4th compliance period
(FY 2025 to 2029)

**Tokyo Metropolitan
Environmental Security Ordinance**

"Tokyo Cap-and-Trade Program" for Large Facilities

April 2025

Bureau of Environment
Tokyo Metropolitan Government

1 Objectives of the Program

In May 2019, the Tokyo Metropolitan Government (TMG) declared that Tokyo will pursue efforts to limit the global average temperature increase to 1.5ºC, as that entails a lower risk, and realize a Zero Emission Tokyo that will contribute to achieving net zero CO_2 emissions by 2050.

As part of the Zero Emission Tokyo Strategy Beyond Carbon Half and with the goal of achieving a 2030 Carbon Half milestone, TMG has set a target to reduce Tokyo's greenhouse gas (GHG) emissions by at least 60% from 2000 levels by 2035. To achieve this, TMG is implementing comprehensive climate change measures across various sectors.

Notably, approximately half of Tokyo's CO_2 emissions come from the industrial and commercial sectors, with large-scale facilities contributing around 40% of those emissions. The Tokyo Cap-and-Trade Program (the Program), which started in April 2010, covers large facilities with a large amount of GHG emissions, with the aim of comprehensively reducing emissions by determining mandatory emission reductions for each facility within a specified period.

2 Coverage of the Program

Covered facilities

Categories	Requirements
Reporting facility	Annual consumption of fuels, heat, and electricity in the previous fiscal year is 1,500 kL* or more in crude oil equivalent (COE). * Equivalent to approximately 6.7 GWh or more of electricity consumption
Compliance facility	Annual consumption of fuels, heat, and electricity is 1,500 kL COE or more for three consecutive fiscal years (except for the fiscal year in the middle of which the use of the facility is started).
SME-owned facility with GHG reporting obligations (SME facility)	Annual consumption of fuels, heat, and electricity in the previous fiscal year is 1,500 kL COE or more. More than 50% ownership of the facility is held by a small and medium-sized enterprises (SMEs).

Scope of facilities

In principle, the scope of facilities is defined as the unit of a building or premises except for residential housing. Multiple buildings and/or premises are regarded as a single facility if they:

- Share points to receive power or gas from energy suppliers;
- Are adjacent to each other and owned by the same owner;
- Are facilities of a certain size, close to each other with a road, water channel, etc. in between (Buildings must have primary users in common); or
- Are district heating and cooling facilities with interconnected ducts.

Obligors

Although facility owners are obligors as a general rule, incorporated management associations or compliance tenants (see 5 . Climate Change Strategy Promotion System at Facilities) can assume obligations on behalf of or jointly with the owners by giving notification to TMG.

Covered GHGs

(1) Energy-related CO_2 emissions subject to reduction obligations:

