



20141209 Lima COP

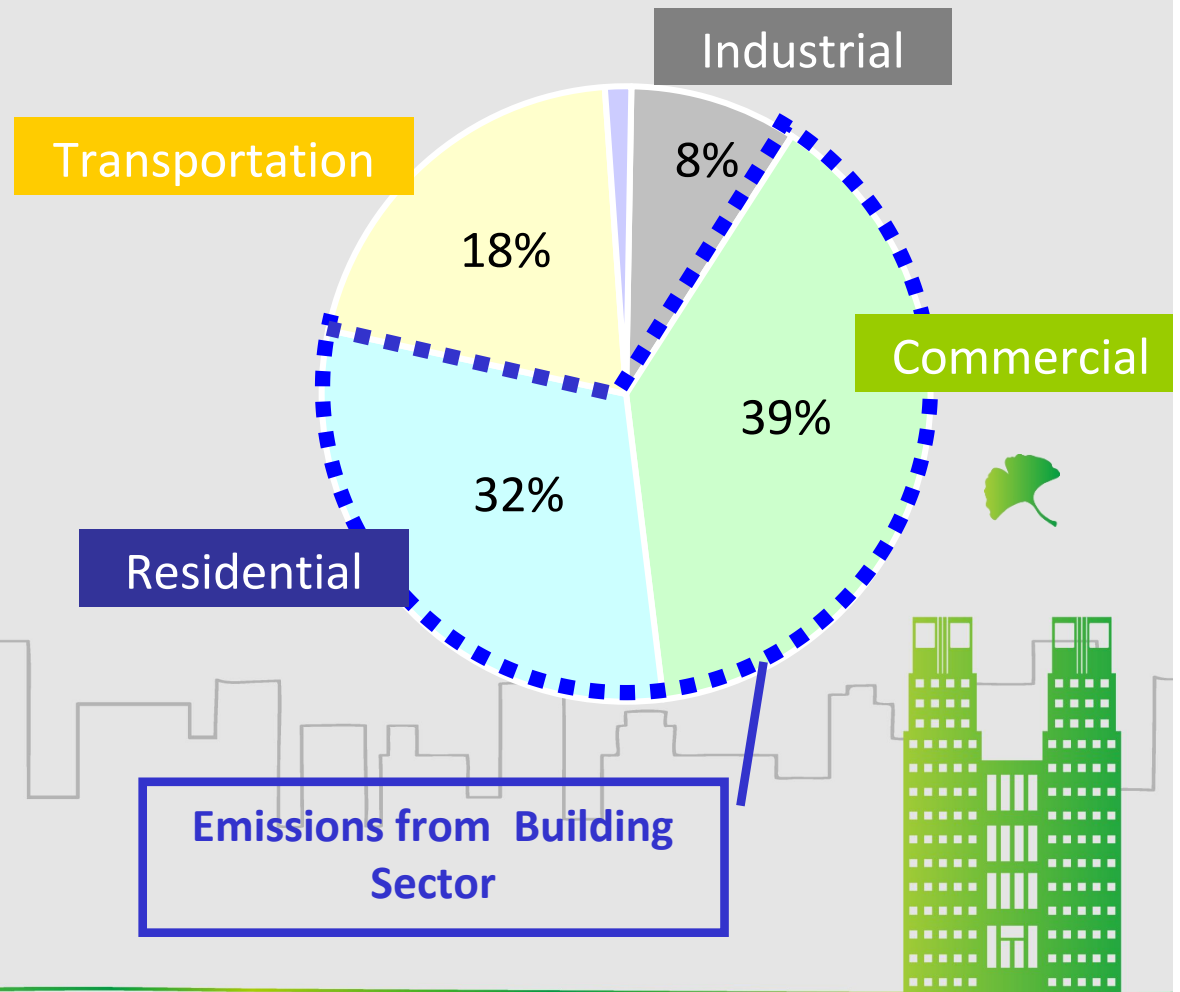
# Toward a Low Carbon City Tokyo and Global Networks

