

Strengthening Urban Resilience with Climate Adaptation

June 14
9am




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TODAY'S
Agenda



Opening Remarks & Introductions



Climate Change and Urbanization



USAID Technical Guidance



Introducing the C40 Cities
Finance Facility



Audience Q&A



Closing Remarks

Meet Today's Speakers



Ann Vaughan
Senior Advisor for
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Kevin Nelson
Urban Governance
Lead | USAID



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**Resilience and Climate
Adaptation Advisor**

USAID, Center for Resilience



Ann Vaughan

**Sr Advisor for Climate Change,
PREPARE Co-Lead
RFS, USAID**



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Climate Change and Urbanization

- ✓ By 2045, the world's urban population will increase by 1.5 times to 6 billion.
- ✓ Climate change is increasingly playing a role in migration to cities.
- ✓ People living in informal settlements are already in vulnerable situations that are compounded by climate-related and other disasters.



“Resilience is the ability of people, households, communities, countries, and systems to mitigate, adapt to, and recover from shocks and stresses, including those resulting from climate change, in a manner that reduces chronic vulnerability and facilitates inclusive growth”

Adaptation for Resilient Cities

- ✓ Climate risks can't be eliminated, but with effective adaptation, the negative impacts on people and economies can be reduced.
- ✓ USAID's urban adaptation work supports the Agency's broader efforts to build resilience to shocks and stressors particularly in vulnerable populations.
- ✓ Strengthening resilience, including through climate adaptation, can help sustain the well-being of cities during crises.



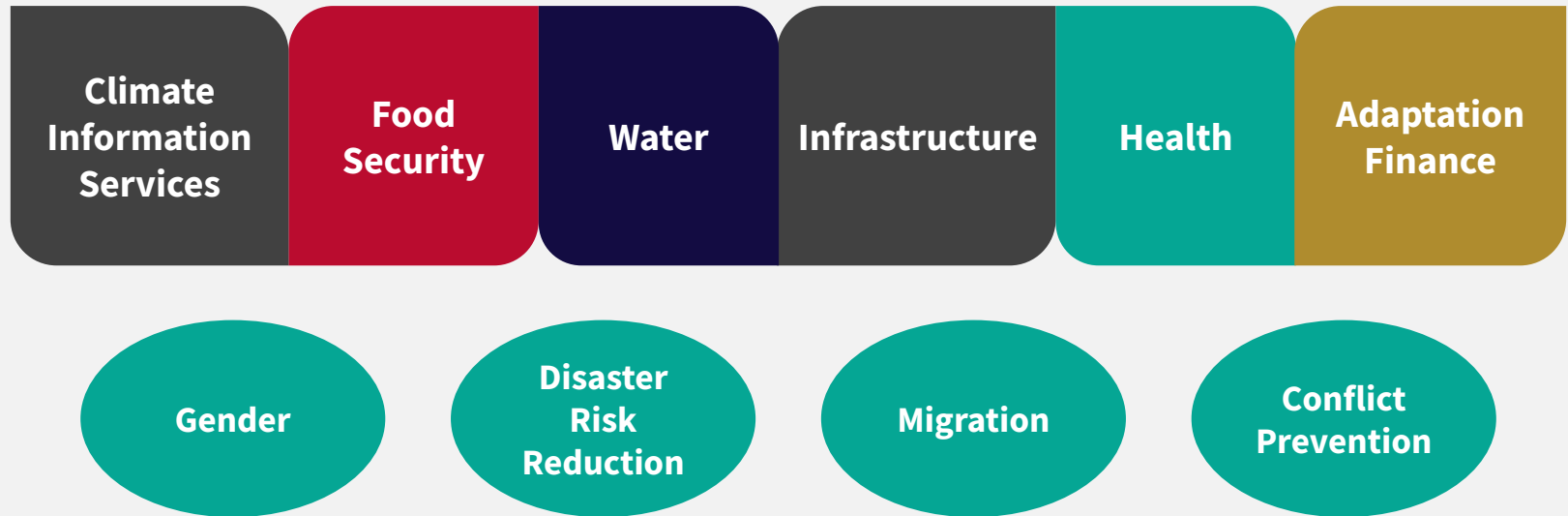
At COP26 in November 2021, President Biden announced PREPARE

The President's Emergency Plan for Adaptation & Resilience

A coordinated, whole-of-government approach that brings together the diplomatic, development, and technical expertise of the United States to **help more than half a billion people in developing countries adapt to and manage the impacts of climate change by 2030**

Areas of Focus Within PREPARE

UNFCCC Definition of Adaptation: Human-driven adjustments in ecological, social or economic systems or policy processes, in response to actual or expected climate stimuli and their effects or impacts.

