

An aerial photograph of the Vancouver waterfront, featuring a marina with numerous boats, a bridge, and modern high-rise buildings. The image is overlaid with a semi-transparent teal color. The text 'BC | Climate Resilience Summit 2026' is centered over the image. 'BC' is in yellow, 'Climate Resilience' is in white, and 'Summit 2026' is in yellow.

BC | Climate Resilience Summit 2026

Vancouver, Robson Square | March 2-3

URSA 2.0: Urban Resilience & Sustainability Alliance

Urban systems digital living Lab - Policy Studio

Who Gets the Power? Using Systems Thinking to Govern AI for Climate Resilience

Dr. Amir Albadvi
URSA Project Lead



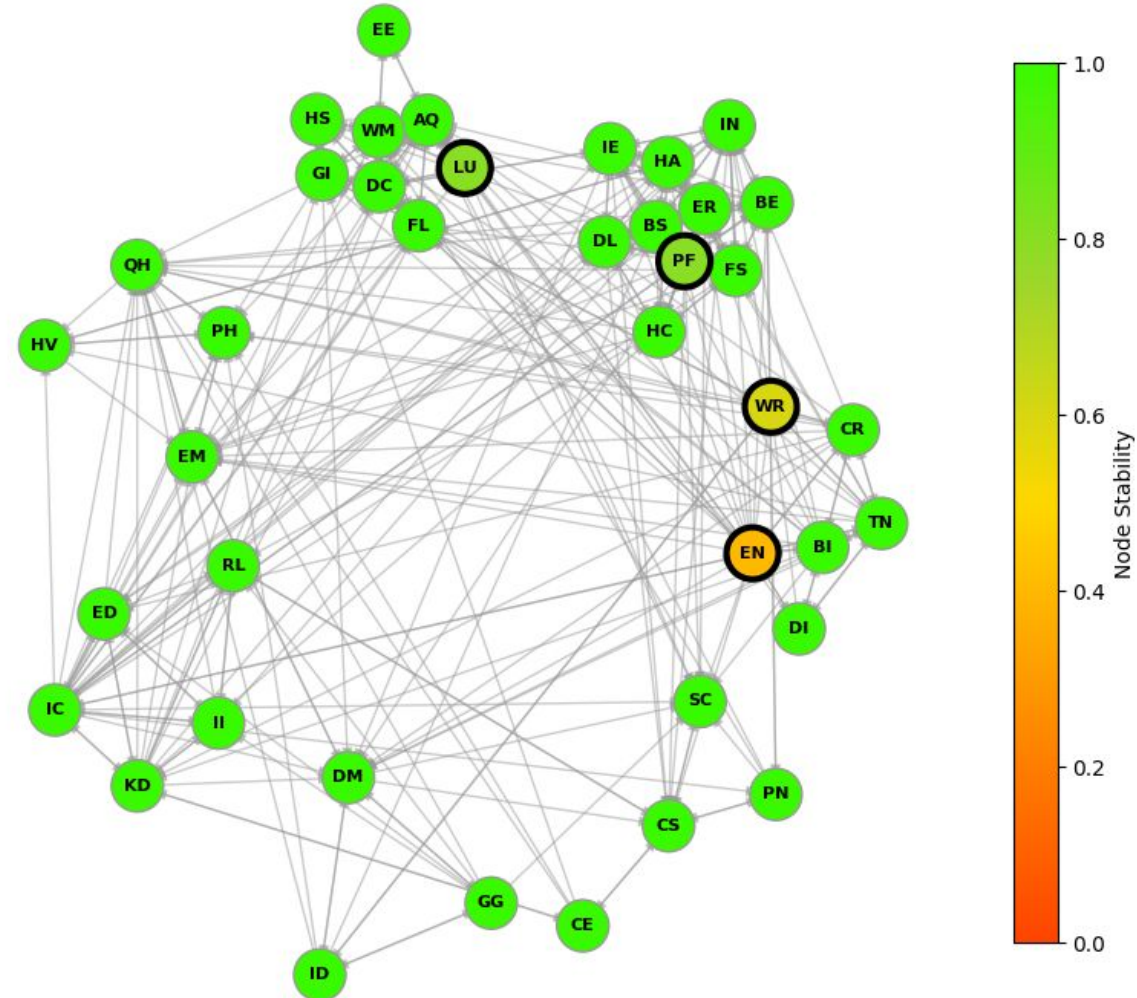
From Reactive to Anticipatory Governance

System-Level Decision for AI Infrastructure

AI Data Centers Compete For:

- Clean Electricity
- Water
- Land
- Public subsidies

What does this do to the city's overall resilience?