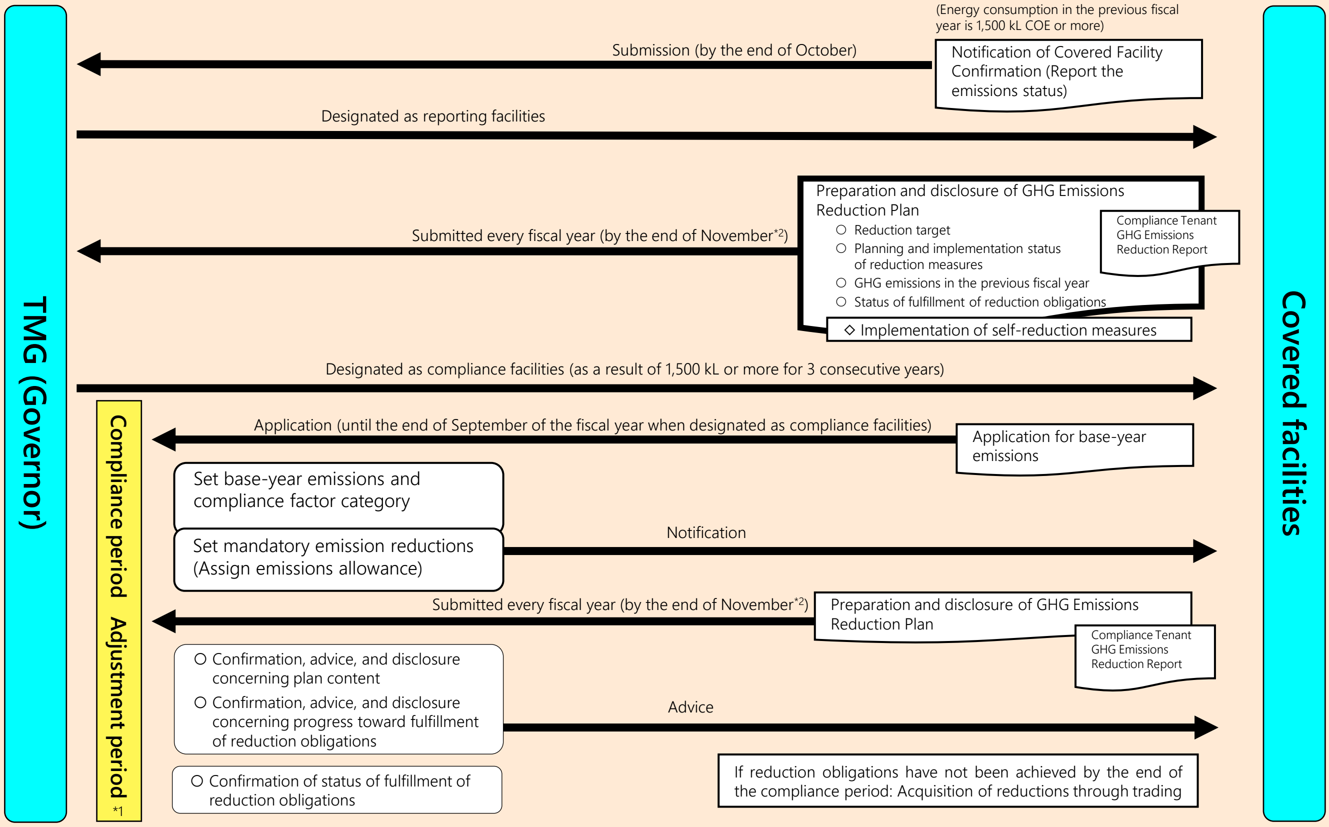
CO_2 emitted associated with the use of fuels, heat, or electricity except those used at housing

(2) Other gases with emissions reporting required:

CO_2, CH_4, N_2O, PFC, HFC, SF_6, and NF_3 not covered above

Please note that reductions in (2) under certain requirements can be appropriated for mandatory emission reductions in (1).

3 Flow of the Program



*1 1st compliance period: FY 2010 to 2014 with adjustment period from April 2015 to the end of September 2016
2nd compliance period: FY 2015 to 2019 with adjustment period from April 2020 to the end of September 2021 (extended until the end of January 2022 due to the COVID-19 pandemic)
3rd compliance period: FY 2020 to 2024 with adjustment period from April 2025 to the end of September 2026
4th compliance period: FY 2025 to 2029 with adjustment period from April 2030 to the end of September 2031

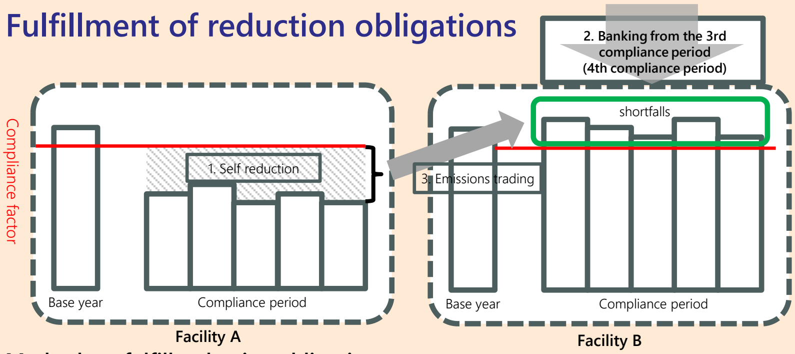
*2 In the 4th compliance period, reporting facilities that calculate GHG emissions from electricity consumption using menu-based emission factors are required to submit a GHG Emissions Reduction Plan by the deadline specified by TMG.