Yuko Nishida Tokyo Metropolitan Government-Environment

# Tokyo and it's carbon emissions

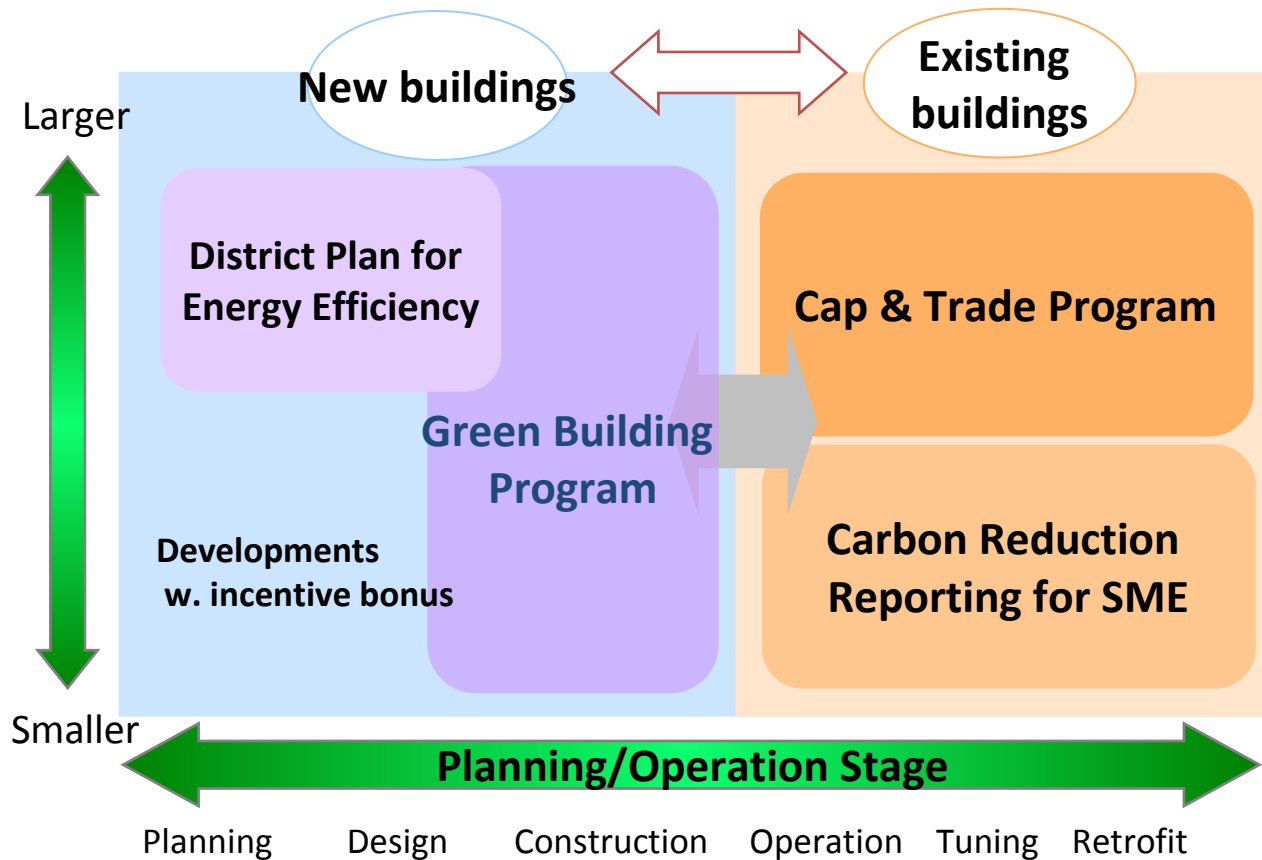


CO2 Emissions by Sector in Tokyo

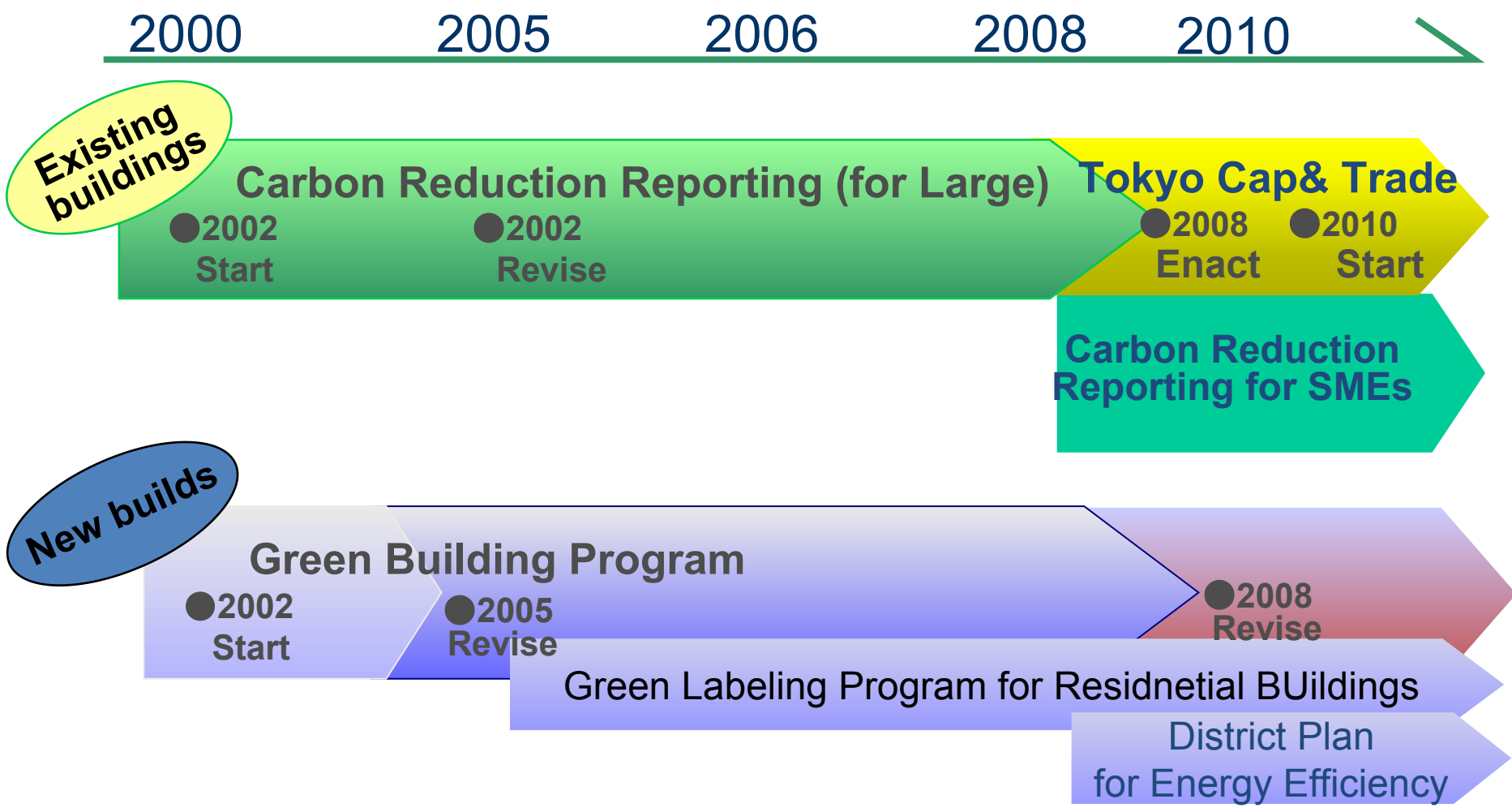


# Tokyo's Policy: Framework

## Policy Likages & Policy Developments



# Tokyo's Policy: Developmet



# Tokyo Metropolitan Government



## Outline of programs

Tokyo Cap-and-Trade Program

Tokyo Green Building Program

Carbon Reduction Reporting



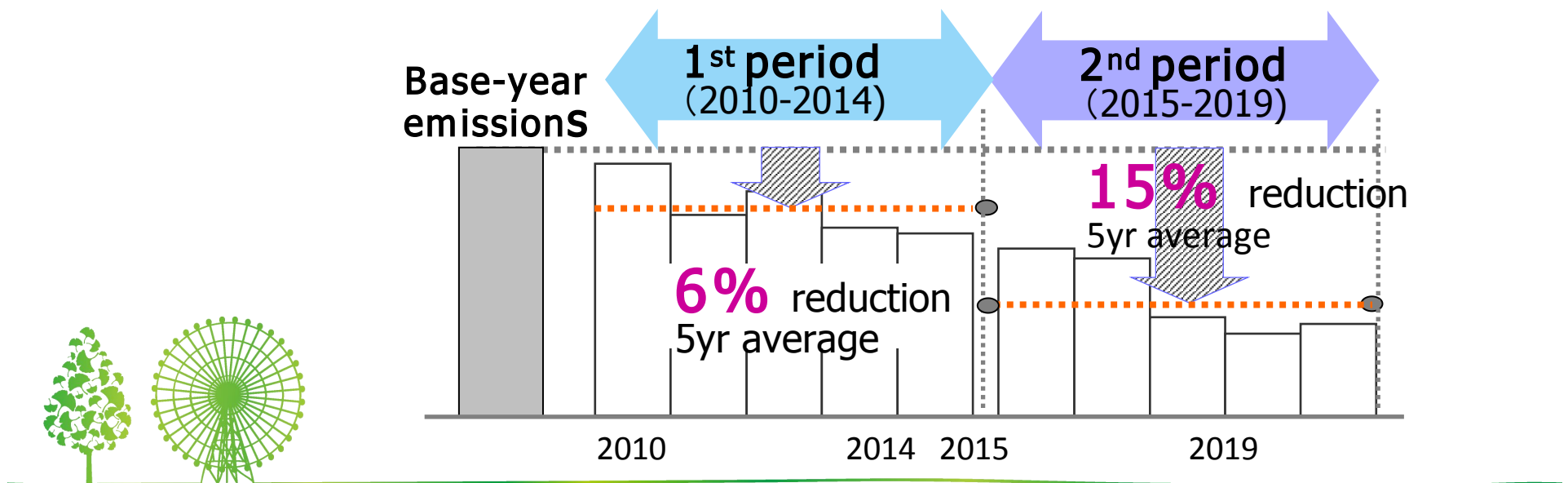
# Tokyo Cap-and-Trade 1

## Cap, Covered Facilities, Cap Settings

Cap (Total emissions allowed for the covered sector) was designed to enable Tokyo to achieve "-25% by 2020" emission target

Setting cap on emissions from **1,400** facilities (Mainly commercial bldgs.), accounting for **20%** of Tokyo's total emissions

Under the cap, each building is obligated to reduce emissions by **6,8 %** (first period) and **15,17%** in the second period



# Tokyo Cap-and-Trade 2

## Trade and Offset

### Emission Trading:

Trade scheme can be utilized by owners to fulfill their obligations  
Tradable allowances are limited to the excess reductions over compliance obligations

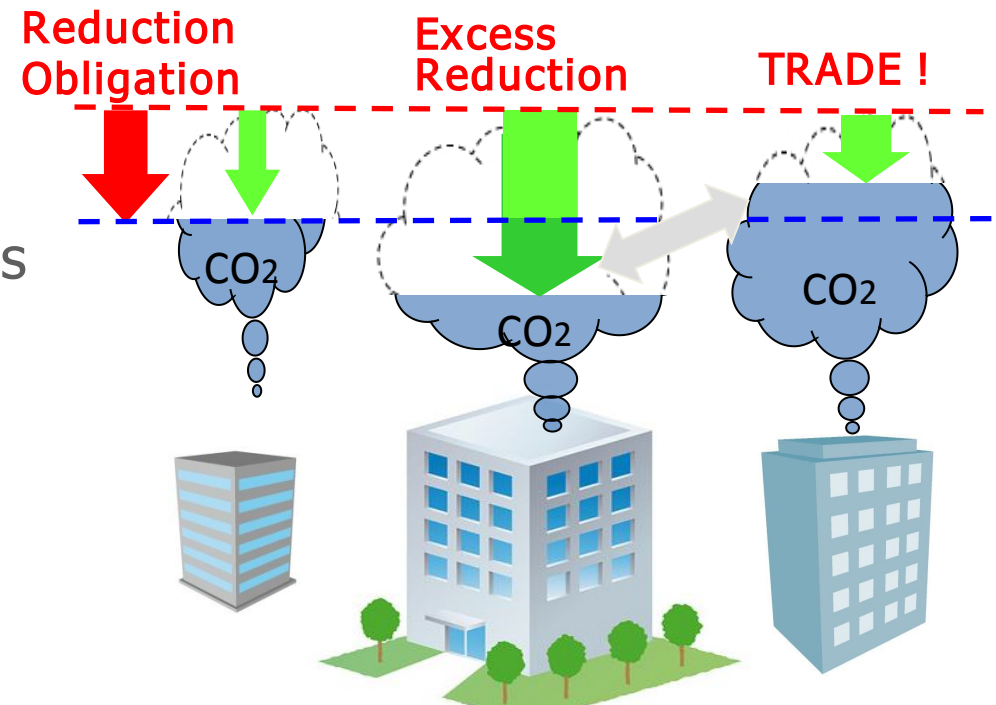
**MRV:** Monitoring and annual reporting are required  
Verification system established for the program

### Offset systems:

Renewables, emission reductions in small facilities, etc.

### Linkage:

Link with the C&T of an adjacent prefecture





# Tokyo Green Building Program

## Rating and disclosure system for sustainable design

**Coverage:** Covering 40% of new buildings  
 Newly planned large buildings (over 5,000 sq. meters)

**Requirement:** Mandatory reporting, Minimum energy standard  
 Submit sustainable design plan with its ratings  