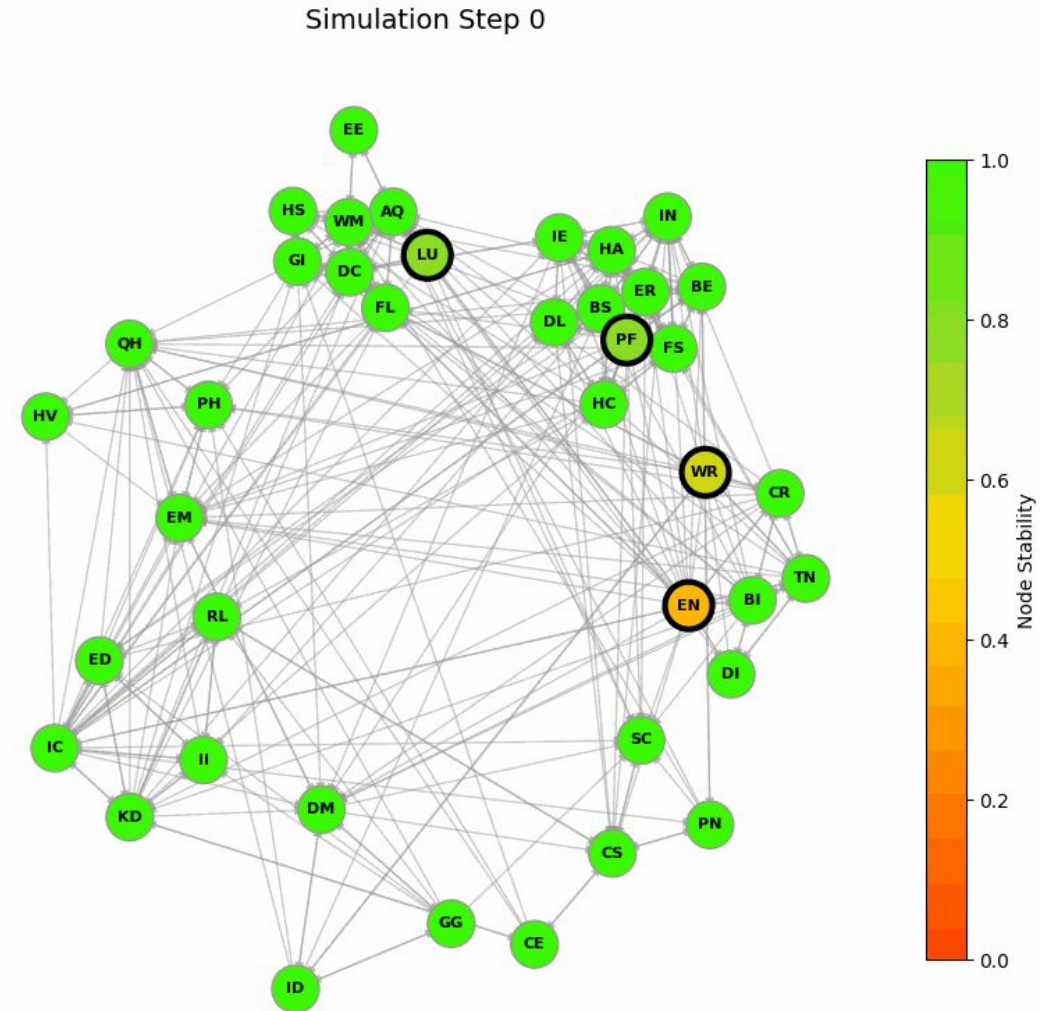
Stress Propagation: How city systems amplify shocks?

Cities are interdependent systems

Stress injected in energy propagates through:

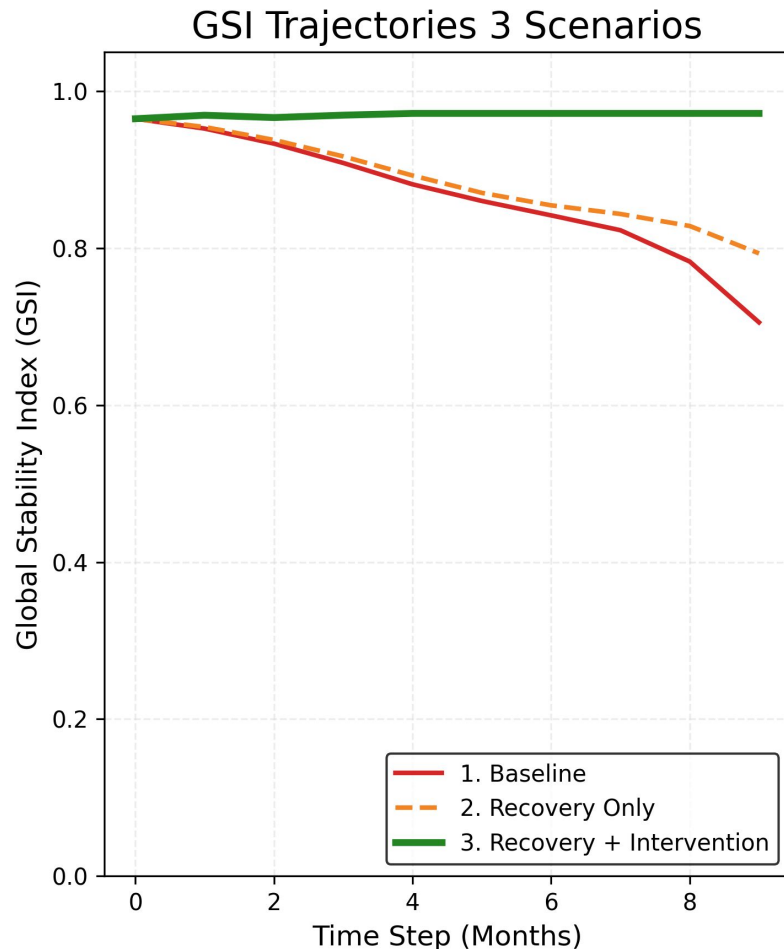
→ **Provision of Critical Services (CR)**

