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ENERGY TRANSITION

Climate-4-CAST

Urban Climate Governance Framework for Climate Budgeting

Climate Budget Summit | Malmö | 01.10.2025

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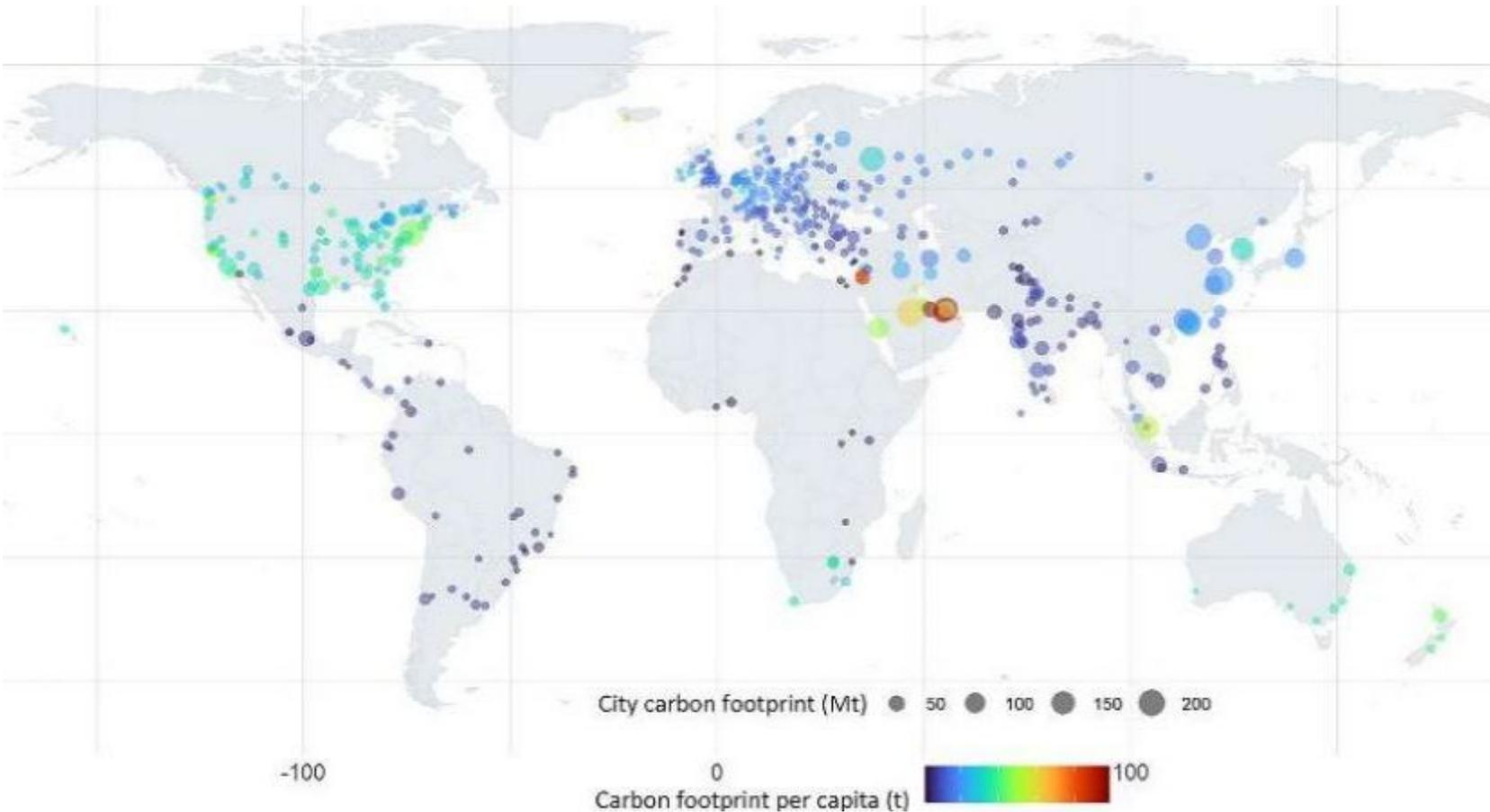


Agenda

1. Climate Change: A Global and Local Challenge
2. Urban Climate Governance
3. Tools & Approaches in Urban Climate Governance
4. Climate Budgeting as a Governance Innovation
5. Wrap-up & Reflection

Source: <https://www.tampere.fi/en/>

Climate Change: A Global & Local Challenge



Total carbon footprint and per capita footprint of global cities, 2020
Source: Sun et al. 2022, Using crowdsourced data to estimate the carbon footprints of global cities

Why Cities Matter?

