

# URBAN SECTOR STRATEGY OUTLINE



GREEN  
CLIMATE  
FUND

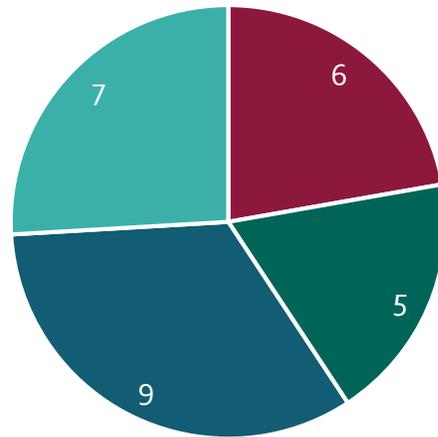
**Dražen Kučan, Division Mitigation & Adaptation**

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# SNAPSHOT OF PORTFOLIO IN THE SECTOR

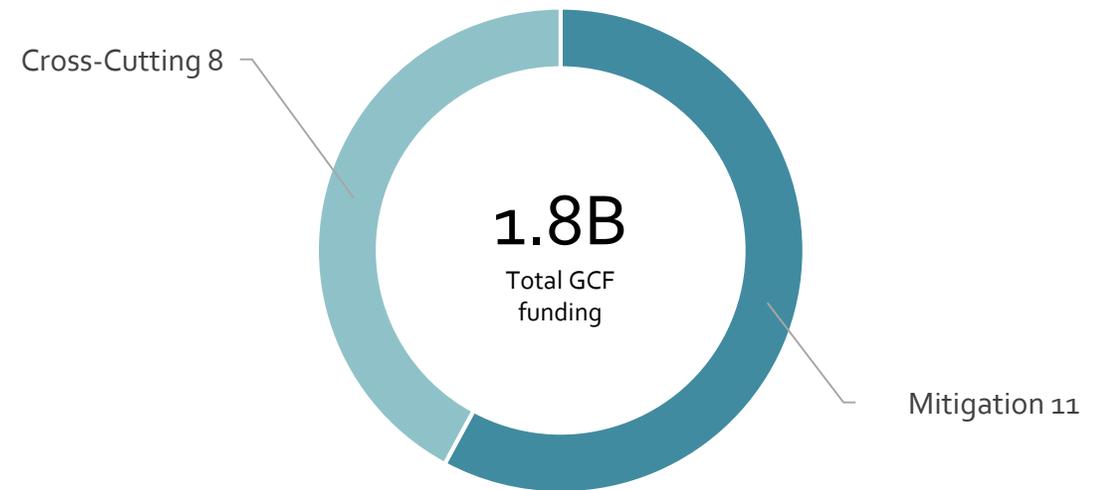


GCF Urban Portfolio – By Region



■ LAC ■ Eastern Europe ■ Asia-Pacific ■ Africa

GCF Portfolio – By Theme



- \$1.8bn GCF finance, \$6.6bn total financing
- 45.57M total beneficiaries; >1bn tones of CO<sub>2</sub> mitigation potential

# CITIES AND GHG EMISSIONS: INDICATIVE 80% BURDEN OF BLAME



## Average per capita GHG emissions in cities:

Rotterdam 29.8 tCO<sub>2</sub>eq.  
Sydney 15 tCO<sub>2</sub>eq.  
Shanghai 12 tCO<sub>2</sub>eq.  
Mexico City 4.25 tCO<sub>2</sub>eq.  
Amman 3.4 tCO<sub>2</sub>eq.  
Colombo 1.54 tCO<sub>2</sub>eq.  
Kathmandu 0.12 tCO<sub>2</sub>eq.



### Caveat:

Close interaction between urban form, service access and per capita GHG emissions; Low and high neighborhoods in the same city vary by a factor of 10. Density play

## The IEA estimates:

While currently 71% of GHG emissions;  
76% of energy related GHG by 2030 will come from the cities.



### Caveat:

Scope 1: production-based emissions  
Scope 2: consumption-based emissions  
Scope 3: consumption-based emissions embodied in fuel, food, building materials and water

## Importance of urban economies:

Both **Tokyo** and **New York** gave a greater GDP than Canada;  
by 2030 **New Delhi** will have a greater GDP than Malaysia.



### Caveat:

Focus on urban form and integrated Transportation system;  
Greater material, products and activities efficiency; low carbon energy / lower energy intensity

# THE RATIONALE



The rationale for (climate change transformative) urban investment is based on the **UNFCCC Technical Paper 13 (2014) ...**

referring to integrated, cross-sectoral mitigation activities in urban areas, that illustrates **the transformational impact:**

***“... through strong mitigation actions aimed at low-carbon, climate-resilient development at the local level across the key sectors such as buildings, transport and waste,***

***...cities in aggregate could reduce their GHG emissions in these core sectors **by an estimated 24 per cent by 2030 and by 47 per cent by 2050*****

*(Erickson et al., 2014)”.*



To undertake its core mandate to foster paradigm shifts and transformation addressing climate change, the **GCF** needs to

**a) find ways to influence and**

**b) where possible fundamentally alter the form and functioning of urban systems:**

which currently perpetuate resource-intensive and high-carbon process.

