



The Tokyo Cap-and-Trade Program Results of the First Fiscal Year of Operation (Provisional Results)

The Tokyo Cap-and-Trade Program was launched in April 2010 based on the Tokyo Metropolitan Environmental Security Ordinance. Under this program, covered facilities¹ are obligated to submit and make public their annual emissions reports and emissions reduction plans.

Through March 31, 2012, annual emissions reports for FY2010, the first year of the program, had been submitted by 1,159 of the 1,348 covered facilities. The Tokyo Metropolitan Government (TMG) examined these reports and prepared the following aggregated statistics.

1. Total Emissions in FY2010

The total emissions in FY2010 from 1,159 facilities were 9,763,956 t-CO₂, while the total base-year emissions² were 11,208,596 t-CO₂. Thus, emissions in FY2010 had been reduced by 13% in comparison to the base-year emissions.

Analysis indicates that most of the reductions that were achieved were the result of active reduction measures undertaken by covered facilities, despite the very hot summer experienced in 2010.

Incidentally, the period of limited use of electricity after the Great East Japan Earthquake lasted only 21 days; thus, these significant emissions reductions were not mainly the result of the earthquake.

<Emissions and Reduction Rates in FY2010 by Usage of Facilities>

Usage of Facilities	Number of Covered Facilities	Base-Year Emissions (t-CO ₂)	Emissions in FY2010 (t-CO ₂)	Emission Reduction Rate (%)	Reference: Average Base-Year Emissions per Facility (t-CO ₂)
Commercial Sector	970	8,302,326	7,418,087	11%	8,559
Office	509	4,176,696	3,656,371	12%	8,206
Information Communication Center	32	375,389	373,260	1%	11,731
Broadcasting Station	5	96,099	90,204	6%	19,220
Commercial Facility	172	1,216,026	1,095,963	10%	7,070
Accommodation	41	475,318	437,529	8%	11,593
Educational Facility	57	470,686	447,350	5%	8,258
Medical Facility	64	542,639	503,563	7%	8,479
Cultural Facility	24	149,427	130,595	13%	6,226
Distribution Center	20	145,864	129,129	11%	7,293
Heat Supplier	46	654,182	554,123	15%	14,221
Industrial Sector	189	2,906,270	2,345,869	19%	15,377
Factory	134	2,253,308	1,756,379	22%	16,816
Waterworks/Sewerage	39	481,658	455,639	5%	12,350
Waste Management	16	171,304	133,851	22%	10,707
Total	1,159	11,208,596	9,763,956	13%	9,671

¹ A facility whose energy consumption in the previous fiscal year is 1,500kL or more in crude oil equivalent is covered under the program.

² The base-year emissions are calculated based on the average emissions of three consecutive fiscal years selected between FY2002-FY2007.

2. Reduction Measures Implemented

According to the 1,159 reports submitted and examined, a total of 5,764 measures, as categorized below, had been carried out in order to reduce emissions through until FY2010. The emissions reduction amount resulting from these measures is estimated to be 380,000 t-CO₂.

<Principle Measures Included in the Reports>

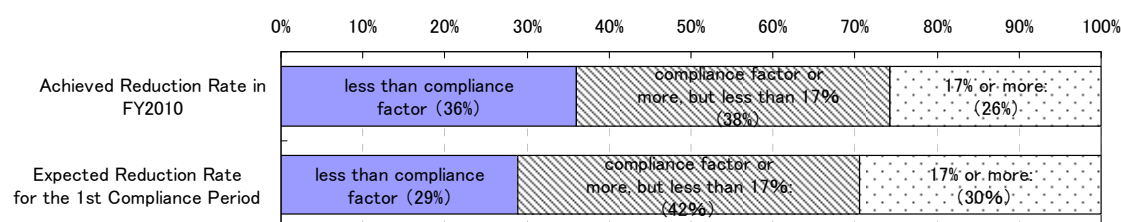
Category of the Measures	Number of Measures Taken	Examples
Management of air conditioning and ventilation	1,602	<ul style="list-style-type: none"> • Upgrade of air conditioning equipment • Review of adequate temperature-humidity • Review of air conditioner operating hours • Review of operation schedule of fans in parking lot • Introduction adequate open-air introduction
Management of lighting, incoming and transforming equipment etc.	1,436	<ul style="list-style-type: none"> • Introduction of Hf, LED or high luminance guide light • Introduction of control device like motion sensor • Lights-off when not using rooms like lunchtime • Upgrade to high-efficiency transforming device
Management of heat source	897	<ul style="list-style-type: none"> • Update of freezing machine • Temperature management of hot and cold water at returning point • Introduction of inverter to hot and cold water pump/ cooling water pump • Strengthen of insulation at vapor bulb
Management of supplying hot water, water supply and drainage, freezing and cooling equipments etc.	302	<ul style="list-style-type: none"> • Stop of supplying hot water to washroom except winter • Upgrade to water-saving toilet or automatic shut-off faucets • Stop of heating supply to toilet seats • Upgrade to energy-saving vending machine
General Management	275	<ul style="list-style-type: none"> • Development of framework for energy-saving (including tenants) • Offer of energy consumption data to tenants • Energy-saving education for employees • Tuning by introduction of BEMS

3. Current and Expected Achievement of Reduction Obligations

Under the Tokyo Cap-and-Trade Program, each covered facility is required to reduce emissions by 8% or more for the commercial sector and 6% or more for the industrial sector, which are the compliance factors for the first compliance period (FY2010-2014).

According to the submitted 1,159 reports, about 64% of facilities succeeded in reducing emissions by no less than the compliance factor in FY2010, and 26% of facilities have already reduced emissions by 17% or more, which is the expected compliance factor for the second compliance period (FY2015-2019).

Furthermore, about 71% of facilities should be able to fulfill their reduction obligations through their own reduction efforts, if all reduction plans included in the reports are carried out through the end of FY2014.³



³ The achievement of reduction obligations will be judged at the end of the compliance period, based on the average reduction rate over a 5-year period.