→ **Disaster Management (DM)**



Measuring the Impact

Small stresses can cascade into system-wide failure



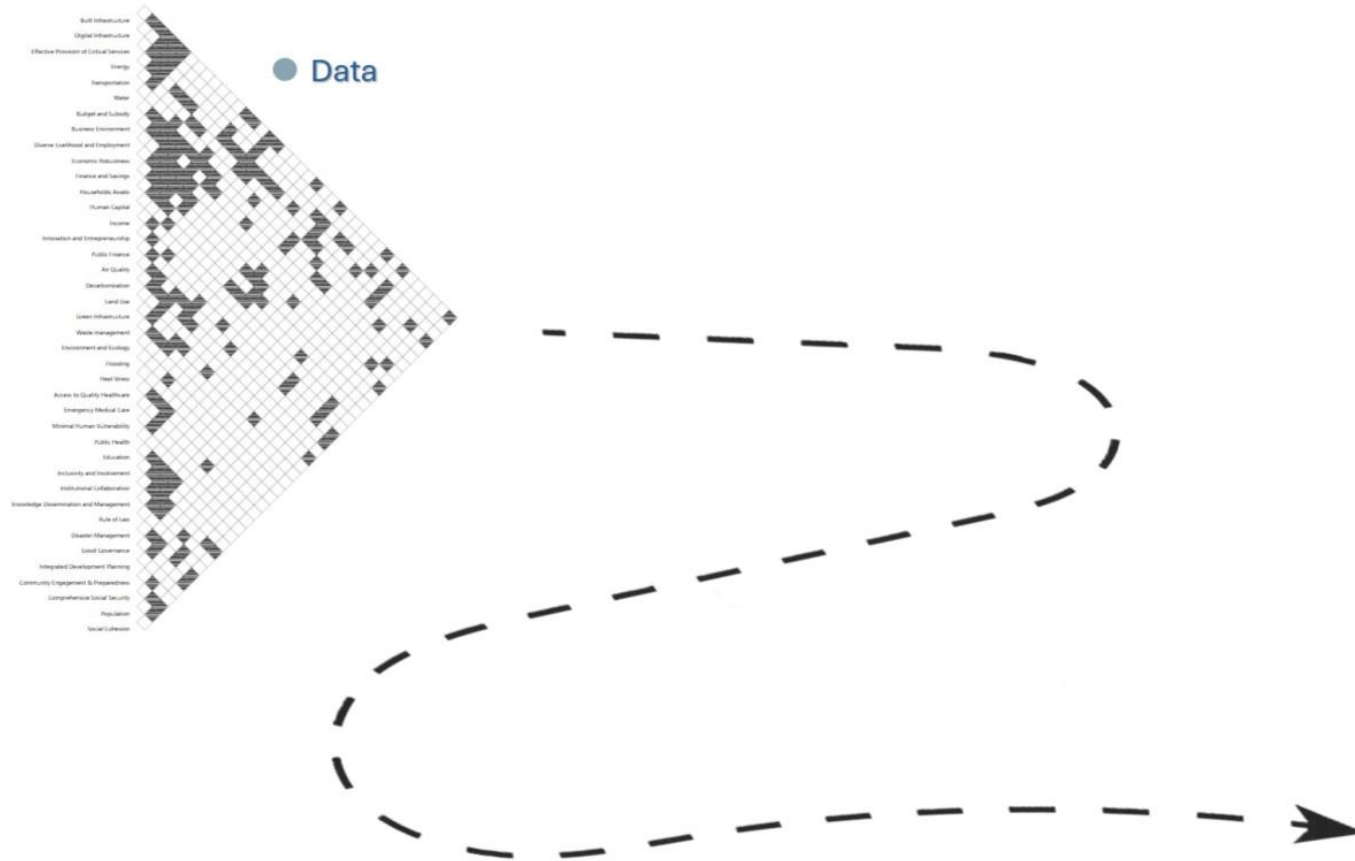
The overall health of the network is tracked using two main metrics throughout the simulation:

- **Global Stability Index (GSI):** This is the average stability score across all indicators in the network.
- **Goal:** Keep the GSI as close to 1.0 as possible. A low GSI means widespread instability.

