



March 5. 2024
Tokyo Metropolitan Government
Bureau of Environment

**Tokyo Cap-and-Trade Program** 

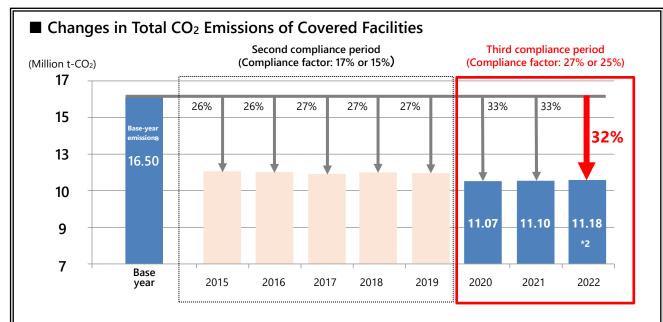
# Significant Emission Reductions Continue at Covered Facilities in the Third Fiscal Year of the Third Compliance Period

We are pleased to announce that we have compiled the reduction results for the third fiscal year of the third compliance period (FY 2022) at facilities covered by the Tokyo Cap-and-Trade Program.

In FY 2022, emissions from covered facilities totaled 11.18 million tonnes, a <u>32% reduction</u> from the base-year emissions\*1, due to progress in energy efficiency measures and the use of low-carbon electricity and heat (see reference), in spite of economic activities being restored to normal conditions at some covered facilities.

The Tokyo Metropolitan Government (TMG) will continue to encourage CO<sub>2</sub> reductions in the third compliance period from FY 2020 to FY 2024 to enable all covered facilities to meet their obligations.

\*1 The base-year emissions are the average emissions of three consecutive fiscal years selected by the facilities between FY 2002 and FY 2007. (Emission factors for electricity etc. are calculated using the values in the third compliance period)



- \*2 Aggregated value as of February 9, 2024 resulting from emission factors for electricity etc. in the third compliance period.
- **■** Examples of Factors Contributing to Increase/Decrease in CO<sub>2</sub> Emissions

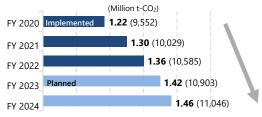
Factors that contribute to a decrease include upgrading to high-efficiency equipment and LED lighting and the use of renewable energy.

Factors that contribute to an increase include restored operating hours and number of users at some covered facilities as well as increased demand for telecommunications infrastructure.

- O About the Tokyo Cap-and-Trade Program
  - In FY 2010, TMG started the Tokyo Cap-and-Trade Program for large facilities according to the Tokyo Metropolitan Environmental Security Ordinance.
  - Compliance factors: 8% or 6% in the first compliance period from FY 2010 to FY 2014
     17% or 15% in the second compliance period from FY 2015 to FY 2019
     27% or 25% in the third compliance period from FY 2020 to FY 2024
  - Covered facilities: Approximately 1,200 facilities which annually use 1,500 kL or more of energy in terms of crude oil equivalent

## > Analysis of Implementation and Planning of Measures

Reductions resulting from measures implemented or planned by covered facilities



\* Number of measures are in parentheses.

New reduction measures planned to meet obligations for the third compliance period

#### Reduction measures indicated in GHG Emission Reduction Plans

Measures for heat sources, air conditioning, and lighting	Quantity	Reductions (tonnes)
Installation of high-efficiency heat source equipment	406	143,704
Installation of high-efficiency pumps for air conditioning and energy-saving control	293	24,876
Installation of high-efficiency air conditioning equipment	425	37,701
Installation of high-efficiency packaged air conditioning equipment	102	8,366
Installation of variable-air-volume systems for air conditioning equipment	34	5,647
Installation of systems for cooling using outside air	213	22,673
Installation of external air volume control based on CO <sub>2</sub> concentration	106	16,605
Installation of total heat exchangers	38	3,692
Installation of high-efficiency fans	220	10,000
Installation of high-efficiency lighting and energy saving control	2,347	184,593

Measures for heat sources, air conditioning, and lighting	Quantity	Reductions (tonnes)
"Cool Biz" and appropriate room temperatures during summer	89	19,020
Implementation of warming-up control	21	486
More careful timing of starting up air-conditioning before using rooms	110	9,721
Installation of building energy management systems	35	6,633
Demand control systems	6	6,189
Relaxing illumination conditions	197	14,753
Total or partial lights-out during lunch break and outside business hours	16	491
Installation of energy saving control for elevators	208	5,740

Total (above measures and others)	11,046	1,455,887

## > Status of the Use of Low-Carbon Electricity and Heat

Selection of low-carbon electricity or heat as a means to meet obligations

- A mechanism is utilized to accept electricity or heat procured from TMG-certified suppliers with lower emission factors\* as equivalent to CO<sub>2</sub> reductions.
- The percentage of facilities using low-carbon electricity increased from about 14% in FY 2021 to about 17%.

Facilities that opted for low-carbon electricity and heat in FY 2022

Catagories	Certified low-carbon suppliers	Facilities using this mechanism		
Categories		Number of facilities	Total reductions	
Low-carbon electricity	21	201	Approx. 383,248 t-CO <sub>2</sub>	
Low-carbon heat	43 (ward area)	179	Approx. 37,070 t-CO <sub>2</sub>	

\* Certification requirements for suppliers in the third compliance period:

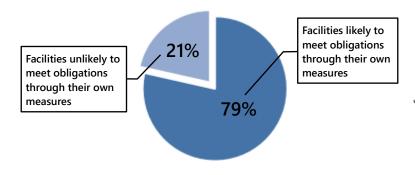
For low-carbon electricity, the CO<sub>2</sub> emission factor is less than 0.37 t-CO<sub>2</sub>/MWh (base emission factor or adjusted emission factor, whichever is lower).

For low-carbon heat, the energy efficiency (COP) of heat is equal to or more than either of the following, and the  $CO_2$  emission factor is less than 0.060 t- $CO_2/GJ$ .

1 0.85 when steam is included or 2 0.90 when steam is not included.

## > Projected Obligation Fulfillment for the Third Compliance Period (reference)\*

Estimated percentage of facilities meeting obligations based on actual results in FY 2022



Based on the assumption that emissions will not change from FY 2022 results during the third compliance period from FY 2020 to FY 2024.