Category	Positioning	Obligations	Period/deadline
Reporting facility	Facility needing to specifically promote climate change strategy	• Calculation of energy consumption in crude oil equivalent and energy-related CO_2 emissions in the previous fiscal year (verification required) • Calculation of other gas emissions in the previous fiscal year (no verification required) • Setting reduction targets and plans	—
		Appointment of general managers and technical managers	Within nine months from the date of appointment (the date of designation as the facility or the date of change of the person in charge due to personnel transfers etc.)
		Cooperative promotion system with tenants	As needed
		Submission and disclosure of the plan including the above	Submission: By the end of November every fiscal year (Whichever is the latest, the end of November or the 90th day after designation for the fiscal year in which the facility is designated as a reporting facility) Disclosure: As soon as possible after submission
Compliance facility	Facility with an obligation to reduce energy-related CO_2 emissions	Application for base-year emissions	By the end of September of the fiscal year in which the facility is designated as a compliance facility
		Obligations of a reporting facility shown above	As mentioned above
		Obligation to reduce energy-related CO_2 emissions	—
		Reduction by the facility itself	As needed
		Procurement of shortfalls of mandatory emission reductions through trading (procuring excess emission reductions from other facilities or renewable energy credits)	As needed

* An SME facility is required to submit and disclose a plan in the same manner as a reporting facility. Please note that verification is not required for energy consumption in crude oil equivalent or energy-related CO_2 emissions in the previous year.

4 Mechanism of the Program

Fulfillment of reduction obligations



The Program stipulates a compliance factor for each facility.

Methods to fulfill reduction obligations include self reduction as well as banking from the third compliance period and emissions trading with other facilities in the case of a shortfall in reductions.

Methods to fulfill reduction obligations

1. Self reduction

(1) Upgrading to high-efficiency energy consumption equipment and developing operational measures
(2) Procuring electricity or heat with lower emission factors (or environmental value appropriated) from suppliers
(3) Procuring renewable electricity from outside through off-site PPAs
(4) From annual emissions deducting CO_2 reduction effects of renewable energy certificates, including Renewable Energy Certificates and non-fossil value certificates

2. Banking from the third compliance period

3. Emissions trading

(1) Excess emission reductions, (2) Small and mid-size facility credits (reductions in Tokyo), (3) Renewable energy credits (environmental value equivalent and other reductions), (4) Outside Tokyo credits (reductions outside Tokyo), and (5) Saitama credits (Links between small and mid-size facility credits are temporarily suspended in the 4th period)

The main revisions in the fourth compliance period are to expand the renewable energy that can be used to calculate emissions at facilities, such as the selection of renewable electricity and heat, the use of off-site renewable energy, and the use of renewable energy certificates, in light of the diversified methods of procuring renewable electricity and heat.

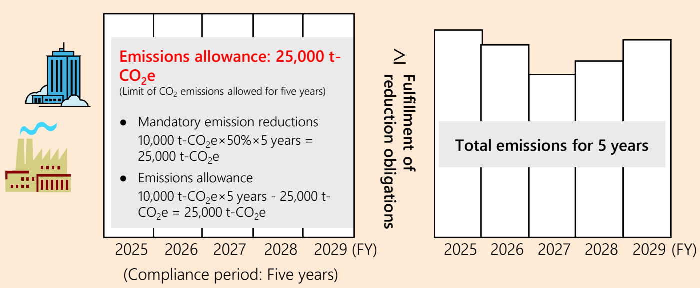
Mandatory emission reductions

Base-year emissions × Compliance factor × Compliance period ⇒ **Mandatory emission reductions**

Base-year emissions × Compliance period − Mandatory emission reductions ⇒ **Emissions allowance**

Reduce emissions during the compliance period up to the emissions allowance given by the formula above

- Base-year emissions: 10,000 t-CO_2e
- Compliance factor for the 4th compliance period: 50%



To determine annual mandatory emission reductions for each facility:

Multiply (1) Base-year emissions by (2) Compliance factor.

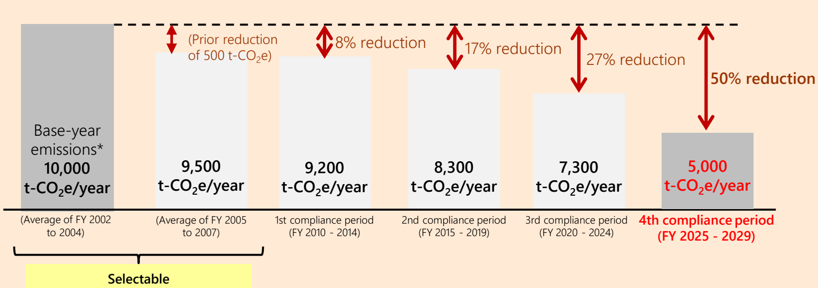
As long as total emissions over the five-year compliance period remain within the allocated emission allowance, facilities may implement their equipment replacement plans flexibly.

