

Local Dimensions of Climate and Environmental Planning Action

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Quick Introduction

Interdisciplinary research at the intersection of local institutions/governance, climate/environmental politics, and socioeconomic justice/equity.

- Particular focus on climate adaptation and resilience
- Comparative (including N/S, local-global)
- Mixed-methods (qualitative, action research, and policy relevance).



Setting the Scene

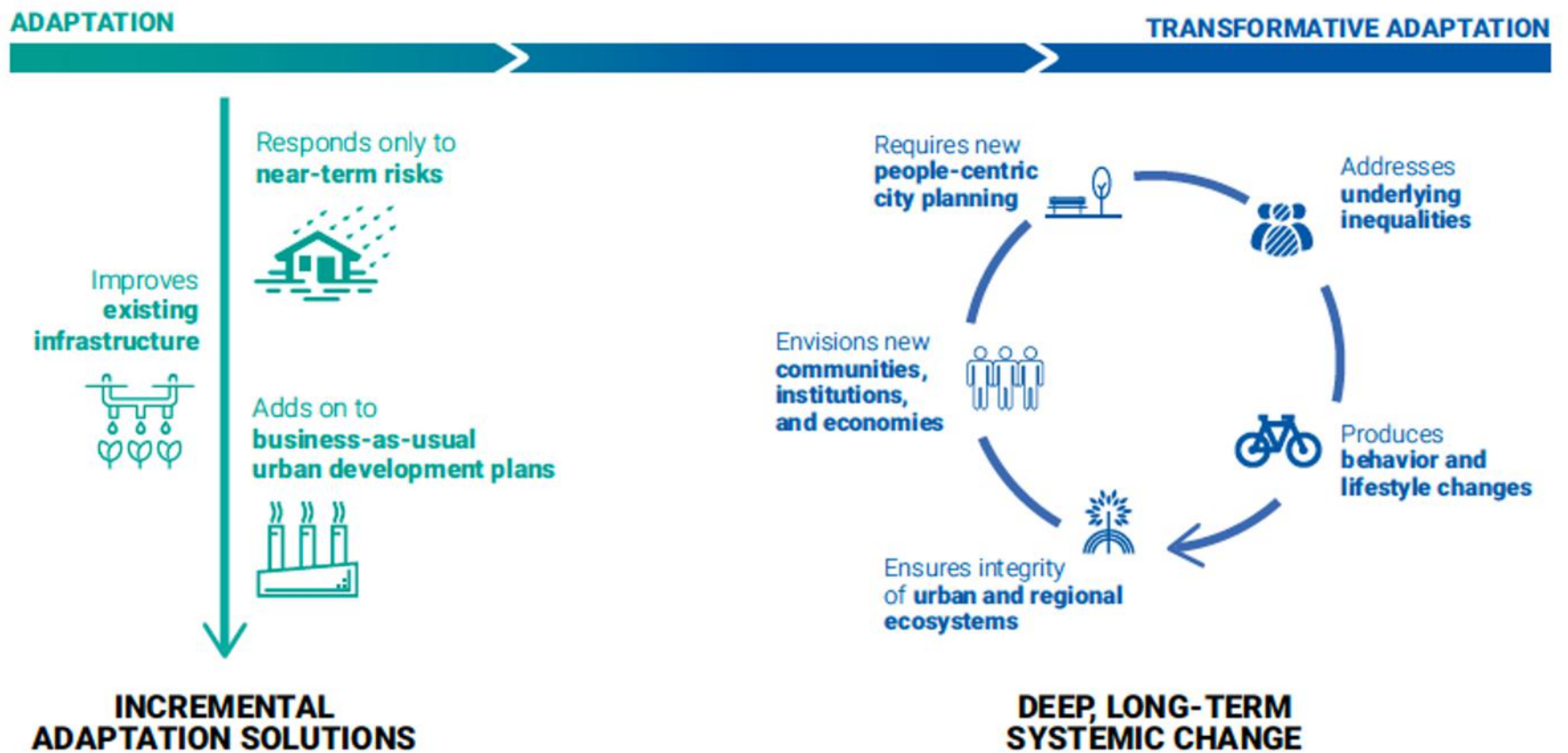
In the forthcoming *IPCC Sixth Assessment Report (2021-2022)*, **wildfire**, **air pollution**, and **extreme heat** are key risks for:

- Key sectors: built environment, housing, human health, transport infrastructure, agriculture, economies and services, as well as forestry and agricultural systems.
- North America region: extreme heat (*all regions, high confidence of increase*), wildfire (*all regions, medium to high confidence of increase*), air pollution (*most regions, medium confidence of increase*).

