

Boundary Organizations and Knowledge Providers Unite to Promote and Support Climate Action

Part 1:

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Part 2:

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Session Objectives and Approach



Obtain feedback on :

- The role of Boundary Organizations
- The potential value-added of an International network of Boundary Organizations and Knowledge Providers



Using :

- Presentations
- Mentimeter
- Plenary discussions

Getting your feedback with Mentimeter

Instructions

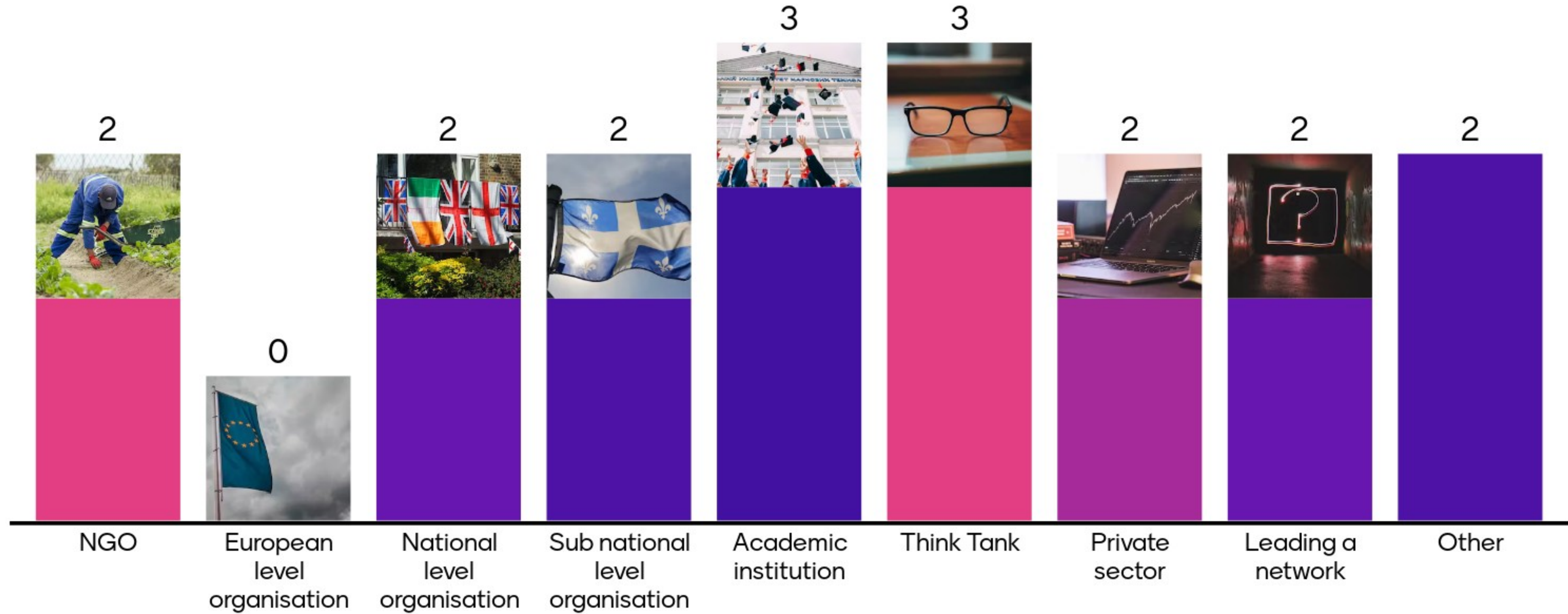
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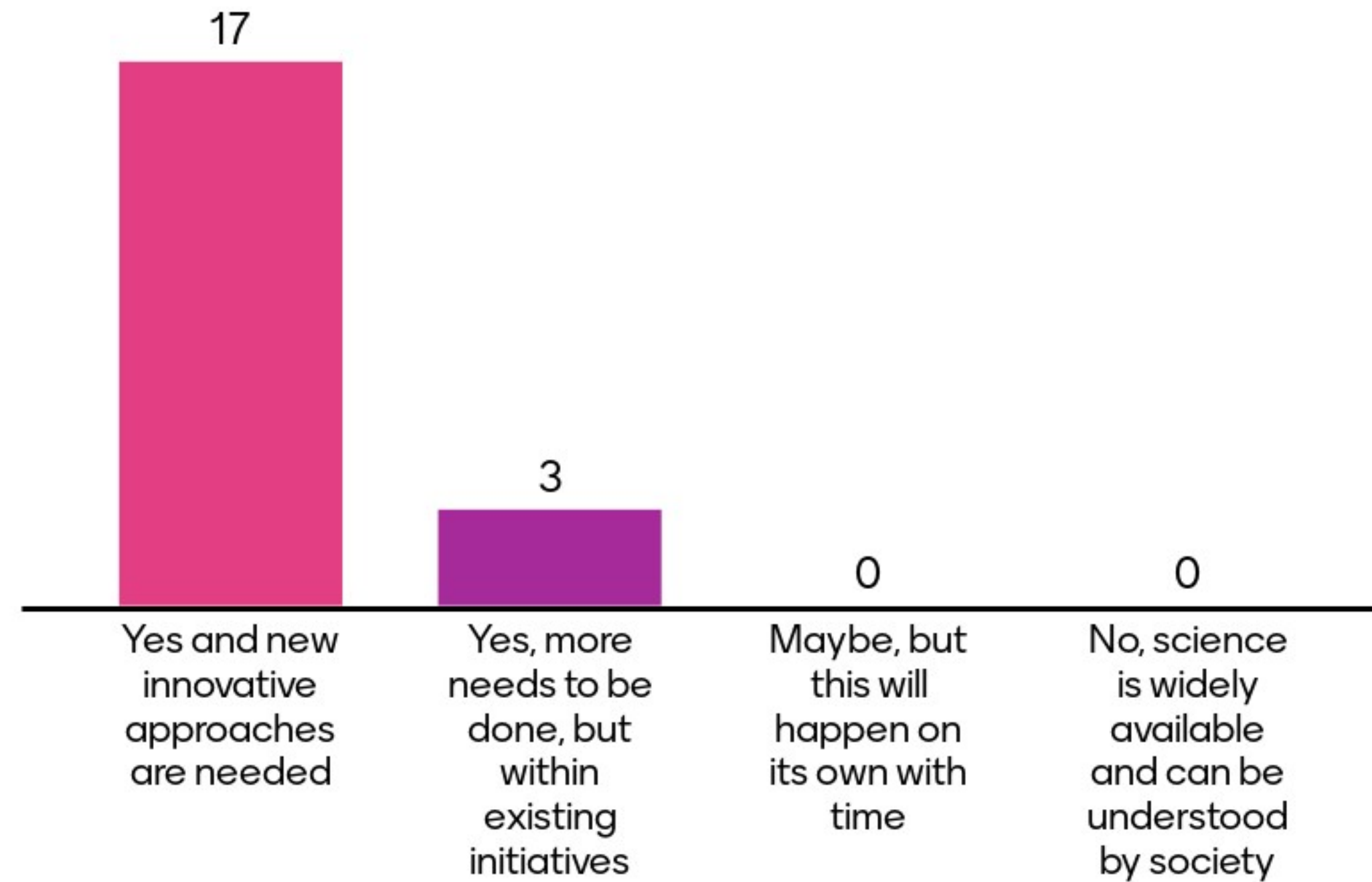
Who is in the room?



