

## SUSTAINABLE DEVELOPMENT GOALS



# Osaka City Action Plan for Global Warming Countermeasures (Local Program)

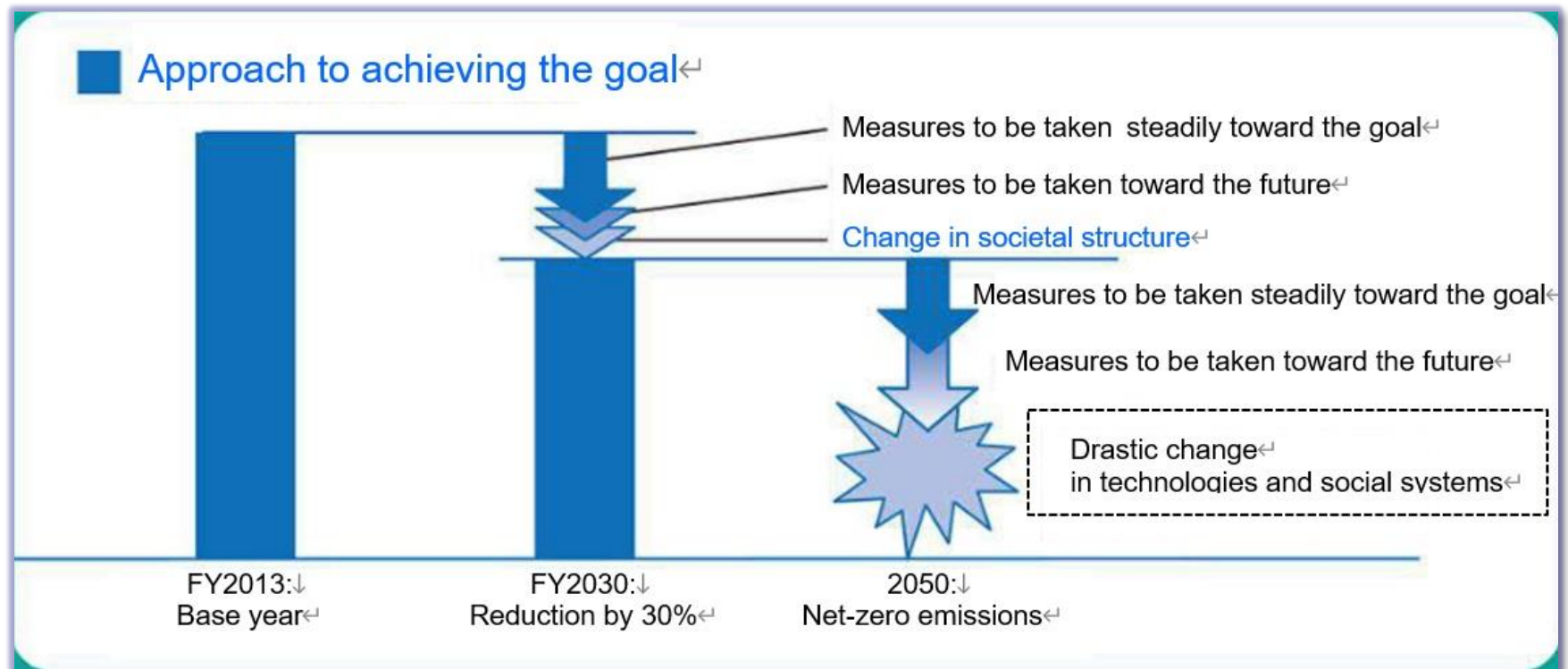
TOWARD "ZERO CARBON OSAKA"

# ✕ Osaka City Action Plan for Global Warming Countermeasures (Local Program)

## GHG emissions reduction targets

GHG emissions from Osaka City amounted to 18,840,000 ton CO<sub>2</sub>-eq. in 2017.

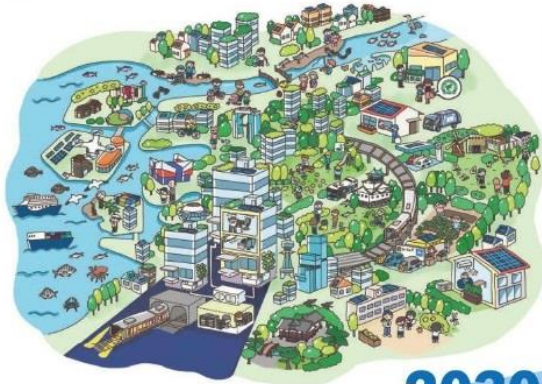
Our goal is to reduce GHG emissions by 30% from the FY2013 level by FY2030, and achieve the net-zero emissions target by 2050.



