







## GLOBAL ENERGY EFFICIENCY ACCELERATOR PLATFORM

## Global public-private approach to city-level acceleration of energy efficiency in buildings

Ksenia Petrichenko Copenhagen Centre on Energy Efficiency

**ECEEE Summer Study 2017** 









WORLD RESOURCES INSTITUTE







## Are you awake yet? Quiz on cities

How many cities are there?

4416

Share of population living in cities?

55%

Portion of global energy use attributed to cities?

2/3









# Achieving Sustainable Energy for All by 2030





















































## **Energy Efficiency Accelerators**

The Global Energy Efficiency Accelerator Platform was established to support specific sector-based energy efficiency accelerators

#### Lighting

Global market transformation to efficient lighting

#### Appliances & Equipment

Global market transformation to efficient appliances & equipment

#### Vehicle Fuel Efficiency

Efficiency Improve the fuel economy capacity of the global car fleet



COPENHAGEN CENTRE Energy Efficiency Hub for SEforALL and a coordinating partner ON ENERGY EFFICIENCY of Global Accelerator Platform

#### **Buildings**

Promote sustainable building policies & practices worldwide





#### **District Energy**

Support national & municipal governments to develop or scale-up district energy systems



#### Industry

Implementing
Energy Management Systems,
technologies & practices











## **Building Efficiency Accelerator (BEA) partnership**

**Coordinating partner:** 



WORLD RESOURCES INSTITUTE

WRI ROSS CENTER FOR SUSTAINABLE CITIES

#### NGOs/Associations/Multilaterals:







WORLD **GREEN** BUILDING COUNCIL



World Business Council for Sustainable Development









































#### **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.









### 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 demonstration **project** 

Create a baseline, track
and report annual
progress, and share
experiences with other
governments

**Policy** 

**Project** 

Tracking & communication

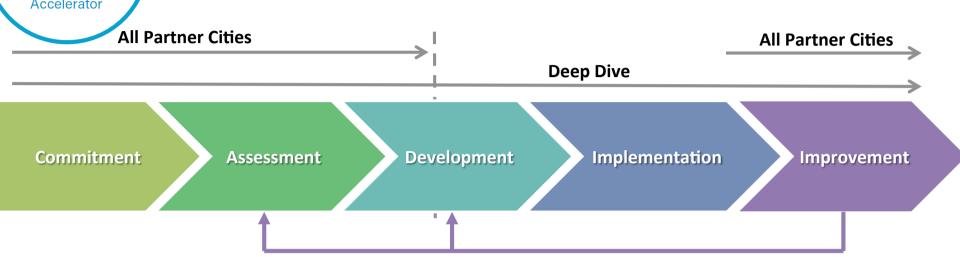








### **BEA City Engagement Process**



- Sign partnership agreement
- Identify preliminary interest areas
- Assess locallyappropriate building efficiency actions
- Access BEA
   Partners' best
   practice technical
   solutions and
   expertise
- Engage with stakeholders to help prioritize actions
- Develop an action plan for implementing prioritized policies and activities
- Solicit technical and financial assistance

- Fund and staff BEA policy & project
- Implement BEA policy & project
- Establish building efficiency performance baseline and track improvements.
- Share best practices with other BEA cities
- Develop an approach for continuous improvement











#### **BEA Partner Jurisdictions**

USA & CANADA Milwaukee, USA

#### LATIN AMERICA & CARIBBEAN

Bogotá, Colombia\*
Medellín, Colombia
Mérida, Mexico
Mexico City, Mexico\*
State of Jalisco, Mexico

\*City selected for "Deep Dive" engagement

## CENTRAL & EASTERN EUROPE

Alba Iulia, Romania Belgrade, Serbia\* Bucharest, Romania Eskişehir, Turkey\* Riga, Latvia Warsaw, Poland

#### BRASIL

Porto Alegre, Brasil

#### AFRICA

MIDDLE EAST Dubai, UAE

Kisii County, Kenya Nairobi, Kenya Tshwane, South Africa **EAST ASIA** 

Ulaanbaatar, Mongolia Tokyo, Japan

SOUTH ASIA

Coimbatore, India Rajkot, India\* Shimla, India

#### **SOUTHEAST ASIA**

Da Nang, Vietnam\*
Iskandar, Malaysia
Mandaluyong, Philippines
Muñoz, Philippines
Pasig, Philippines
Santa Rosa, Philippines