Context

- Despite extensive work to further develop climate change science, the challenge of moving from the production of information to its use in actual decision-making persists
- Barriers identified include :
 - mismatched terminology, where terms have different implications for climate scientists as they do for stakeholders
 - stakeholders have unrealistic expectations about the kinds of information that can be developed
 - order of climate information sometimes comes prematurely in the decision-making process.
- One-on-one producer–user relationships are often seen as critical to usability
- Boundary Organizations started from the base, by necessity to address these types of barriers
- IPCC is an example, but not at the right scale

In your opinion, is more action needed to connect science and society to better serve adaptation policy and actions?



What is Boundary work and what are Boundary organizations?

The concept **boundary organization** has been introduced over 20 years ago to describe specific organizational efforts to mediate between science and policy.

This form of work and organization were originally described to aim at creating collaborative processes that allow both science and policy to achieve their goals while stabilizing the social boundary between them.

In 2016, over half the publications on Boundary Organizations were on applications in environmental issues, and over half of those on climate change (Gustafsson and al., 2018).

An illustration of boundary work

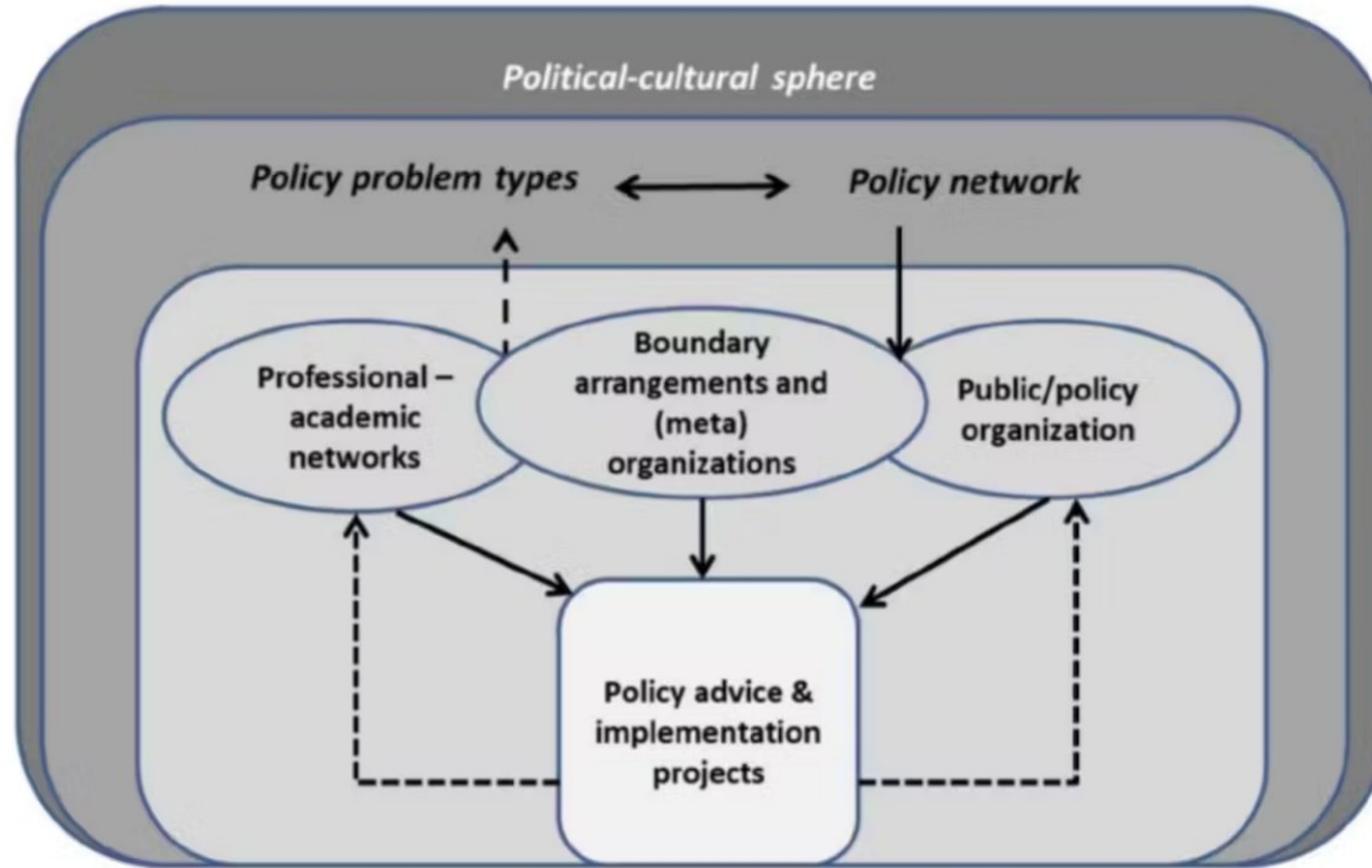


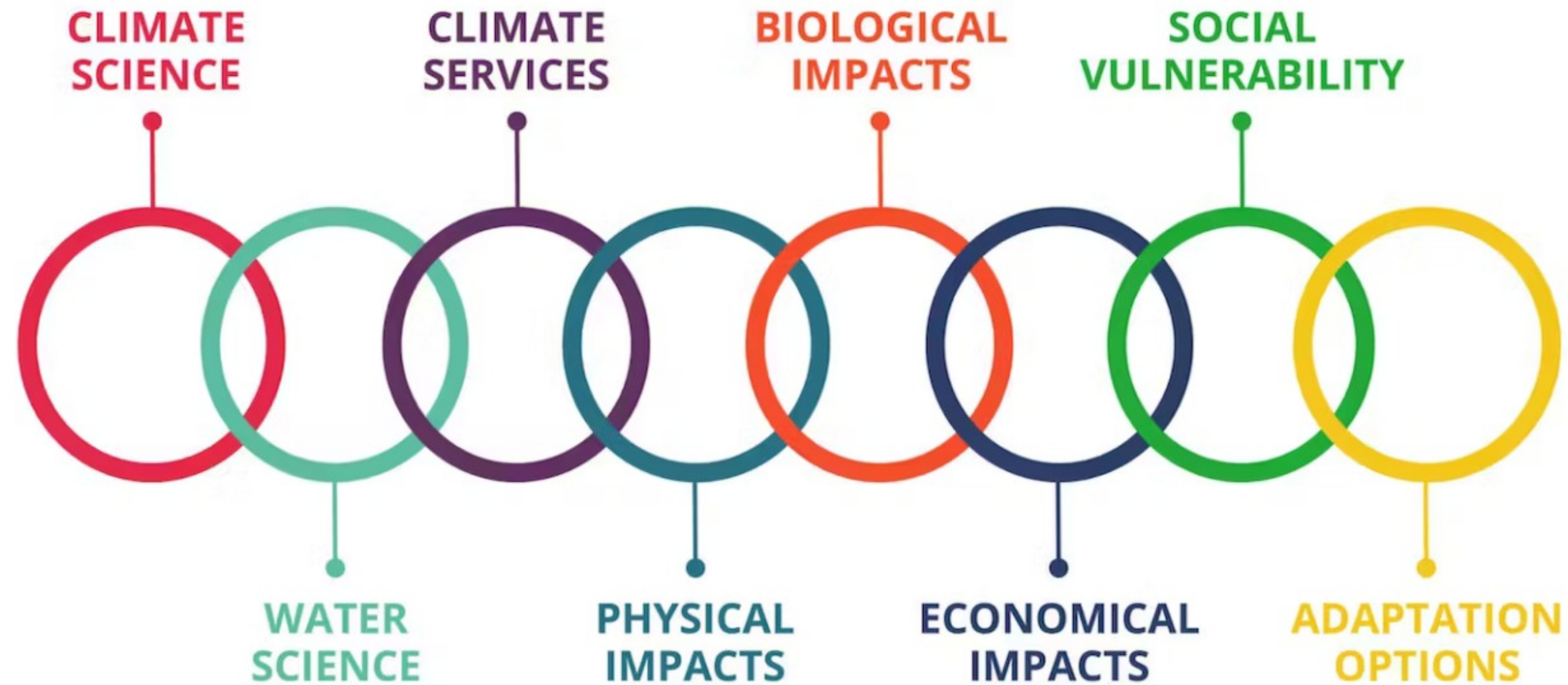
Fig. 1 Multi-level conceptual framework for boundary work (Hoppe et al. 2013)



is a well established sub-national scale
**Boundary
Organization**
with increasing influence
on the national and
international level

- Applied R&D consortium created in 2002 bridging universities (science providers) and government agencies, parapublic notably Hydro-Quebec, municipal and other types of adaptation users (users of science for policy and practice)
- Non-profit hosting 57 employees and a CAD 8-10M yearly budget for projects and coordination
- Significant support to Canada's national adaptation strategy
- Co-Lead of the Adaptation Futures international conference (Montreal, Oct 2-6th 2023)
- Host of the World Climate Research Program: Regional Information for Society (RIfS)

Ouranos works along the whole continuum from climate sciences to knowledge brokering





