



GLOBAL ENVIRONMENT FACILITY  
INVESTING IN OUR PLANET

[www.theGEF.org](http://www.theGEF.org)

# Sustainable Cities Need Energy Resiliency

CSIS  
7 April 2015

David E. Rodgers  
Senior Climate Change Specialist  
Global Environment Facility

# Global Distribution of GEF Urban Projects

- ✓ GEF support for sustainable urban projects started in 1999
- ✓ 101 projects in over 110 cities and 60 countries
- ✓ \$601 million committed, with \$7.2 billion leveraged in co-financing



# A Success Story: Sino-Singapore Tianjin Eco-City Project

Designed to be practical and replicable, Tianjin Eco-City is built on three planning principles:

- Compact land-use
- Transit-oriented
- Vegetation-and-water network

## Outcomes:

A role model for other Chinese cities in resource-efficient and low emission development.



# A Success Story: Enhancing Resilience to Urban Flooding in Yaounde

## Adaptation Actions:

- Integrating climate change risks into urban planning, policies and regulation.
- Implementation of community-based adaptation measures, in tandem with larger-scale investments in flood risk management, water and sanitation.

## Outcomes:

- Enhanced community resilience to floods.
- Reduced energy consumption in waste water treatment.



Source: Wikimedia Commons

# An energy resilient city will:

- Rely on and strengthen natural systems
- Manage water before, during, and after severe events
- Prioritize efficiency in buildings, equipment, and appliances
  - Efficient buildings and equipment have lower peak demand
  - Advanced glazing moderates climate variations and protects against severe weather
- Invest in diverse sources of energy supply and storage
  - Distributed and self-reliant installations create a resilient backbone
- Build modern ICT connectivity
  - Data and dynamic controls enable decision-makers to take informed action
- Enable transportation alternatives



GLOBAL ENVIRONMENT FACILITY  
INVESTING IN OUR PLANET

# Two channels for Sustainable Cities support under the GEF-6 strategy (2014-2018)

## *Low-emission urban systems*

Project examples:

- Transit-oriented development;
- Building energy efficiency codes in cities;
- Distributed urban energy resources; and
- Energy recovery from municipal waste.



Indicative funding resources: \$210 million

# Two channels for Sustainable Cities support under the GEF-6 strategy (2014-2018)

## *Sustainable Cities Integrated Approach Pilot (IAP)*

- ✓ Integrating **global environmental considerations and resilience** into city management through planning, design, and action
- ✓ Enhancing **partnership** towards impact
- ✓ **Supporting goals** of Multilateral Environmental Conventions
- ✓ Going beyond traditional, single GEF focal area project



GLOBAL ENVIRONMENT FACILITY  
INVESTING IN OUR PLANET

# Sustainable Cities IAP Common Platform

*An iterative, organic network program to bring together institutions and to encourage partnership*

## 1. Sustainability plan

- Clear, rolling plan that provides an assessment of challenges and opportunities at cities/metro area
- Consistent with those spearheaded by partner institutions
- Inclusion of global environmental benefits

## 2. Tools

- Underpinning sustainability plan development and implementation
- Partners and participating cities to agree to use same set of tools and metrics



GLOBAL ENVIRONMENT FACILITY  
INVESTING IN OUR PLANET

# GEF Sustainable Cities Integrated Approach Pilot

Mexico: La Paz, Campeche, Xalapa  
Co-Financing: \$110,000,000  
GEF Funding: \$ 15,000,000

Senegal: Dakar  
Co-Financing: \$51,380,000  
GEF Funding: \$ 9,499,900

Peru: Lima  
Co-Financing: \$133,300,000  
GEF Funding: \$ 7,500,000

Paraguay: Gran Asuncion  
Co-Financing: \$240,340,000  
GEF Funding: \$ 8,250,445

Brazil: Brasilia & Recife  
Co-Financing: \$193,000,000  
GEF Funding: \$ 24,673,000

India: Vijayawada-Guntur,  
Mysore, Jaipur, Bhopal, Vizag  
Co-Financing: TBD  
GEF Funding: \$ 10,500,000

China: Guiyang, Shenzhen, Ningbo,  
Nanchang, Beijing, Tianjin, Shijiazhuang  
Co-Financing: \$411,000,000  
GEF Funding: \$ 41,000,000

Côte d'Ivoire: Abidjan  
Co-Financing: \$21,300,000  
GEF Funding: \$ 5,727,500

Vietnam: Hue  
Co-Financing: \$175,000,000  
GEF Funding: \$ 9,000,000

Malaysia: Melaka  
Co-Financing: \$18,000,000  
GEF Funding: \$ 3,000,000

South Africa: Johannesburg  
Co-Financing: \$119,927,433  
GEF Funding: \$ 9,000,000



GLOBAL ENVIRONMENT FACILITY  
INVESTING IN OUR PLANET

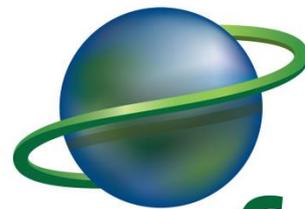
# Sustainable Cities IAP Expected Outcomes

## *In five to ten years, participating cities:*

- Recognized as leading examples of sustainable urban management
- Yielding clear and quantified local and global environmental benefits
- Leaders and officials of these pilot cities are envisaged to gain and put into practice the expertise and policy means to address global environmental concerns in an integrated manner



GLOBAL ENVIRONMENT FACILITY  
INVESTING IN OUR PLANET



gef

Thank you

For more information: [www.thegef.org](http://www.thegef.org)

Sustainable Cities lead: Xiaomei Tan at [xtan1@thegef.org](mailto:xtan1@thegef.org)