

SDGs Future City – Yokohama

Climate Change Measures of City of Yokohama

Climate Change Policy Headquarters
City of Yokohama

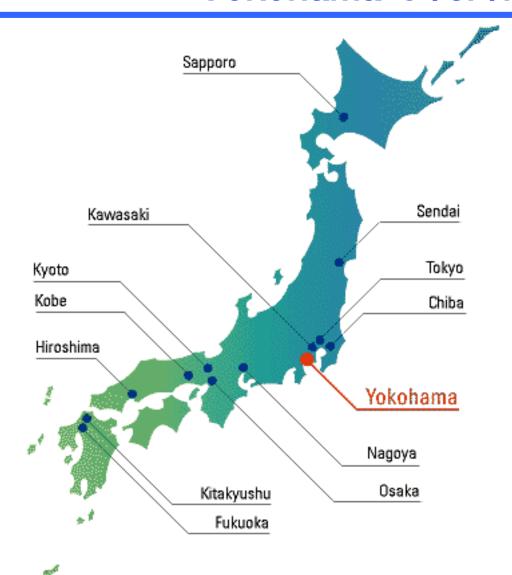






Yokohama Overview





•Area: 435 km²

•Population: 3.75 million

•Number of office: 120,000

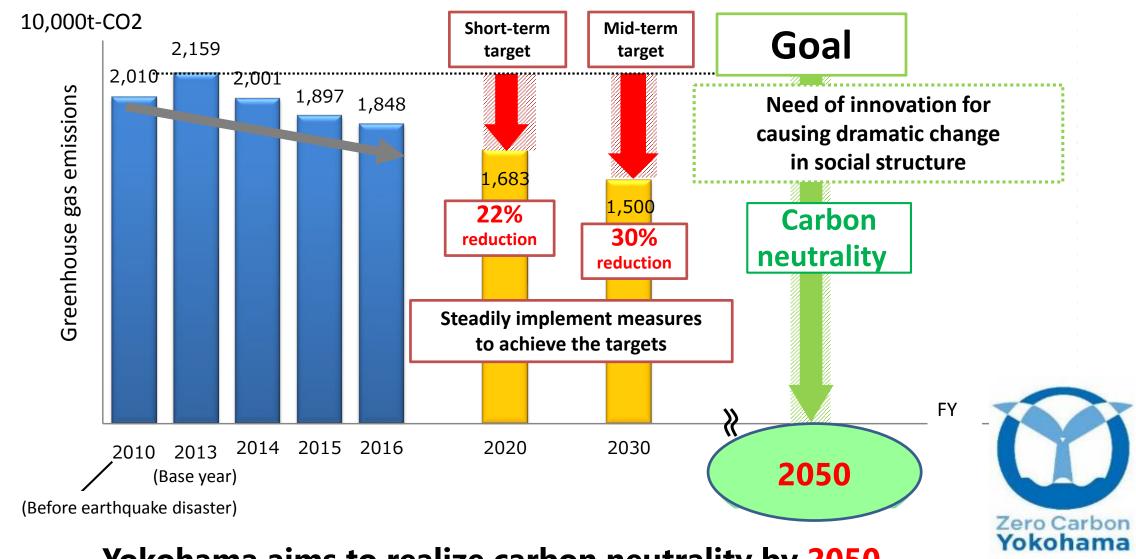


Yokohama, one of Japan's leading cities



Zero Carbon Yokohama



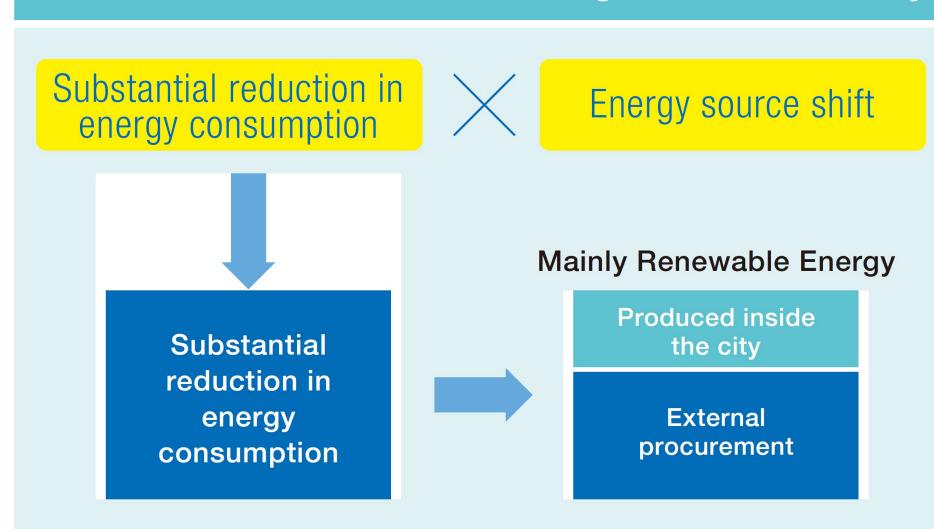


Yokohama aims to realize carbon neutrality by 2050