4th largest hydropower generator in the world

Over 20 years of scientific and user domain frontier management



Hydro Québec strategy



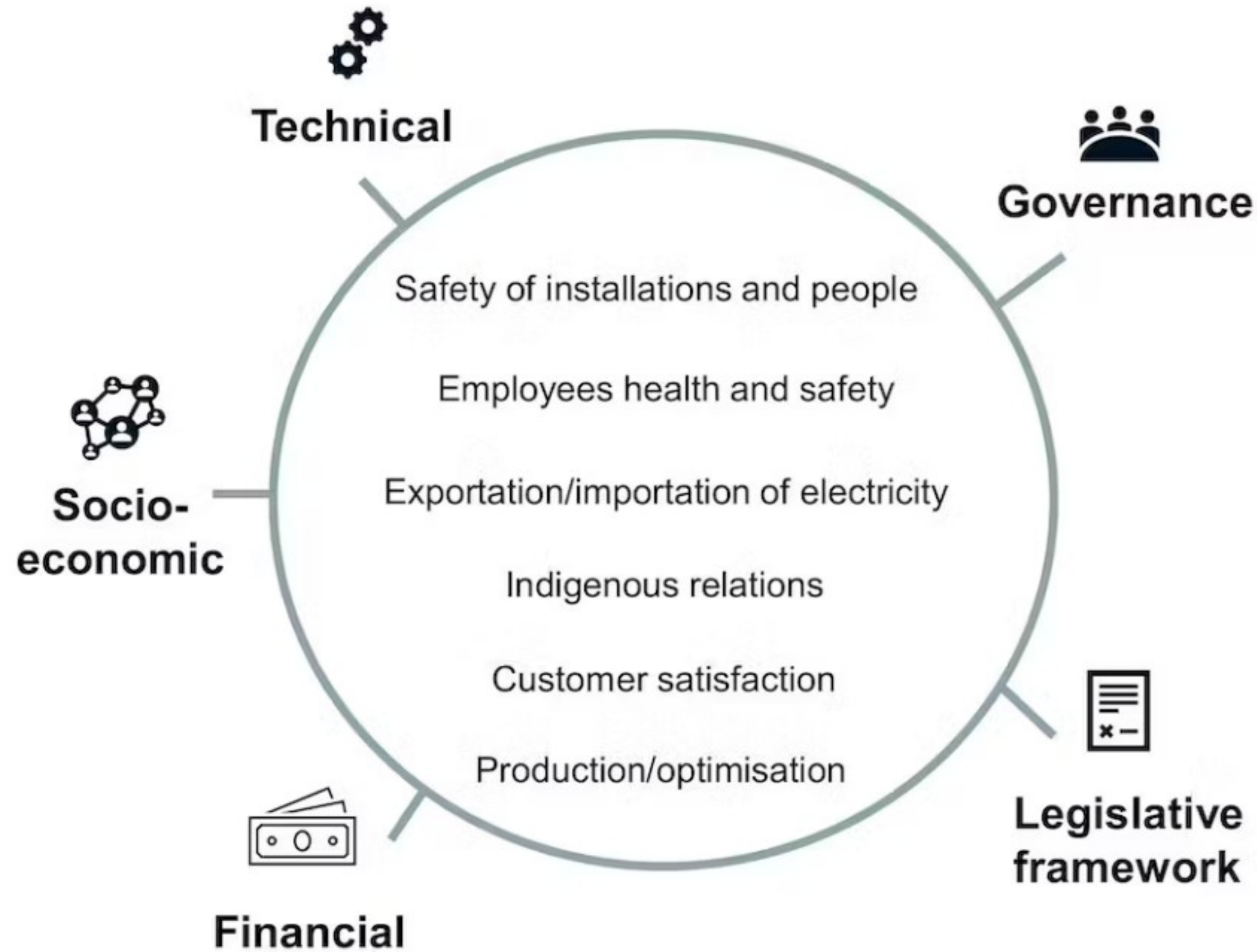
Climate change issues



Climate science & adaptation R&D



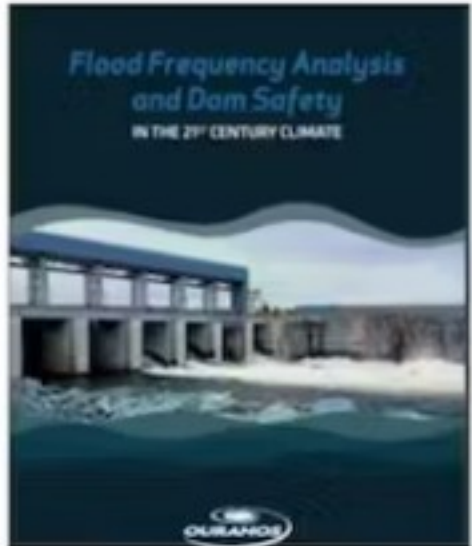
Example from Quebec



Forest Fire Exposure



Flood Frequency



Wind energy potential



Extreme weather events





CONTEXT

- Regional Research Network : Tool for Regional Strategy for Higher Education, Research and Innovation (Nouvelle-Aquitaine)
- The Regional Council created the Futurs-ACT network in February 2020 to:
 - Address the challenges related to climate change in its territories
 - Compensate inequalities between territories re: Higher Education, Research, Innovation
 - Unite the region's scientific potential
- Operational objectives:
 1. Mobilise the strengths spread throughout the region's territories
 2. Bolster the visibility of research addressing territories' priority issues at the national and European levels

A PARTNER OF





RÉGION
**Nouvelle-
Aquitaine**

REGIONAL RESEARCH NETWORK



Futurs ACT 

ANTICIPATION OF CLIMATE CHANGE
FOR TERRITORIES IN TRANSITION
NOUVELLE-AQUITAINE

PRINCIPLES

- Anticipation and future studies: creating scenarios and pathways of the possible futures of Nouvelle-Aquitaine territories
- International research, knowledge *for* the territories, *by* the territories
- Actionable knowledge co-produced between science-society-decision-makers

ACTION GROUPS

- Education
- Energie
- Indicators
- Science-Society Interchange
- Vulnerabilities

PARTNERS

- 45 partners from Higher Ed., Research, Innovation
- 14 research centre
- +370 researchers
- International cooperation: Ouranos (Québec), CCCA (Autriche)

CONTACT

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Futurs-ACT example of anticipation study: « Vents et Marées »

Noëlle Bru (UPPA) & Nathalie Caill-Milly (IFREMER)



Climate-related concerns include:



- New trends in marine resources distribution (temporal, spatial)
- Meteorological conditions for professional fishing



- New conditions for fishing trips (period, distance, species)



- Need to revise spatialized fishing rights (including quotas, UE Common Fisheries Policy)
- Solution to maintain company profitability (cost increase, fish price...)



