European Polar Board

The European Polar Board (EPB) is an independent organisation focused on major strategic priorities in the Arctic and Antarctic. EPB has 31 Members from 22 countries across Europe. Current EPB membership includes research institutes, funding agencies, scientific academies and polar operators from across Europe.

Established by the European Science Foundation in 1995, the EPB has been an independent entity since 2015. The EPB Secretariat was hosted by the Dutch Research Council (NWO) in The Hague from 2015 to 2024. Since January 2025, the EPB Secretariat has been located in Umeå, hosted by the Umeå University.

EPB envisions a Europe with a strong and cohesive polar research community and wherein decisions affecting or affected by the polar regions are informed by independent, accurate, and timely advice from the EPB.

EPB has a mission to improve European coordination of Arctic and Antarctic research, by optimising the use of European polar research infrastructures. We promote multilateral collaborations between our Members and provide a single contact point for the global polar community. We advance the collective knowledge of polar issues, particularly in the context of European societal relevance.

EPB Strategy

EPB´s Strategy for 2023–2027 is structured around three main pillars: Coordination, Collaboration, and Communication.

Coordination: EPB aims to serve as a knowledge-sharing forum, supporting scientific cooperation and information exchange in polar research, logistics, and infrastructure. This involves acting as the central hub for information dissemination within the European polar research community, coordinating large-scale polar science projects, and providing scientific policy advice.

Collaboration: The strategy emphasizes strengthening the member network and identifying synergies with existing and new organizations to facilitate flagship polar research projects. EPB seeks to facilitate information exchange, identify timely synergies among EU research programs, provide a forum for discussing research possibilities, and continue to grow partnerships with relevant international organizations.

Communication: EPB plans to promote and optimize communication tools and platforms to encourage knowledge-sharing, provide sound policy advice, and strengthen networks for the next generation in polar research. This includes supporting platforms for useful information exchange, promoting actions and identifying opportunities for EPB members in other organizations and fora, providing instruments to communicate with other polar organizations, and elevating the level of polar activities on a global scale.

Through these pillars, EPB envisions a unified network for polar organizations across Europe, coordinating and collaborating on scientific priorities and acting as the voice of European polar research.

EPB Structure and Action

The EPB Members together form the Plenary, which meets twice annually to advance its work in line with the EPB Strategy.

The EPB's work is largely implemented though its various **Action Groups**, focused on issues such as infrastructure, international cooperation, policy advice and the environmental impacts of polar research and logistics. The EPB also participates in large-scale **projects** with European and international partners, with tasks focusing on coordination of polar research and communication with policymakers or other stakeholders.

EPB engages with national and international research agencies and organizations through several key mechanisms:
Diverse Membership Network: EPB consists of national polar research institutes, funding agencies, and scientific organizations across Europe. It facilitates collaboration and coordination among these entities by organizing meetings, working groups, and strategic initiatives.

Policy and Advisory Role: EPB is well-positioned to provide scientific policy advice to policymakers at the regional level across Europe and, to some extent, internationally.

Research Coordination and Collaboration: EPB promotes synergies between European and global research programs, ensuring alignment with international polar research priorities.

Engagement in International Fora: It represents European interests in global discussions on polar research and environmental policy.

Communication and Outreach: EPB serves as a hub for information exchange, hosting workshops, webinars, and conferences to engage with researchers, policymakers, and the public. It maintains active communication channels to ensure that European polar research remains visible and influential on the global stage.

European Polar Coordination Office
Starting in January 2025, the European Polar Coordination Office (EPCO) will function as a central contact point for European polar research community, policymakers and decision-makers, including the European Commission. The office will build on the results of the two successful EU PolarNet projects. It will also continue to coordinate the EU Polar Cluster, a large group of EU-funded projects on polar science, to promote synergies and optimise EU investments in this field. EPCO is hosted by the EPB Secretariat in Umeå, Sweden.

