CECAN Webinar - Policy Red Teaming: Uncovering Policy Risks Before It's Too Late

Monday 1st June 2026, 13:00 – 14:00 BST

Presenter: Linda Lammensalo (CECAN Fellow)

Welcome to our **CECAN Webinar.**

All participants are muted. Only the Presenters & CECAN Host can speak. The webinar will start at **13:00 BST.**

Linda will speak for around 40 minutes and will answer questions at the end.

Please submit your questions at any point during the webinar via the Q&A box in the Zoom webinar control panel. You will also be able to 'upvote' questions.

Today's webinar will be recorded and made available on the CECAN website.

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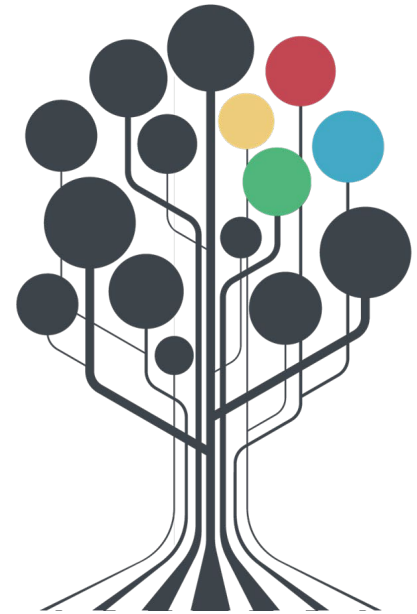

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science sparring

Policy red teaming

Uncovering risks before its too late

Linda Lammensalo

CECAN Fellow

AGENDA

1. Knowledge brokering + Finnish Academy of Science & Letters
2. Context & rationale
3. What is policy red teaming?
4. Case examples
5. Challenges & next steps

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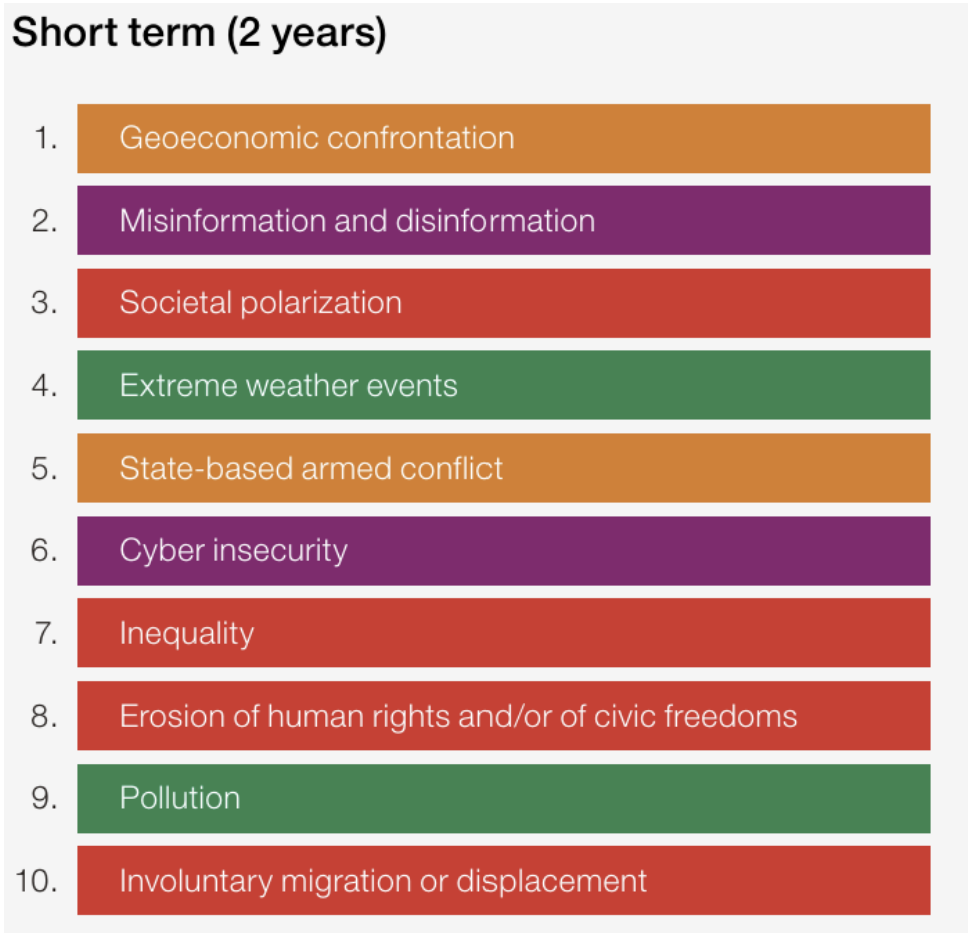
Finnish Academy of Science and Letters