Next steps:

- Results consolidation
- Scenarios projections for anticipatory trajectories

- Question: Which impacts of climate change and economical factors on fishing trips?
- Study focuses on small vessels using gillnet, line or purse seine from local ports of SW France
- Main exploited species: hake, sea bass, sole, monkfish, cuttlefish, sparidae, etc.



Le projet « Vents et Marées » aborde les questions d'exposition et de sensibilité des flottes de pêche aux conditions climatiques maritimes changeantes. La vocation est d'associer conjointement les professionnels aux travaux afin que les résultats soient partagés et utilisés par ces derniers pour leurs besoins de prospective.

**Rapport final :
Projet Vents Et
Marées**

Université de Pau et des Pays de l'Adour - EMAP - Anglet
Noëlle BRU - Claire KERMORVANT

Ifremer - Unité Littoral / IER Arcachon - Anglet
Nathalie CAILL-MILLY - Muriel LISSARDY

« Vents et Marées »
Futurs-ACT as supporting partner

Master degree internship
Futurs-ACT as financial partner

Logos: Université de Pau et des Pays de l'Adour, IFREMER, Nouvelle-Aquitaine, Union Européenne, Europe 2020.

Example from Austria

2nd Austria Assessment Report

(based on the IPCC reports)

- involvement of approx. 120 researchers from all field
- Integration of stakeholders, such as regional government, unions, lobbies, NGOs, social organizations

Dissemination Support for research Projects

- Increasing visibility of results
- Facilitating the language of communication and interacting with relevant and new stakeholders.



- Schnee in Österreich – Vergangenheit (1971–2000)
- Der unvermeidliche Klimawandel / 2-Grad-Weg
- Der fossile Weg (2071–2100)



K3-Congress on Climate-Communication

(cross-country congress, Germany, Switzerland, Austria – every two years)

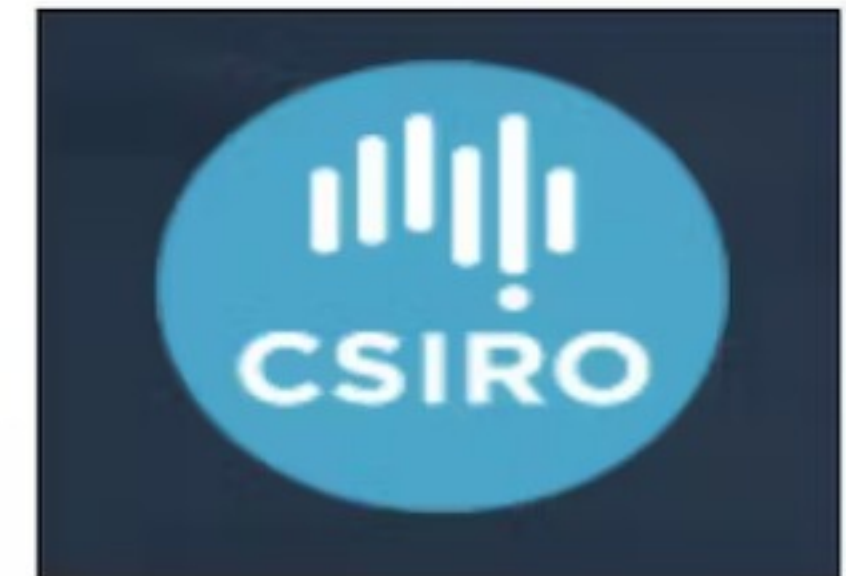
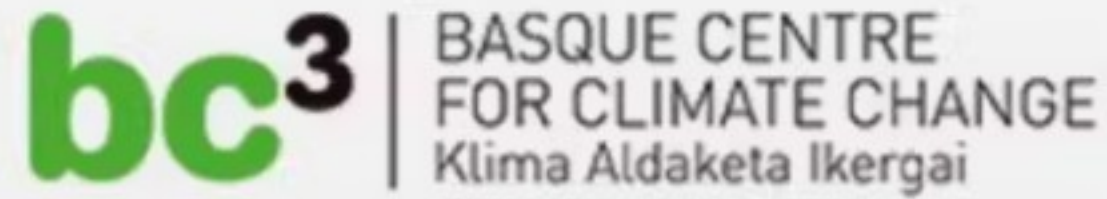


- Effective communication to activate people to act
- Providing an overview to the international status quo on research and practical used cases
- Being a networking platform for stakeholders from politics, decision making, lobby organizations, NGOs, media and PR.