Base-year emissions - Existing covered facilities

In principle, calculate the average emissions of three consecutive fiscal years between FY 2002 and FY 2007* (Businesses can choose any three consecutive fiscal years)

* If the Governor identifies a year or two with irregular emissions among the three fiscal years, covered facilities can choose from the average of two years or the emission of a single year by excluding the year or two with irregular emissions.

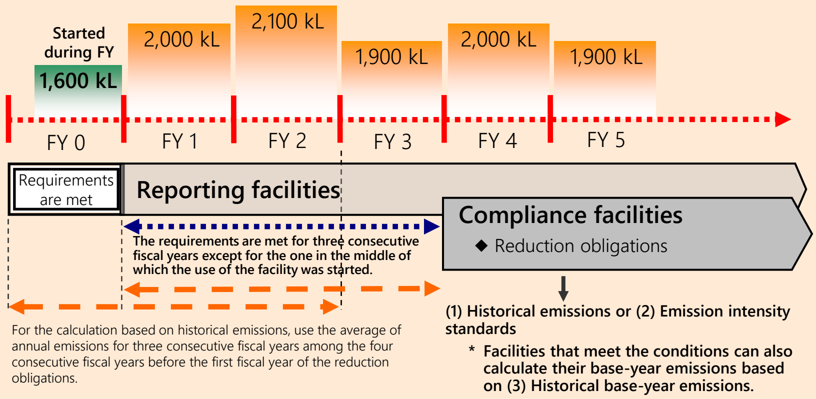
Example: A facility with historical emission reductions can select earlier fiscal years for the calculation.



If a facility took energy efficiency measures to achieve emission reductions before the start of the Program, it could take advantage of the efforts by selecting earlier fiscal years to determine base-year emissions.

If buildings are extended or there is a significant change in amount of equipment after the determination of base-year emissions, the base-year emissions can be changed to assume reduction obligations based on appropriate criteria.

Base-year emissions - New covered facilities



If energy consumption at a new building in the previous year is 1,500 kL COE or more, the relevant facility is designated as a reporting facility that assumes the obligation to submit plans and report emissions.

Then, if energy consumption remains at 1,500 kL COE or more for three consecutive fiscal years, it is designated as a compliance facility that assumes reduction obligations.

Base-year emissions of such a new covered facility are calculated by selecting either (1) Historical emissions* or (2) Emission intensity standards.

* Only available when a climate change strategy is implemented at the facility above a certain level.

Compliance factors

Category			Compliance factors: 1st compliance period	2nd compliance period	3rd compliance period	4th compliance period
I	I-1	Office buildings etc.[*1]	8%	17%	27%	50%
I	I-2	Facilities among office buildings etc., which use a larger amount of heat-related energy supplied by others [*2]	6%	15%	25%	48%
II		Factories etc.[*3]	6%	15%	25%	48%

*1 Office buildings, commercial facilities, accommodation facilities etc., and heat suppliers, except for those included in Category I-2

*2 Energy supplied by district heating and cooling plants and others accounts for 20% or more of the entire energy consumption at the facility

*3 Facilities not belonging to Category I-1 or I-2, including factories, water supply and sewage facilities, and waste treatment facilities

*4 Compliance factors for top-level facilities:
Facilities which achieve significant progress against global warming and meet the standards established by the governor of Tokyo are certified as top-level facilities. For top-level Gold and Silver facilities that meet certain conditions, compliance factors are relaxed to 3/5 and 4/5 respectively.

There are two different compliance factors defined by category. Please note that the compliance factors are relaxed if facilities:

(1) Have the Guidelines for Relaxation of Compliance Factors for Medical Facilities applied to them among facilities to which a compliance factor of 50% or 48% is applied;

(2) Use electricity for less than 20% of their total energy consumption; or

(3) Demonstrate excellence in implementing climate change strategies and have submitted the required application and received official recognition as eligible facilities[*4].

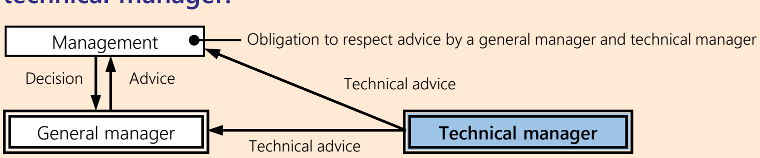
Compliance factors for new compliance facilities

The compliance factors for new facilities depend on the fiscal year in which the facilities become subject to reduction obligations.