 Satisfy Tokyo's energy standard (higher than the National)

**Rating & Disclosure:**  
 12 items in 4 categories including "Energy, Natural Environment, Water/Material, and Heat Island category"  
 Rated results are disclosed on the TMG website

Labeling and Energy Efficient Certificate Programs  
 have been developed based on this GB program  
 Incentive system in the urban planning is effectively working





# Carbon Reduction Reporting for Small and Medium Facilities

## Target:

Small & medium emitters not covered by the Tokyo C&T

## Requirement: Mandatory reporting

Reporting annual CO<sub>2</sub> emissions & their plan for reductions

Disclose on the TMG website

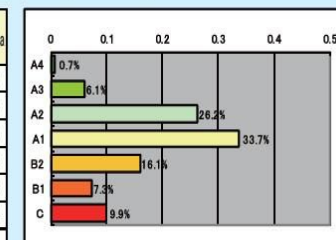
Over 34,000 facilities are reporting including 10,000 volunteers

## Launched Voluntary Benchmarking Program

22 building-use categories in 7 ratings

2. Medium-sized Buildings for Rent (3,000 m<sup>2</sup> or larger but smaller than 10,000 m<sup>2</sup>)

Range	Basis	Emission Intensity (kg / m <sup>2</sup> )	Number of Facilities	Percentage	Average Floor Area		
A4	0.25 or less	19.6 or less	7	0.7%	4988.83		
A3	More than 0.25 but 0.50 or less	More than 19.6 but 39.1 or less	58	6.1%	5063.63		
A2	More than 0.50 but 0.75 or less	More than 39.1 but 58.6 or less	250	26.2%	5526.83		
A1	More than 0.75 but 1.00 or less	More than 58.6 but 78.1 or less	321	33.7%	5444.23		
B2	More than 1.00 but 1.25 or less	More than 78.1 but 97.7 or less	153	16.1%	5930.80		
B1	More than 1.25 but 1.50 or less	More than 97.7 but 117.2 or less	70	7.3%	5981.22		
C	More than 1.50	More than 117.2	94	9.9%	5537.81		
		Average intensity	78.1	Total	953	100%	5566.20