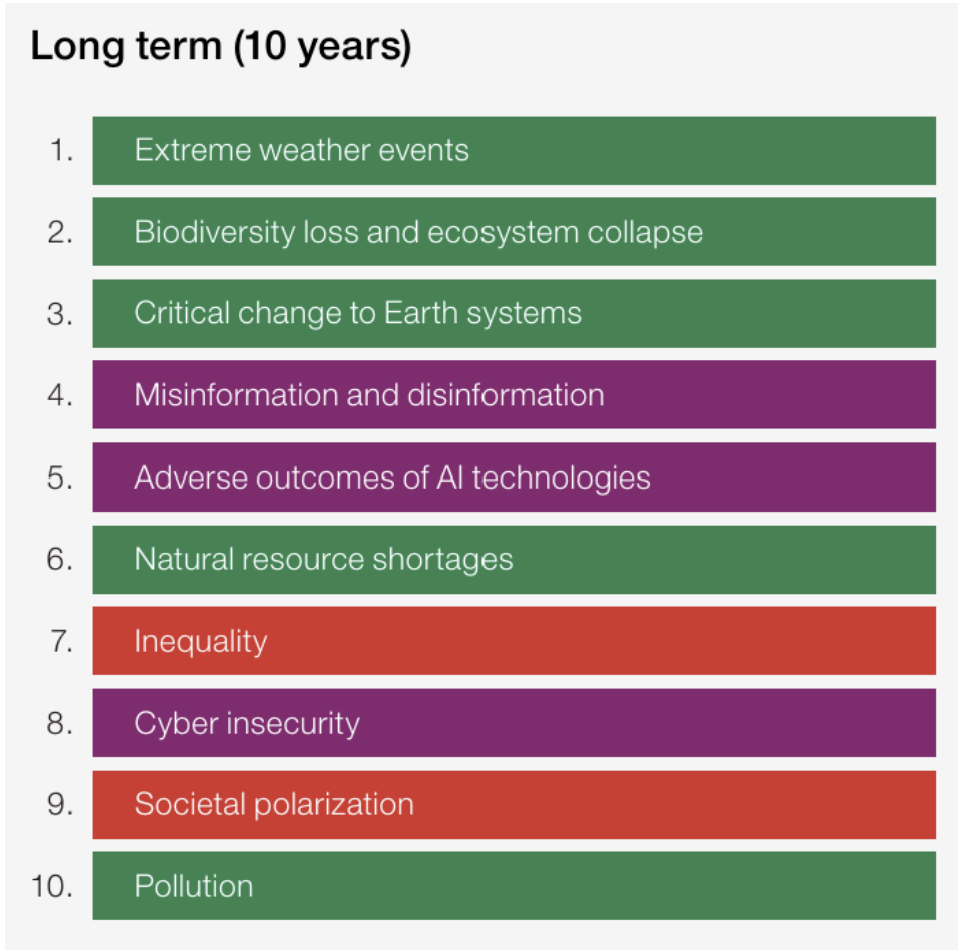
800+ members from the scientific community.

Advancing **evidence-informed policymaking** since 2019:

1. Science impact and knowledge brokering training for researchers
2. Experimental development work
3. Shared platform for the science for policy actors in Finland

Policymakers are navigating rapidly changing and entangled policy issues.



