



How to brace governance against climate crises?

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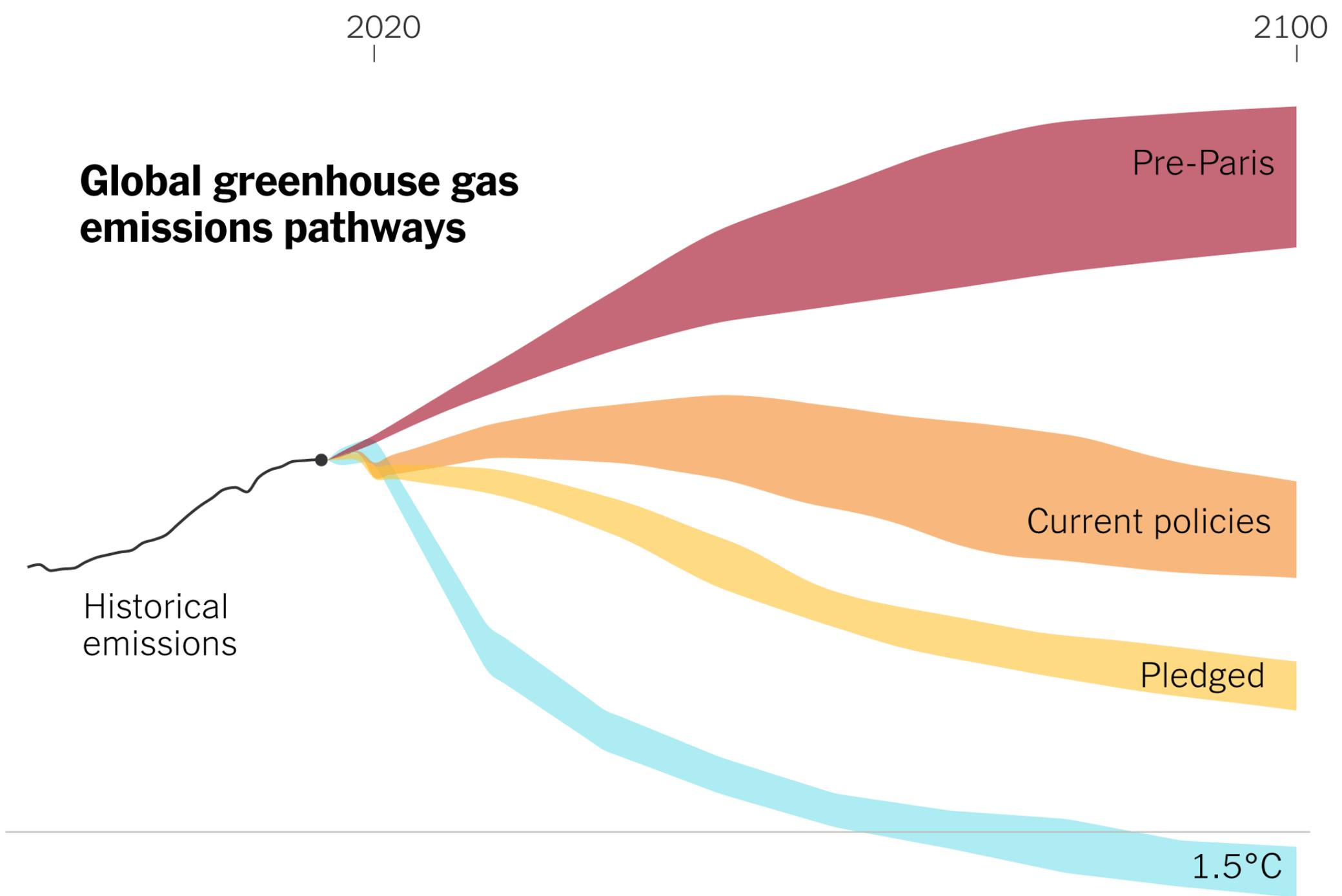
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HELSINGIN YLIOPISTO
HELSINGFORS UNIVERSITET
UNIVERSITY OF HELSINKI

