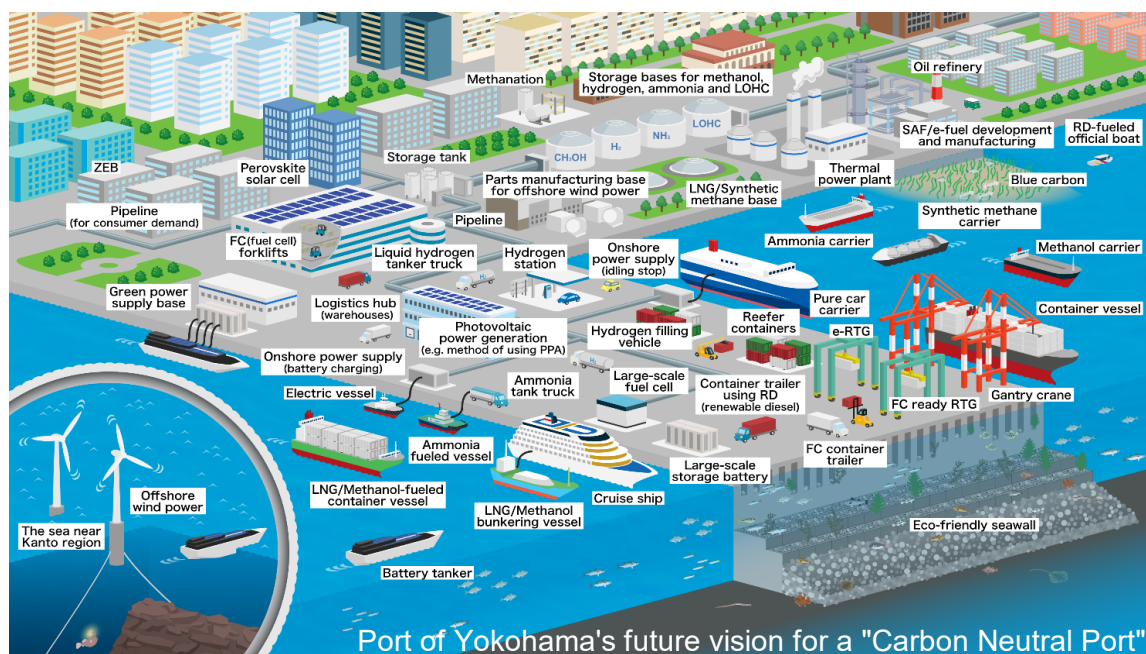


## “Port and Harbor Decarbonization Plan for the Port of Yokohama” was released

The City of Yokohama has been promoting the formation of a Carbon Neutral Port (CNP), which will reduce overall greenhouse gas emissions to zero, with the aim of achieving a decarbonized society by 2050.

In order to promote the effective use of ports that contribute to the advancement of decarbonization through public-private partnership, the “Port and Harbor Decarbonization Plan for the Port of Yokohama” (hereinafter referred to as the “Plan”) was published today in accordance with the provisions of Article 50-2 of the Ports and Harbors Act. The Plan is based on the opinions of the Yokohama Port CNP Council (hereinafter referred to as the “the Yokohama Port CNP Council”) and others, and was prepared after soliciting opinions from the public. For more information on this plan, please see the 2D code at the end of this document.



Port of Yokohama's future vision for a "Carbon Neutral Port"

1 Comment from Mr. Kikkawa, the chairperson of Yokohama CNP Council

(President, International University of Japan; Professor Emeritus, University of Tokyo and Hitotsubashi University)

### “Plan to lead the nation”

The Plan, which was recently formulated by the City of Yokohama, is leading the way in carbon neutral port projects that the government is promoting throughout Japan. There are several reasons for this. The first is using green methanol to decarbonize container ship fuel, an initiative rarely seen in other ports. The second is launching the Port of Yokohama Sustainable Finance Framework, which will target not only large corporations but also small and medium-sized enterprises (SMEs) for financial assistance. The third is the fact that the Port of Yokohama waterfront area is envisioned to serve as a receiving site for power generated by floating offshore wind turbines that are planned to be constructed far offshore in Tokyo Bay. These are all unique features that can only be found in the “Yokohama Port Plan”. We hope that this Plan, along with other measures, will be steadily implemented in society.