Polar Knowledge Canada

https://www.canada.ca/en/polar-knowledge.html

Polar Knowledge Canada (POLAR) was established in 2015 as an agency of the Government of Canada with responsibilities for strengthening Canadian leadership in polar science and technology. POLAR's mandate includes advancing knowledge of the Canadian Arctic to improve economic opportunities, environmental stewardship and the quality of life of its residents and all other Canadians; promoting the development and dissemination of knowledge of the other circumpolar regions, including the Antarctic; strengthening Canada's leadership on Arctic issues; and establishing a hub for scientific research in the Canadian Arctic.

POLAR is headquartered at the Canadian High Arctic Research Station (CHARS) in Cambridge Bay, Nunavut. These facilities house both labs and office space, and serves a place for community and pubic gathering. There are also accommodations for researchers and other visitors and extensive field service supports including snowmobiles, all-terrain vehicles, boats and equipment to conduct research on, under and above land, water. It serves as a hub for world-class Arctic research and is an integral part of our efforts to attract and retain top researchers to shape the future of the North.

Polar Knowledge Canada engages with Indigenous communities, government partners, academic institutions, and international organizations to foster collaborative, multidisciplinary research and to support Indigenous-led initiatives that are of critical importance to Canada, the North and our international partners. To the end, POLAR has a pan-Northern science and technology program that emphasizes collaboration and community involvement.

Polar Knowledge Canada advances its pan-Northern science and technology goals by funding and conducting research focused on:

- Improving knowledge of northern terrestrial, freshwater, and marine ecosystems amidst rapid environmental change;
- Understanding the connections between Northern community wellness and environmental health; and
- Advancing sustainable solutions for energy, technology, and infrastructure tailored to the unique environmental, social, and cultural conditions in the North.

Examples of research activities include monitoring biodiversity, contaminants, permafrost, and ecosystem dynamics; testing clean energy technologies to help Northern communities reduce reliance on fossil fuels; and studying the impacts of emerging diseases on caribou and muskoxen populations, which are vital to food security in the region.

Polar Knowledge Canada delivers its science, technology, knowledge management, and engagement programs through a combination of approaches:

- Direct delivery: Collaborating with partners using internal staff and operating funds to achieve shared objectives.

- In-kind support: Providing researchers access to the Canadian High Arctic Research Station facility, technical expertise, and opportunities to work alongside Kitikmeot researchers to understand the region and its changing conditions.

- Funding support: Offering grants and contributions through open, competitive processes to qualified external recipients whose projects align with the agency's objectives.

- Leveraging external capacity: Encouraging other organizations to address Northern priorities, creating locally relevant and globally significant knowledge.

The Agency's annual $7.4 Grants and Contributions funding programs support grants for polar research and activities ($1.4 million) and grants and contributions for northern science and technology ($6.0 million), as well as support for students and early career researchers (e.g. Northern Scientific Training Program).

Knowledge management and engagement activities are delivered in close collaboration with science and technology programs through a combination of information activities and projects. These include speaker series, synthesised reports and info sheets with integrated technical information and Indigenous knowledge, an on-line journal, knowledge sharing symposia and policy analysis recommendations on topics of Northern relevance.

POLAR is Canada's adhering body to The International Arctic Science Committee (IASC), Scientific Committee on Antarctic Research (SCAR) and the council of Managers of National Antarctic Programs (COMNAP), and supports Canadian participation in the Forum of Arctic Research Operators (FARO), UArctic, the Arctic Science Funders Forum, and other international polar science organizations. POLAR also maintains a number of bilateral memorandums of understanding with other national polar organizations, and works closely with other Government of Canada agencies and northern partners and rightsholders on a coordinated approach to science and research, inclusive of Indigenous and Inuit knowledge, in the Canadian Arctic.

Asian Forum for Polar Sciences (AFoPS)

The Asian Forum for Polar Sciences (AFoPS) was established by three founding members (China, Japan and Korea) in Shanghai, 2004, in order to encourage and facilitate cooperation for the advancement of polar sciences among countries in the Asian region. Since its inception, the AFoPS member countries has grown to six (India and Malaysia became members in 2007, Thailand became a member in 2016). AFoPS has served as an important medium of collective endeavors in human and information exchange, research collaboration, and logistics cooperation among Asian polar science institutions. Through collaborative research expeditions and shared logistics, AFoPS has facilitated the exchange of expertise, data, and resources, leading to various successes.

