

PUHEENVUOROJA BY FORUM FOR ENVIRONMENTAL INFORMATION



Addressing the Triple Crisis Through Knowledge Brokering

Overview of the Finnish Science-Policy Interface



The Triple Crisis Cannot Be Solved Without Science

The ecological sustainability crises—climate change, biodiversity loss, and pollution—form an interconnected triple crisis that cannot be solved without scientific advice and science-informed decision-making. These crises are complex, intertwined phenomena demanding systemic responses across economies, societies, technologies, and our values and perceptions. Known for their complexity and uncertainties, these “wicked” problems require multi- and interdisciplinary approaches and the integration of diverse forms of knowledge to enhance the science-policy dialogue.

PRINCIPLES FOR EFFECTIVE SCIENCE-POLICY DIALOGUE

While there are occasions when scientific knowledge can be “injected” into the policymaking process at an optimal time, a more fruitful approach is to foster the inclusion of knowledge throughout these processes. New ways of working between the scientific community and policymakers are characterised by continuous interaction, open discussion of uncertainties, involvement of a wide array of scientific disciplines, and collective sense-making.

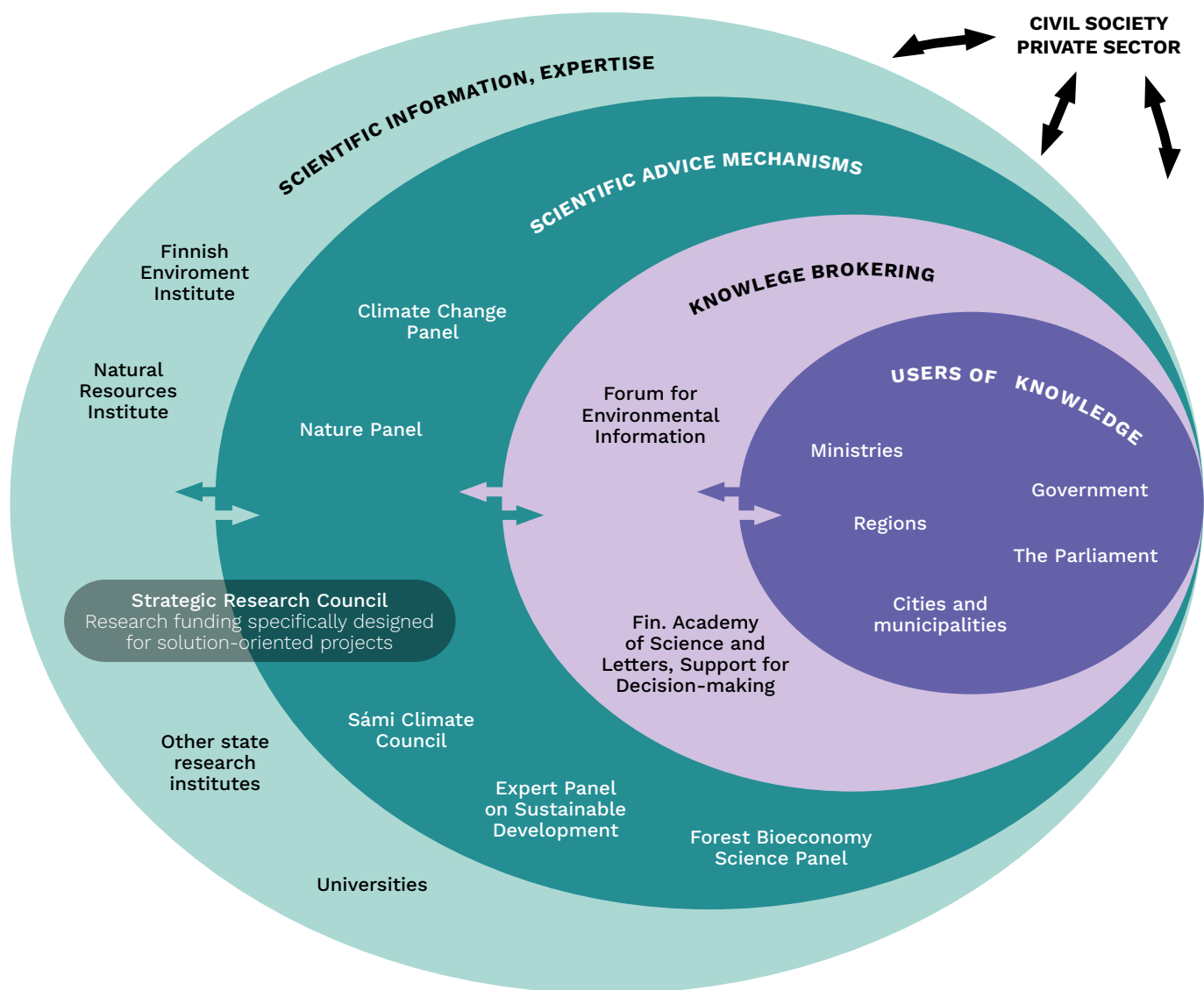
Central to effective science-policy dialogue is the establishment of trust among different actors. Building connections between researchers, policymakers, and affected communities, and cultivating motivation to engage in meaningful dialogue are essential. Trust cannot be assumed; it must be actively nurtured through transparent communication and genuine collaboration.

Decision-making systems are unique to each country and organisation. Knowledge brokers need to select methods that are suitable for the policy processes and systems at hand. In this document, we provide an overview of the Finnish system and some examples of meaningful science-policy dialogue aimed at addressing the triple crisis.

