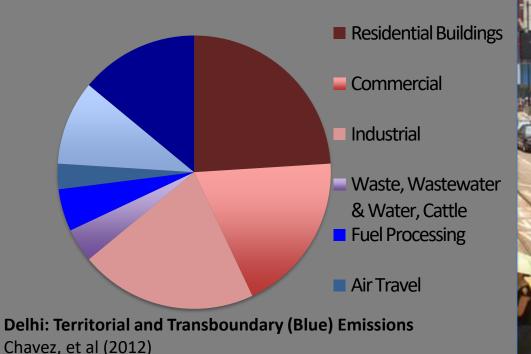


Photo: Andrew Stokols



CHALLENGE I: "Urban" Emissions are only part of the picture.



Chavez, A., Emani, K., Guru, R., Nath, D., & Ramaswami, D. (2012). Implementing Trans-Boundary Infrastructure-Based Greenhouse Gas Accounting for Delhi, India. Journal of Industrial Ecology, 16(6), 814-828

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CHALLENGE II: City Actions are only part of the picture.



- Economic Geography (Trade, Industry Structure, Bunkers)
- Income (Consumption)
- Technology: Efficiency of Energy End-Use (Buildings, Processes, Vehicles, Appliances)
- Urban Form and its Interactions with Urban Infrastructures
- Fuel Substitution (Imports)
- Energy Systems Integration (Co-Generation, Heat-Cascading)
- Urban Renewables, Urban Afforestation

(Seto et al., 2014, p.949)





Level of Urban Policy Leverage

Impact on GHG Emissions

Low

Seto K.C., Dhakal, S., Bigio, A., Blanco, H., Delgado., G.C., Dewar, D., Huang, L., Inaba, A., Kansal, A., Lwasa, S., McMahon, J.E., Muller, D.B., Murakami, J., Nagendra, H., & Ramaswami, A. (2014). Human Settlements, Infrastructure, and Spatial Planning. In O. Edenhofer, R.Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, I.Baum, S.Brunner, P. Eickemeir, B.Kriemann, J. Savolainen, S.Schlomer, C. von Stechow, T.Zwickel an J.C. Minx (eds.), Climate Change 2014: Mitigation of Climate Change. Combution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel of McOmate Change (pp.) 927-1600). No. Amount of New York, USA. Cambridge University Press



Three Challenges

Three Forces

Sovereign Authority:

Rule of law, uniquely legitimate enforcement power, statement of public and social compact - but depends on effective state to affect ground realities.

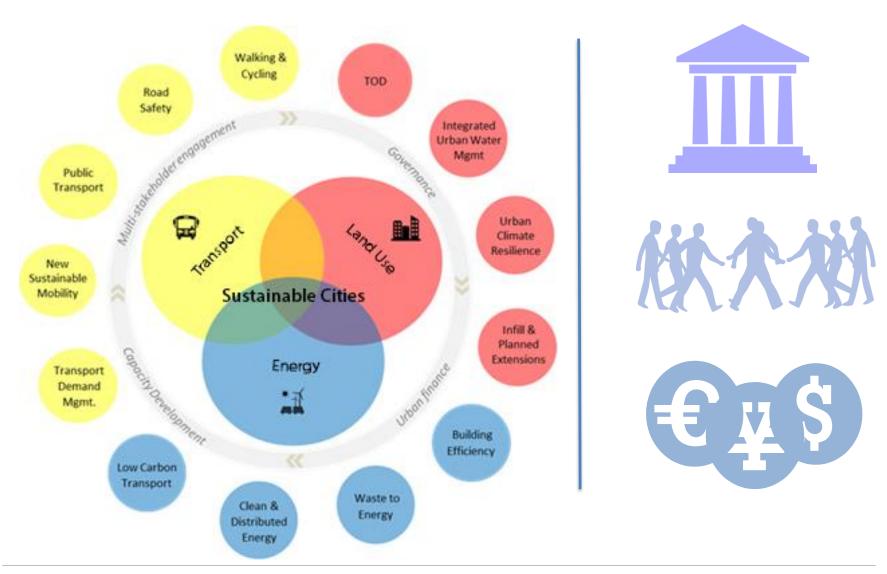
Markets:

Decentralized, dynamic, flexible, innovative strategies to produce outcomes – as long as they can be measured and converted to financial terms.

Community Action:

Invokes altruism, generosity, resilience, companionship – but can also be exclusionary, oppressive, and particularistic.