# Tokyo Metropolitan Government



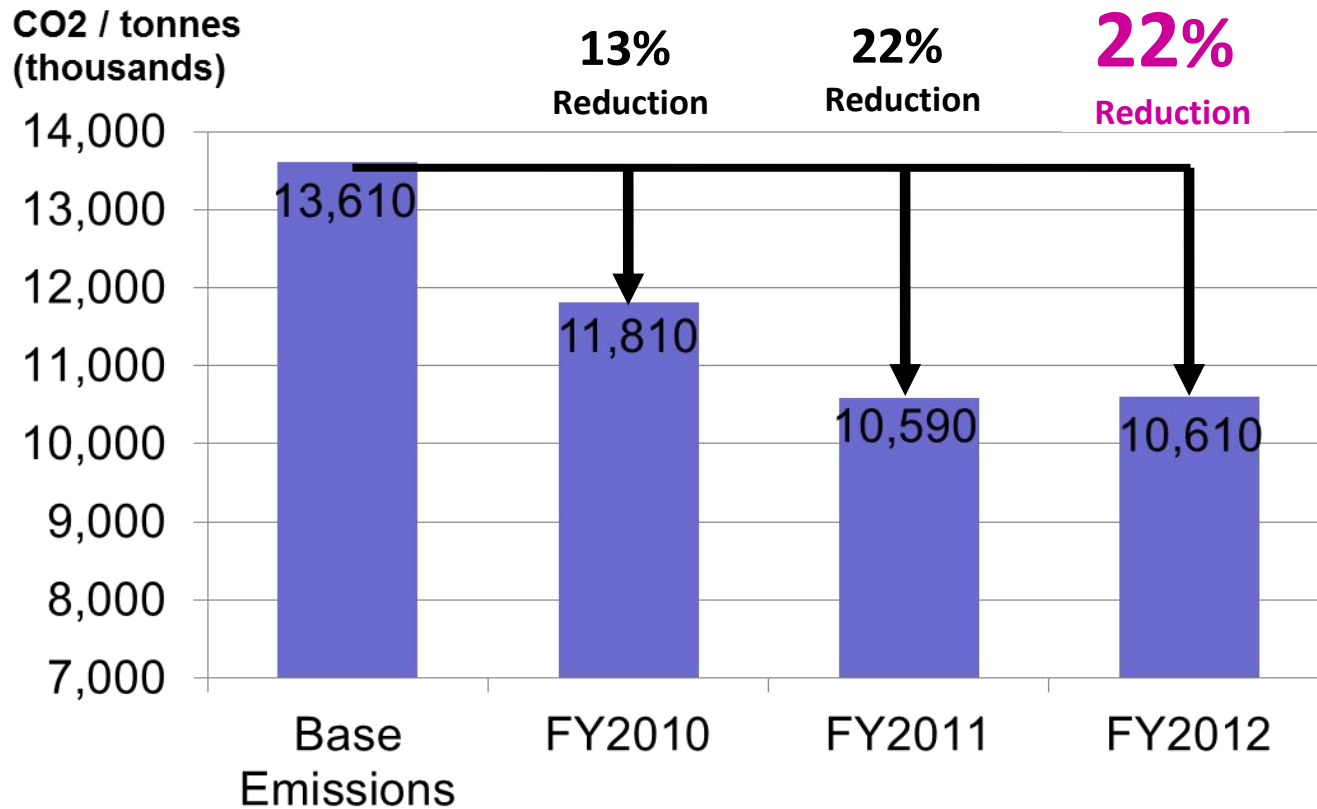
## Results to Date

## Tokyo Cap-and-Trade Program



# Tokyo Cap-and-Trade: Results to Date 1

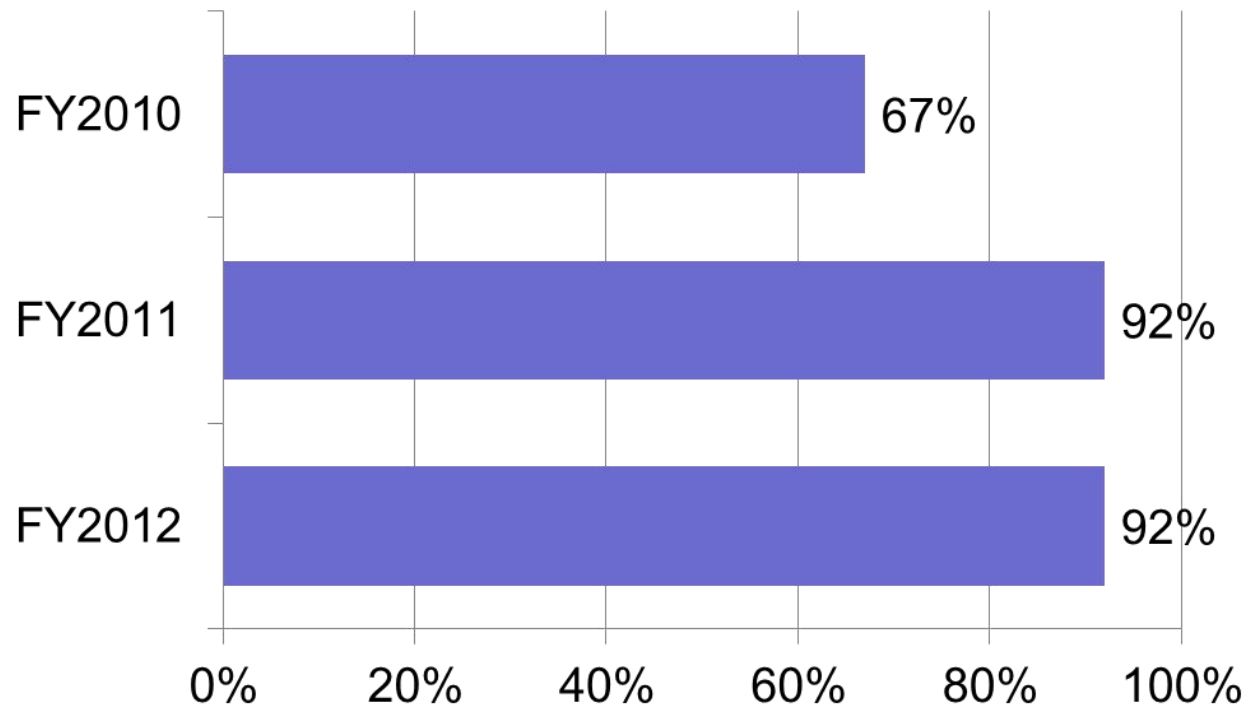
Total CO2 emissions from facilities covered by C&T dropped drastically