## Deep Dive assistance (available to some BEA jurisdictions)

- 6 BEA jurisdictions selected for "deep dive" assistance:
  - One staff from BEA partner funded and assigned to work full-time with jurisdiction for 12-16 months
  - Coordinate prioritization and implementation of local building efficiency policies and projects
- Benefits of deep dive, on-the-ground assistance:
  - Enhanced staff capacity and building efficiency focus
  - Local multi-stakeholder engagement process
  - Prioritization of actions and assistance in implementation through leveraging BEA partners





















## What are BEA Cities Interested in Doing? City Commitments by Topic Area

	Codes	Leadership / Incentives	Retrofits	Procurement	Finance	Tracking	Other
Alba Iulia							
Belgrade							
Bogota							
Bucharest							
Coimbatore							
Da Nang							
Dubai							
Eskişehir							
Iskandar							
Jalisco							
Mandaluyong							
Medellin							
Mexico City							
Milwaukee							
Porto Alegre							
Rajkot							
Riga							
Santa Rosa							
Science City of Muñoz							
Shimla							
Tokyo							
Tshwane							
Warsaw							









## **BEA Working Groups**

BEA WORKING GROUPS AND TECHNICAL EXPERTISE				
BUILDING ENERGY CODES	Policies to enact building codes to establish minimum requirements of energy performance			
ABOVE CODE & CERTIFICATIONS	Certification programs for green buildings that go beyond traditional minimum energy code requirements for buildings			
FINANCE	Funding programs and financing tools to support and encourage building efficiency improvements			
PUBLIC PROCUREMENT	Policies and actions to incorporate energy efficiency considerations into government procurement practices			
RETROFITTING EXISTING BUILDINGS	Initiatives to renovate existing buildings to improve energy performance			
TRACKING PROGRESS	Methods and tools to generate data, baselines, and record progress towards building efficiency goals			









### **Deep Dive Case Study: Mexico City**

September 2014 commitment from Mexico City government to:

- Implement a building energy code
- Retrofit public buildings

Launch workshop for common vision: March 2015

 100 multi-stakeholder participants – including city government, federal government, businesses, finance, civil society and consulting

Action plan underway: 4 workgroups chaired by Mexico City staff and an SEforALL partner, project managed by WRI

- Technical workshop on building retrofits and finance
- Recommendations on action by government and stakeholders delivered in October; Actions announced at COP 21 in December
- Program implementation phase 1: January 2016-October 2016
- June 2016: New energy code adopted; public building audits approved
- December 2016: Audits of 4 public buildings completed















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



Mayor Mancera at COP21 Buildings Day



## Scaling up: work in deep dives

#### Belgrade

- Customised procedures for building retrofits
- Municipal building retrofit project

#### **Da Nang**

- Building efficiency standars and incentives
- Energy eff demo pro

#### Rajkot

 Implementation of India's ECBC and requirement for solar HW systems

 Energy efficiency standards for social housing programs

#### Bogota

- Adaptation and implementation of national regulation on construction
- Construction of a new private building

#### **Eskişehir**

lementation of energy ormance certification rgy efficiency into district-scale elopment projects







## Knowledge Management System

The Copenhagen Centre's Knowledge Management System (KMS) engages stakeholders in energy efficiency initiatives through knowledge sharing and outreach. The KMS provides users with access to selected information, reports, publications, and databases on energy efficiency. The KMS is linked to many other energy efficiency initiatives.

## kms.energyefficiencycentre.org







#### **More Information**

#### We welcome new business, NGO, and government partners!

#### For more information or to join as a partner, contact:

World Resources Institute, WRI Ross Center for Sustainable Cities

Debbie Weyl, Manager, Building Efficiency Initiative, <a href="Debbie:Weyl@wri.org">Debbie:Weyl@wri.org</a>

**BuildingEfficiencyAccelerator.org** 



