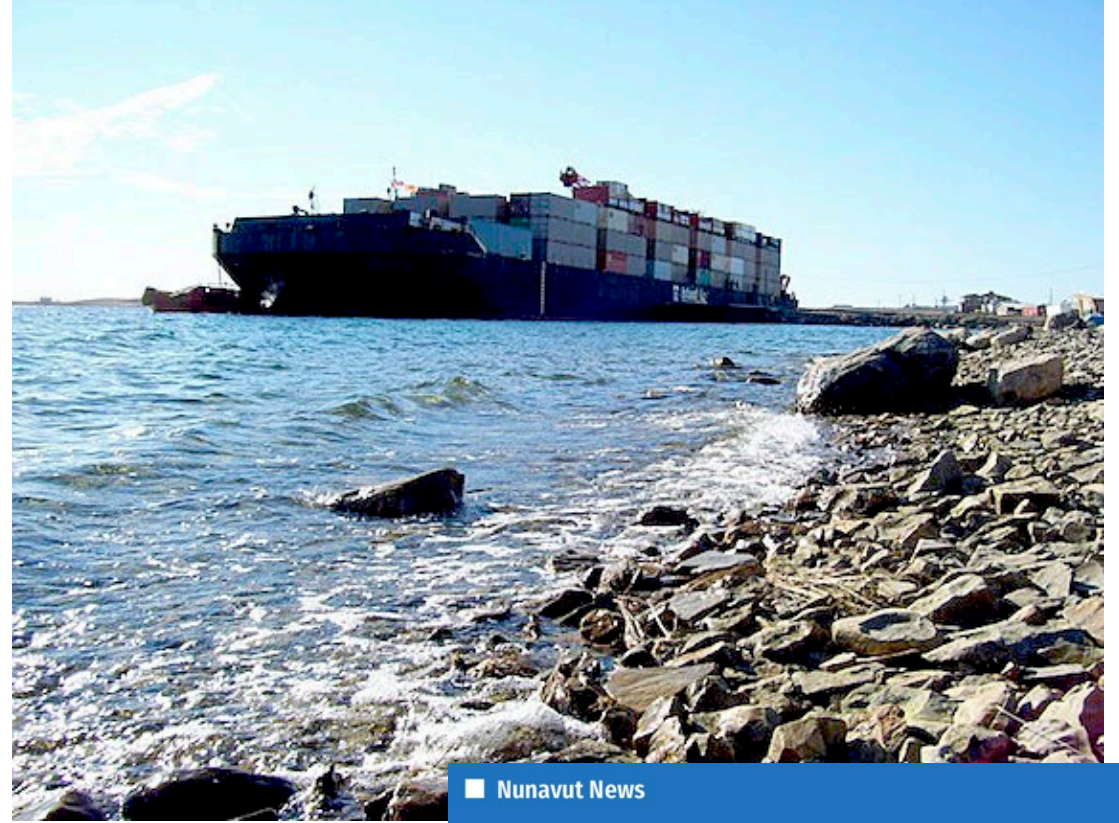






Multiple and cumulative impacts of human activity

Almost everything that comes into Cambridge Bay stays there



■ Nunavut News

**Cam Bay sealift will be late, ice
breaker en route**







Litter and
microplastics
present in the
environment



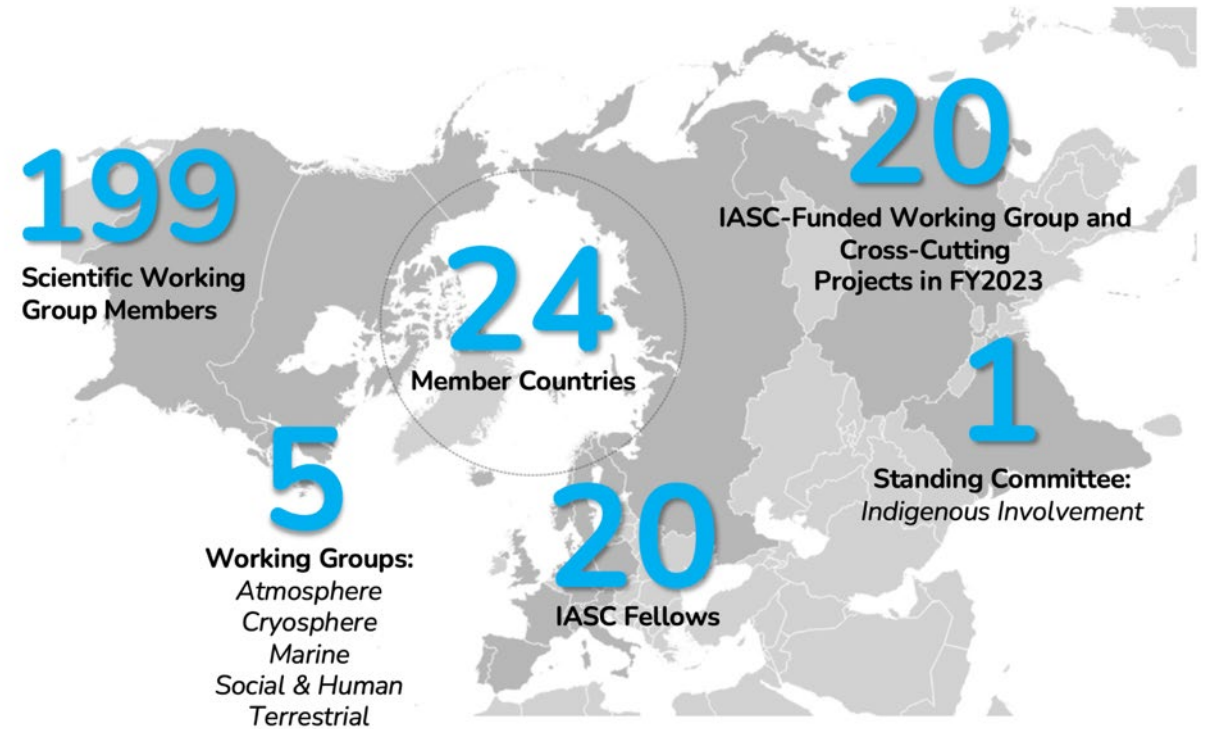




International Arctic Science Committee (IASC)



- is a non-governmental, international scientific organization.
- encourage and facilitate cooperation in all aspects of Arctic research, in all countries engaged in Arctic research and in all areas of the Arctic region
- promoting and supporting leading-edge multi-disciplinary research to foster a greater scientific understanding of the Arctic region and its role in the Earth system.