- Emission hotspots
- Climate frontline

The Need for Action!

- Lead the way
- Protect the communities

How?

Urban Climate Governance

Urban Climate Governance

“Urban climate governance refers to the ways in which public, private, and civil society actors and institutions articulate climate goals, exercise influence and authority, and manage urban climate planning and implementation processes.”
(Anguelovski & Carmin, 2011)

Why Urban Climate Governance Matters?

- Multi-actor: government + stakeholders (private, civil society)
- Multi-instrumental: formal, informal, economic + organizational instruments
- Multi-level: local / intermediary city ↔ national

Governance framework:

- An “ideal” setting that provides long-term orientation and overarching umbrella for future development of the cities



Fig.: Good Governance Practice

Source: Own Illustration based on C40 Cities, 2021

Urban Climate Governance

Multilevel Governance

- Network of relationships between governmental levels, non-state actors, and organizations in climate action.
- Key idea: Climate change requires collective decision-making and shared competencies across levels.
 - ❑ **National level:** sets regulations, provides funding, supports cities
 - ❑ **Local/municipal level:** implements policies, manages local adaptation & mitigation
 - ❑ **Transnational level:** city networks (C40, ICLEI, UBC) enable knowledge-sharing and joint initiatives

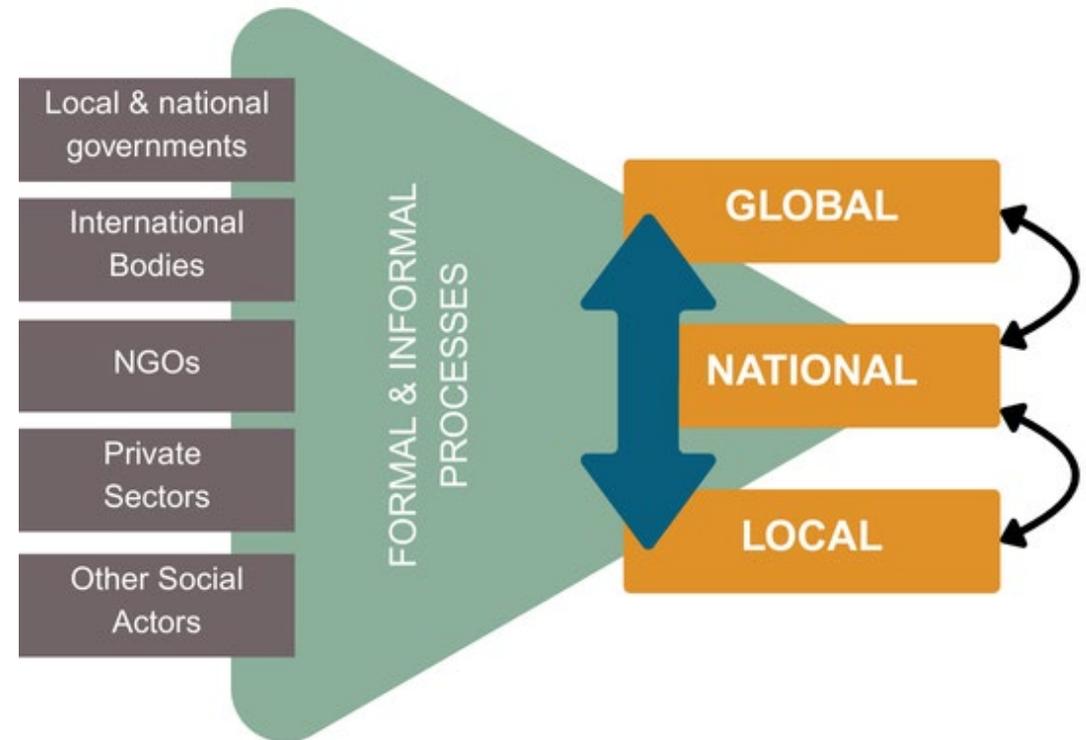


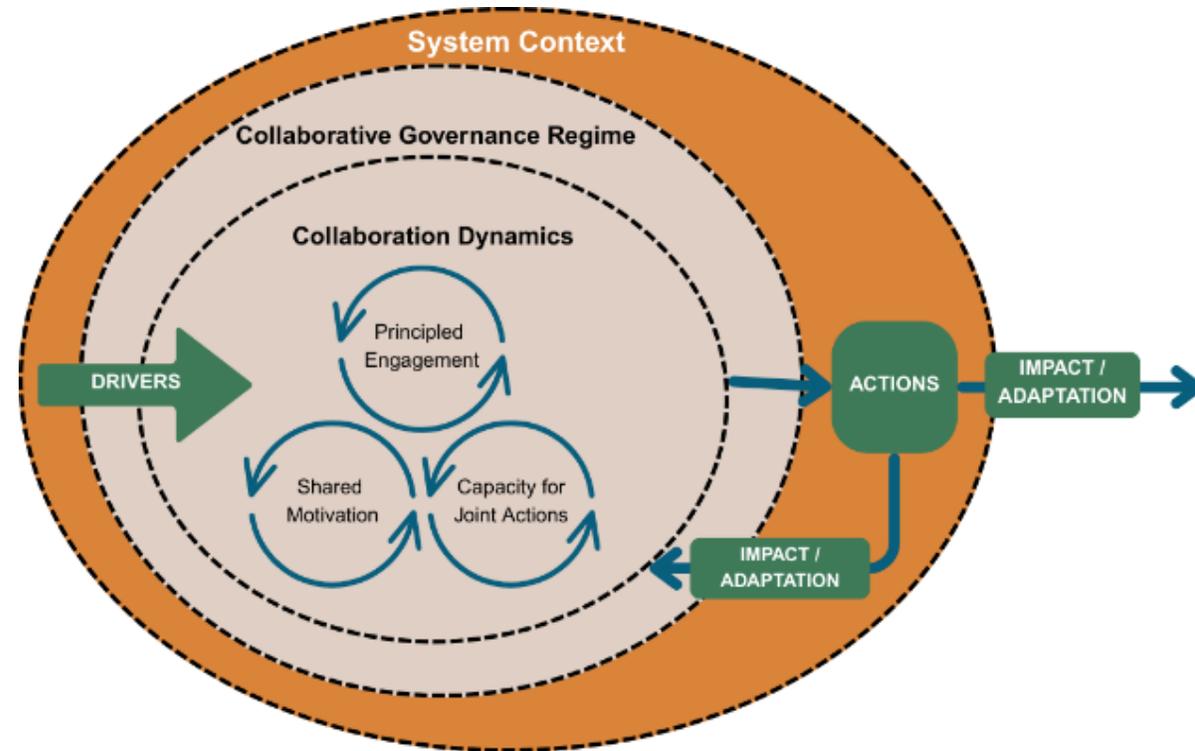
Fig.: Multilevel Governance

Source: Own Illustration based on Bulkeley et al. 2003

Urban Climate Governance

Collaborative Governance

- Public agencies engage non-state stakeholders in formal, consensus-oriented, deliberative decision-making.
- Key element
 - ❑ **Starting conditions:** consider power imbalances, incentives, and past cooperation/conflict.
 - ❑ **Design & leadership:** clearly define roles, encourage interdependence, and build networks.
 - ❑ **Collaboration process:** foster dialogue, trust, “small wins,” and commitment to shared goals.
 - ❑ **Outcomes:** achieve joint action, iterative learning, and tangible policy impact.
- **Governance as dynamic and cyclical, not linear.**



The Integrative Framework for Collaborative Governance

Source: Own Illustration based on Emerson et al. 2012

Urban Climate Governance

Challenges in Governance

Collaboration

- Power asymmetries, conflicting interests, unequal representation
- Lack of resources and social dialogue tools

Multilevel governance

- Misalignment between national, regional, and local government
- Leads to delays, inefficiencies, and incoherent policies

Source: Shtjefni, et al. (2024)

Tools & Approaches in Urban Climate Governance

When did cities start acting on climate?