# Tokyo Cap-and-Trade: Results to Date 2

## Emission reductions in each facility:

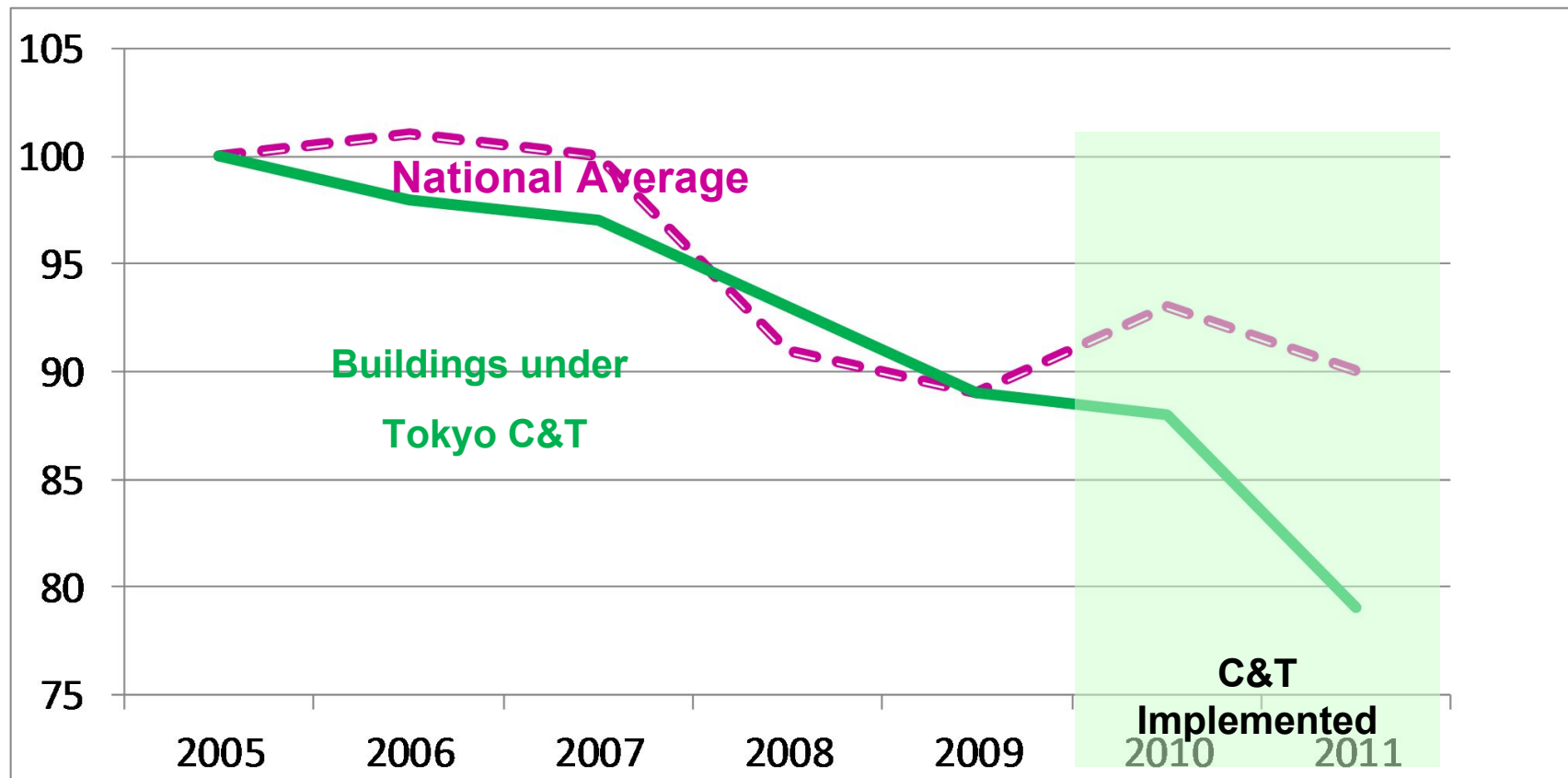
92% of all facilities have successfully achieved more than their obligations