**TAL
TECH**

Global greenhouse gas emissions pathways



2020

2100

Pre-Paris

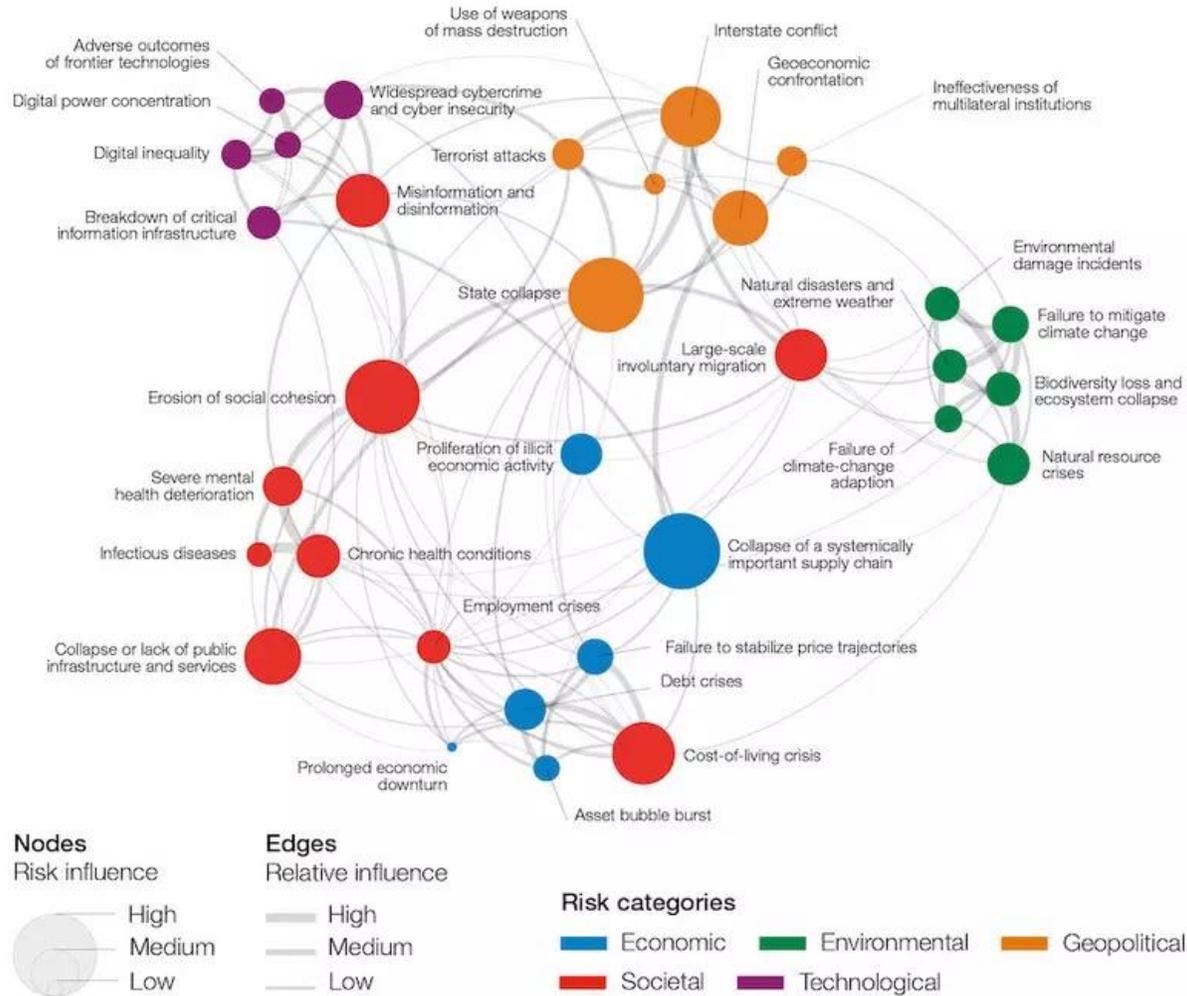
Current policies

Pledged

Historical emissions

1.5°C

Global risks landscape: an interconnections map



Four governance challenges



Separation of acute crisis management from long-term resilience planning



Unforeseeable futures as a blind spot



Division of labor between departments



Boundaries between experts and politicians

High Reliability Management



Preoccupation
with Failure



Reluctance
to Simplify



Sensitivity
to Operations



Commitment
to Resilience



Deference
to Expertise



WISE

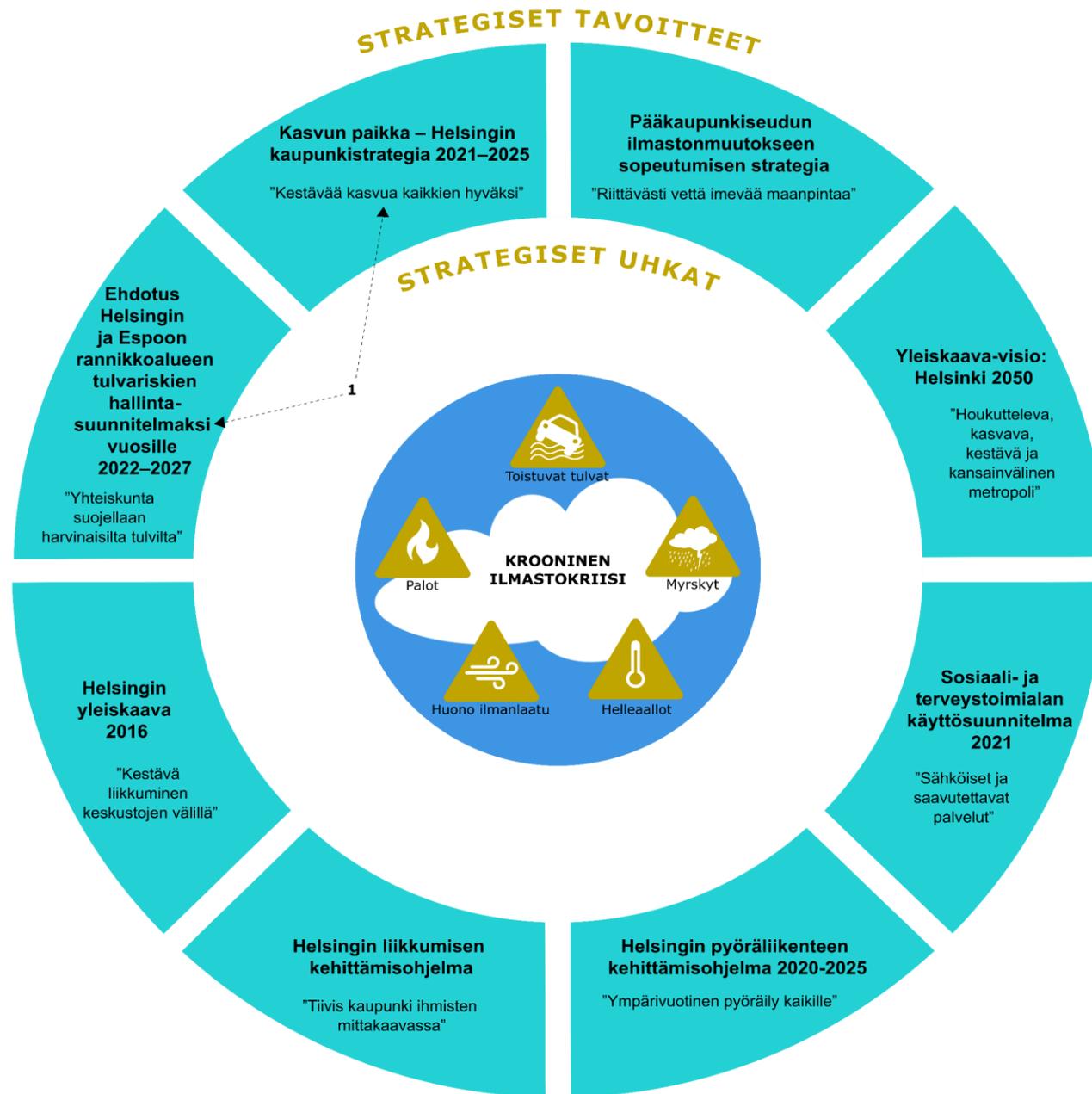
strateginen **TUTKIMUS**





Screenshots from fake newsreel





Start with a distributed stormwater management system, as it is cheaper and can be implemented in phases. Adjust the details based on lessons learned during implementation.

At the same time, start implementing and integrating a separate sewer system in phases, as the old combined sewer system will need renovation in the coming years anyway.

Develop a strategic plan for stormwater management for the city, including clear financial commitments beyond the four-year electoral cycle.

Establish and practice a management and operating model that can be applied in emergency situations.

Levels of integration



REGULATIVE
INTEGRATION



NORMATIVE
INTEGRATION



COGNITIVE
INTEGRATION



How to brace governance for climate crisis?

Create an operations group based on experts and decision-makers from different divisions and organise regular “policy operations room” exercises

Further reading about PORs

- Vihma & Hukkinen (2024) Bracing urban governance against climate crises: How to integrate high reliability into strategic decision-making? *Environmental Policy and Governance*, <https://doi.org/10.1002/eet.2129>
- Hukkinen, Eronen, Janasik, Järvensivu, & Kaaronen (2022) Coping with policy errors in an era of chronic socio-environmental crises. *Ecological Economics*, <https://doi.org/10.1016/j.ecolecon.2022.107489>
- Hukkinen, Eronen, Janasik, Kuikka, et al (2022) The policy operations room: Analyzing path-dependent decision-making in wicked socio-ecological disruptions. *Safety Science* , <https://doi.org/10.1016/j.ssci.2021.105567>
- Järvensivu, Räisänen, Hukkinen (2021). A simulation exercise for incorporating long-term path dependencies in urgent decision-making. *Futures*. <https://doi.org/10.1016/j.futures.2021.102812>