



**Building Efficiency
Accelerator**



**GLOBAL ENERGY EFFICIENCY
ACCELERATOR PLATFORM**



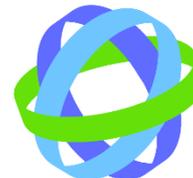
The SEforALL Building Efficiency Accelerator- Cities for energy efficient buildings

IEA Future Buildings Forum 2017
October 24-25, Singapore

Sumedha Malaviya, World Resources Institute India



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Building Efficiency Accelerator

UN Sustainable Energy for All

One Goal:
Achieving Sustainable Energy for All by 2030



Three Objectives:



 **ENSURING**
universal access
TO MODERN ENERGY SERVICES.

 **DOUBLING THE GLOBAL RATE OF IMPROVEMENT IN**
energy efficiency.

 **DOUBLING THE SHARE OF**
renewable energy
IN THE GLOBAL ENERGY MIX.



Global EE Accelerator Platform

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

Improve the fuel economy capacity of the global car fleet



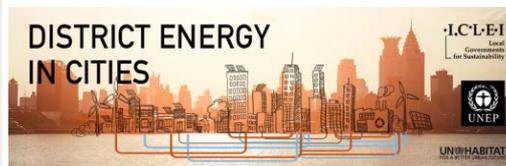
Buildings

Promote sustainable building policies & practices worldwide



District Energy

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



Industry

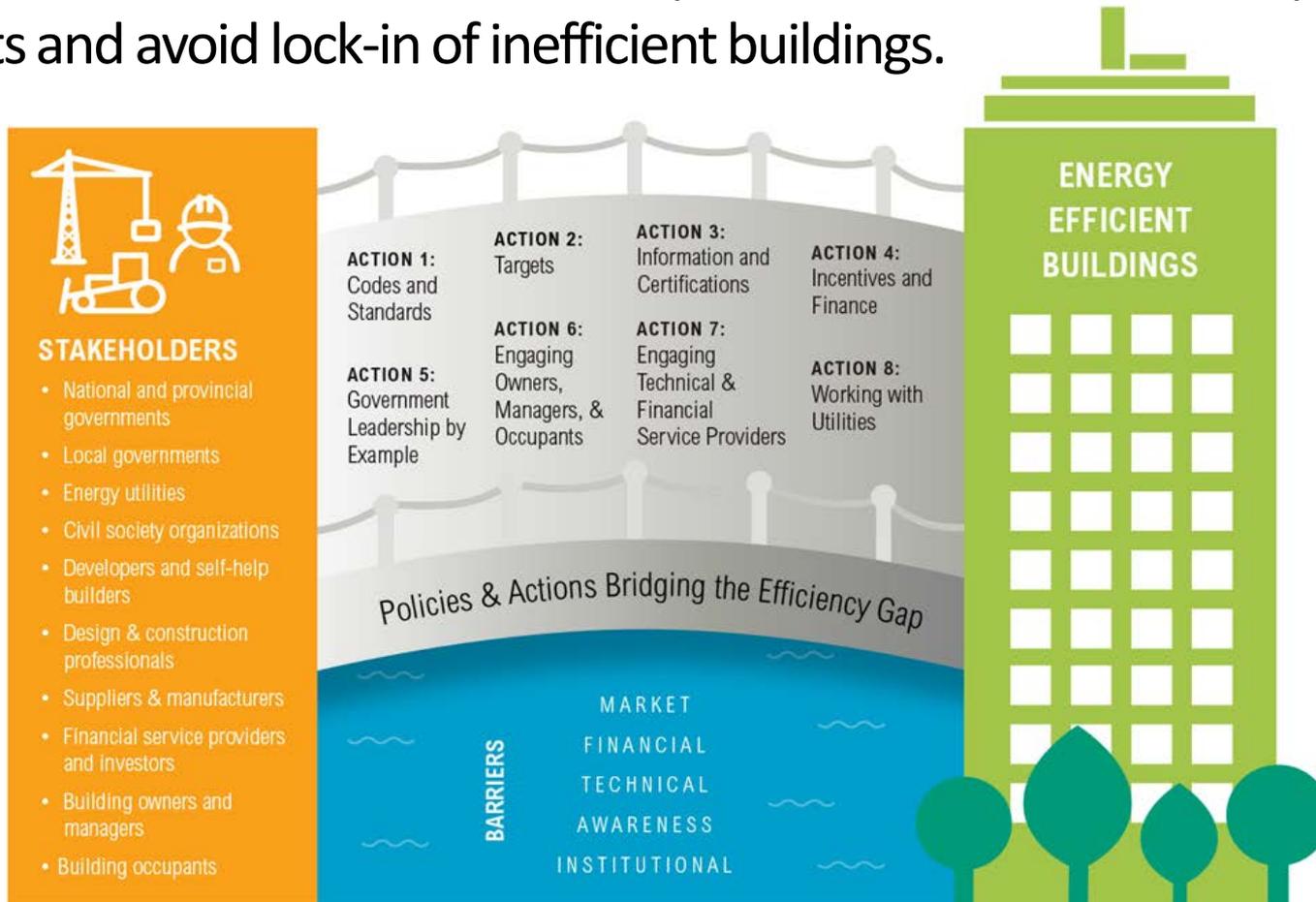
Implementing Energy Management Systems, technologies & practices