Moving from business-as-usual to transformative action...

FIGURE ES-1

Incremental vs. Transformative Urban Adaptation to Climate Change



Source: Chu, Eric, Anna Brown, Kavya Michael, Jillian Du, Shuaib Lwasa, and Anjali Mahendra. 2019. *Unlocking the Potential for Transformative Climate Adaptation in Cities*. Background Paper Prepared for the Global Commission on Adaptation. Washington, DC and Rotterdam. <https://wrirosscities.org/research/publication/unlocking-potential-transformative-climate-adaptation-cities>.

Communities as 'laboratories' of environmental action:

How are emerging priorities around mitigating wildfire-induced air pollution being learned, integrated, and implemented in ways that are sustainable, resilient, and transformative?

- Motivations, incentives, and ideologies of the design of air pollution mitigation actions.
- Evaluating implementation outcomes, particularly in terms of equity and justice.
- Localities as testing grounds for radical change.



Methodology

Focus on policy-engaged science and the interface between scientist, policy-maker, and citizen.

- Interviews, focus groups, workshops, and design/planning charrettes around risk, policy response, local engagement, and capacity/resource support.
- Analysis of documents, maps, and local histories.
- Games and simulations to support citizen engagement and policy-making.



Example: comparative case studies and the distillation of policy-relevant insights and lessons.

FIGURE 7

Urban Planning with Nature-based Solutions for Climate Adaptation



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Source: Chu, Eric, Anna Brown, Kavya Michael, Jillian Du, Shuaib Lwasa, and Anjali Mahendra. 2019. *Unlocking the Potential for Transformative Climate Adaptation in Cities*. Background Paper Prepared for the Global Commission on Adaptation. Washington, DC and Rotterdam. <https://wrirosscities.org/research/publication/unlocking-potential-transformative-climate-adaptation-cities>.

Potential Outputs

- Understanding institutional context, political drivers, and enablers/constraints of innovative action.
- Supporting decision-making at the local/regional levels.
- Scaling-up insights for implementation in other contexts.

TABLE 4 Key Enabling Conditions for Transformative Climate Adaptation in Cities

KEY ENABLING CONDITIONS	DETAILS
Strong leadership	Knowledgeable and visible issue leaders in local government, community-based organizations, or the scientific community can help raise awareness and advocate for resources and capacity. They can drive collaborative action across multiple levels of government and jurisdictions.
Inclusion and equity	Adaptation plans and actions must address historic inequities and varying degrees of vulnerability across cities by including marginalized communities in decision-making; distributing future losses and benefits in fair and equitable ways; and recognizing nondominant cultures, values, interests, and norms in determining which actions to take.
Finance and local capacity	Adaptation plans can support and pool resources from public finance (including intergovernmental transfers), private investments, multilateral support, and local/community-based financing. A combination of these sources can then help target the costs and demands of transformative adaptation by improving infrastructure; alleviating poverty; protecting human health and the environment; and building dedicated skills and capacity across public, private, and civil society organizations. These actions can be further supported by new actors, such as insurance/reinsurance providers or philanthropic entities.
Synergies across scales	Adaptation priorities should align with global priorities, such as those set out by the Sustainable Development Goals (SDGs), Paris Agreement, the New Urban Agenda (UN-Habitat III), Sendai Framework for Disaster Risk Management, and others. This will help attract resource/capacity support, increase knowledge and awareness, and draw attention to the need for fairness in transformative adaptation.
Knowledge, data, and partnerships	Meaningful, localized information and empirical evidence must be available to decision-makers across scales and partnerships to enhance the adoption and spread of new ideas and practices. Partnerships and city-to-city peer exchanges can help scale up good practices.
Evaluation and learning	Emerging technologies make it easier to launch, monitor, and share information about climate adaptation projects. Evaluating outcomes in a participatory and inclusive way is critical for drawing and comparing lessons across cases, understanding the conditions under which specific actions work, and assessing the impacts on different socioeconomic groups.
Accountable institutions and governance	Strong, accountable, informed, and equitable institutions can translate scientific data into appropriate actions, matching adaptation to local needs; ensuring democratic decision-making; and promoting financial, social, and political accountability. Institutions can also work across mandates to promote integration.