

# 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).



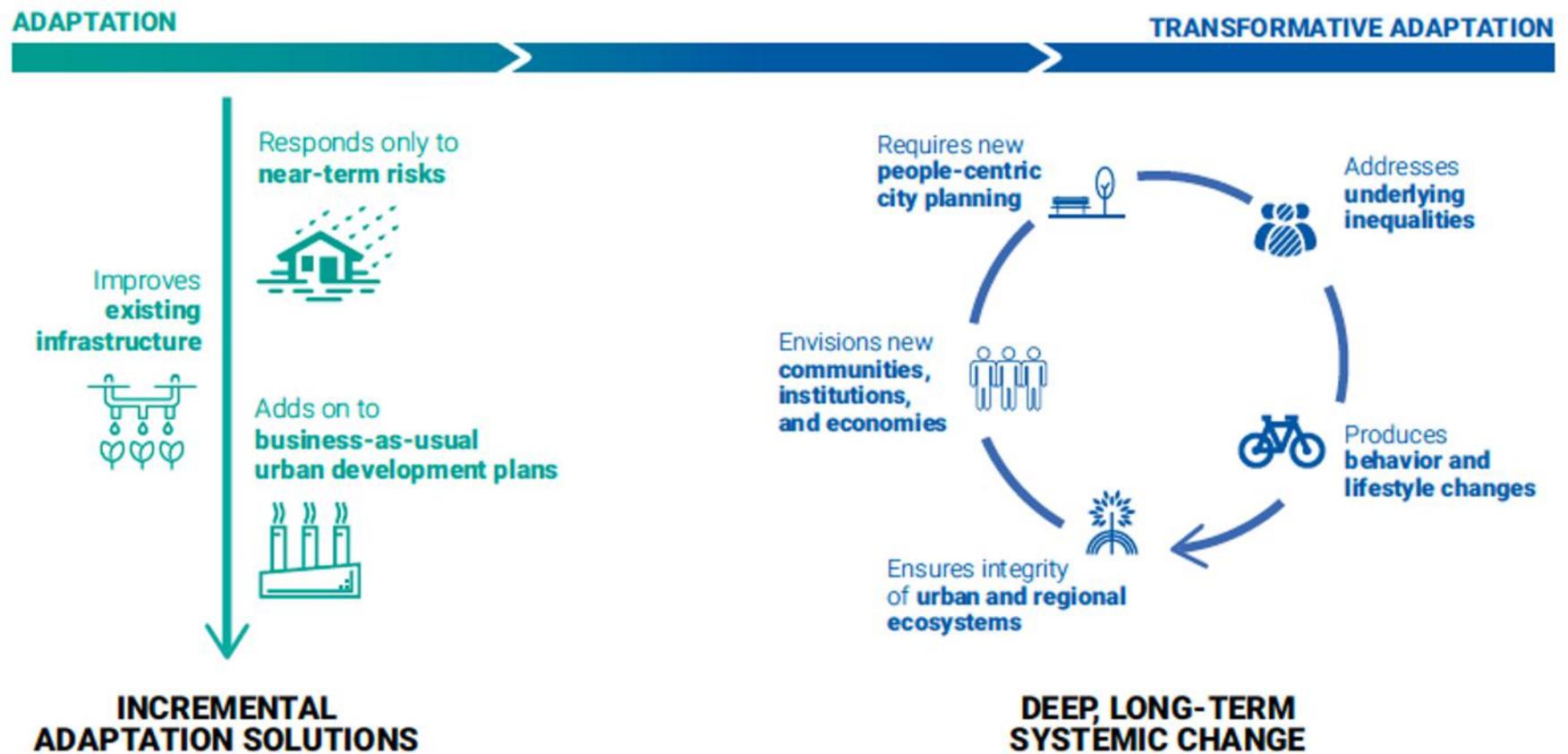
# Setting the Scene

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
<b>Strong leadership</b>	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.
<b>Inclusion and equity</b>	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.
<b>Finance and local capacity</b>	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.
<b>Synergies across scales</b>	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.
<b>Knowledge, data, and partnerships</b>	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.
<b>Evaluation and learning</b>	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.
<b>Accountable institutions and governance</b>	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.