# Tokyo Cap-and-Trade: Results to Date 3

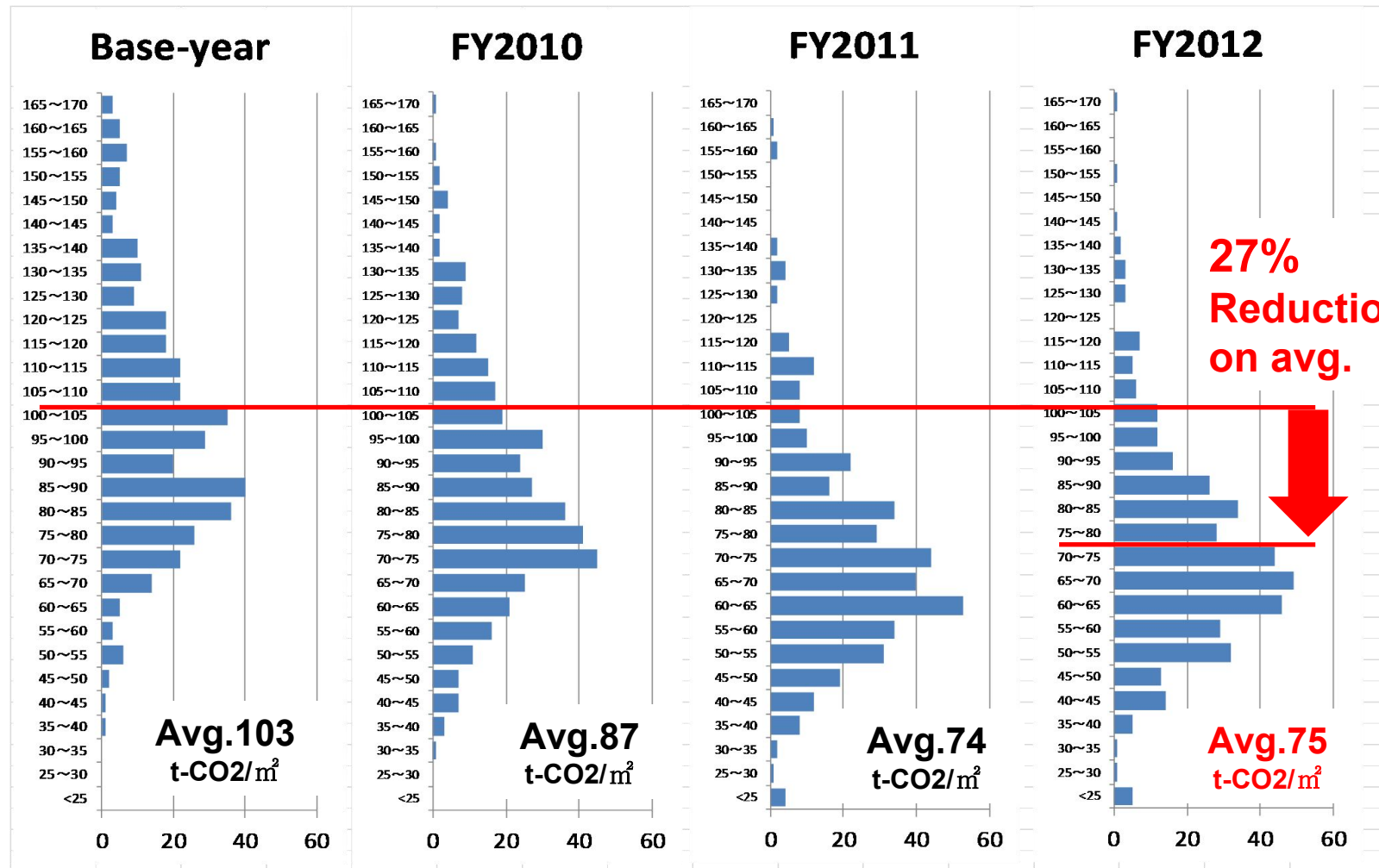
## Comparison with national total trend:

Facilities under C&T decreased emissions drastically



# Tokyo Cap-and-Trade: Results to Date 4

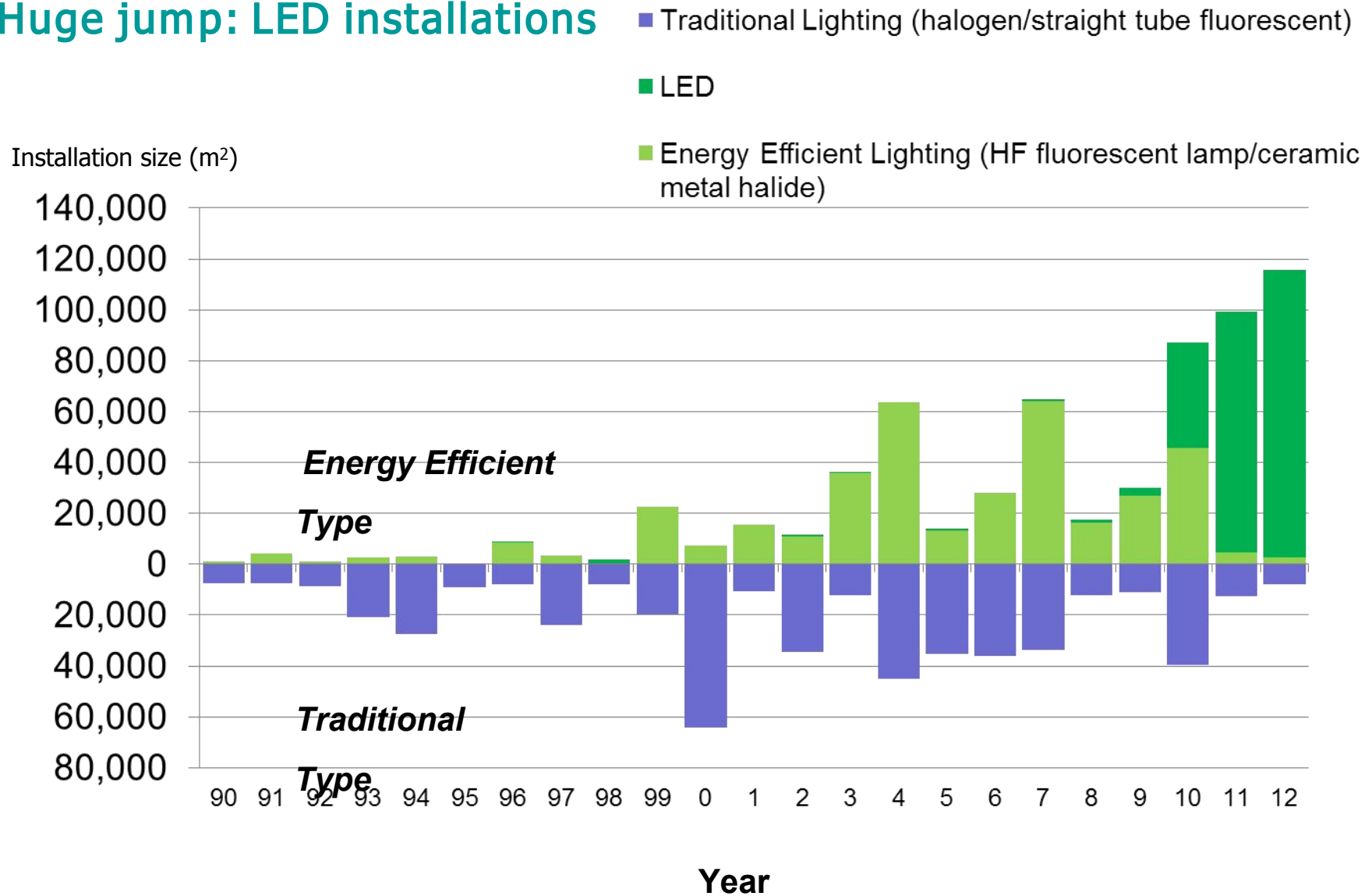
## Dramatic drop in CO2 emission intensity





# Tokyo Cap-and-Trade: Results to Date 5

## Huge jump: LED installations



For the Steps Forward...