	Compliance period	Subject to reduction	3rd compliance period					4th compliance period				
	Fiscal year	Fiscal year	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
New facilities	New entrants in the middle of the 1st compliance period	FY 2010	27% / 25%	27% / 25%	27% / 25%	27% / 25%	27% / 25%	50% / 48%	50% / 48%	50% / 48%	50% / 48%	50% / 48%
		FY 2011	17%／15%	27% / 25%	27% / 25%	27% / 25%	27% / 25%	41% / 39%	50% / 48%	50% / 48%	50% / 48%	50% / 48%
		FY 2012	17%／15%	17%／15%	27% / 25%	27% / 25%	27% / 25%	41% / 39%	41% / 39%	50% / 48%	50% / 48%	50% / 48%
		FY 2013	17%／15%	17%／15%	17%／15%	27% / 25%	27% / 25%	41% / 39%	41% / 39%	41% / 39%	50% / 48%	50% / 48%
		FY 2014	17%／15%	17%／15%	17%／15%	17%／15%	27% / 25%	41% / 39%	41% / 39%	41% / 39%	41% / 39%	50% / 48%
	New entrants in the middle of the 2nd compliance period	FY 2015	17%／15%	17%／15%	17%／15%	17%／15%	17%／15%	41% / 39%	41% / 39%	41% / 39%	41% / 39%	41% / 39%
		FY 2016	8%／6%	17%／15%	17%／15%	17%／15%	17%／15%	41% / 39%	41% / 39%	41% / 39%	41% / 39%	41% / 39%
		FY 2017	8%／6%	8%／6%	17%／15%	17%／15%	17%／15%	41% / 39%	41% / 39%	41% / 39%	41% / 39%	41% / 39%
		FY 2018	8%／6%	8%／6%	8%／6%	17%／15%	17%／15%	41% / 39%	41% / 39%	41% / 39%	41% / 39%	41% / 39%
		FY 2019	8%／6%	8%／6%	8%／6%	8%／6%	17%／15%	41% / 39%	41% / 39%	41% / 39%	41% / 39%	41% / 39%
	New entrants in the middle of the 3rd compliance period	FY 2020	8%／6%	8%／6%	8%／6%	8%／6%	17%／15%	41% / 39%	41% / 39%	41% / 39%	41% / 39%	41% / 39%
		FY 2021	Reporting	8%／6%	8%／6%	8%／6%	17%／15%	31% / 29%	41% / 39%	41% / 39%	41% / 39%	41% / 39%
		FY 2022	Reporting	Reporting	8%／6%	8%／6%	17%／15%	31% / 29%	31% / 29%	41% / 39%	41% / 39%	41% / 39%
		FY 2023	Reporting	Reporting	Reporting	8%／6%	17%／15%	31% / 29%	31% / 29%	31% / 29%	41% / 39%	41% / 39%
		FY 2024		Reporting	Reporting	Reporting	17%／15%	31% / 29%	31% / 29%	31% / 29%	31% / 29%	41% / 39%
	New entrants in the middle of the 4th compliance period	FY 2025			Reporting	Reporting	Reporting	31% / 29%	31% / 29%	31% / 29%	31% / 29%	41% / 39%
		FY 2026				Reporting	Reporting	Reporting	31% / 29%	31% / 29%	31% / 29%	41% / 39%
		FY 2027					Reporting	Reporting	Reporting	31% / 29%	31% / 29%	41% / 39%
		FY 2028						Reporting	Reporting	Reporting	31% / 29%	41% / 39%
		FY 2029							Reporting	Reporting	Reporting	41% / 39%

5 Climate Change Strategy Promotion System at Facilities

- **Each reporting facility is required to appoint a general manager and technical manager.**



To ensure systematic and reliable reductions, each facility is required to appoint