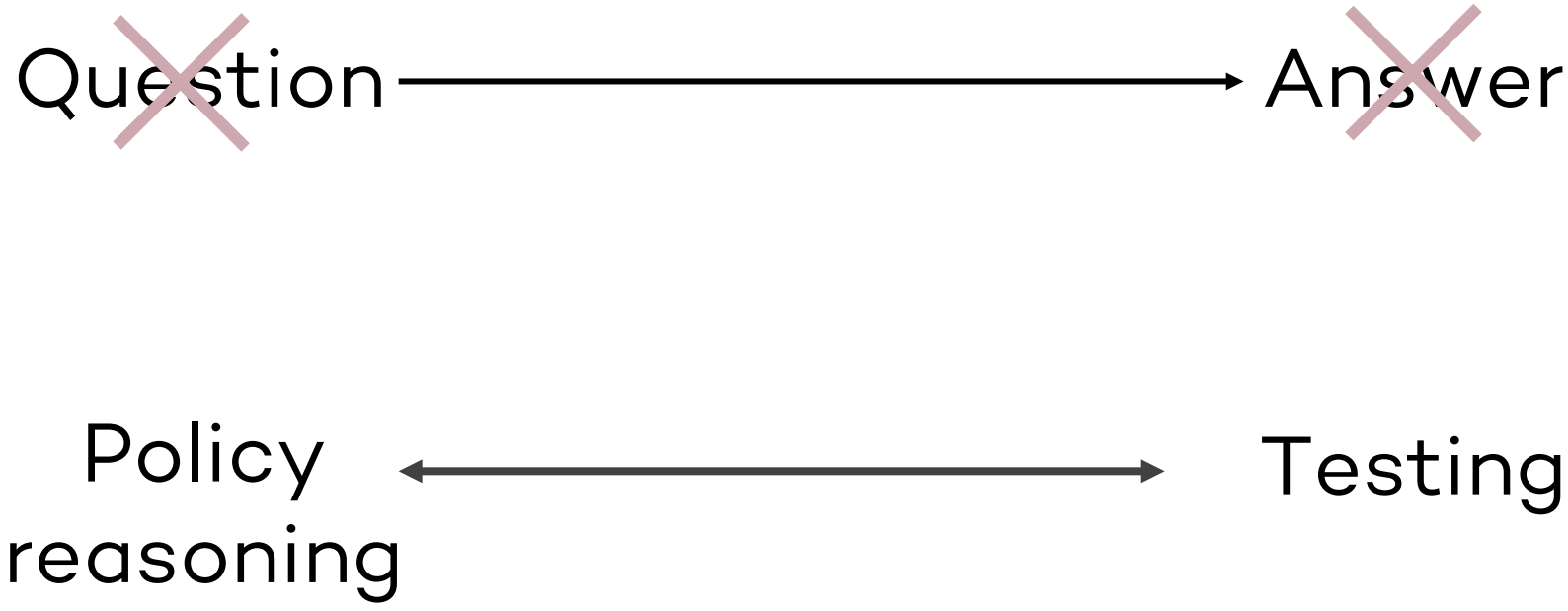


WEF, 2025. WEF_Global_Risks_Report_2026.pdf p. 9

In conditions of deep uncertainty, policymakers do not primarily need more information.

They need help structuring what is known, what is contested, and what is genuinely unknown.

INVERTING THE LOGIC OF SCIENCE ADVICE



APPROACHES

→ Devil's advocacy: conflicting perspectives & adversarial thinking (see Cunico, Zimmermand & Videira, 2024)

→ Policy stress testing: testing policy plans & and alternatives against divergent scenarios (see European Parliament, 2022; Government Office for Science 2024)

→ Red teaming: particularly in intelligence, risk management & foresight (Zhang & Gronvall 2020; Moran, 2021; Scott, 2021; UK Ministry of Defence, 2021)

Science Sparring

POLICY RED TEAMING

Multidisciplinary group of researchers
= red team

Identifies risks, **unintended consequences**, **assumptions** and **evidence gaps** in policy preparation proactively.