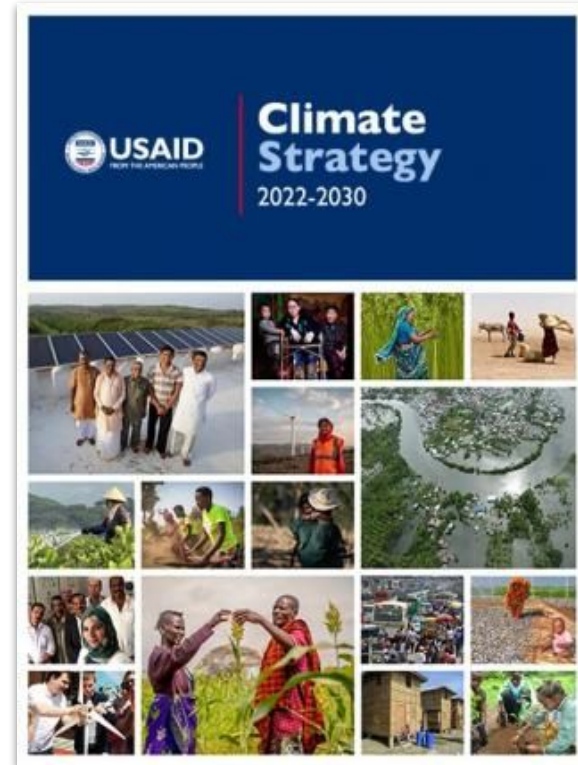
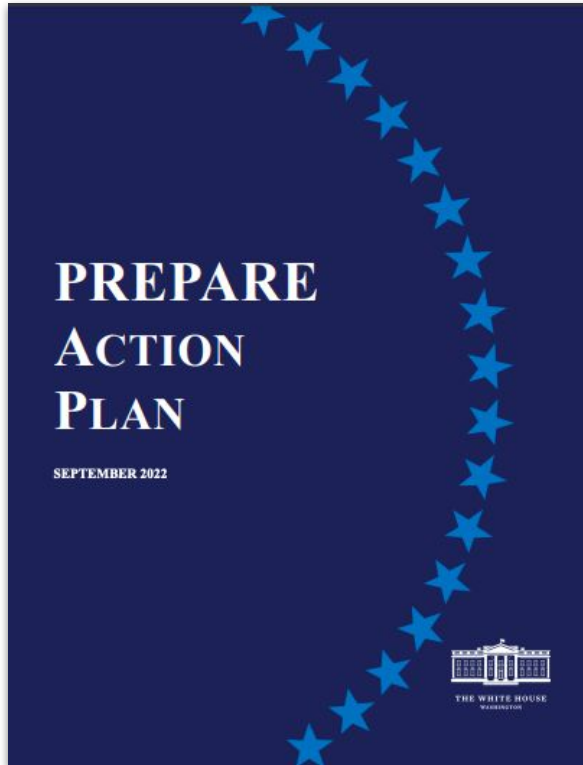


Urban Resilience and PREPARE— What's in the PREPARE Action Plan?

Pillar 2 Plans and Programs for Infrastructure (Illustrative)

- Strengthen decision maker capacity to understand, integrate, and plan for climate risks in infrastructure planning and decision making in partner countries at national, subnational and community levels, with an emphasis on urban systems.
- Support the use of climate data and risk information, not just historical data, for urban and land use planning, zoning, infrastructure planning, permitting, and decommissioning.
- Identify and support nature-based infrastructure solutions, including through urban policies and planning, which support resilient infrastructure and can have other co-benefits (e.g., greenhouse gas emissions reduction).