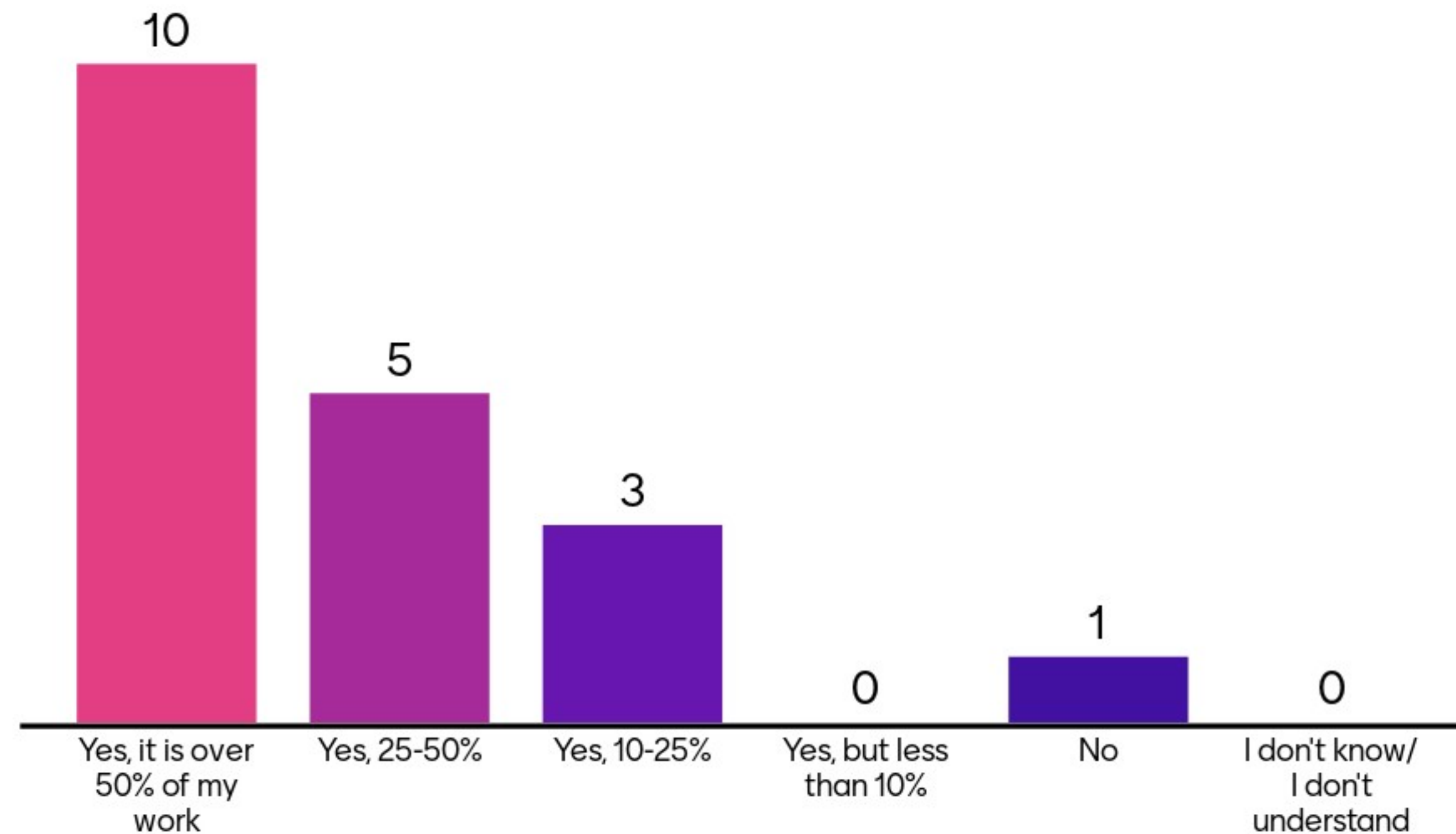
Boundary organizations come in all shapes and sizes

- With or without climate services
- With or without policy influence as one of its objectives
- At a variety of scales, local, national, regional, international
- Well established or newly created

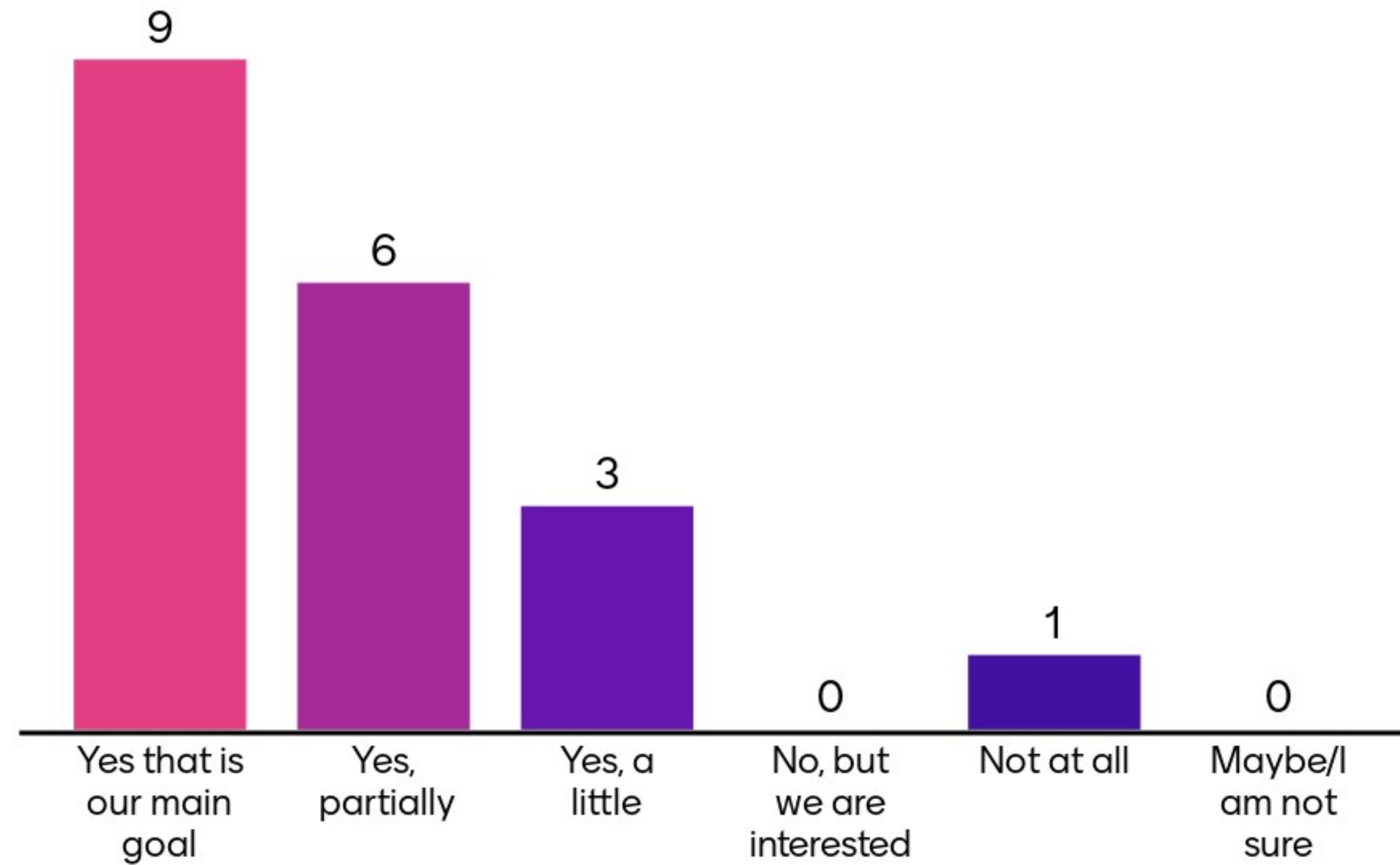
Probably many other examples in the room