Acceleration of building efficiency policy efforts

New 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 Accelerator

Building Efficiency Accelerator Cities & States



ALBA IULIA



Beograd
www.beograd.rs



ALCALDÍA MAYOR DE BOGOTÁ D.C.



București



COIMBATORE



DÀ NẴNG



GOVERNMENT OF DUBAI



ESKİŞEHİR BÜYÜKŞEHİR BELEDİYESİ



ISKANDAR MALAYSIA



GOBIERNO DE JALISCO



KISHI COUNTY PROSPERITY FOR ALL



CITY OF MANDALUYONG



Alcaldía de Medellín



Mérida Ciudad Blanca AYUNTAMIENTO 2015-2018



CDMX CIUDAD DE MÉXICO



City of Milwaukee



SCIENCE CITY OF MUÑOZ PHILIPPINES



NAIROBI



SAGSAG NG LUNGSOD NG PASIG METRO MANILA 1573



Prefeitura de Porto Alegre



राजकोट महानगरपालिका RAJKOT MUNICIPAL CORPORATION



RĪGAS DOME



CITY OF SANTA ROSA LAGUNA 1792 2004



SHIMLA MUNICIPAL CORPORATION WORK IS WORSHIP



TOKYO METROPOLITAN GOVERNMENT



Улаанбаатар



CITY OF TSHWANE IGNITING EXCELLENCE



CITY OF WARSAW



WORLD RESOURCES INSTITUTE



SUSTAINABLE ENERGY FOR ALL



UN environment



gef



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BEA Partner Jurisdictions

USA & CANADA

Milwaukee, USA

CENTRAL & EASTERN EUROPE

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

EAST ASIA

Ulaanbaatar, Mongolia
Tokyo, Japan

MIDDLE EAST

Dubai, UAE

LATIN AMERICA & CARIBBEAN

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

BRASIL

Porto Alegre, Brasil

SOUTH ASIA

Coimbatore, India
Rajkot, India*
Shimla, India

SOUTHEAST ASIA

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

AFRICA

Kisii County, Kenya
Nairobi, Kenya
Tshwane, South Africa

*City selected for "Deep Dive" engagement

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**

Policy

Implement one or
more pilot **project**

Project

Track and report
progress, and **share**
experiences with
other governments

**Tracking &
communication**

Building Efficiency Accelerator (BEA) Global Partners



Coordinating partner:



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WRI ROSS CENTER FOR
SUSTAINABLE
CITIES

NGOs/Associations/Multilaterals:



WORLD
GREEN
BUILDING
COUNCIL



World Business Council for
Sustainable Development



International
Energy Agency



International
Finance Corporation
WORLD BANK GROUP



ALLIANCE
TO SAVE ENERGY



NRDC



Energy Sector Management Assistance Program

PIONEERED BY THE
ROCKEFELLER FOUNDATION

100 RESILIENT CITIES



Service Providers/Companies:



What are businesses and NGOs committing to do?



1. Sign Statement of Support for SEforALL Accelerator Platform
2. Provide a primary point of contact
3. Identify topic(s) and/or geography(ies) to support
4. Participate (a minimum of twice each year)
 - Attend or present at regional workshops
 - Join partnership calls
 - Provide in-kind assistance to partner jurisdiction(s)
 - Identify and recruit additional partners or resources

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.

BEA support to jurisdictions- The 8 topic areas

POLICY & PROGRAM MECHANISMS

1. CODES & STANDARDS

- Building energy codes and product standards establish minimum requirements for energy performance.