# Future vision "Zero Carbon Osaka" and action policy

Together, we can change the future! Let's unite to achieve the "Zero Carbon Osaka" vision.

## Toward "Zero Carbon Osaka"



Deregulation to remove barriers

Sharing of the vision for 2050

Proactive introduction of cutting-edge innovations

International cooperation and contribution

**2030:** Environmentally-advanced city that contributes to the SDGs

**2025:** EXPO 2025 Osaka, Kansai

## 2050: Zero Carbon Osaka

Promoting environmental innovations to help create a post-carbon society and prevent the climate crisis

- Climate change measures are incorporated in all municipal policies and strategies.
- Sufficient decentralized energy infrastructure is in place to meet energy demand.
- Osaka City leads the global shift to decarbonization.
- Environmental businesses are exported overseas.
- Local SDGs are developed.
- Electric vehicles (EVs) and fuel cell vehicles (FCVs) become mainstream.
- Plastic waste is reduced to zero.
- Low-carbon system for transportation and logistics are in place.
- Renewable energy, untapped energy, and new energy sources such as hydrogen become commonplace.
- Greening is promoted.
- Environmental technologies are implemented in society.
- Carbon-free lifestyles and workstyles prevail.
- The use of geothermal heat is standardized.
- Self-sustaining carbon-free business models are promoted.
- Energy consumption is reduced.

## Five concepts of "Zero Carbon Osaka"

### A city that enables a low-carbon lifestyle

Facilitate the transition to low-carbon energy sources and take rigorous energy-saving measures.



Measures

- Enhance initiatives to encourage the use of renewable energy.
- Facilitate maximum use of untapped energy sources.
- Encourage and expand the use of new energy sources such as hydrogen.
- Enhance initiatives to promote electric vehicles.

### A city where zero-carbon attitudes and practices are embraced

Promote a shift to more environmentally-friendly consumer behavior.



Measures

- Facilitate lifestyle and workstyle reforms.
- Promote environmental education and awareness-raising activities.
- Reduce energy consumption.
- Improve energy-saving efficiency of buildings.
- Support companies in their own decarbonization efforts.
- Take proactive measures to reduce GHG emissions from municipal operations.

### A sustainable city where a system for decarbonization is in place

Accelerate sustainable urban development to achieve the SDGs by implementing environmental technologies in society.



Measures

- Promote urban development by implementing environmental technologies in society.
- Reduce GHG emissions by improving the transport network and logistics efficiency.
- Facilitate low-carbon transport.
- Promote resource saving and recycling.
- Prevent marine pollution by reducing plastic waste in the ocean.
- Promote greening.

### A city that leads the decarbonization movement by leveraging diverse networks

Achieve a post-carbon society leveraging Osaka City's networks with diverse stakeholders.



Measures

- Promote the environmental and energy industries and support the sustainable growth of all companies.
- Contribute to decarbonization across municipal borders through inter-regional partnerships.
- Promote inter-city cooperation.
- Facilitate overseas development of local companies through public-private collaboration.

### A disaster-resistant city prepared to mitigate the impacts of climate change

Create a disaster-resistant city that is robust, resilient and sustainable.



Measures

- Promote measures for adapting to climate change.
- Take measures to prevent urban flooding.
- Take measures to alleviate extreme summer heat.
- Improve and expand green infrastructure.
- Enhance resilience by improving and expanding energy infrastructure.

# ✕ Five Concepts of “Zero Carbon Osaka”

## A city that enables a low-carbon lifestyle

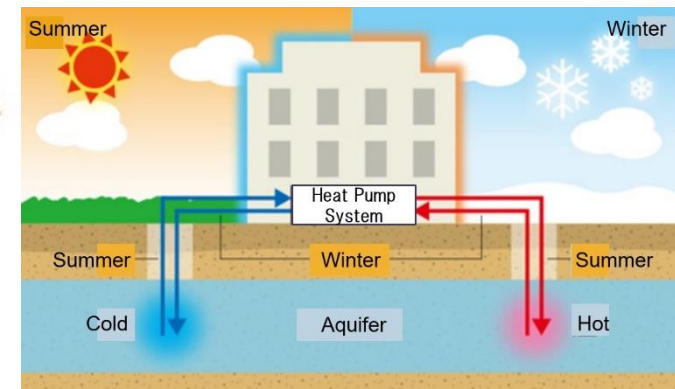
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### Measures

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Maishima Incineration Plant, Konohana Ward, Osaka City



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- ▶ Promote greening.



Umekita 2nd Project (Source: <https://umekita2.jp/>)



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## Measures



UNEP-International Environmental Technology Centre: IETC

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JCM Project: Nhu Quynh Food Factory  
Acecook Vietnam Joint Stock Company

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# ⚡ Overcoming water pollution, air pollution, and waste problems

Water and environmental issues that Osaka City used to face  
(Water pollution, air pollution, garbage problems, etc.)



