



June 14, 2017  
Department of Environment  
Saitama Prefectural Government

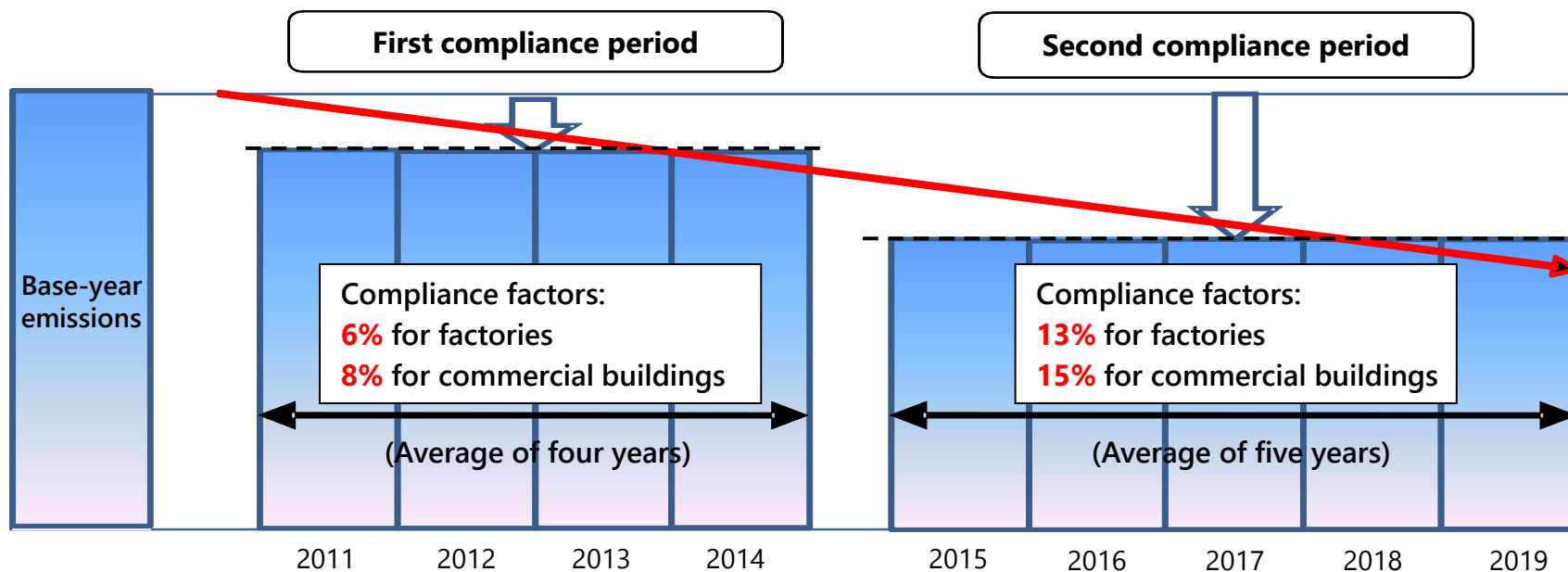
# Emissions Trading System in Saitama



## Target Setting Emissions Trading System

# Overview of Target Setting Emissions Trading System

- Introduced in **FY2011** to efficiently reduce CO<sub>2</sub> emissions in the **industrial and commercial sectors**
- Covering **approximately 600 facilities** that consume energy equivalent to 1,500 kL or more of crude oil annually for three consecutive years
- Linkage with the Tokyo Cap-and-Trade Program that started in FY2010




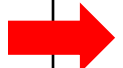
## Main differences between Tokyo and Saitama

	Tokyo	Saitama
Compliance factors for Second compliance period	<b>15%</b> for factories <b>17%</b> for commercial buildings	<b>13%</b> for factories <b>15%</b> for commercial buildings
No. of covered facilities	Approx. 1,400 (20% factories and <b>80% commercial buildings</b> )	Approx. 600 ( <b>70% factories</b> and 30% commercial buildings)

# Outcomes of First Compliance Period (1)

## Reduction outcomes

CO<sub>2</sub> emissions **reduced by 22%** at both factories and commercial buildings  
 A **29% reduction** achieved on average at small- and medium-sized businesses that account for approximately 30% of covered facilities

Use	Compliance factor (target)	Average reduction rate (results)
Factories	6% 	<b>22%</b>
Commercial buildings (stores, hospitals, public offices, etc.)	8% 	<b>22%</b>
Overall	—	<b>22%</b>

Size categories	Average reduction rate (results)
Small and midsize businesses	<b>29%</b>
Major businesses	21%
Others (hospitals, public offices, etc.)	15%

## Achievement of reduction targets

		Achievement of targets	
		Number of facilities	Percentage
Targets achieved through:	Reducing own emissions	<b>533</b>	<b>88%</b>
	Emissions trading	<b>66</b>	<b>11%</b>
Carry-over of shortfalls to Second compliance period		9	1%
Total		608	100%