# GCF PUBLIC PORTFOLIO IN CITIES / URBAN AND EE SECTOR



Title, Country and AE	Total Financing	GCF financing
ADB Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Project (AHURP)	\$544 million	\$95 M concessional loan and \$50 M grant
World Bank Brazil: Financial Instruments for Brazil Energy Efficient Cities (FinBRAZEEC)	\$ 1.3 billion	GCF financing \$ 186 M loan and \$9 M grant
World Bank Viet Nam: Scaling Up Energy Efficiency for Industrial Enterprises in Vietnam	\$ 497 million	\$75 M guarantee and \$11.3 M grant
IDB Promoting private sector investments in energy efficiency in the industrial sector in Paraguay	\$ 43 million	\$20 million loan \$3 million grant
UNDP Scaling-up Investment in Low-Carbon Public Buildings, Bosnia-Herzegovina	\$122 million	\$17.3 million grant
EBRD Green Cities Facility	Euro 598.6 million	1 <sup>st</sup> tranche: Euro 65 million concessional loan and Euro 22 million grant

# TRANSFORMATIVE ACTION FIELDS FOR CITIES



Transformative Action Fields	2030 GHG emissions reduction	2050 GHG emissions reduction
Decarbonization of energy sector	50% to 70% renewables, saving 35% - 45% of GHG At cost \$40-\$80 per MW	Up to 90% reduction on the basis of the same trend
Improving energy efficiency in building stock	Buildings: 32% reduction in primary material consumption and associated GHG	Buildings: 53% reduction in primary material consumption and associated GHG
Mobility and transport	20% to 45% emissions reduction	Same trend
Urban form	20% emissions reduction	40% emission reduction combined with transportation strategies
Urban resilience	DRR / Optimizing value for money through resilience enablers	DRR / Optimizing value for money through resilience enablers
Materials and material flow	32% reduction in primary material consumption and associated GHG	53% reduction in primary material consumption and associated GHG
Improving waste management	20 % reduction in related GHG emission	40% reduction in related GHG emissions

# PROPOSED APPROACH FOR SECTOR STRATEGY (1) – WORK IN PROGRESS



Shift path dependencies related to carbon emissions and resilience trajectories of Secondary Cities

Transformational planning  
and programming

Urban planning, policy /regulatory/operating frameworks transformed to become climate compatible; Strengthen public capacities of local governments and municipalities to plan, design and deliver green and resilient urban and municipal infrastructure design and solutions.

Catalyzing climate  
innovation

Impactful, demand-driven and supply-driven urban management tools and capacities supported by innovative financial mechanisms, pilot-tested. GCF urban projects maintain the level of ambition including innovation for climate neutral and green cities eventually also becoming smart cities.

Mobilization of  
investments at scale

Secondary urban areas and urban communities have unrestricted access to financial resources, mobilized at scale. Deploy structuring and de-risking approaches through GCF instruments; as well as other facilitative mechanisms.

Replication of knowledge  
to shift financial flows

Knowledge, lessons learnt from GCF urban projects, Community of Practice and partnerships codified, shared and replicated

# PROPOSED APPROACH FOR SECTOR STRATEGY (2) – WORK IN PROGRESS



**Megacities and large urban agglomerations: reducing emissions footprint and supporting climate smart urban infrastructure**

Transformational planning and programming

Integrated retrofitting intervention planned and developed, focused on buildings and urban mobility; Development of strategic sub national investment plan and programming focused on buildings and urban mobility

Catalyzing climate innovation

Development of green urban standards including on energy efficient and resilient buildings, transport, and other related infrastructure and services Piloting strategic project selection in cities based on a climate change selection criterion that sets targets on efficiency and effectiveness

Mobilization of investments at scale

De-risking and pooled finance facilitation for blended financing mechanism serving megacities and urban agglomerations' demand.

Replication of knowledge to shift financial flows

Technical validation and sector benchmarking workshops on transformational climate investment in urban areas and cities.

# FLAGSHIP IDEAS



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**Flagship 1:** *Shift path dependencies related to carbon emissions and resilience trajectories of Secondary Cities*



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**Flagship 2:** *Megacities and large urban agglomerations – reducing emissions footprint and supporting climate smart urban infrastructure*

# PARTNERS

- NDAs and AEs
- Multilateral Development Banks
- Knowledge partners (e.g., WRI, C40)
- Foundations
- City planners and mayors



*Empowered lives.  
Resilient nations.*





# GREEN CLIMATE FUND