Science-Policy Actors in the Field of Ecological Sustainability in Finland

Finland has a strong tradition of using scientific research to inform policymaking, supported by robust education and research systems, and complemented by a culture that highly values scientific knowledge. Finland is known for a collaborative governance approach, bringing together policymakers, scientists, industry representatives, and civil society organisations to shape societal reforms. This collaboration extends to members of parliament, who, compared to many other countries, are relatively accessible to the research community.

Key users of scientific knowledge in the domain of ecological sustainability include Ministry of the Environment, Ministry of Agriculture and Forestry, Ministry of Economic Affairs and Employment, Ministry of Transport and Communications, Ministry of Social Affairs and Health, and the Prime Minister’s Office. Regional authorities, cities, and municipalities also play significant roles, particularly in domains like land use planning. Leading entities in the production of scientific



knowledge include the Finnish Environment Institute (SYKE), Natural Resources Institute (LUKE), and other state research institutes, universities, and independent research groups. These efforts are further supported by national independent scientific expert panels and organisations dedicated to funding societally relevant research and specialising in knowledge brokerage. The actors of science-policy interface in the field of environmental sustainability in Finland are presented in image 1.

Recent developments in the Finnish science-policy interface have introduced new instruments and fostered more interactive collaboration methods. Impact assessments conducted by the Forum for Environmental Information (FEI) reveal that interactions at the science-policy interface have increased over the past four years. Presently, the most effective forms of science communication occur through established institutional entities such as science panels and roundtable discussions. These formats have demonstrated increased effectiveness, a shift from earlier assessments which had highlighted the media's role more prominently.

The increasing interaction at the science-policy interface suggests a promising future for science-informed decision-making. However, sustaining this momentum requires continuous adaptation of communication strategies and integration mechanisms of scientific findings into policy.

Image 1. Finnish science-policy field of actors resolving the triple crisis. Focus here is on public sector, while civil society and private sector make significant contributions.

MORE INFORMATION



Ministry of the Environment –
Research & Development



Forum for Environmental Information

Founded in 2010, the Forum for Environmental Information supports evidence-informed decision-making in environmental research. FEI focuses on brokering existing research knowledge and fostering interaction between researchers and policymakers through collaboration with its networks. FEI is a non-profit organisation funded by the Maj and Tor Nessling Foundation.



Ympäristöministeriö
Miljöministeriet
Ministry of the Environment

This publication is a part of the "Puheenvuoroja" series, published by FEI. The publication was written by Johanna Riitakorpi, Kaisa Välimäki from FEI and Heta Heiskanen, Laura Höijer and Kirsi-Marja Lonkila from Ministry of Environment. OpenAI's ChatGPT provided support in drafting and grammar checking.

Good Practices from the Finnish Science Advice System

CASE: SCIENCE SPARRING AT THE MINISTRY OF THE ENVIRONMENT

Science sparring is a dialogical support action between researchers and decision-makers designed to strengthen the knowledge base for policymaking (Finnish Academy of Science and Letters). There is a strong demand for interactive support and dialogue between policymakers and the scientific community. Instead of traditionally asking a question from scientists in the form of a commissioned report, support is sought for sense-making and collaborative thinking between legislators and scientists from environmental, economic, social sciences, and humanities.

The Ministry of the Environment has experimented with science sparring since early 2020 in several processes, such as the renewal of the Nature Protection Act, drafting of the Chemical Strategy, and the National Architectural Policy Strategy. In these cases, interaction with a multidisciplinary group of researchers was directly linked to the preparatory phase and needs of the policy process in question. The dialogue between policy makers and researchers facilitated carefully by "knowledge brokers" external to the policy process, was based on draft policy documents as well as existing data and research.

CASE: DIALOGUE CONCEPT BETWEEN POLITICIANS AND RESEARCHERS BY FORUM FOR ENVIRONMENTAL INFORMATION (FEI)

Initiated by Forum for Environmental Information in 2018, the "Saumakohtia" (meaning 'seam' in Finnish) dialogues provide a confidential platform for direct and appreciative discussions between scientists and members of parliament. These dialogues meet the need for face-to-face encounters that transcend preconceptions, promoting a deeper understanding of complex challenges from multiple perspectives. The "Saumakohtia" dialogues are confidential and follow the Chatham House Rule. Typically, 2-4 scientists offer brief introductions on a selected topic, followed by thorough discussions. FEI proposes themes reflecting current political processes and societal discussions, but the final topic is decided in collaboration with the parliamentary groups. To prevent sensitive confrontations and ensure a safe, productive environment, these events are organised for one political party at a time. The meetings include researchers from various institutions and disciplines, enhancing the breadth of discussion.

CASE: THE FINNISH CLIMATE CHANGE PANEL

The Finnish Climate Change Panel is an independent scientific advisory body that promotes dialogue between climate science and policymaking. The panel consists of scholars from diverse scientific backgrounds and its work is supported by a secretariat. Its role as a scientific advisory body was established under the Climate Act. A recent (2023) evaluation of the Panel concluded that it is successful in its role of supporting policymaking and has had a particularly visible impact in the 2022 update of the Climate Act and its associated plans. However, the politicisation of climate themes poses challenges for the Panel's work.

The Panel supports climate policymaking by providing scientific advice. It produces, compiles, and communicates scientific information. Parliamentary Committees, for instance, actively request expert statements from the Panel. It gives its opinion on climate policy plans under the Climate Act and produces reports to support the preparation and implementation of climate policy and legislation in Finland. The Panel has assessed the coherence of climate policy and the sufficiency of the implemented measures. It has also developed popular tools, like a calculator that allows the public to compare car emissions. The Climate Change Panel collaborates closely with other scientific expert panels in Finland (See image 1.).