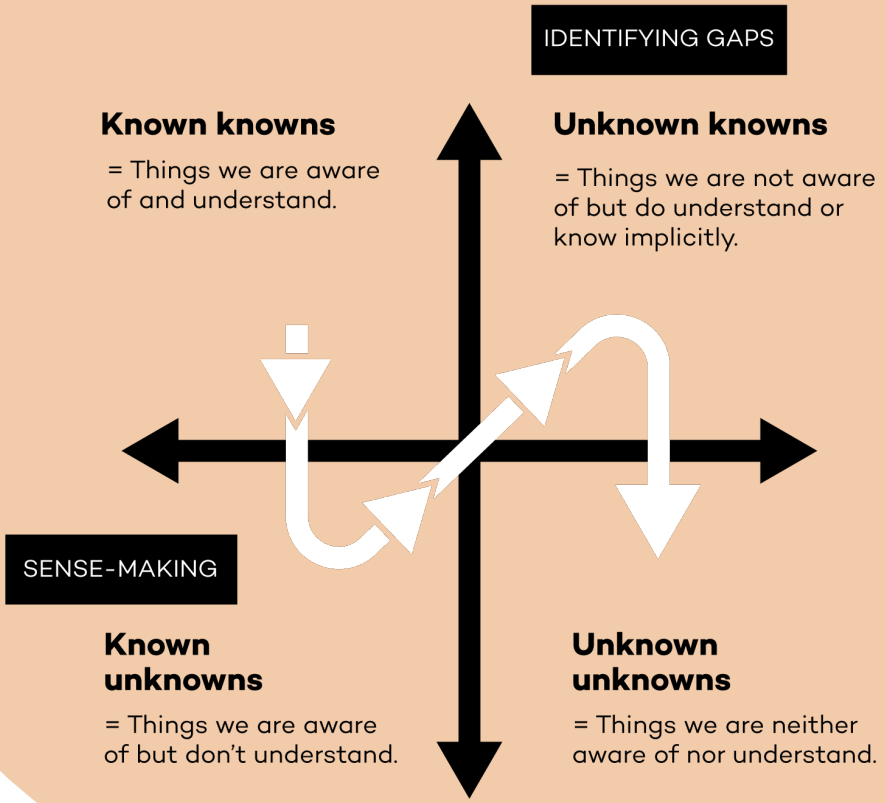
Adopt a **critical mindset** and red team their subject.

GOALS

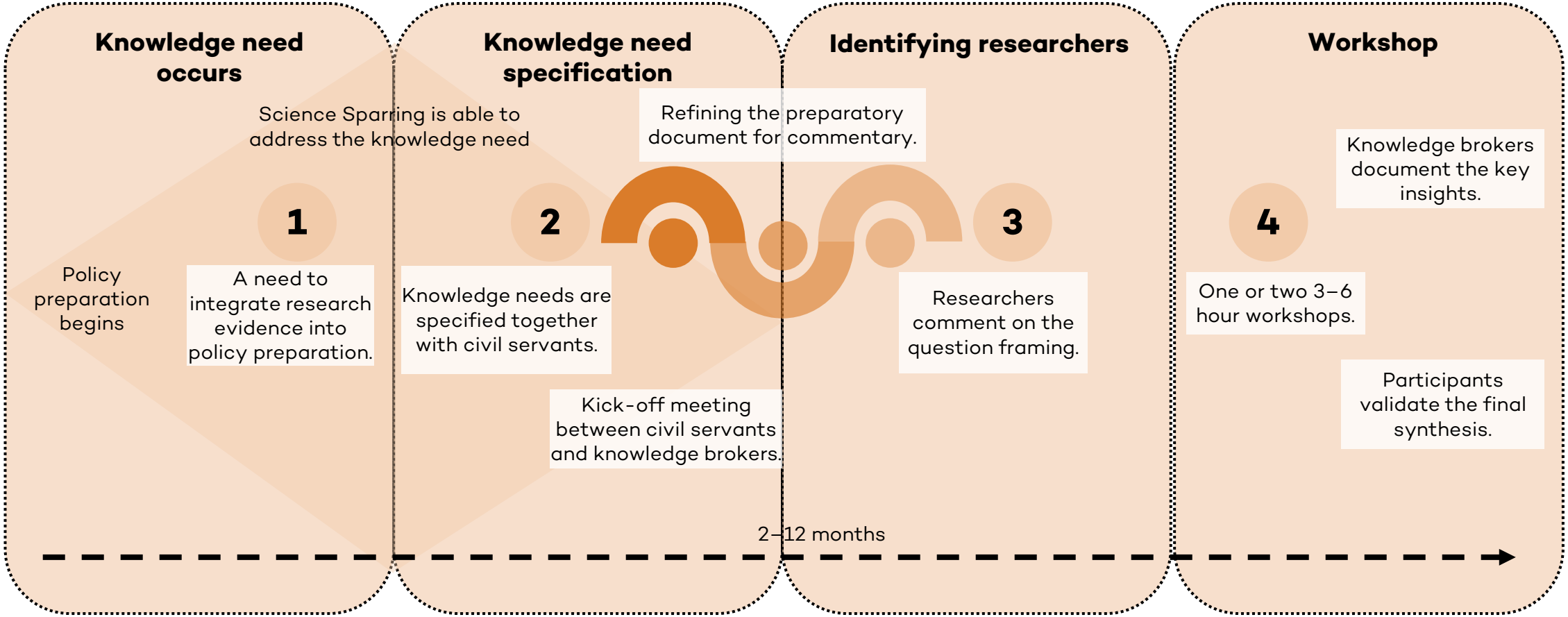
- **Epistemic stress-testing** of policy drafts (acting as a boundary objects).
- Helps to surface **evidence gaps, unintended consequences, uncertainties, risks, and assumptions** that might otherwise go unexamined. → Enables real-time discussion of alternatives.
- Multidisciplinary scrutiny aims to improve **robustness of policies***