**Global Cooperation**

**Toward Low Carbon City**



# City and Climate Change: Power and Opportunity

- ◆ **Diverse resources**  
(Citizens, Companies, Governments, NGOs...)
- ◆ **Scale of economy**
- ◆ **Innovations**
- ◆ **Local governments**  
functions and experiences



# City and Climate Change: Collaborative work among cities

**C40CITIES**  
CLIMATE LEADERSHIP GROUP

**·I.C.L.E.I** Local Governments for Sustainability

 **Covenant of Mayors**  
Committed to local sustainable energy



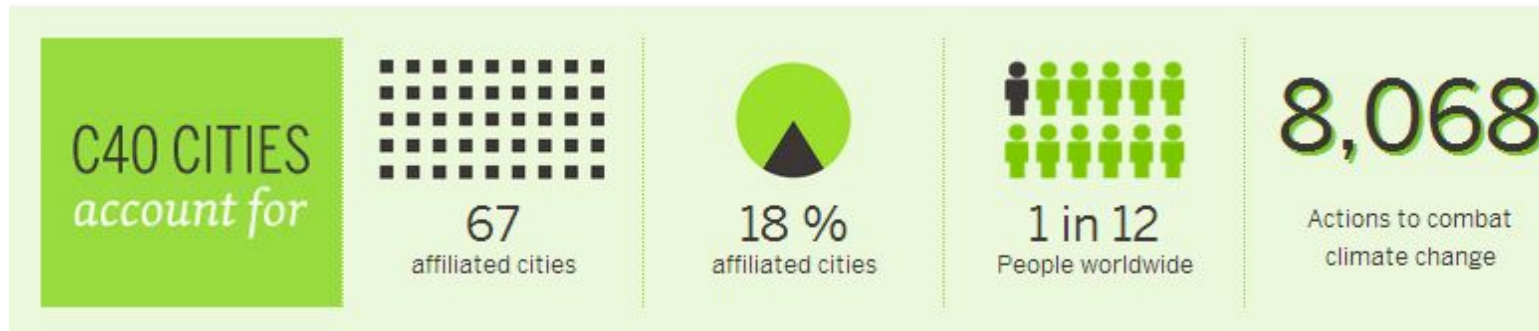


# City and Climate Change: Power of Network



## The C40 Cities Climate Leadership Group

Network of the world's megacities committed to addressing climate change



# Power of Network



## Networks

- Bus Rapid Transit
- Green Growth
- Climate Positive Development
- Climate Risk Assessment
- Connecting Delta Cities
- Cool Cities
- Electric Vehicles ..... and more

- Private Sector Building Efficiency
- Municipal Building Efficiency
- Sustainable Solid Waste System
- Measurement and Reporting
- Global Standards for Measurement & Planning
- Sustainable Infrastructure Finance





# C40 Cities Private Building Efficiency Network



Workshop  
Webinar  
Conference call  
Research  
Joint action

## Key Features

1. Network of key officials
2. Close relationship among members
3. Secured environment
4. Supporters



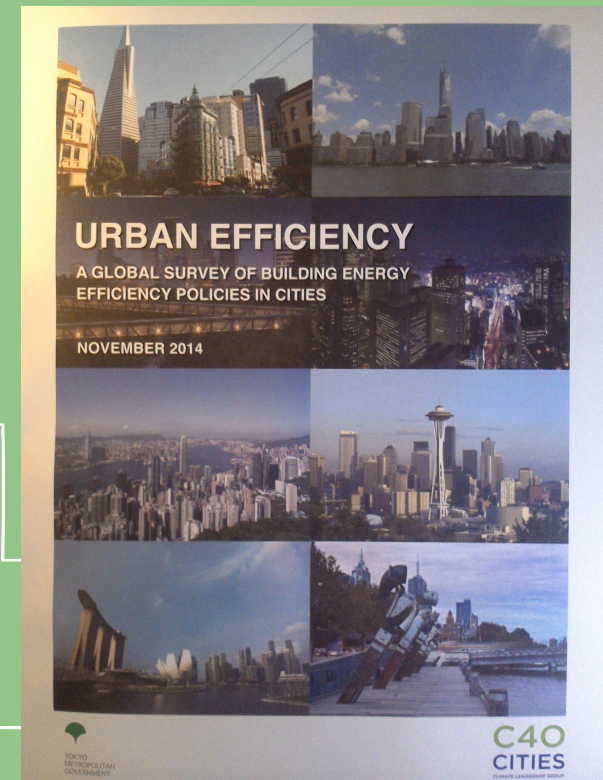
# Private Building Efficiency Network

## "Urban Efficiency"

A Global Survey of  
Building Energy Efficiency Policies in Cities

Highlighting various BEE policies in cities  
to serve as a resource for city officials

Success factors and key challenges



[www.kankyo.metro.tokyo.jp/en](http://www.kankyo.metro.tokyo.jp/en)

For the Steps Forward...