(1) a general manager to serve as the chief supervisor and

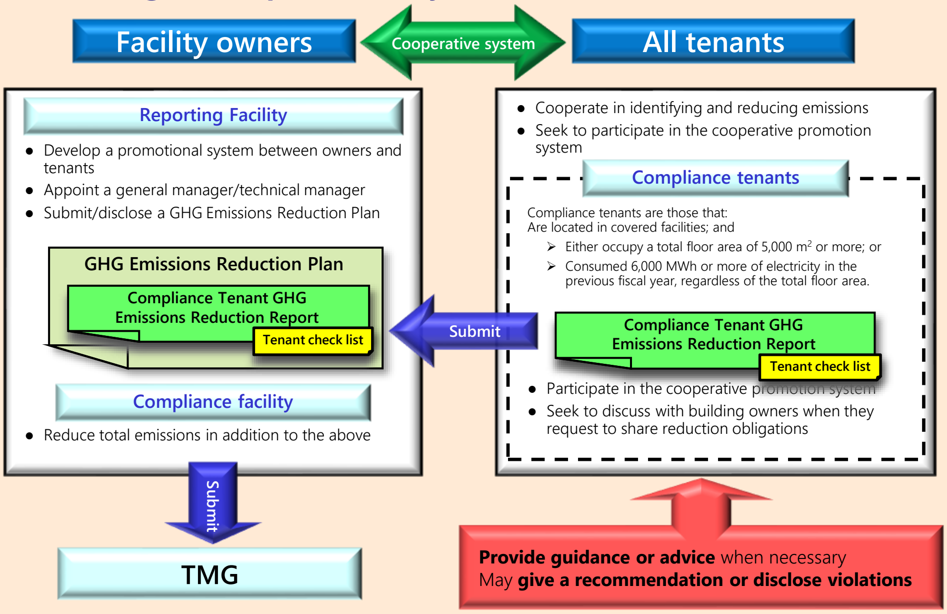
(2) a technical manager with appropriate expertise in energy efficiency.

*1 Technical manager is supposed to:
(1) Be a Certified Energy Manager or have other relevant qualification(s); (2) Have the ability to perform an energy efficiency and conservation audit; and
(3) Complete the training course specified by TMG[*3].

*2 Outsourcing is allowed provided that one person may be appointed as technical manager of up to five facilities.

*3 Mandatory for new general managers or technical managers at new reporting facilities designated from the third compliance period onward.

Building a cooperative system for owners and tenants



Effective reduction of GHG emissions at a rented building used by people other than its owner needs efforts by both parties, the building owner and tenants. Therefore, TMG provides a framework that treats building owners as principal reduction obligors and requires:
(1) All tenants to cooperate with building owners in their reduction measures; and
(2) Compliance tenants* to prepare and submit a plan describing their own measures and promote the measures based on the plan in addition to the obligation of (1).

TMG may offer guidance on the implementation of their measures directly to tenants as necessary.

* Compliance tenants are those that: Are located in covered facilities; and
- Either occupy a total floor area of 5,000 m^2 or more; or
- Consumed 6,000 MWh or more of electricity in the previous fiscal year, regardless of the total floor area.

6 Submission and Disclosure of GHG Emissions Reduction Plan

Main items to be disclosed

○ **Reduction targets**: Set quantitative reduction targets equal to or higher than a compliance factor, 50% or 48% in the fourth compliance period.

○ **Planning and implementation of measures to achieve the targets**: Use self-reduction measures at covered facilities and emissions trading to implement economically and technically feasible measures and identify the results.

○ **Annual emissions of energy-related CO_2**: Every fiscal year, identify the emission status and check the progress of measures.

○ **Status of using renewable energy**: Identify the ratio of renewable energy in all energy used at facilities.

○ **Annual emissions of other gases**: Strive to set targets for a large amount of emissions. Set quantitative targets if the emissions of other gases account for 1/2 or more of emissions at covered facilities.

Covered facilities are required to prepare a GHG Emissions Reduction Plan and submit it to the governor every fiscal year. As shown in 5 above, compliance tenants are required to prepare and submit a Compliance Tenant Report.

Covered facilities must also disclose mandatory emission reductions, base-year emissions, compliance period, status of planning and implementation of measures to achieve the targets, and annual emissions in the previous fiscal year.

The above information is disclosed in the website of the Bureau of Environment, Tokyo Metropolitan Government.

7 Verification

Registration categories of verification agencies

Category No.	Category name	Verified items
1	Energy-related CO_2 emissions/base-year emissions	Energy-related CO_2 emissions in every fiscal year
		Base-year emissions
2	Reductions inside/outside Tokyo	Small and mid-size facility credits
		Outside Tokyo credits
3	Other gas reductions	Appropriation of other gas reductions for fulfilling reduction obligations
4	Reserve of environmental value, including electricity	Renewable energy credits
5	Compliance with criteria for top-level facilities	Certification criteria for top-level facilities

To make sure of the fulfillment of reduction obligations and fairness of emissions trading, the Program requires verification by verification agencies registered with TMG. Facilities under the Program must undergo verification by a verification agency* registered with TMG when they (1) apply for base-year emissions, (2) report emissions every fiscal year, (3) apply for certification as top-level facilities, or (4) receive the certification of gas reductions not subject to reduction obligations.