- **Early Voluntary Initiatives (Pre-1990s):** Cities began engaging in climate action through awareness campaigns, pilot projects, and local environmental programs.
- **Formalization and Regulation (1990s–2000s):** Establishment of UNFCCC laid the groundwork for cities to adopt more structured climate policies.
- **Integration into Urban Planning (2000s–2010s):** Cities incorporating climate considerations into urban planning, developing comprehensive climate action plans, setting emissions reduction targets, and implementing sustainability initiatives.
- **Current Trends (2010s–Present):** Growing emphasis on operationalizing climate action to reach climate targets

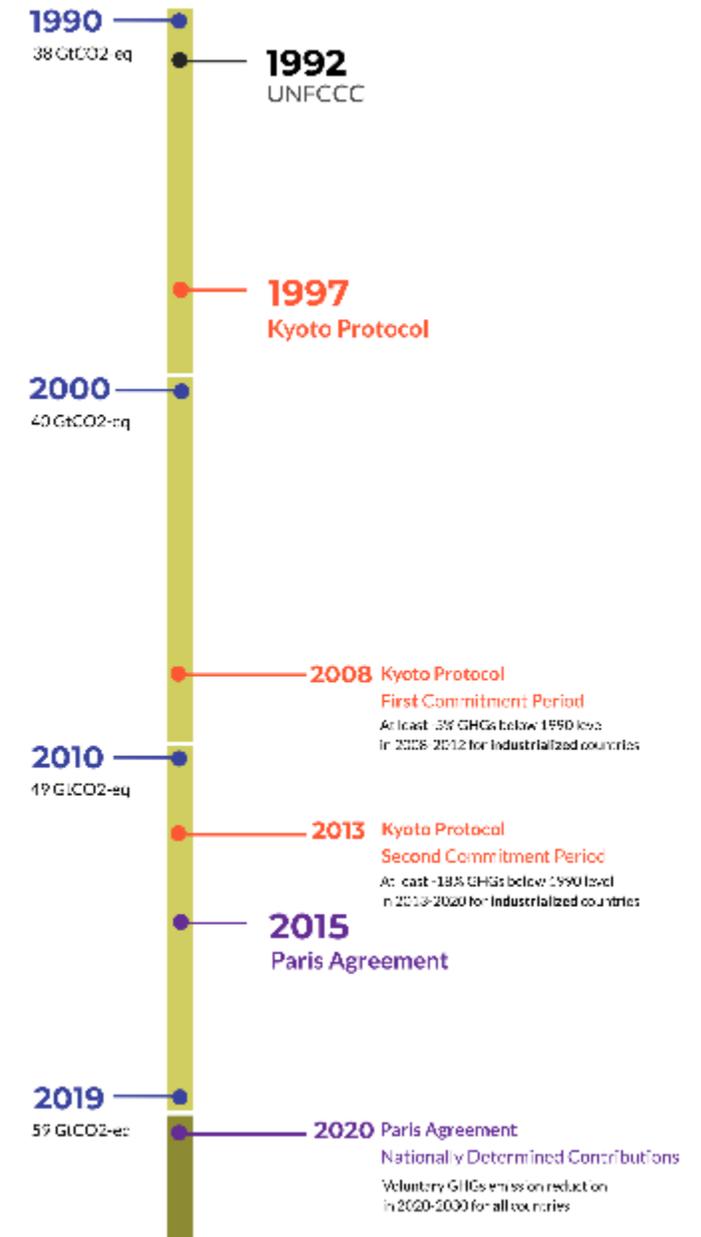


Fig.: Key Milestones of Climate Action

Tools & Approaches in Urban Climate Governance

Climate Change Mitigation in Cities: Voluntary vs Regulatory

- Voluntary commitments
- Regulatory Tools
- Transnational networking
- Infrastructure investment
- Collaborative governance
- Innovative tools

Voluntary / Soft Tools	Regulatory / Hard Tools
Emissions goals & pledges (e.g., net-zero by 2030/2040)	Laws & regulations (building codes, emission standards)
Climate Action Plans (CAPs), often non-binding, Climate Budgeting	Mandatory reporting (GHG inventories)
Partnerships & networks (C40, ICLEI, Covenant of Mayors)	Zoning & land-use planning
Participatory Budgeting, Citizen participation, stakeholder dialogues	Financial instruments: carbon pricing, green bonds, subsidies, PPPs
Knowledge-sharing & experimentation (Living Labs, pilot projects)	Integration of targets into legal / financial frameworks
Sources: van der Heijden 2019; Haarstad et al. 2024; Shtjefni et al. 2024; Barrett et al. 2024.	



MENTIMETER SURVEY

For the cities and administrations, what are the biggest challenges that you face with climate governance?