2. TARGETS

- Targets to align interests and spur action to improve efficiency in the building sector.

3. PERFORMANCE INFO & CERTIFICATIONS

- Data, baselines, disclosure and certifications for market differentiation of building performance or attributes.

4. INCENTIVES & FINANCE

- Programs and incentives to provide funding to building efficiency improvements.

5. GOVERNMENT LEADERSHIP BY EXAMPLE

- Programs to support government efficiency, including public building retrofits and innovative procurement.

6. BUILDING OWNER & OCCUPANT ACTIONS

- Building design, construction, operations, occupant behavior.

7. TECHNICAL & FINANCIAL SERVICES

- Market development and skilled workforce for private providers of building construction, services & equipment

8. WORKING WITH UTILITIES

- Planning and programs by utility companies for energy efficiency improvement.

STAKEHOLDER STRATEGIES



BEA assistance to partners and “deep dives”

Available to all partner jurisdictions:

- Assigned BEA point of contact (local & global)
- Assessment and action prioritization process
- Resources and assistance from technical work groups of global partners
- Webinars, trainings, regional meetings
- Matchmaking with peer, inspiring, or aspiring cities

6 BEA jurisdictions selected as “deep dives”:

- Funding: one full-time staff from BEA partner to support jurisdiction for 12-16 mos
- Coordinate prioritization, planning, implementation of building efficiency actions
- Resulting in:
 - Enhanced staff capacity and building efficiency focus
 - Facilitation and development of local multi-stakeholder partnership
 - Prioritization of actions and implementation assistance by leveraging BEA partners



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CDMX
CIUDAD DE MÉXICO



Role of BEA- implementation intermediary between global and local partnerships





BEA city action process

Starting status:

Limited building efficiency action in city

BEA 2030 vision:

Doubled energy efficiency improvement in city

Commit

Stage 0

- Sign **partnership agreement**
- Identify preliminary **interest areas**

Assess

Stage 1

- Assess **locally-appropriate** building efficiency actions
- **Engage with stakeholders** to help prioritize actions
- Develop an **action plan** for implementing priorities

Develop

Stage 2

- Access BEA Partners' **technical solutions and expertise**
- Solicit **financial assistance** with BEA
- **Draft and adopt** policy
- Develop **technical documentation** identify **funding** for project

Implement

Stage 3

- **Fund and staff** BEA policy & project
- **Implement** BEA policy & project

Improve

Stage 4

- Establish building efficiency **performance baseline** and track improvements.
- Share best practices with other BEA cities
- Develop an approach for **continuous improvement**