Are you personally involved in boundary management work? How much involved?



Is your organization a boundary organization? How significantly?



Do you agree with the following:

Boundary organizations are a good approach to connect science and society

8.5

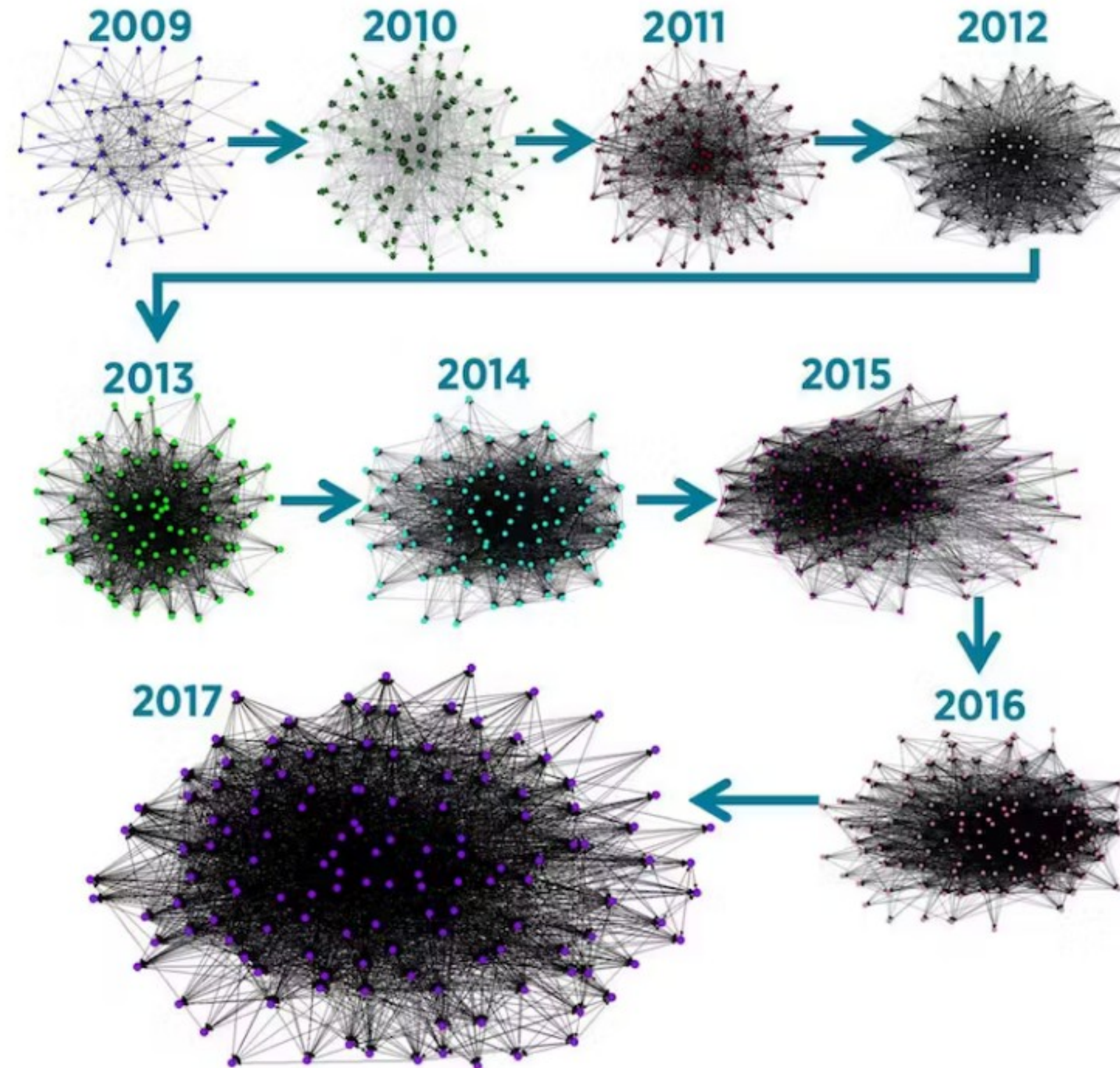
The concept of "boundary organization" should be better defined

6.8

Should Boundary Organizations and Knowledge Providers unite to better promote and support climate action?

We think they should!