*Defined as: the capacity of policy reasoning to withstand scrutiny and remain its core functions across changing contexts (El-Taliawi & Goyal, 2026).

POLICY RED TEAMING – structured critique



PROCESS


Knowledge need occurs
Policy preparation begins
1
A need to integrate research evidence into policy preparation.
Science Sparring is able to address the knowledge need
Knowledge need specification
2
Knowledge needs are specified together with civil servants.
Kick-off meeting between civil servants and knowledge brokers.
Refining the preparatory document for commentary.
Identifying researchers
3
Researchers comment on the question framing.
Workshop
4
One or two 3–6 hour workshops.
Knowledge brokers document the key insights.
Participants validate the final synthesis.
2–12 months

Science could solve some of the world's biggest problems. Why aren't governments using it?

A *Nature* global survey finds that most specialists are unhappy with systems to provide science advice to policymakers.

By Helen Pearson

nature

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nnish y of S e and Le Helsinki, p a s or th ry.
Kuosmanen, its chief coordinator, decided to tackle the problem scientifically: conduct experimental pilots of different methods and study them along the way.

RELATED

AI tools as science policy advisers? The potential and the pitfalls

One method that Kuosmanen has tested is rapid-response knowledge syntheses. In April this year, when a 12-year-old boy shot and killed one child and injured two others at a school in Finland, some politicians suggested installing metal detectors in schools to prevent future shootings, Kuosmanen says. But rather than jump to solutions, he thought that expert knowledge could help. The perpetrator said that he'd been a victim of bullying and, within a week of the shooting, Kuosmanen's team had synthesized published research and expert opinions on the links between school bullying and violence. The team also suggested a range of possible actions, such as supporting marginalized children (see go.nature.com/3gsv2rz; in Finnish). Since then, the government "keeps coming back and requesting more" syntheses, he says.

One of the most promising approaches Kuosmanen and the team has trialled is 'red teaming' for policymaking. This involves scientists working confidentially with policymakers to scrutinize early drafts of policies from a scientific perspective. This scrutiny "in a kind of confidential, trustful setting, is something that hadn't been done before", he says, and the group is now working out how to scale it up.

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Lessons learned from practice

Ten out of twelve ministries have utilised Science Sparring.