Examples of BEA City and State commitments

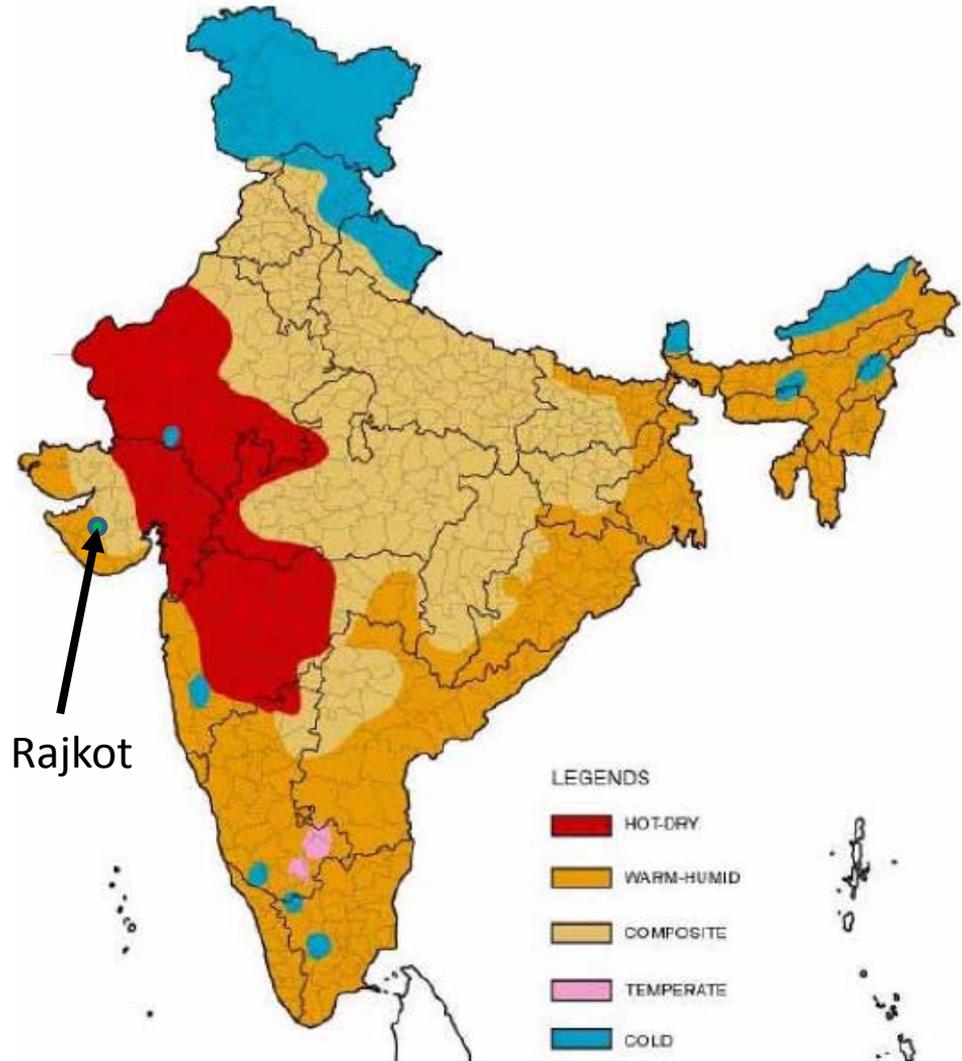
CITY	POLICY	PROJECT
Belgrade, Serbia	Develop standard procedures for building retrofits including consumption-based billing	Conduct a retrofit on one or more public buildings
Bogota, Colombia	Integrate a national regulation for building construction into local plans	Apply best practices for new efficient buildings in a district scale regeneration project
Bucharest, Romania	Incorporate private investment into the city's sustainable development strategy	Retrofit schools and apartment buildings
Da Nang, Vietnam	Develop a directive to implement efficiency measures in large buildings	Implement energy efficiency solutions for hotel demonstration project
Dubai, UAE	Adopt a policy for energy performance labelling of existing buildings	Benchmark the energy performance of 100 buildings
Eskisehir, Turkey	Implement a national mandate for EPCs	Integrate building efficiency measures in a new building
Merida, Mexico	Adopt and implement a building energy code	Retrofit four public buildings using audits and benchmarking tools
Porto Alegre, Brazil	Launch a municipal fund for efficiency and RE investment	Benchmark municipal and school buildings to prioritize for investment
Rajkot, India	Develop a green building policy	Retrofit one or more existing municipal buildings
Santa Rosa, Philippines	Adopt a mandatory green building code	Launch a green building city challenge for new and existing buildings



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Deep-dive case study- Rajkot

- **SMART city, 6th fastest** growing city in India and the **22nd fastest** growing urban areas in the world. “ (City Mayor’s World Congress)
- **20-25k new houses** are built annually
- **Demonstrate leadership** in commitments to sustainable development and **encourage other development** within the City to follow the principles set out in this policy
- Rising demand for cooling since Rajkot falls in the Composite climate zone (ECBC’2005), however it also exhibit some conditions of Hot & Dry climate zone



- Jurisdiction partner- Rajkot Municipal Corporation (RMC)
- RMC's policy commitment- RMC Green Building program
 - Establishing of a green building cell
 - Incentives and awards for greener construction
 - Mandatory for all new residential buildings/building complexes with built-up area of more than 10,000 square meters
- RMC's project commitment- Retrofitting of two municipal buildings

Key lessons learned in BEA 1.0

- Building broad coalitions- shared vision of stakeholders for the local jurisdiction even if political transitions remain difficult
- Delineating leadership roles- Clear responsibilities, goals, and accountability are crucial for success
- Readiness for finance- cities not ready to talk about finance unless clear about projects and current city contracting or budgeting constraints
- Achieving scale for finance and impact- Connections with high-level platforms such as SE4all provide an important political link

Current BEA Partner Businesses and Organizations



World Business Council for Sustainable Development



World Resources Institute

Pioneered by the Rockefeller Foundation

100 Resilient Cities

C40 Cities Climate Leadership Group



WRI Ross Center for Sustainable Cities



World Bank Group



中国节能





Next Steps- BEA 2.0

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, Debbie.Weyl@wri.org

BuildingEfficiencyAccelerator.org