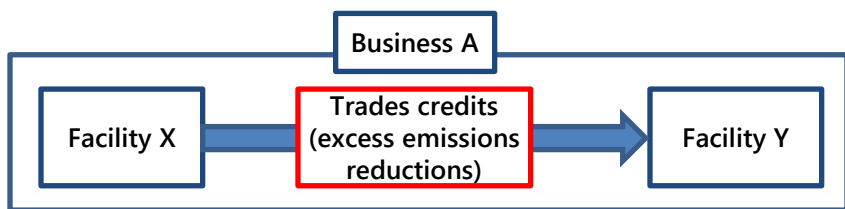
# Outcomes of First Compliance Period (2): Status of Emissions Trading

66 facilities achieved targets by acquiring credits from other facilities through emissions trading to make up for their shortfall

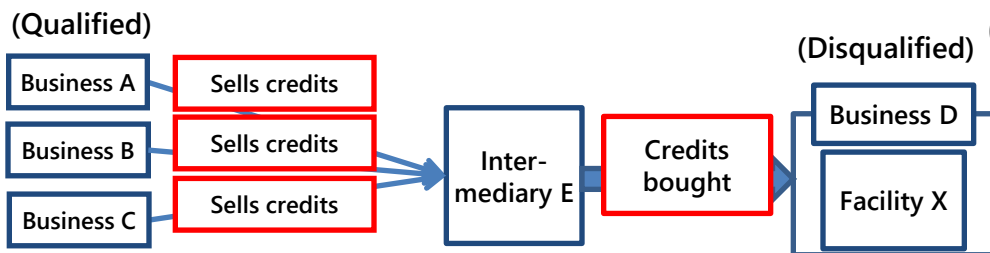
- Many of the facilities acquired credits from other large facilities in the same company
- There were also many facilities that made acquisitions through intermediaries
- Tokyo-Saitama Credits were also used:
  - Six cases from Saitama to Tokyo
  - Nine cases from Tokyo to Saitama
- Total trading volume was approximately 200,000 tonnes
- Trading volume per facility was approximately 60 to 65,000 tonnes

## Trading examples:

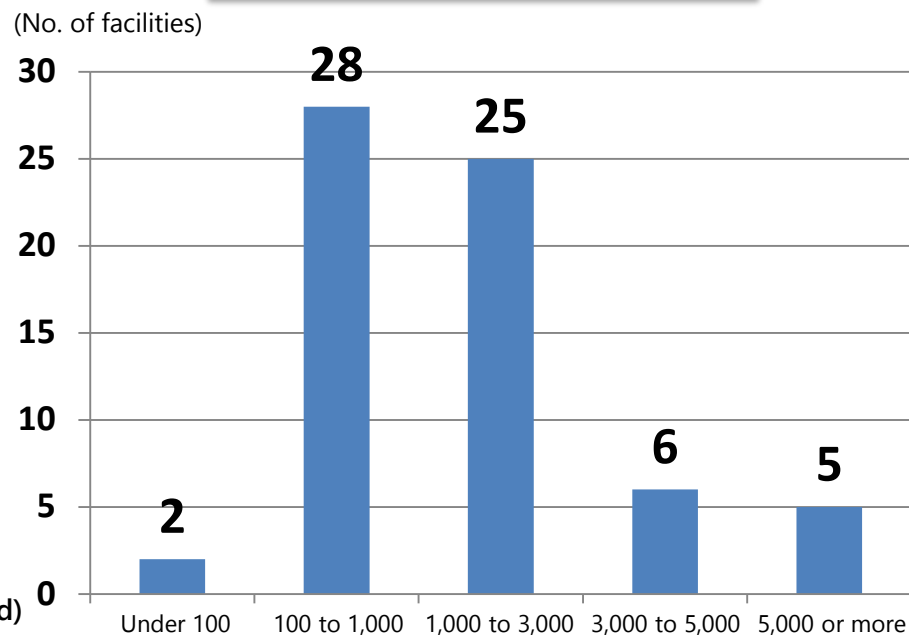
- Acquisition from other large facility in the same company



- Acquisition through intermediary



## No. of facilities by trading volume



Trading volume per facility in tonnes

# Operation of Target Setting Emissions Trading System

## Benefit of linkage with Tokyo

- In most cases, the headquarters or other offices of the covered facilities are located in Tokyo. Therefore, there are significant benefits in being able to trade credits with businesses in Tokyo.
- The aggregated population and gross domestic product (GDP) of Tokyo and Saitama account for approximately 20% of the whole of Japan. The outcomes achieved through the systems of the two prefectures will help spread ETS across the country.

### Reference:

#### (1) Population

Approximately 13 million in Tokyo, 7 million in Saitama (130 million in Japan)

#### (2) GDP

Approximately JPY 100 trillion in Tokyo, JPY 20 trillion in Saitama (JPY 550 trillion in Japan)



## Future challenges

- Support of small- and medium-sized businesses that account for approximately 30% of covered facilities
  - Financing that facilitates funding from financial institutions at a low, long-term fixed-rate
  - Dispatch of energy efficiency experts to facilities to give advice about saving energy
- Planning for the third and subsequent compliance periods