Website: www.iasc.info



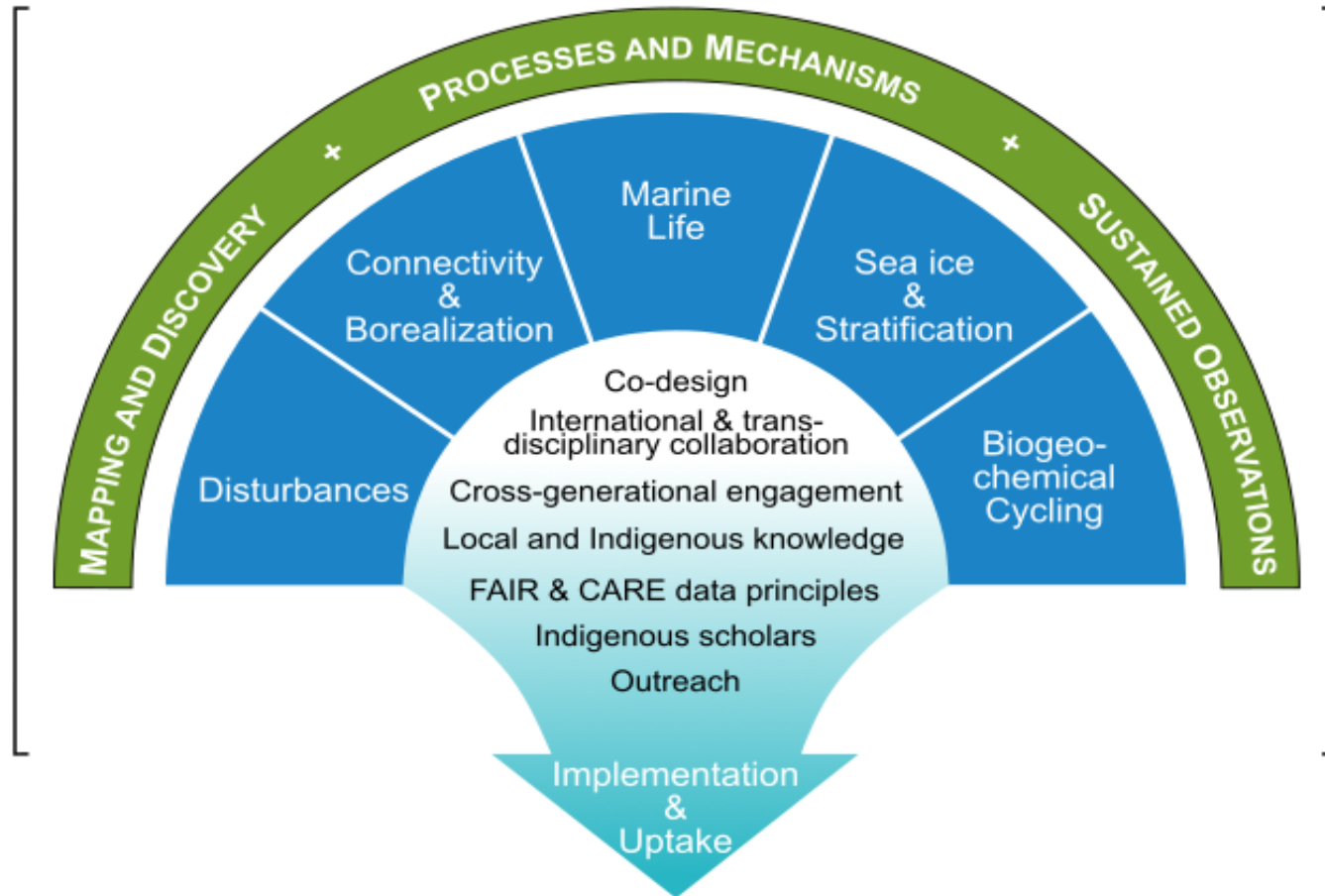
**International
Science Council**

IASC Marine Working Group is developing a research strategy aligned with the UN Ocean Decade - Arctic Action Plan

UN Ocean Decade Challenges

- Challenge 1**
Understand and beat marine pollution
- Challenge 2**
Protect and restore ecosystems and biodiversity
- Challenge 3**
Sustainably feed the global population
- Challenge 5**
Unlock ocean-based solutions to climate change
- Challenge 6**
Increase community resilience to ocean hazards
- Challenge 7**
Expand the Global Ocean Observing System
- Challenge 10**
Change humanity's relationship with the ocean

A strategic plan for the Marine Working Group of the International Arctic Science Committee (IASC)



UN Ocean Decade - Arctic Action Plan

Research challenges

- Mapping and understanding Arctic ecosystem services (TS1)*
- Understand how anthropogenic pressures impact environmental health and resilience (TS2)*
- Understanding the Arctic ocean-climate nexus and ecosystem dynamics (TS2)*
- Coordinated sustained observations of the status and development of Arctic environments and pressures (TS3)*

Organizational challenges

- Collaborating and coordinating Arctic research and observations*

Predictability and Integrated Ecosystem Management

ICARP IV – Fourth International Conference on Arctic Research Planning



2022 – 2026 Activities

- community-wide undertaking engages **Arctic researchers, Indigenous Peoples, policy makers, residents and stakeholders** from around the world
- Discuss the state of Arctic science, and the place the Arctic occupies in global affairs and systems, to:
 - consider the most urgent **knowledge gaps and Arctic research priorities and needs for the next decade**
 - explore avenues to **address these research needs**