Overcome through various efforts by the public and private sectors



# ✂ Maintaining a comfortable urban environment(air)

- 【凡例】 ● 一般環境大気測定局(13局)  
■ 自動車排出ガス測定局(11局)



## Constant monitoring of air pollutants

Air pollution is constantly monitored at 24 monitoring stations in the city.

## Regulations and guidance to the source

Regulatory guidance to factories and workplaces

Promotion of measures against automobile emissions



Air Pollution Monitoring Station

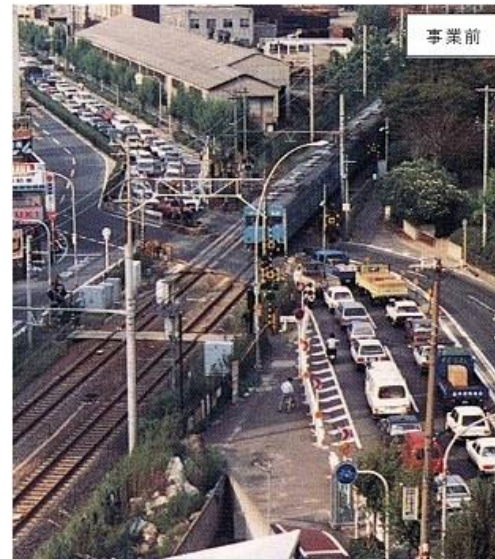
# ✕ Controls on Mobile sources (air)

## Content

- Restrictions on the source of pollutants  
(Popularization of low-pollution and low-exhaust vehicles, etc.)
- Traffic Volume measures and Traffic Flow measures  
(Eliminating traffic congestion etc.)
- Measures of Road structure and Roadside  
(Maintenance of the Green Belt, etc.)
- Collaboration with Citizens and Companies (Promotion of Ecodrive, etc.)