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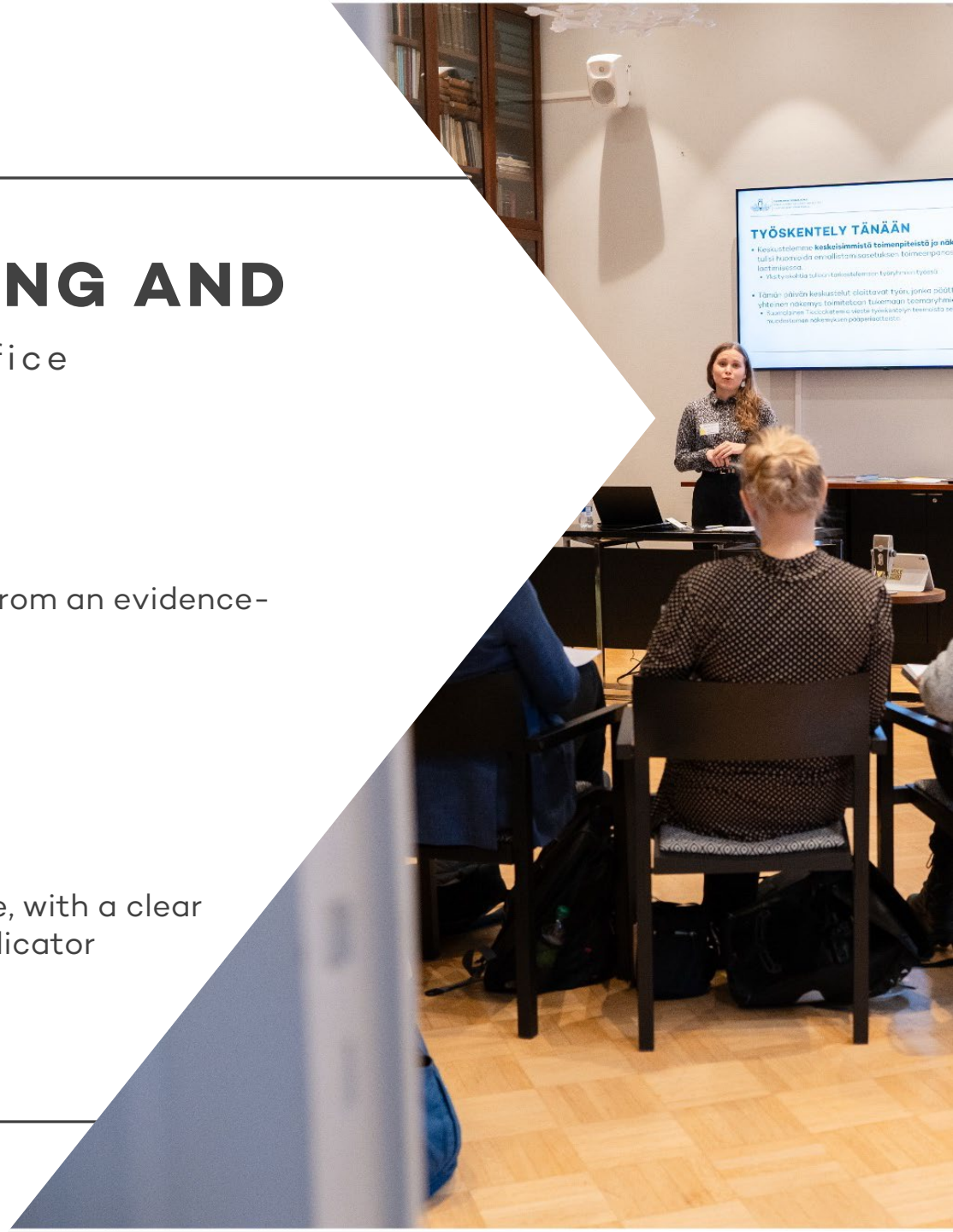
STATE R&D FUNDING MONITORING AND EVALUATION PLAN Prime Minister's Office

BACKGROUND MATERIAL (preparatory document)
Draft monitoring and evaluation plan

OBJECTIVE
Seek to supplement the evaluation framework and monitoring indicators from an evidence-based perspective and compile information on monitoring opportunities.

LESSONS LEARNED
- Two workshops –model helped to build insights and explorative space.

OBSERVATIONS
Measuring R&D collaboration should be approached as broadly as possible, with a clear impact framework built around the whole. As a result of the discussion, indicator weightings were revised and some dropped entirely.