Photo: Susan Christianen

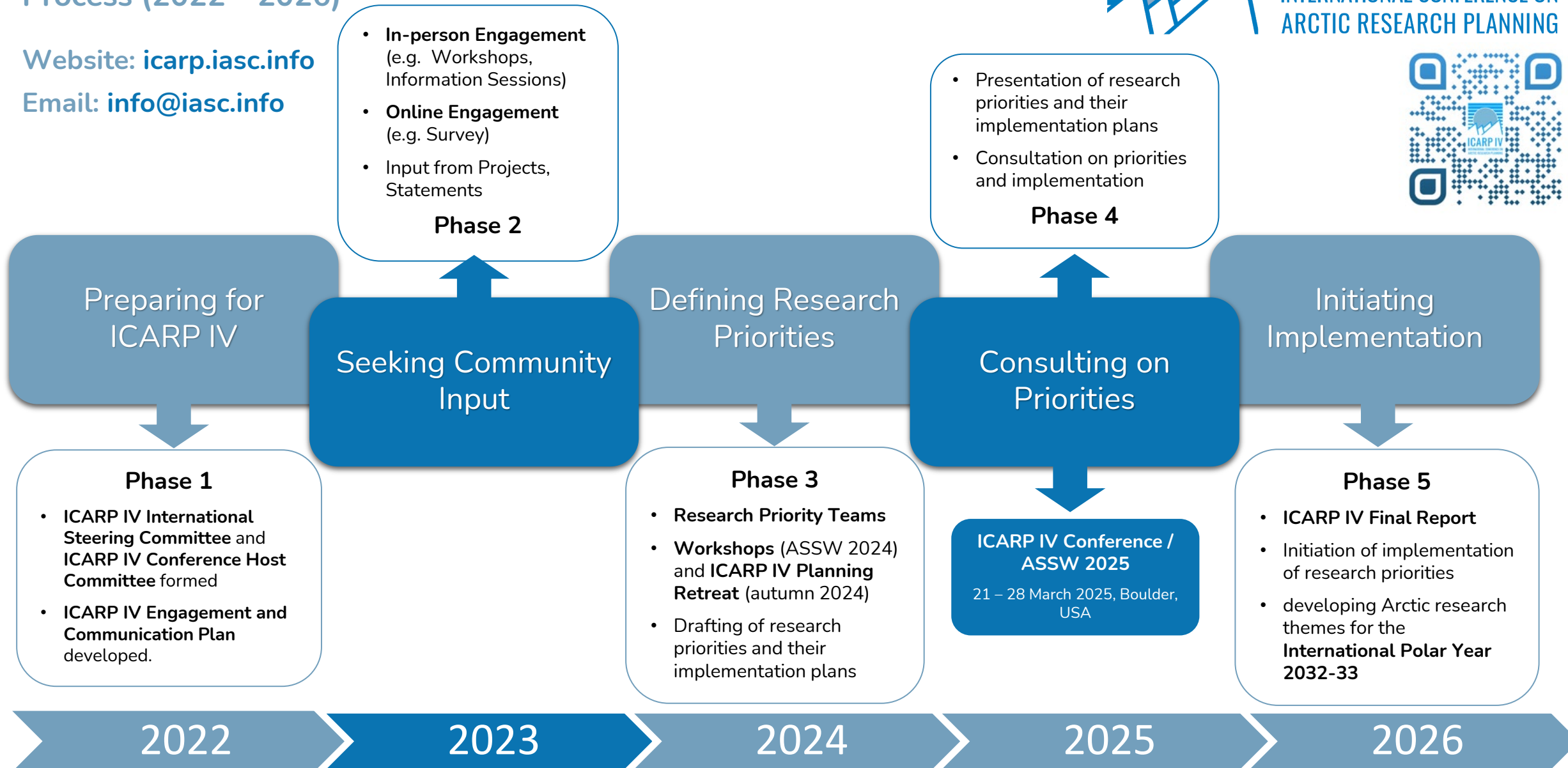
Arctic Research Planning for the next Decade - Fourth International Conference on Arctic Research Planning (ICARP IV) Process (2022 – 2026)



ICARP IV
INTERNATIONAL CONFERENCE ON
ARCTIC RESEARCH PLANNING

Website: icarp.iasc.info

Email: info@iasc.info



ICARP IV Process – Defining Research Priorities

ICARP IV Research Priority Teams

- Topic Area 1: The Role of the Arctic in the Global System
- Topic Area 2: Observing, Reconstructing, and Predicting Future Climate Dynamics and Ecosystem Responses
- Topic Area 3: Understanding the Vulnerability and Resilience of Arctic Environments and Societies and Supporting Sustainable Development
- Topic Area 4: Scientific cooperation and diplomacy
- Topic Area 5: Co-Production and Indigenous-led methodologies
- Topic Area 6: Preparing present and future generations through Education, Outreach, Communication, Capacity Building, and Networking
- Topic Area 7: Technology, Infrastructure, Logistics, and Services



2022

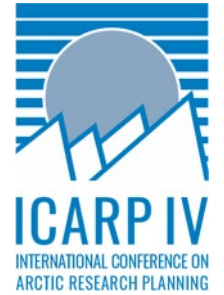
2023

2024

2025

2026

Participate in the ICARP IV Survey!



**ICARP IV**
INTERNATIONAL CONFERENCE ON
ARCTIC RESEARCH PLANNING

ICARP IV SURVEY

GOALS, PURPOSES, DATA POLICY, AND FOLLOW UP

Goals

The goal of the fourth International Conference on Arctic Research Planning engagement process is to ensure that the scientific priorities for the next decade are firmly grounded on the advice and needs of Arctic scientists and science organizations, Indigenous peoples and Arctic residents, stakeholders, and rights-holders. This survey has been designed to be inclusive of diverse perspectives. It is one component of the ICARP IV community engagement process.

Purpose of this survey

The purpose of the ICARP IV Survey is to gather input on research priorities for the next decade (2025–2035). This includes collecting information on implementation: for example, the best research practices to date, key lessons learned in the last decade, and strategies for improvement.



2022

2023

2024

2025

2026

5th International Polar Year 2032-33

- **Early 2021:** Discussions among several International, Arctic and Antarctic organisations started
- **December 2022:** Joint Statement on the 5th IPY from IASC and SCAR in cooperation with WMO, ISC, UArctic, IASSA, APECS and other partners
- **October 2023:** Initial Concept Note published



Organisations currently involved in the IPY Planning Group



5th International Polar Year 2032-33