Urban Resilience & Our Climate Ambition





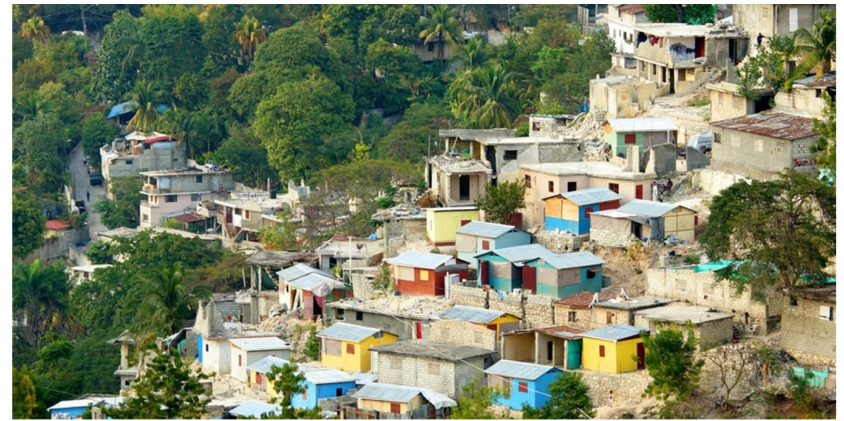
Kevin Nelson

Urban Governance Lead
USAID, Bureau of Development,
Democracy, and Innovation

USAID Urban Resilience Technical Guidance

April 2023

- ✓ Case for urban resilience
- ✓ Approaches and building blocks
- ✓ Key questions



Sector Guides

- ✓ Governance
- ✓ Health
- ✓ Power



Key Definitions



URBAN SYSTEMS

1. People and communities,
2. Infrastructure and the natural environment, and
3. The cultures, norms, and policies in cities and towns



URBAN RESILIENCE

The ability of urban systems to mitigate, adapt to, and recover from shocks and stressors in a manner that reduces chronic vulnerability while positively transforming towards sustainable, equitable, and inclusive development.



SHOCKS & STRESSORS

Shock: Sudden onset event, e.g. a disaster

Stressor: generally slow, constant event, like a long-term drought

Climate change as well as other sources such as rapid urbanization, pandemics, or conflict can lead to both shocks and stressors

How to Strengthen Urban Resilience?

Building Blocks. The Framework identifies five building blocks that represent cross-cutting approaches to strengthen the resilience of urban systems:



Key Questions

- ✓ Resilience to what?
- ✓ Resilience for whom?
- ✓ Resilience through what?
- ✓ Resilience to what end?



GOVERNANCE SECTOR EXAMPLES



SURGE ● ● ●

Strengthening Urban Resilience for
Growth with Equity in the Philippines

COASTAL CITY ADAPTATION ● ● ●

Increase coastal resilience to
climate change in the country's
secondary cities in Mozambique

GOVERNANCE SECTOR APPROACHES



Commit to Coordinate

Build capacity for and commitment to coordinated action across government



Strengthen Inclusion

Ensure the most vulnerable voices are heard and benefit from activities



Policy & Regulation

Improve integration and coherence of relevant policies and regulations



Strengthen Civil Society

Generate demand for government transparency

HEALTH SECTOR EXAMPLES



(Photo by Eduardo Munoz Alvarez/Getty Images)

