Tokyo Solutions for Environmentally Sustainable City

Regulative method and Market Mechanism

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CO2 Emissions by Sectors (2009)

**FY2009**

- **Industrial** (4.6Mt)
- **Commercial** (19.7Mt)
- **Residential** (14.7Mt)
- **Transportation** (13.2Mt)

Emission from the Buildings Sector

- Building Sector emits more than 70%

**Reducing emissions from buildings is the problem to address!**

Increasing in Commercial and Residential Sectors

☆ Reducing emissions from buildings is the problem to address!
FY2009
53.6Mt

Tokyo Solutions

Solutions for Buildings

Transportation

- Vehicle Emissions Reduction Program
- Truck Benchmarking

Residential

- Energy Saving Advisers
- Subsidy for Solar energy
- Roof Lease Business Matching Program

Industrial

- Carbon Reduction Reporting Program
- Cap-and-trade

Commercial

[Large Facilities]

- Carbon Reduction Reporting Program
- Cap-and-trade

[Small & Medium Facilities]

- Carbon Reduction Reporting Program
- Subsidy Program for Retrofit
- Tax Exemption for Retrofit
- Energy Efficiency Audit & Advise
- Low-carbon Building Bench-marking

New Buildings

- Green Building Program
- Green Label Program for Condominiums
- Low-carbon prerequisite for Large Developments
Mandatory emission reductions & Emission trading program

Reduction Obligation

CO2

Excess reduction

TRADE!

CO2

Reduction Obligation Rate

Factories: -6%

Office Buildings: -8%
Rating and Disclosure System to improve environmental performance of new buildings

Covered: Newly planned buildings over 5,000 sq. meters

Purpose: To create a real estate market where greener buildings are valued

Requirement: Building owner is required to employ eco-friendly design and to submit a “Building Environmental Plan” outlining the building’s environmental performances

Disclosure: Plan with rated result with 3 ratings are disclosed on TMG website

Covers about 40% of new buildings
The Result of Cap-and-trade Program (2\textsuperscript{nd} Year)

- 23% reduction in total
- 93% reduced emissions more than obligation
Green Building Era in Tokyo

Low Emission Buildings TOP30

Carbon Reduction Reporting Program

- A prior program to Cap-and-Trade (2002-2009)

◆ Mandatory Reporting Program

Require a report of 5 year plan for energy reduction with voluntary reduction target

◆ Advise, Evaluate & Disclose

Level up the reduction efforts by
- advising,
- evaluating and
- public disclosure

Easy to introduce

Good for collecting data needed for mandatory reduction program
Towards low-carbon and environmentally sustainable Asian cities, Tokyo wishes to share experiences.

Thank you for your attention.

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