## 2 Port of Yokohama CNP Council\* Introduction \*Consultative meeting based on Article 50-3 of the Port and Harbor Law

### (1) Members

#### ○Companies and Organizations



#### ○Related government agencies :

Kanto Regional Development Bureau, Ministry of Land, Infrastructure, Transport and Tourism

#### ○Academic Expert :

President, International University of Japan; Professor Emeritus, University of Tokyo and Hitotsubashi University, Takeo Kikkawa (Council Chairperson)

Institute for Global Environmental Strategies (IGES), research manager, Akihisa Kuriyama (Doctor of Engineering)

### (2) Progress of the meeting

Six meetings were held from August 2022 to February 2025

## 3 Grasping the current status of greenhouse gas emissions

### (1) Carbon dioxide emissions from the Yokohama waterfront area

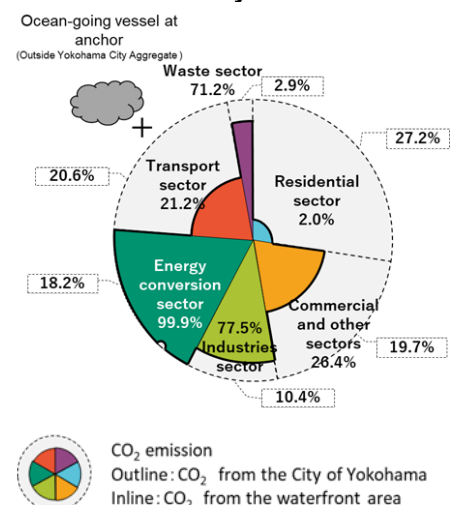
In addition to its logistics functions, the Port of Yokohama has production, tourism, and cultural functions, and the amount of carbon dioxide emitted from the waterfront area accounts for about 40% of the city's total emissions. The plan also includes figures for carbon dioxide emissions from power generation projects, which are determined by direct emissions.

#### Estimated CO2 Emissions from Waterfront Area of the City of Yokohama

(Unit: 10,000 tons)

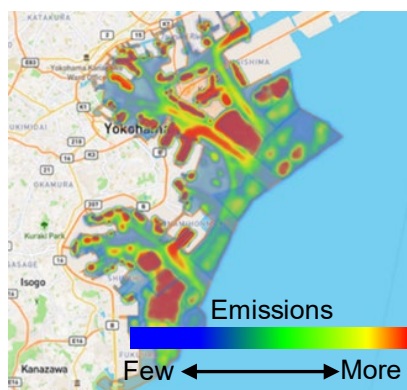
FY2022 (preliminary results)	Yokohama Waterfront Area		Entire City Area		Waterfront Area / Entire City Area
	Emissions	Proportion	Emissions	Proportion	
Land Emissions	622.7	97.4%	1,604.2	99.0%	38.8%
Energy Conversion Sector	294.4	46.0%	294.8	18.2%	99.9%
Industrial Sector	130.7	20.4%	168.6	10.4%	77.5%
Business Sector	84.1	13.2%	318.8	19.7%	26.4%
Transportation Sector	70.8	11.1%	334.2	20.6%	21.2%
Waste Sector	33.7	5.3%	47.4	2.9%	71.2%
Household Sector	9.0	1.4%	440.4	27.2%	2.0%
Emissions from ocean-going vessels at anchor	16.7	2.6%	16.7	1.0%	100.0%
<b>Total</b>	<b>639.4</b>	<b>100.0%</b>	<b>1,620.9</b>	<b>100.0%</b>	<b>39.5%</b>

#### Percentage of carbon dioxide emissions by sector



\*This table and pie chart show indirect emission figures

The Port of Yokohama is the first port in Japan to use the Maritime Emissions Portal, a system developed by RightShip (headquartered in Melbourne, Australia), to accurately track greenhouse gas and environmental pollutant emissions from all modes of vessel operation, which had previously been difficult to do.

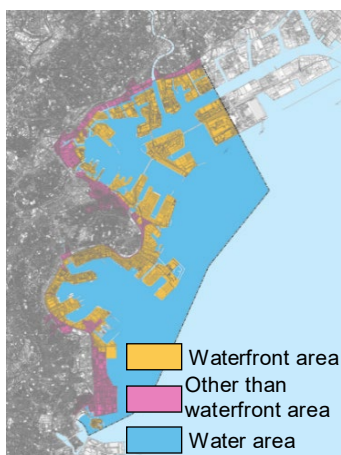


(Actual results for 2024)		
Mode	CO <sub>2</sub> emissions(t)	CO <sub>2</sub> Equivalent(t)
At berth (alongside)	187,556	191,349
Anchored (anchorage)	48,838	49,540
Maneuvering	70,349	71,433
<b>Total</b>	<b>306,743</b>	<b>312,341</b>