BUILDING HEALTHY CITIES ● ● ●

Systems strengthening to build a new vision for healthy urban planning

CLEAN AIR CATALYST ● ● ●

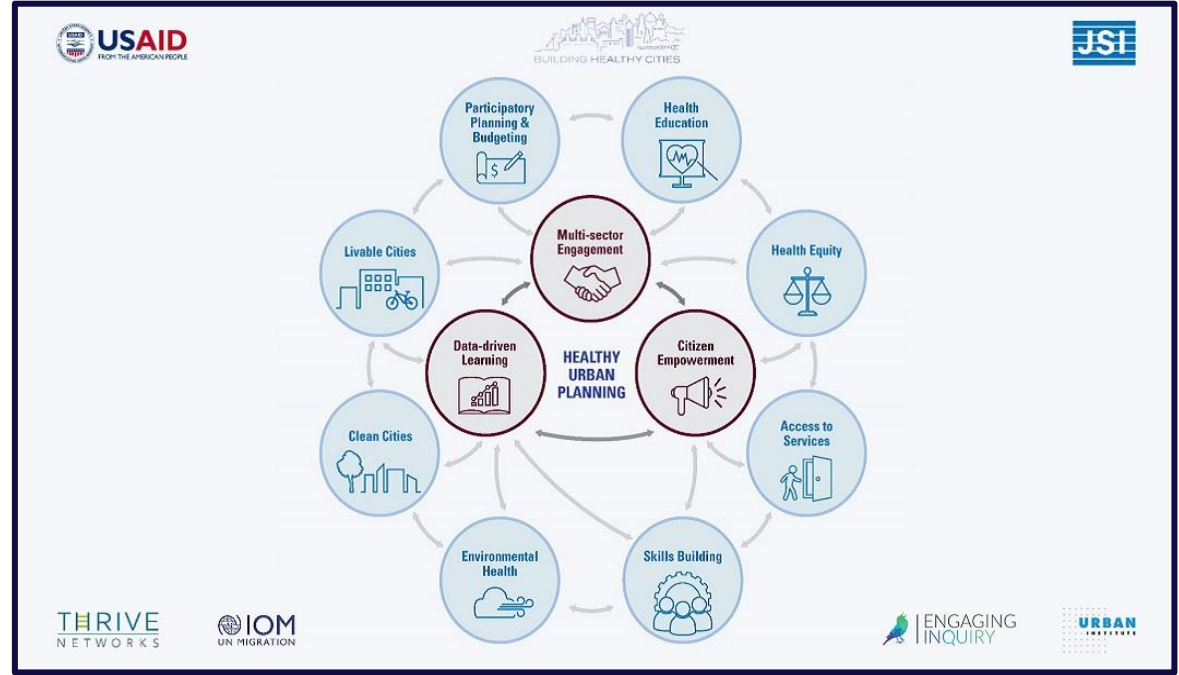
Work with local communities to identify, test, accelerate, and scale solutions for cleaner, healthier air

CLEANER AIR & BETTER HEALTH ● ● ●

Strengthen air pollution mitigation for a cleaner environment and healthier population

BUILDING HEALTHY CITIES

- Systems-thinking approach to help city planners and administrators build relationships with citizens and civil society organizations and create traceable, transparent, and collaborative policy initiatives.
- Urban Resilience in Indore:
<https://www.thinglink.com/scene/1553495320258674691?buttonSource=viewLimits>
- Healthy Urban Planning:
<https://youtu.be/8Y-jR038Zig>



POWER SECTOR EXAMPLES



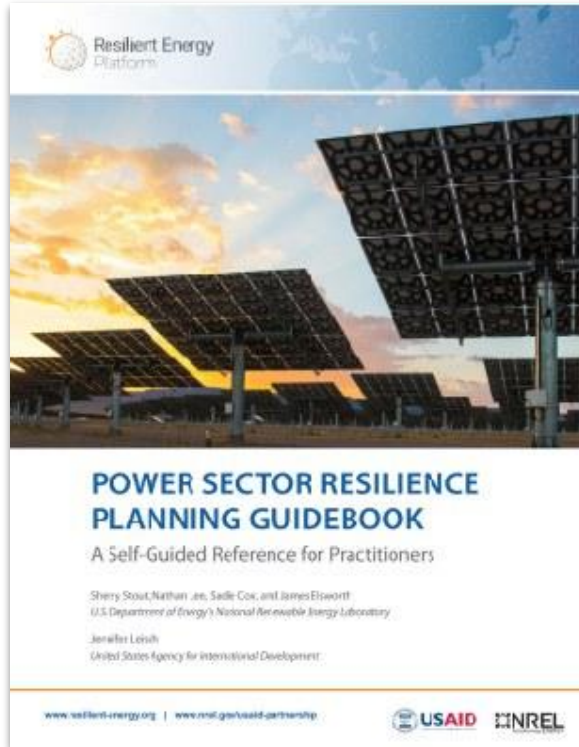
Vietnam Urban Energy Security ● ● ●

promotes deployment of advanced, distributed energy solutions such as rooftop solar, electric vehicles, waste-to-energy, and other energy efficiency solutions in urban areas

Ghana's Integrated Resource and Resilience Planning ● ● ●

promote better understanding of climate change implications for the power sector and identify key metrics to measure resilience

POWER SECTOR TOOLS



- The enhancement of resilience to disasters and climate change in the Caribbean through the modernization of the energy sector
- “Energy Resilience Takes on Renewed Urgency.”