How to realize Zero Carbon Yokohama?



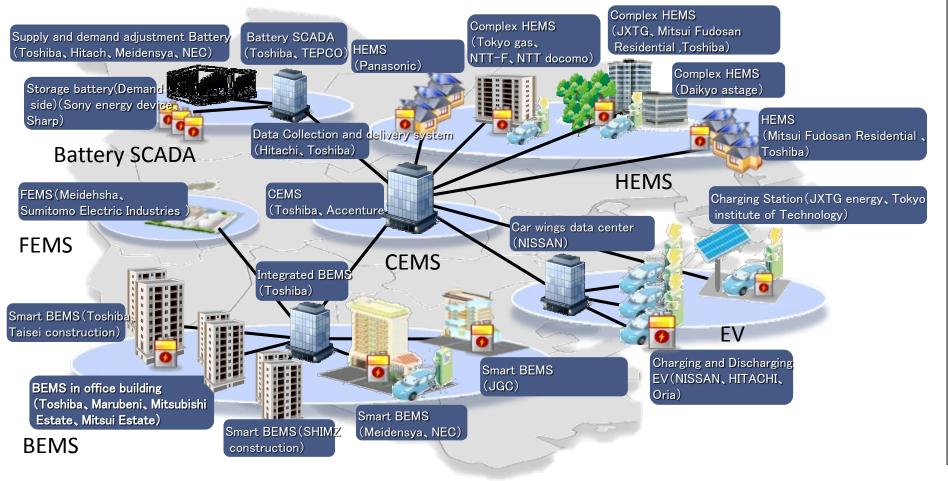
Zero Carbon Yokohama Achieving Carbon Neutrality



Yokohama Smart City Project (YSCP)



Demonstration Project of Development/Introduction of a Regional Energy Management System in large-scale existing urban area



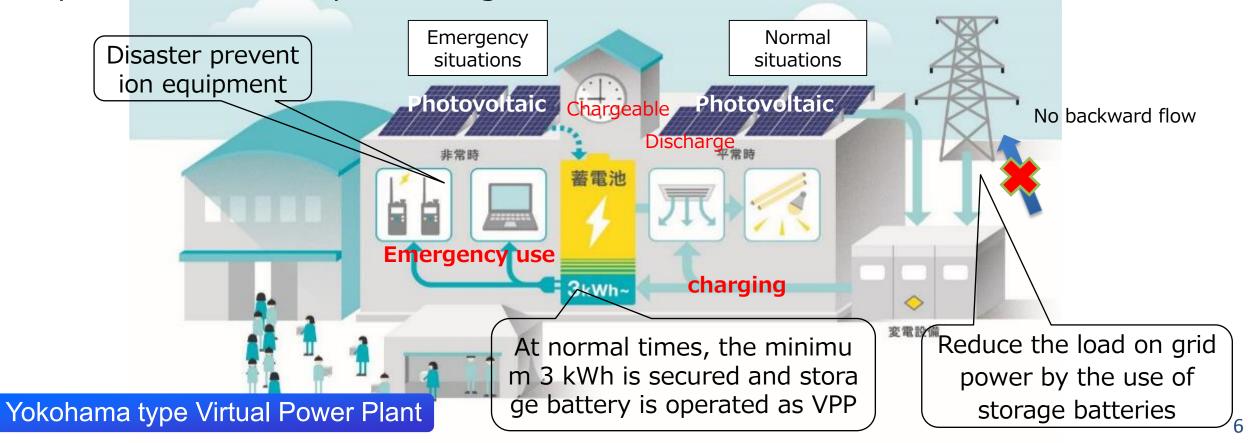
■ Performance/Target FY 2010~2014 HEMS (4,200site/4,000site), PV (**37MW**/27MW) EV **(2,300**/2,000) CO₂ Reductions (**39kton**/30kton) CO₂ Reduction Ratio **(29%**/25%)