* The website of the Bureau of Environment, Tokyo Metropolitan Government discloses registered verification agencies and the evaluation system for the agencies.
URL: https://www.kankyo.metro.tokyo.lg.jp/climate/large_scale/authority_chief

8 Fulfillment of Reduction Obligations through Emissions Trading

The Program allows compliance facilities to not only implement energy efficiency measures at their own sites but also fulfill reduction obligations by procuring reductions through emissions trading.

There are five types of credits for emissions trading at present. In principle, they are available, at the latest, for the fulfillment of reduction obligations for the next compliance period.

Transactions of these credits are basically carried out between the parties involved with transaction records managed in the registry (electronic system) maintained by TMG.

(URL: https://www10.kankyo.metro.tokyo.lg.jp/CapAndTrade/tradingaccount/auth/TpPage)

Compliance facilities are encouraged to put a priority on self-reduction measures, including upgrading to high-efficiency energy consumption equipment and developing operational measures, over emissions trading.

▲electronic system

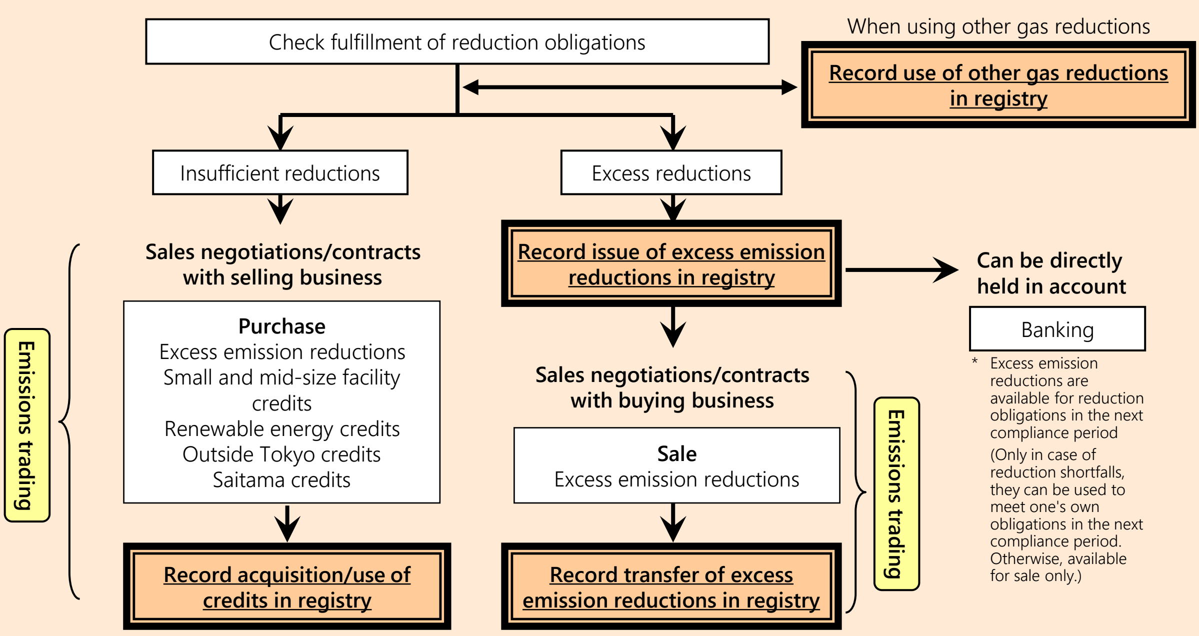
Available credits

Name	Description
(1) Excess emission reductions	Of reductions achieved by compliance facilities beyond their mandatory emission reductions, those generated according to the level of energy efficiency measures and the use of renewable energy (on-site/off-site)
(2) Small and mid-size facility credits	Reductions achieved beyond assumed levels through energy efficiency measures by small and medium-sized facilities in Tokyo
(3) Renewable energy credits	Environmental values of renewable energy ● Other reductions: Environmental values through other programs, including Green Electricity/Heat Certificates ● Environmental value equivalent: Environmental values created by equipment certified by TMG
(4) Outside Tokyo credits	Reductions achieved through energy efficiency and renewable energy measures by large facilities outside Tokyo
(5) Saitama credits	Excess emission reductions and small and mid-size facility credits certified under the Saitama Target-Setting Emissions Trading System (Links between small and mid-size facility credits are temporarily suspended in the 4th period)