Rob Short

CFF Senior Project Advisor
GIZ



Rahel Herrman

CFF Project Manager
GIZ

Introducing the C40 Cities Finance Facility



2020 UNFCCC Global Climate Action Award

Winner in the category: *Financing for Climate Friendly Investment*



2022 included as leading infrastructure initiative by G7 members

Development Ministers Communiqué 2022 + 2023



Federal Ministry
for Economic Cooperation
and Development



UK Government

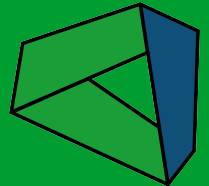


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The key pillars of CFF support



Financial Readiness

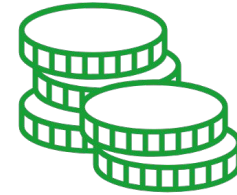
Finance readiness both for the project and the implementing institution/city administration.

Addressing the deadlock
in urban finance



Replication and Upscaling

Strengthen cities at an institutional level to foster scale up of existing projects or replicate projects in cities in the C40 network and beyond. Measures include capacity development and knowledge work.



Link to Finance

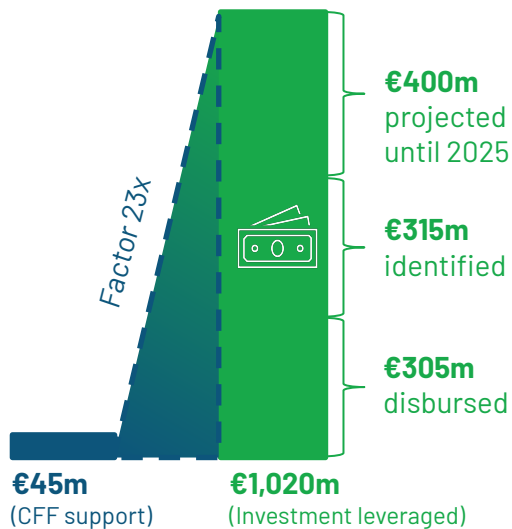
Supporting cities in political processes and the negotiations with financial institutions.



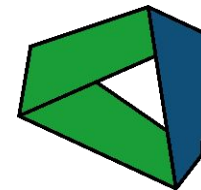
Mainstreaming Equity & Inclusion

Addressing the needs of vulnerable groups, creating co-benefits, emphasizing gender aspects ...

Over \$1bn climate finance leveraged

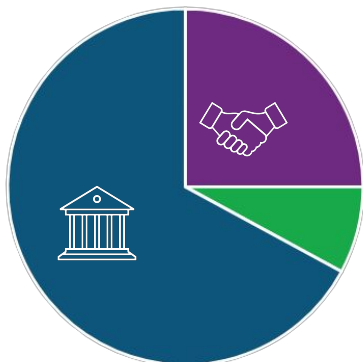


Public + private finance solutions for CFF projects



Public:
408 Mio. €

Blended/ PPP's:
164 Mio. €



Private:
48 Mio. €



Curitiba (energy)
financed from municipal budget



Durban (riverine management)
Blended: OPEX (~90%, Public),
CAPEX (~10%, Private)



Monterrey (electric BRT)
Blended: Leasing with private
loan for e-buses

Jakarta (E-bus)
Blended: Buy-the-service PPP



Bogotá (Bike sharing)
Private: Investment by
private operator

CFF Impacts

2.5 Mio. tons CO₂ emissions reduced
(projected, CO₂ - equivalent). This is equal to:



680 large wind turbines, or
(savings from one year of operations compared to US energy mix)



6,3 large-scale gas power plants, or
(emissions from one year of operations)



78.125 electric cars
(savings by switching from petrol to electric cars)



**2 million people benefiting
from increased resilience**

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CFF in practice



Previous project: Durban / eThekweni Municipality

Transformative Riverine Management Project (TRMP)

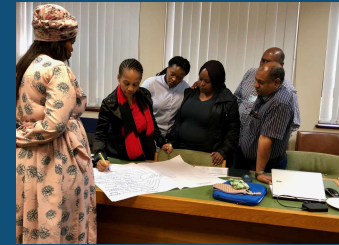
Expand river management to all 7,400km of streams and rivers to strengthen communities' resilience to the effects of climate change.