Source: <https://nomadenstory.de/reiseberichte/oslo-eine-woche-in-norwegens-hauptstadt/>

Key Challenges Cities Face

Implementation Gaps:

Cities announce ambitious goals, but actions lag due to weak budgets, limited technical capacity, and siloed department structure

Frontrunner paradox: a few innovative cities skew perception of broader capacity

CAPs often focus on planning rather than measurable interventions

Capacity and Resources:

Smaller cities: lack skills, staff, and financial capacity

Larger cities: complex stakeholder networks and institutional barriers

Capacity-building is a critical need

Data and Transparency:

Limited harmonized GHG inventories and reporting; weak monitoring of climate outcomes

Reduces accountability and evidence-based decision-making

Climate Budgeting: A Governance Innovation

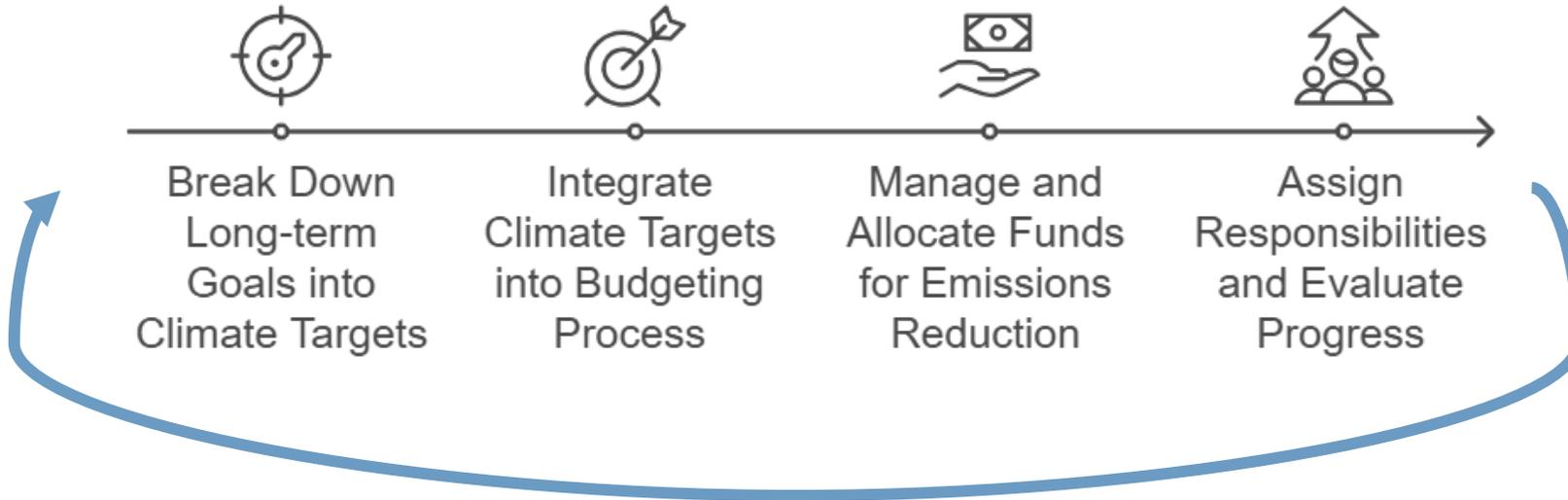
Linking Challenges to Needs

- **Implementation Gap** → Operationalize climate actions by identifying and closing delivery gaps
- **Budget Misalignment** → Systematically align climate targets with financial planning and resource allocation
- **Silos in Governance** → Integrated, cross-departmental collaboration to accelerate action
- **Transparency Deficit** → Robust monitoring and reporting to show the real impact of policies
- **Capacity Shortfalls** → Strengthen municipal expertise, data access, and decision-support tools



Climate Budgeting: A Governance Innovation

Climate Budget: What?



Source: Illustrated by the author from C40 Cities (2024): Climate budgeting – Transforming governance to mainstream climate action

Climate Budget: Why?

Effective climate action

Enhanced accountability

Facilitated collaboration

Link financial budget to climate target

Source: Illustrated by the author from Robertsen, C. (2023): Climate budgeting at local level. Directorate-General for Economic and Financial Affairs.

Wrap-up & Reflection

Urban Climate Governance

Multi-Actor

Multi-level

Dynamic and Evolving

Climate Budgeting as a Governance Tool

Addresses uncertainties in emissions impacts, costs, and timing

Strengthens municipal capacity to take bold, data-driven decisions for climate action

Provides a scalable framework that other cities can adopt for neutrality



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Thank you for your attention!

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