Registries

Type	Description
Compliance account	An account opened for each reporting facility to record the status of the fulfillment of reduction obligations
Trading account	An account to record credit ownership etc. opened by an applicant who wishes to participate in emissions trading

Flow of transactions



9 Ensuring the Effectiveness of the Program

Compliance period: <u>Five years</u>

Adjustment period
Eighteen months after the compliance period

Compliance facility
- Confirmation of the fulfillment of reduction obligations
- (If reduction obligations have not been fulfilled by the end of the compliance period) Acquisition of reductions (credit etc.) through trading

Deadline of emission reduction obligation

In case of non-compliance → **Order for Action** (Reduction of 1.3 times the shortfall)

Deadline of order implementation

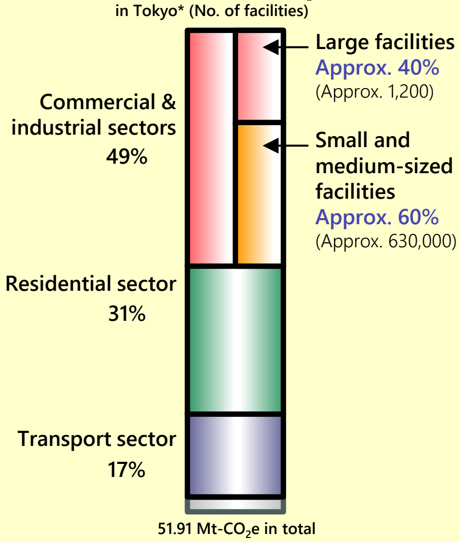
In case of violation of the order →
- Monetary fine (JPY 500,000 or less)
- Disclosure of violations
- The governor's office purchases the credits in shortfall with the payment cost charged to the violating facility

If reduction obligations have not been fulfilled by the deadline of emission reduction obligations, an Order for Action will be issued. If the order is not implemented by the deadline of order implementation, a monetary fine will be imposed.

For non-compliant tenants, a recommendation will be given, or violations will be disclosed as well.

Climate Change Measures of TMG

Sectoral breakdown of CO_2 emissions in Tokyo* (No. of facilities)



* Sectoral breakdown is calculated from preliminary results in FY 2022.

Impose reduction obligations on large facilities
- Tokyo Cap-and-Trade Program

Promote energy efficiency at small and medium-sized facilities
- Carbon Reduction Reporting Program for Small and Medium-Sized Facilities
- Provide support for the introduction and renovation of energy efficient equipment

Promote power saving and energy efficiency at home
- Promote Tokyo Zero Emission House
- Improve thermal performance of existing residential buildings, promote solar power generation, storage batteries, and high efficiency water heaters
- Expand the use of residential fuel cells
- Improve energy efficiency performance of new residential buildings, mandate the installation of renewable energy equipment

Reduce CO_2 in the automobile sector
- Expand the use of ZEVs (zero emission vehicles), including fuel cell vehicles and electric vehicles
- Promote climate change strategy in transportation

Introduce and strengthen an environmental urban development system
- Evaluate and disclose environmental performance of large new buildings
- Green Labeling for Condominiums
- Mandate energy efficiency performance for large-scale urban development
- Local Decarbonization Planning Program

* <u>Energy efficiency performance standards strengthened, the installation of renewable energy equipment required from FY 2025</u>

<u>Where to find information on the Tokyo Cap-and-Trade Program:</u>

- **Tokyo Cap-and-Trade Program website (English version)**
  https://www.english.metro.tokyo.lg.jp/w/021-101-001120
  ▲ Same information available here
- **Ordinances, regulations, guidelines, and outlines**
  https://www.kankyo.metro.tokyo.lg.jp/climate/large_scale/rules
  ▲ Same information available here
- **Required documents**
  https://www.kankyo.metro.tokyo.lg.jp/climate/large_scale/documents
  ▲ Same information available here
- **Information on briefings and seminars**
  https://www.kankyo.metro.tokyo.lg.jp/climate/large_scale/meeting
  ▲ Same information available here

<u>Contact for the Tokyo Cap-and-Trade Program:</u>

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20th Floor - South Side, TMG No. 2 Building, 8-1 Nishi-Shinjuku 2-chome, Shinjuku-ku, Tokyo 163-8001
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The contents of this brochure are those as of June 2025 and may be changed in the future.