750,000 individuals
benefitting from increased
resilience



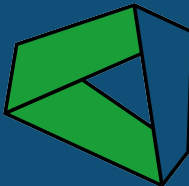
Est. Project Volume: **\$90M**
(infrastructure only)



- Flagship project of international significance, developed with extensive stakeholder consultation and ownership
- Creation of community-led cooperatives for waste-removal and management, employing local disadvantaged populations
- Co-benefit: Creation of >10,000 jobs
- Development of equity and inclusion principles, implemented in the whole project

„CFF has provided invaluable support [...] to tackle crosscutting issues such as climate change and riverine management across different departments while paying attention to social inclusion.“

Joanne Douwes
Manager of Policy and Implementation, Environmental Planning and Climate Protection Department



Current CFF supported adaptation projects

4 Cities, 4 Projects, 2 Regions: Africa and Latin America,



Cape Town



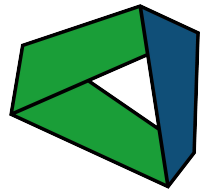
Drakenstein



Medellín



Salvador



Cape Town:

Green Infrastructure for Liveable Urban Waterways

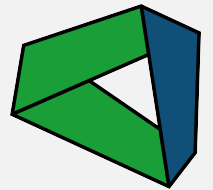
- **Crisis to resilience:** from preventing droughts ("Day Zero") and mitigating floods to re-establishing community relationships with the city's waterways.
- Strong policy and institutional response (including a resilience strategy and vision for water sensitive city). Trying to **break down silos**.
- Development of the liveable urban waterways programme, **integrating Nature-based Solutions** (including wetland building and restoration, improving biodiversity in attenuation ponds, access to green spaces, improving water quality, riverbank restoration).
- **Making the link:** how climate change adaptation projects, integrating NbS, support basic service delivery at municipal level.



Before



After



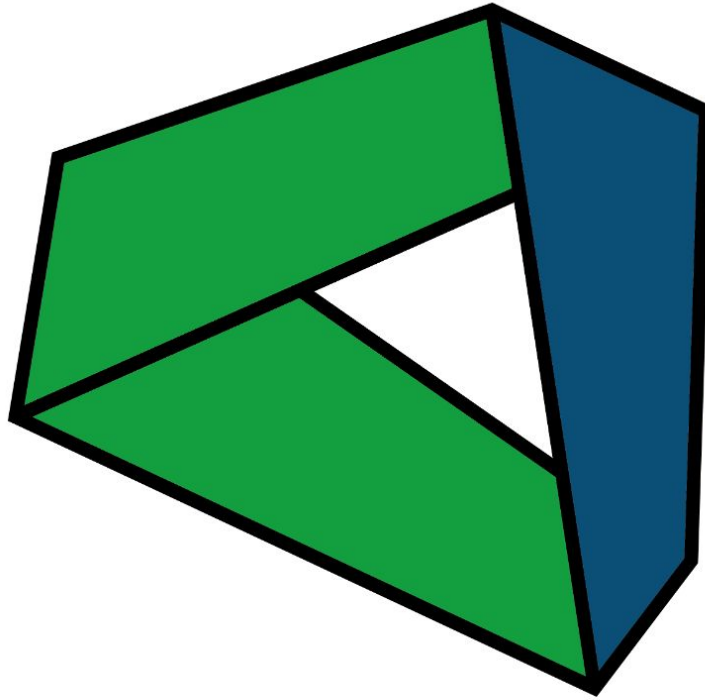


Laying the foundations:

Ensuring basic service delivery in a changing climate

- Local government structures **are at different stages of their thinking around resilience**, reflecting their scale, institutional arrangements and socio-economic contexts (e.g. Increase in informal settlements)
- Overarching Developmental Concerns: delivering **basic services** and protecting **existing infrastructure investment**
- Lack of understanding of the **value of NbS** to assist in addressing service delivery backlogs – moving away from defaulting to "Grey" infrastructure. Natural assets to be seen as part of the infrastructure network and maintained effectively (dedicated OPEX budgets)
- Making the case for hybrid solutions: **not a choice between "Grey" or "Green"** infrastructure
- **Institutional mindset shift**: key component of the approach including breaking down silos
- Supporting cities to **identify sources of finance** (e.g. national grants for urban development)
- Value of **cost-benefit analysis** to support access to finance for NbS infrastructure through communication to decision-makers





Thank you

For additional questions, please reach out to contact@c40cff.org

Further information/ back-up slides

- CFF Process Overview
- Structure of CFF support to cities
- The CFF Project Advisory Group

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Thank You

Please submit your questions
for our speakers in the Q&A.



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