Energy Saving -Virtual Power Plant-



- ➤ In normal situations, we contribute to a society that uses electricity smartly, which is aimed at by the government, with the effects of VPP.
- ➤ In emergency situations, including power outage, we contribute to the improvement of anti-disaster property of local community, by using VPP as "a power source for preventing disaster."



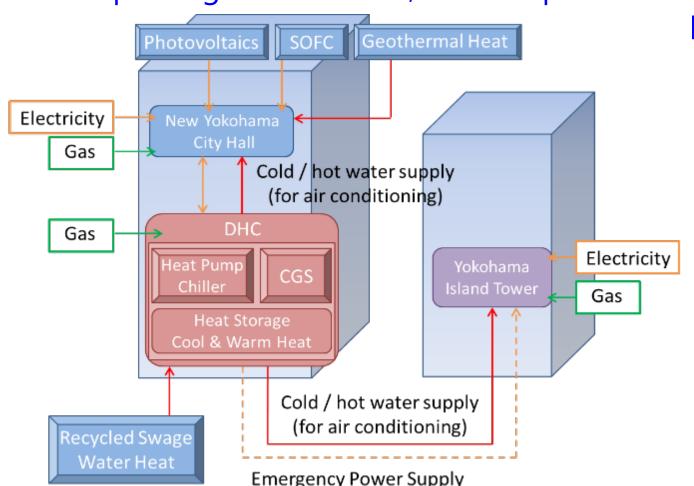


Energy Saving -New City Hall-

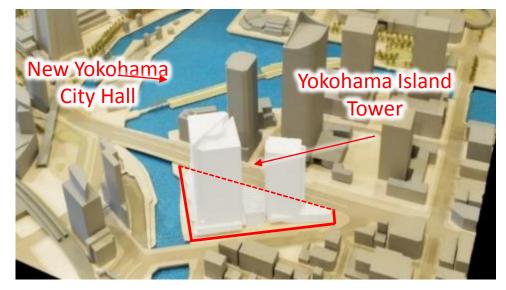


- Area Energy Network with neighboring building, Yokohama Island Tower
- ■Installing CGS, Photovoltaics, SOFC, Geothermal Heat ,··· etc.

Improving environment, disaster prevention and economy



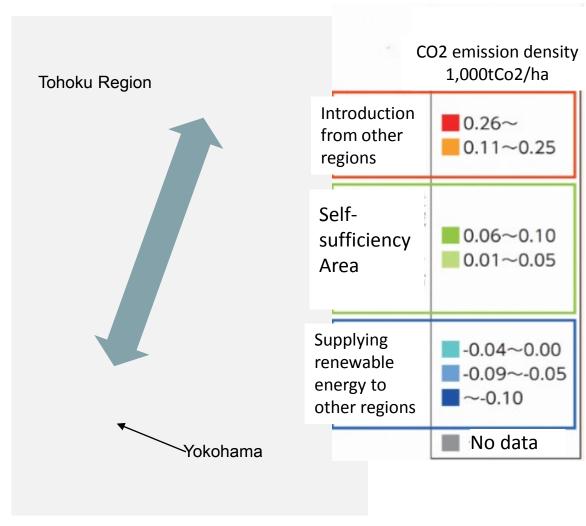
by installing equipment



Renewable Energy -Regional Circular and Ecological Sphere-



- Potential for renewable energy in Yokohama: 11%
- Case of Japan, regions with high renewable energy density are limited.
- The key point is to make link regions with high energy consumption with regions that can produce large amounts of renewable energy.
- Promote partnerships with large areas with great potential for renewable energy (Ex. Tohoku Region)
- Model case of Regional Circular and Ecological Sphere by exchange with citizens and companies in other regions



Renewable Energy -Cooperation among local governments-



Partnership agreement with 12 Municipalities (2019 Feb. 6)

- Yokohama Town, Aomori Pref.
- 9 municipalities in Eligible Municipalities within Northern Iwate Regional Development Bureau
- Aizuwakamatsu City, Fukushima Pref.
- Koriyama City, Fukushima Pref.