WRI'S ENGAGEMENT MODEL WITH CITIES: SOLUTIONS AS ENTRY POINTS, CROSS-SECTOR COALITIONS FOR SUSTAINED IMPACT











GLOBAL ENERGY EFFICIENCY ACCELERATOR PLATFORM

City Partnerships Accelerating Action on Sustainable Buildings

Eric Mackres, Manager, Building Efficiency - WRI Ross Center for Sustainable Cities





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Various urban leaders influence action at points in the building lifecycle

NEW BUILDINGS			EXISTING BUILDINGS				
Land Use/ Planning	Design	Construction	Sale or Lease	Tenant Build-Out	Operations & Maintenance	ジッジ ジッジ Retrofit	Demolition & Deconstruction
Local governments	Design & construction professionals	Design & construction professionals	Buildings owners and managers	Buildings owners and managers	Buildings owners and managers	Buildings owners and managers	Design & construction professionals
Developers and self-help builders	National and provincial governments Local governments	Building investors Suppliers & manufacturers	Developers and self-help builders Building occupants	Building occupants Design & construction professionals	Energy utilities Building occupants	Building investors Building occupants Design & construction professionals	Buildings owners and managers





Acceleration of building efficiency actions

New visions and partnerships, built around public-private collaboration, address barriers to action, enable implementation of ambitious policies and projects and avoid lock-in of inefficient buildings.





Building Efficiency





BEA Partner Jurisdictions

CENTRAL & **EAST ASIA** EASTERN EUROPE Ulaanbaatar, Mongolia **USA & CANADA** Alba Iulia, Romania Tokyo, Japan Milwaukee, USA Belgrade, Serbia* Bucharest, Romania Eskişehir, Turkey* MIDDLE EAST Dubai, UAE Riga, Latvia Warsaw, Poland **SOUTH ASIA** Coimbatore, India LATIN AMERICA BRASIL **SOUTHEAST ASIA** Rajkot, India* & CARIBBEAN Porto Alegre, Brasil Da Nang, Vietnam* Shimla, India Bogotá, Colombia* Iskandar, Malaysia Medellín, Colombia **AFRICA** Mandaluyong, Philippines Mérida, Mexico Kisii County, Kenya Muñoz, Philippines Mexico City, Mexico* KwaDukuza, South Africa Pasig, Philippines State of Jalisco, Mexico

Nairobi, Kenya

Tshwane, South Africa



*City selected for "Deep Dive" engagement



Santa Rosa, Philippines



What are cities signing up to do?

Overarching commitment:

double the rate of building energy efficiency by 2030 in targeted sector within the jurisdiction

Implement one enabling policy

Implement one or more pilot **project**

Project

Track and report progress, and share experiences with other cities

Tracking & communication

Policy







Building Efficiency Accelerator (BEA) Global Partners

Coordinating partner:



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WRI ROSS CENTER FOR SUSTAINABLE CITIES

NGOs/Associations/Multilaterals:











World Business Council for Sustainable Development















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Service Providers/Companies:































What does the BEA provide?

Local action prioritization process



Collaborative, multi-stakeholder assessments and workshops to define and prioritize policies and projects.

Tools, expertise and solutions



Technical support through trainings, tools.

Access to network of subject matter
experts and service providers.

Funding opportunities



Connect projects in need to financial partners who can provide funding to efficiency actions.

International recognition and collaboration



Recognition of efficiency actions at international events. Knowledge sharing through a global network of peers.







Case Study: Mexico City

- **Sept. 2014:** Commitment from Mexico City gov't to:
 - (1) Implement building energy code; (2) Retrofit public buildings
- March 2015: Launch workshop for common vision
 - 100 multi-stakeholder participants: city government, federal government, businesses, finance, civil society and consulting
- 2016-2017: Action plan underway via Mexico City staff and local partner leadership, managed by WRI Mexico
 - Oct. 2015: Recommendations delivered on action by government and stakeholders, following workshops
 - Dec. 2015: Actions announced at COP 21
 - June 2016: Energy code adopted
 - Dec 2016: 4 public building audits complete
 - April 2017: Announce target to retrofit 30% of public bldgs



Tanya Müller García, Secretary of the Environment, discussing Mexico City's leadership actions



Mayor Mancera at COP21 Buildings Day

- **Phase 2 ongoing:** code implementation capacity building, retrofitting, additional public buildings audits













Ripples of action - BEA as an implementation intermediary between global and local partnerships