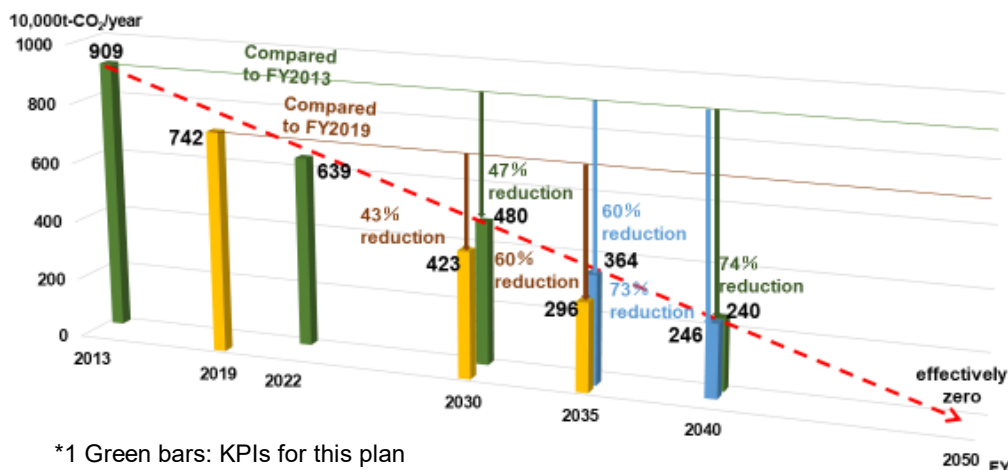
Name	Amount (t/year)
CO <sub>2</sub>	308,147
N <sub>2</sub> O	16
CH <sub>4</sub>	53
SO <sub>x</sub>	891
NO <sub>x</sub>	3,523
PM <sub>2.5</sub>	123
PM <sub>10</sub>	134

This plan covers the waterfront area of the Port of Yokohama, including the Minato Mirai 21 district and the Kanazawa Industrial Park, in addition to the port and harbor area. The period and goals of this plan are set as follows.

### ○Duration and Goals



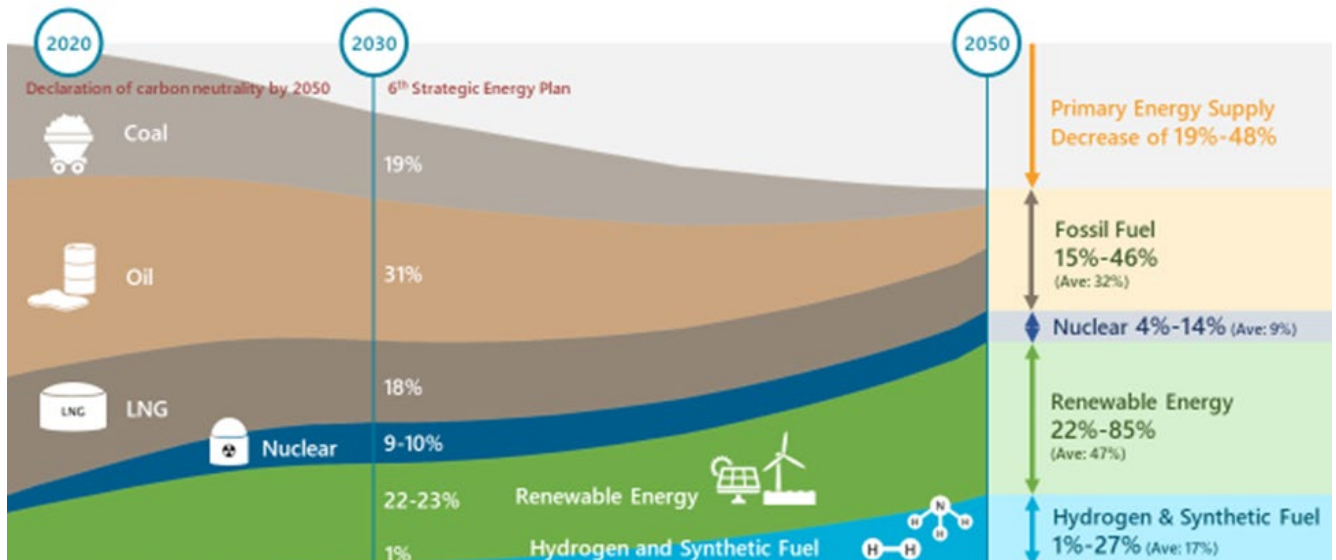
KPI (Key Performance Indicators)	Target Values		
	Short-to-medium term (FY2030)	Medium term (FY2040)	Long term (FY2050)
①Carbon dioxide emissions from the Yokohama waterfront area	4.8 million t-CO <sub>2</sub> /year (reduced by 47% from FY2013)	2.4 million t-CO <sub>2</sub> /year (reduced by 74% from FY2013)	Effective 0 t-CO <sub>2</sub> /year
②Preservation, reproduction and creation of blue infrastructure	Approx. 150 t-CO <sub>2</sub> /year (CO <sub>2</sub> absorption)	Approx. 200 t-CO <sub>2</sub> /year (CO <sub>2</sub> absorption)	Approx. 250 t-CO <sub>2</sub> /year (CO <sub>2</sub> absorption)



\*2 Blue bars: reference values calculated from the targets in the Plan for Global Warming Countermeasures (Cabinet decision on February 18, 2025)

\*3 Yellow bars: reference value considering global stocktake

○Independently developed “Estimated Forecast of Primary Energy Supply”



(Prepared by Yokohama Port and Harbor Bureau and Hiroaki Onodera (National Institute for Environmental Studies))

5 Port decarbonization promotion projects

We have defined 42 entities and 121 projects\* as port decarbonization promotion projects.