Over the past 20 years, AFoPS six members and observers has achieved significant milestones in polar research and collaboration, playing a crucial role in fostering scientific cooperation among Asian countries in the Antarctica. AFoPS enhanced its position as a regional scientific forum and engaged with various international partners including the Scientific Committee on Antarctic Research (SCAR) and the International Arctic Science Committee (IASC).

As AFoPS enters a new decade of its existence, it remains committed to:

(i) enhancing regional cooperation in polar science in Asian countries,

(ii) advancing polar research in Asian countries,

(iii) contributing to international polar research initiatives and collaborating with international research communities in the polar regions.

AFoPS Secretariat

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The Polar Research Board (PRB) of the U.S. National Academies of Sciences, Engineering, and Medicine is the focal point within the institution for providing independent scientific advice to the federal government and more generally on issues related to the Arctic and Antarctic. The PRB brings together leading scholars, federal agencies, and other interested groups and provides a forum for exploring needs, challenges, emerging issues, and opportunities for polar science, including around complex and controversial issues. The PRB serves a special role at the interface of polar science and policy and provides a unique resource to the federal government and others with interests in the polar regions.

The roots of the PRB date back more than 60 years, when the National Academy of Sciences established a "Polar Research Committee" to coincide with the 1957-8 International Geophysical Year. In its early days, the PRB identified research priorities for fieldwork in Antarctica, selected scientists to conduct the research, and even helped to coordinate logistics for expeditions. As federal agencies built their polar programs and capacity, the PRB continued to provide guidance for research priorities and to synthesize scientific knowledge.

Over the past several decades, the PRB has produced more than 80 publications on topics ranging from climate change to national security to how polar research is conducted. The PRB gathers, analyzes, and synthesizes information and insights emerging from the research community, to make it more accessible and directly useful to decision makers. The PRB has two primary mechanisms to accomplish these goals: activities of the Board itself, and activities of ad hoc committees. Board members help identify emerging issues, conduct strategic planning and information gathering for new initiatives, lead interactions with federal agencies and the broader research community, provide oversight of current activities, and help with information dissemination and outreach. Ad hoc committees are specially-appointed groups of relevant experts charged with conducting in-depth analysis of focused topics. The hallmarks of the National Academies' study process are the use of independent volunteer experts who produce carefully considered written reports with consensus findings, and the rigorous peer review process for all reports.

The regional focus of the PRB is rather unique among National Academies boards, which typically have subject matter foci. As a result, the scope of the PRB's work covers a diverse range of disciplines including geology/geophysics, glaciology, permafrost science, physical and biological oceanography, biology and ecology, atmospheric and climate science, space science, engineering and technology, resource management, sustainability of communities, and other aspects of social science and polar science policy. Because of the regional focus of the PRB, particular emphasis has been placed on opportunities to bridge research across disciplines to highlight connections and advance understanding and dialogue.

The PRB is also engaged with the international research community, serving as the adhering body to the International Arctic Science Committee (IASC) and the Science Committee on Antarctic Research (SCAR). In these roles, the PRB appoints the U.S. delegates and representatives to these committees and more broadly fosters engagement of U.S. scientists in international efforts to coordinate and advance polar research and participate in a variety of SCAR and IASC activities.

The PRB played a vital role in supporting U.S. engagement in the Fourth International Polar Year (IPY4), including establishing a U.S. National Committee that created a vision for U.S. participation. This Committee, along with other experts, developed a consensus report to outline recommendations for U.S. engagement in IPY4, organized a workshop to provide a forum to discuss the report contents and the U.S. contribution, and produced a follow-up consensus study report to reflect on the successes and challenges of IPY4. The PRB is now looking ahead to IPY5, holding board meeting sessions to set the stage for U.S. involvement, discuss lessons learned from IPY4, and to connect with other polar organizations. An ad hoc committee under the auspices of the PRB is also planning a workshop focused on U.S. engagement in IPY5 scheduled to be held in Spring 2025.

Learn more at:
PRB Website
IPY5 Workshop Website