With targeted conditions (curtailment, recycling, public fiscal neutrality), system stability holds

From Data to Policy

Conditional Approval Framework



In a climate-constrained future, infrastructure decisions are resilience allocation decisions.

Q & A

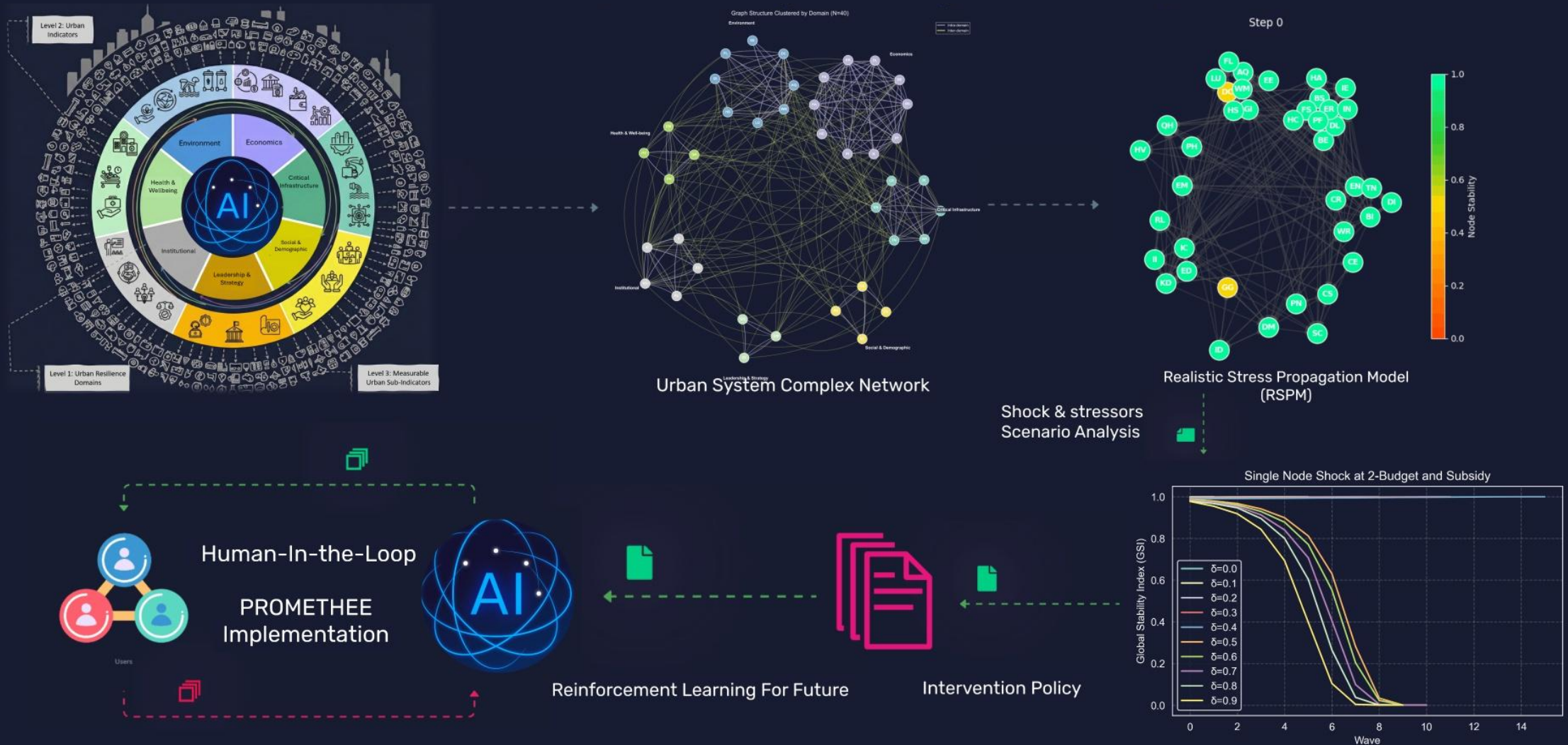
URSA 2.0 Next Step & Call to Action

If BC wants to move from reactive to anticipatory AI infrastructure governance, we need system-level stress testing before approval.

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