\*As of March 2025

① Policies for decarbonization of the waterfront area

Energy conservation in lighting,  
air conditioning/heat sources,  
production facilities, etc.  
Next-generation fuel bunkering  
Use of decarbonized electricity and fuels  
(e.g., CO<sub>2</sub>-free electricity)

Renewal of generators,  
use of hydrogen and ammonia  
  
Synthetic methane supply  
Hydrogen use in LNG- and  
coal-fired power generation

② Policy for decarbonization initiatives at the terminals

Energy-saving lighting equipment  
  
Use of Solar power generation and  
decarbonized electricity and fuels

Next generation fuel bunkering,  
decarbonization of ships  
Installation of onshore power supply  
facilities and decarbonized cargo handling  
equipment, etc.

③ Efforts for the creation of sustainable oceans with abundant marine life

Preservation, reproduction and creation of blue infrastructure



## 6 Initiatives that make the most of the characteristics of the Port of Yokohama

Promote the use of next-generation marine fuels



Development of onshore power supply facilities

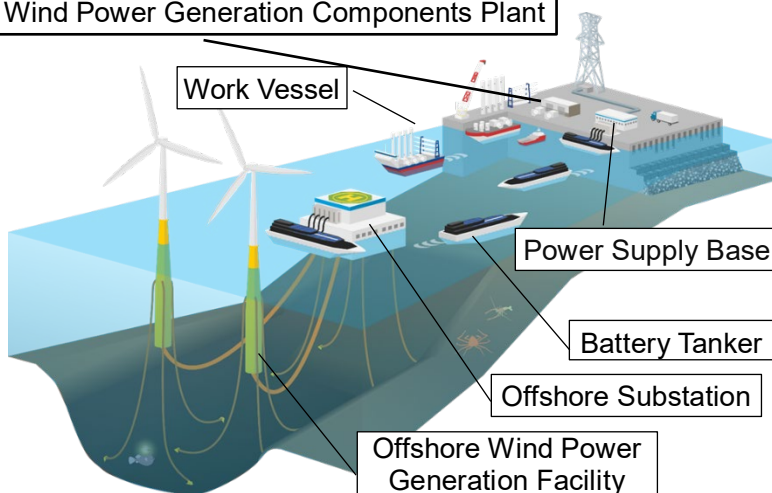


Blue Infrastructure

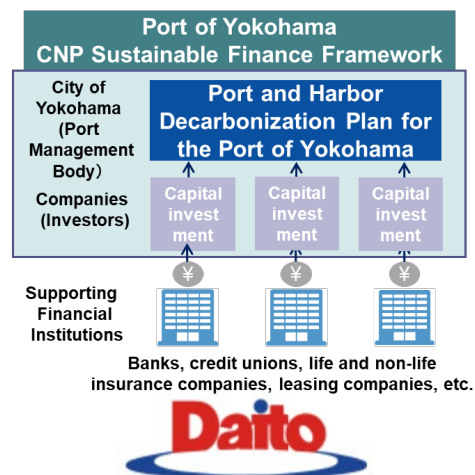


Study on the formation of green power supply bases

Wind Power Generation Components Plant



Port of Yokohama CNP Sustainable Finance Framework



Signing of the First Financing Agreement  
Daito Corporation  
“Construction of an electric tugboat”

## 7 Same day press release

Today, we made three press releases regarding the Port and Harbor Decarbonization Plan for the Port of Yokohama, including this one.

- (1) “Port and Harbor Decarbonization Plan for the Port of Yokohama” was released 【This release】  
Presented by: City of Yokohama
- (2) “Port of Yokohama CNP Sustainable Finance Framework” was released.  
Presented by: City of Yokohama, Mizuho Bank, Ltd., The Bank of Yokohama, Ltd., DNV business assurance Japan
- (3) Daito Corporation Signs First Financing Agreement Utilizing the Port of Yokohama CNP Sustainable Finance Framework  
Presented by: City of Yokohama, Daito Corporation, Mizuho Bank, Ltd., DNV business assurance Japan



Carbon Neutral Port Initiative at the Port of Yokohama

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