Networks can allow connections to grow



Urban sustainability directors network, from 10% connected in 2009 to 90% connected in 2017

Do you agree with the following:

An international network of boundary organizations could add value

8.8

My organization would join such a useful network

7.8

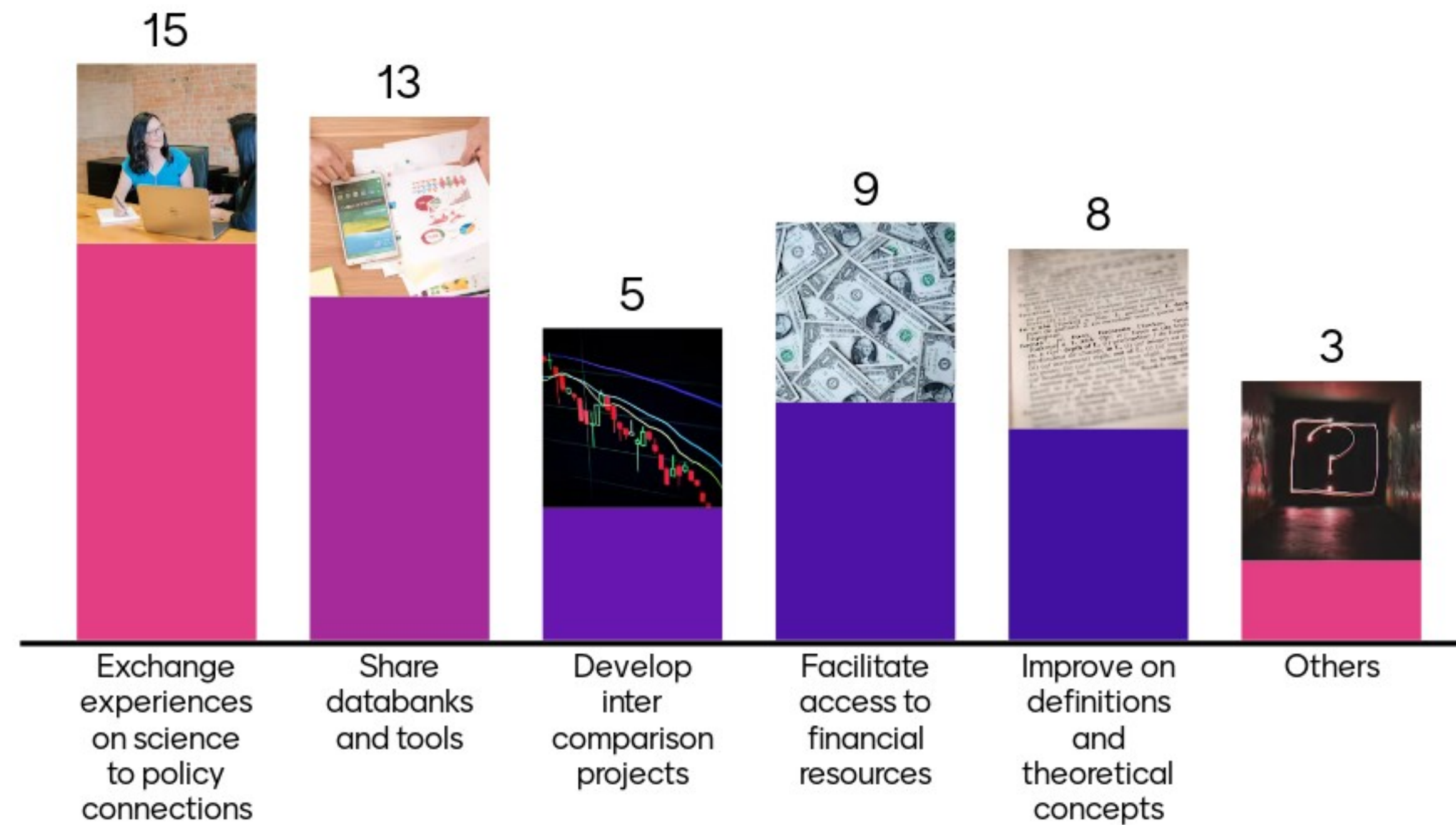
How should an international network of boundary organizations be structured?

- By continent?
 - By country?
 - By economic sectors?
 - By IPCC thematic?
 - By geographic characteristics?
-
- Is there a need for a structure to start with?

How such a network should be structured? (use one or two words)



What type of connections could the network stimulate between its members?



Other suggestions on how a network of boundary organizations could add value?

governance arrangements
lessons learnt
consistency of info
reduce knowledge silos
quick feedback community
good practice
standards
alignment
collaborations
exchange learning
support innovation
legitimacy
give value to the role
convince scientists
sharing good practice
actionnable knowledge
share resources
international links
accountability
share processes
share processes
improve consistency
inspire boundary work
securing funding
establish best practices
knowledge sharing
pushing for a common goal

sharing
governance
lobbying

Before meeting you, our key messages were:

- While there has been progress both in climate change science and mainstreaming adaptation, connecting science and society remains a major challenge. Adaptation is still more reactive (weather events) than proactive (anticipating).
- Boundary organizations have been useful and have been loosely developing over the last 20 years. They could contribute further in the future.
- An international network gathering boundary organizations, if structured adequately, could add value by facilitating exchange of experiences and information, by cooperating on tool development and comparing approaches, by providing clearer definitions and theoretical context, etc.

Next steps

Special events to continue this discussion to be organized at:

- Adaptation Futures, October 3 to 6, Montreal, Canada
- WCRP Open Science Conference, October 23 to 27, Kigali, Rwanda
- COP 28, November 30 to December 12, 2023, Dubai, United Arab Emirates

Thank you for your input. *Interested in staying informed?*

Please write to Info@ouranos.ca