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Atlantic Meridional Overturning Circulation (AMOC)

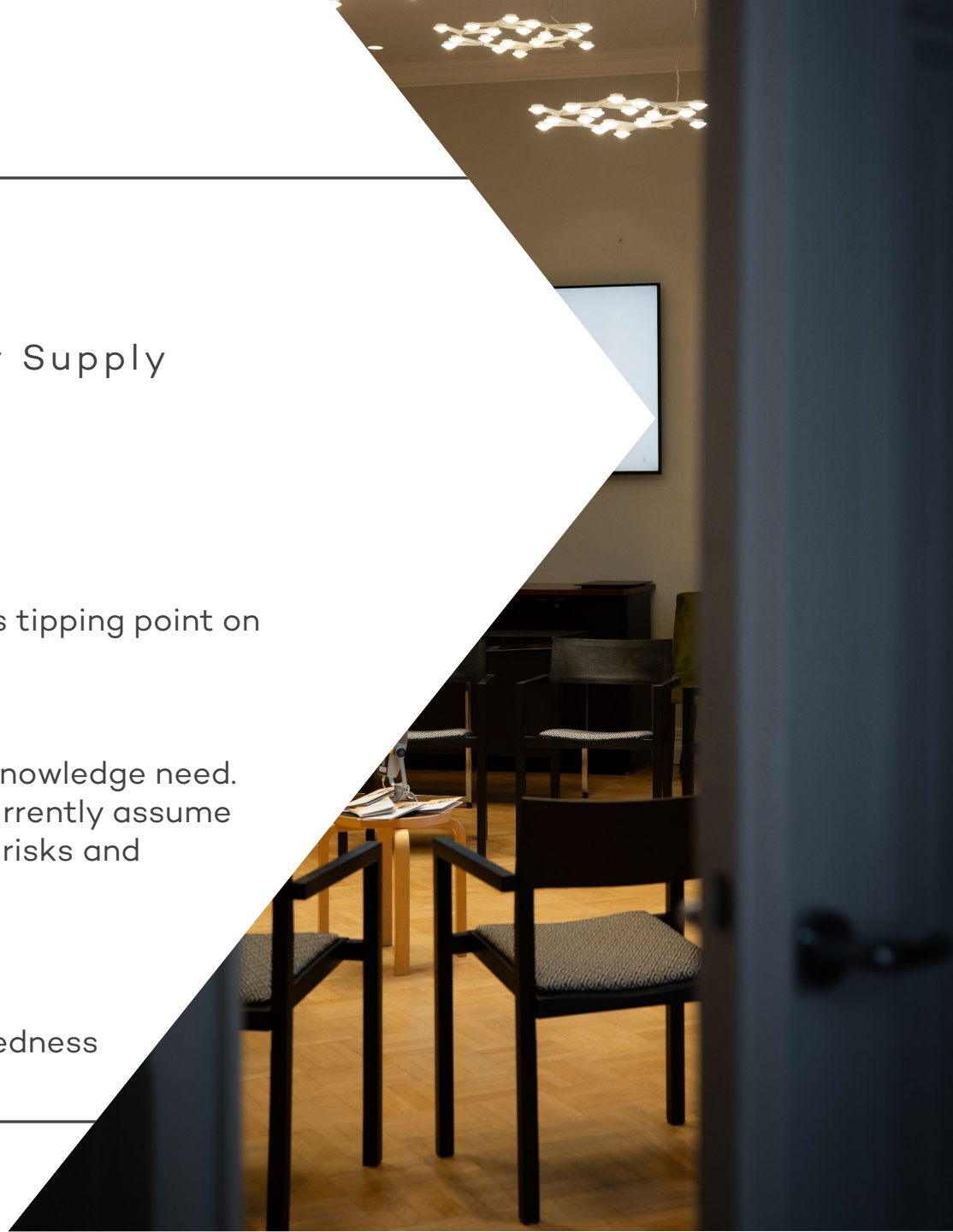
National Emergency Supply Agency + Operation Arktis

BACKGROUND MATERIAL (preparatory document)
Synthesis of anticipated impacts of AMOC's potential collapse

OBJECTIVE
The objective was to identify the direct and cascading impacts of AMOC's tipping point on Finland and their implications for the security of supply.

LESSONS LEARNED:
- "Supply-driven" Sparring works, but takes a more time in defining the knowledge need.
- Focus on system vulnerabilities (Where does Finland's preparedness currently assume climate stability?) and identifying points in the system where greatest risks and weaknesses are.