Renewable Energy -Cooperation among local governments



Start supplying electricity generated in Yokohama Town (Amori) to Yokohama City (2019 Sep. 5)







Target of Hydrogen Utilization



Energy Action Plan

Targets (FY 2020)	
Fuel Cell Vehicles	2,000
Hydrogen Station	10
Domestic Fuel Cell	40,000



Operation of Stational-type Domestic Fuel Cell



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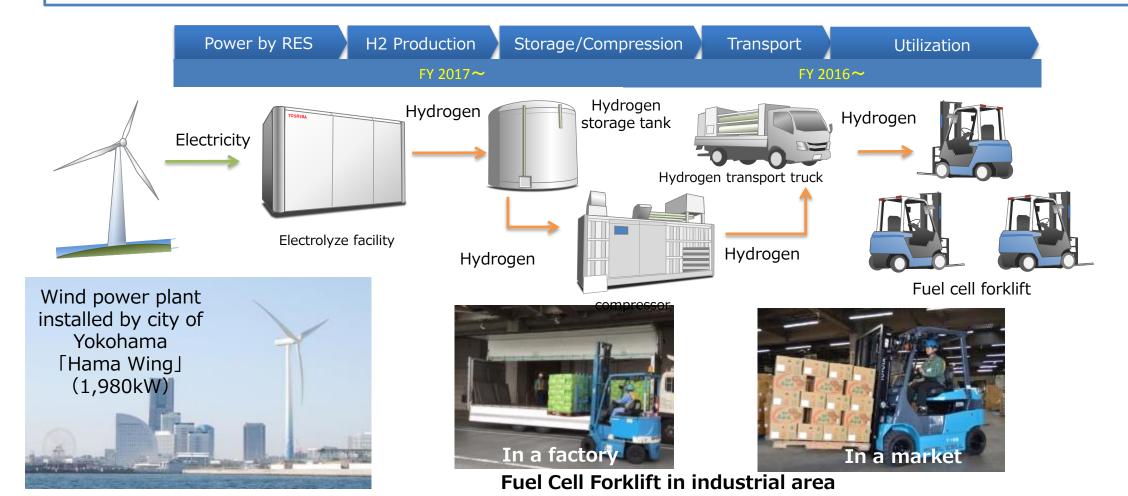


○Installation of Hydrogen Station

Demonstration Project for Low Carbon Hydrogen Utilization in Keihin-area using Hama-Wing Wind Power



As a clean energy, hydrogen is expected to contribute to reducing environmental burdens. Yokohama promotes use of hydrogen energy toward realization of a "hydrogen society" where hydrogen can be used in various fields.



International Cooperation on Climate Change





















SDGs Future City YOKOHAMA

































- **◆** Basic stance: take actions that are conscious of SDGs in all policies
- •Integration of Three Aspects: **Economy, Society and Environment**
- Cooperation with Various Stakeholders
- Sustainability







YOKOHAMA SDGs Design Center

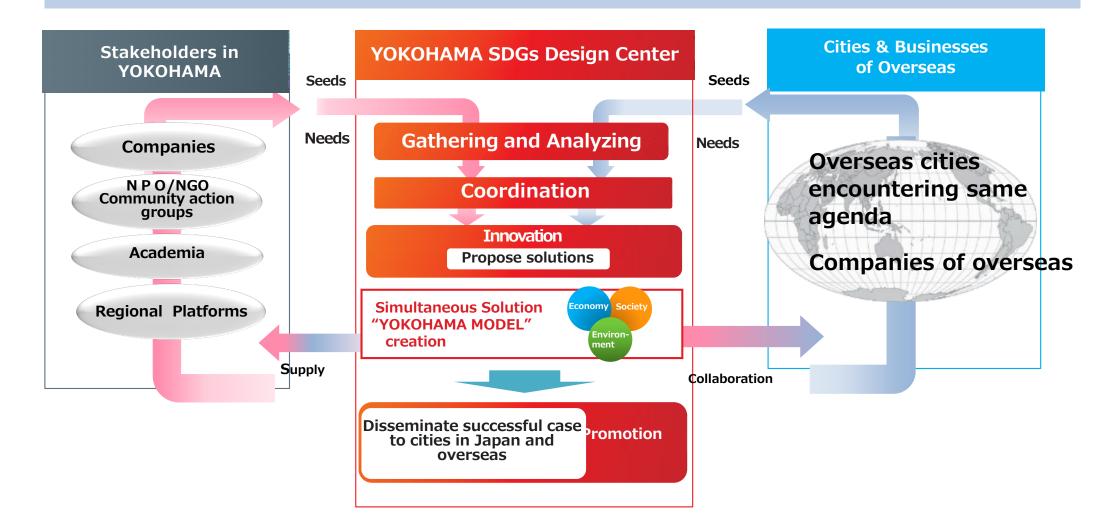
⇒Yokohama City and private enterprises operate in collaboration