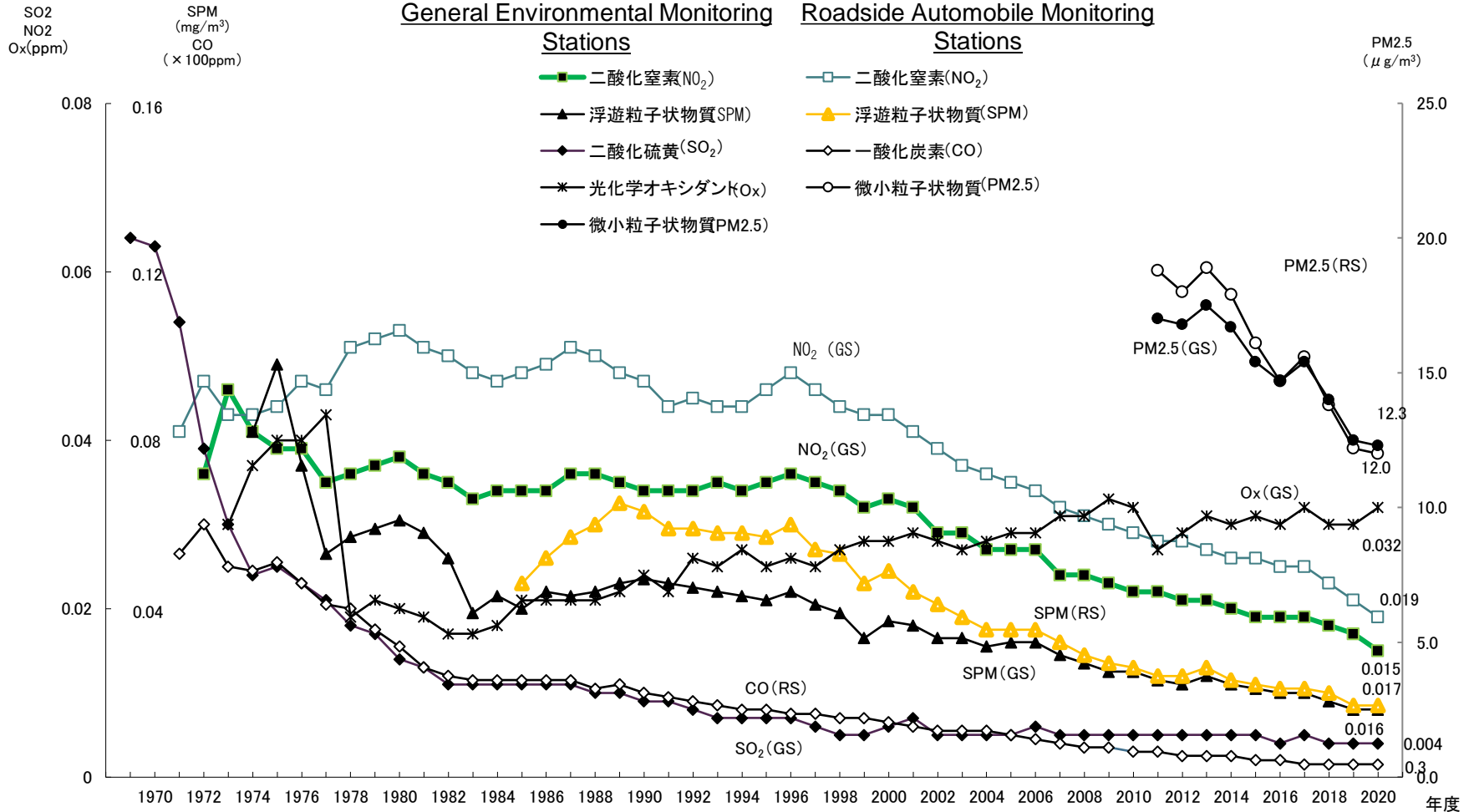
Electric Vehicle Charging Station



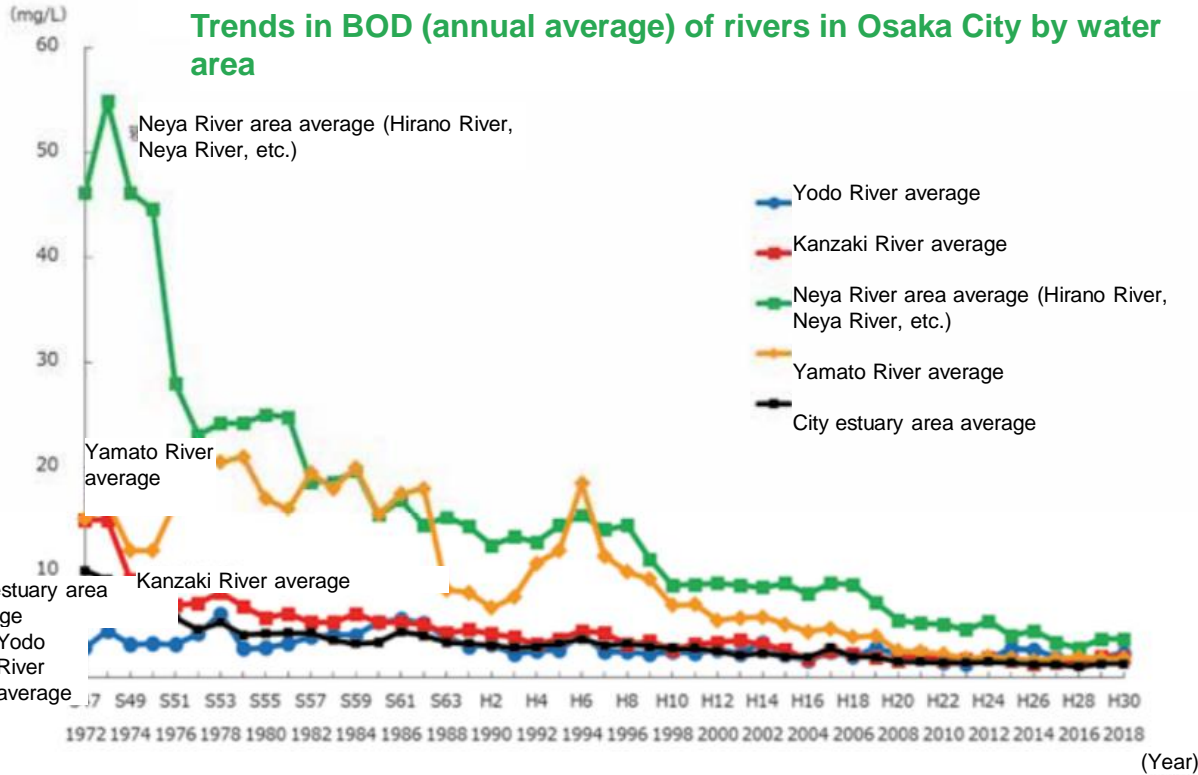
Cancellation of the traffic jam



# Main Air Pollutants change over the year



# ✂ Maintaining a comfortable urban environment(water)



Source: Osaka City Environment Bureau Survey



# ✂ Maintaining a comfortable urban environment(water)

- Worked to improve sewerage system (12 sewage treatment plants in the city)
- Effluent control and source monitoring at factories, etc.
- Dredging of bottom mud in rivers and sea areas



Maishima Sludge Center



River Dredging

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