OBSERVATIONS
Imagining an AMOC tipping point reframed thinking on preparedness. → It would be bring a permanent shift, demanding the courage to begin preparedness before the need becomes urgent.



WHEN DOES IT WORK?

1. Anticipating risks and unintended consequences

2. The evidence base of a policy needs scrutiny

3. Need for proactive evaluation

WHY IT WORKS?

- **Prioritises policy relevance** by clearly defining the knowledge need and anchoring discussions to specific policy problems. Final synthesis supports this.
- **Stress-testing** by providing structured critique provides value to the participants and concrete suggestions to improve quality of the policy.
- **Working with the preparatory document** ensures shared focus and reduces unproductive tangents and ensures that changes are still possible.
- **Emphasis on multidisciplinarity,** making it suitable particularly for complex systemic policy topics and identifying risks systematically.
- **Knowledge brokers** enable the process by building trust between researchers and policymakers.
- **Closed-door dialogue** encourages trust and enables an exploratory space.

EXAMPLES OF USE

1. Knowledge base for information and technology policy, (Parliamentary Cooperation Group on Information Policy), 2026 (forthcoming)
2. National recommendations on digital device use for young people, (Finnish National Agency for Education), 2026
3. Knowledge base for the National Risk Assessment, Ministry of the Interior, 2026
4. Measures for learning outcomes in basic education, Ministry of Education and Culture, (Ministry of Education and Culture), 2026
5. Knowledge base for promoting capital-driven industrial competitiveness (Ministry of Economic Affairs and Employment, Ministry for Foreign Affairs), 2025
6. Knowledge base for civil society policy (Ministry of Justice), 2025
7. The impact of tipping points on emergency supply (National emergency supply agency, Operaatio Arktis), 2025
8. Requirements set by the sustainability crisis for journalism and science communication (Helsinki Institute of Sustainability Science HELSUS), 2025
9. High impact climate actions in regional administration (ELY Centres), 2025
10. Knowledge base of physical activity, sports and elite sports (Ministry of Education and Culture), 2025 | Read more
11. Monitoring and Evaluation Plan for Government R&D funding (Prime Minister's Office), 2024
12. Systems mapping on demographic change (Prime Minister's Office, DEMOGRAPHY program), 2024
13. Implementation of the Restoration Regulation (Ministry of the Environment, Ministry of Agriculture and Forestry, Science Panels), 2024
14. Anticipation of the Biodiversity Act (Ministry of the Environment), 2023
15. Ecological connectivity (Ministry of the Environment), 2023
16. National Climate Adaptation Plan (Ministry of Agriculture and Forestry), 2022
17. Architectural Policy Program (Ministry of Education and Culture, Ministry of Economic Affairs and Employment, and Ministry of the Environment), 2021
18. Roadmap to Fossil-Free Transportation (Ministry of Transport and Communications), 2021
19. Nature Conservation Act reform (Ministry of the Environment), 2021
20. Public Sector Strategy (Ministry of Finance and Association of Finnish Municipalities), 2020
21. National Transportation Plan, (Ministry of Transport and Communications), 2020
22. Climate Regulatory Impact Assessment (Ministry of the Environment, Ministry of Justice), 2020

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Challenges & next steps

EXISTING CHALLENGES

1. Scaling the model and its use (legitimacy across different contexts)

2. Relatively time consuming & resource-intensive (particularly for knowledge brokers)

3. Integrating the model into early policy processes

SCIENCE SPARRING x AI

- In collaboration with Aalto University, we are developing an AI-powered process to enhance red teaming.

- The key questions is how could **AI challenge group think and cognitive biases** and serve as a sparring partner in science-policy dialogue settings (HCI).
  - Explored with architypes e.g., systems thinker, optimists, risk averse
  - Build a prototype to support facilitators (particularly with assumption stress-testing)

BUILDING A COMMUNITY OF POLICY RED TEAMERS

Science Sparring Masterclass, Spring 2026

24 knowledge brokers from different organisations

→ 4 projects already ongoing

Päätöksenteon
stressitestaus

Handbook in Finnish, English version published in early autumn 2026.

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Let's stay in touch!

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Read more: acadsci.fi/en/science-and-policy/science-sparring/

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