YOKOHAMA SDGs Design Center



Creation of simultaneous solution "YOKOHAMA model" that creates solutions of environmental, economical and social challenges and connects needs and seeds across fields and organizations by civic collaboration.





Yokohama SDGs DESIGN CENTER (**)







"On-Demand Bus service" (Wakabadai district, Asahi ward)











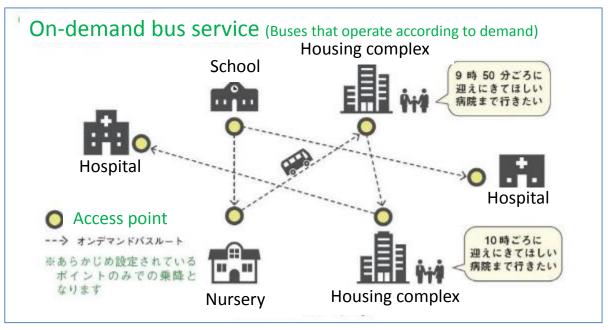






- Yokohama SDGs DESIGN CENTER has conducted a pilot project of on-demand bus service in collaboration with private enterprise and NPO.
- This project aims to create a comfortable living condition that is easy for the child-raising generation and the elderly to move around.







Yokohama Wood Straw Project



■ Raising awareness project for decarbonization, marine plastic waste, forest preservation etc. by using wooden straws

■ Distribute the straws to citizens in various events, introduce them to local businesses, aiming at local production and local consumption



























Expected effects in environmental, economical and social aspects

Society

- Countermeasure for marine plastic waste
- Realization of a society where everyone plays an active role

Economy

- Creation of new opportunities for business and employment Activation of forestry



Yokohama SDGs

- Preservation of forest and water source forest
- Reduction of CO₂ emissions.

Environment

Vision: Zero Carbon Yokohama and SDGs FutureCity

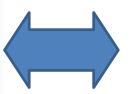




- Revised <u>"Yokohama City</u> <u>Climate Change Policy Plan"</u> in Oct. 2018.
- New goal based on "IPCC Special Report on 1.5 Degrees"

Zero Carbon Yokohama

We aim to realize carbon neutrality as soon as possible aiming at 2050"





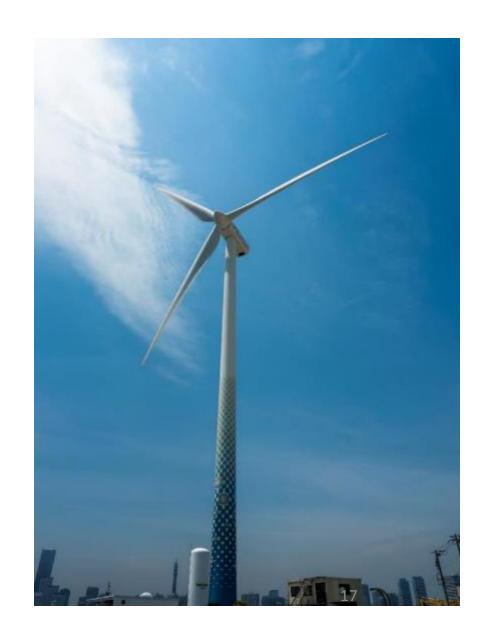
Promoting both Climate change countermeasure and SDGs are two of the most important issues for realizing sustainable future.



Role of City



- **◆**As of 2018, about half of the world's population lives in urban areas.
- **◆**Carbon emissions from urban areas are estimated for three quarters of the world.



Thank you for your kind attention.

http://www.city.yokohama.lg.jp/ondan/



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