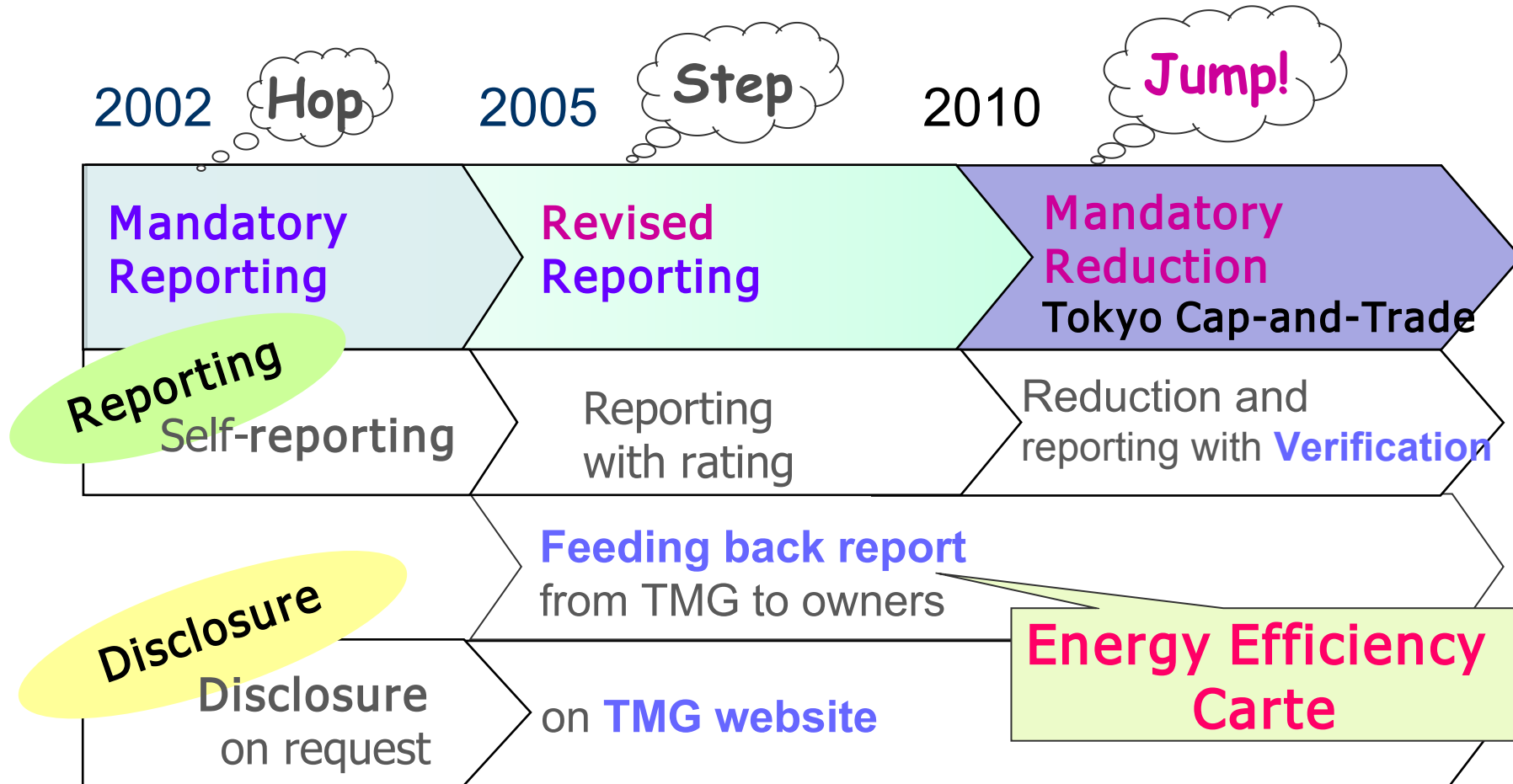


 **Bilateral Cooperation**  
**Tokyo's Experience**



# Hop, Step & Jump!

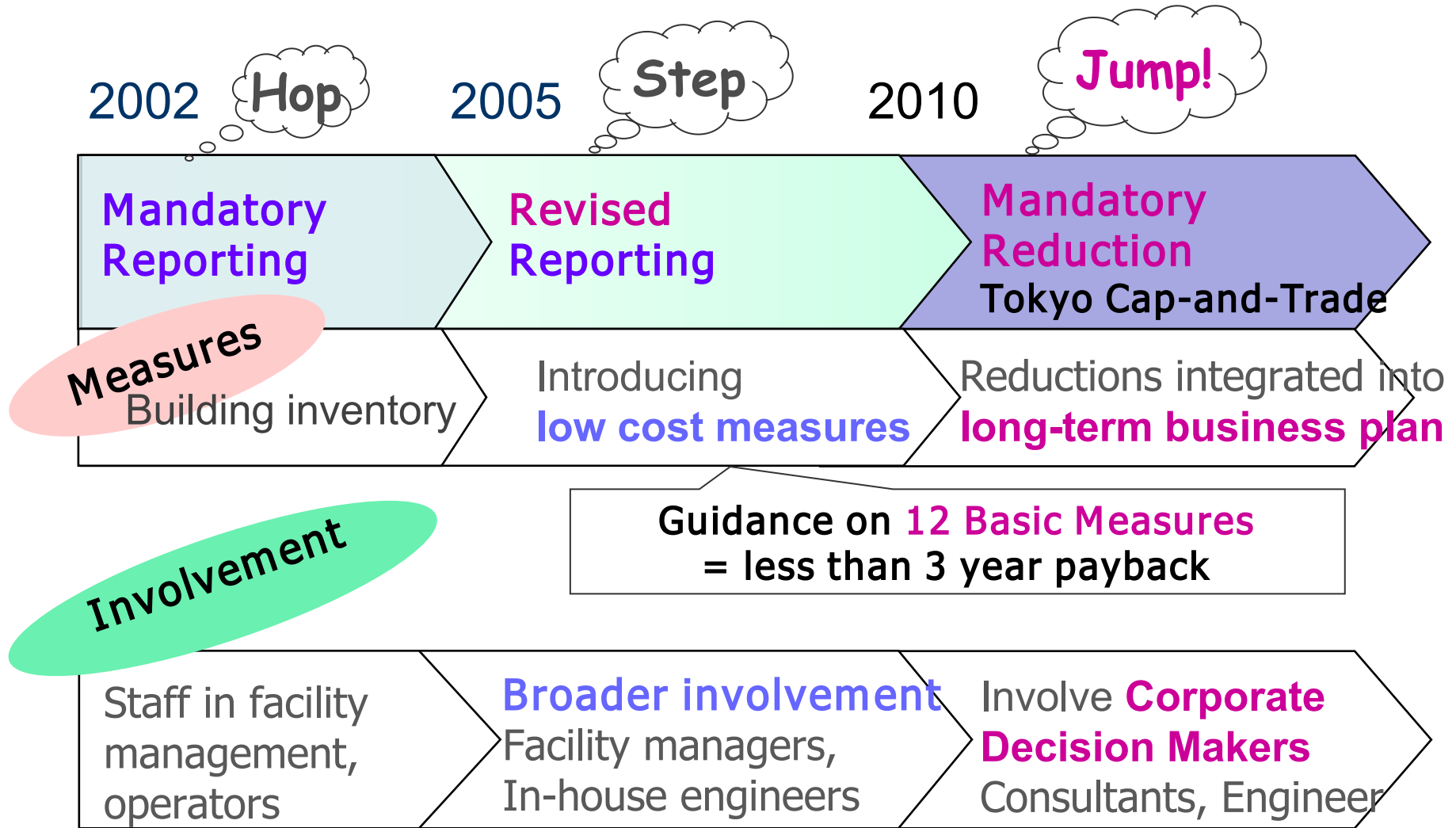
Reason for steady reductions





# Hop, Step and Jump!

Reason for steady reductions



# More Global Attentions for Local Climate Actions!



## References

TMG Website: [www.kankyo.metro.tokyo.jp/en](http://www.kankyo.metro.tokyo.jp/en)

TMG Facebook: [www.facebook.com/Environment.TMG](http://www.facebook.com/Environment.TMG)

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