

An aerial photograph of Yokohama, Japan, with Mount Fuji visible in the background. The city's skyline is prominent, featuring numerous skyscrapers and modern buildings. The harbor is visible in the foreground, with several ships docked. The overall image has a blue tint.

“FutureCity” Yokohama

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City of Yokohama

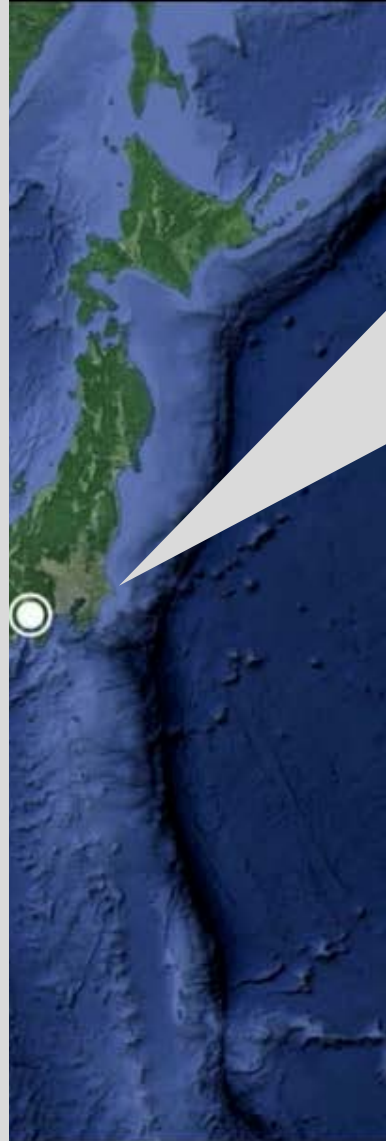
Yokohama, Japan

Population
3,730,000

Number of households
1,646,676

Area
435.21km²

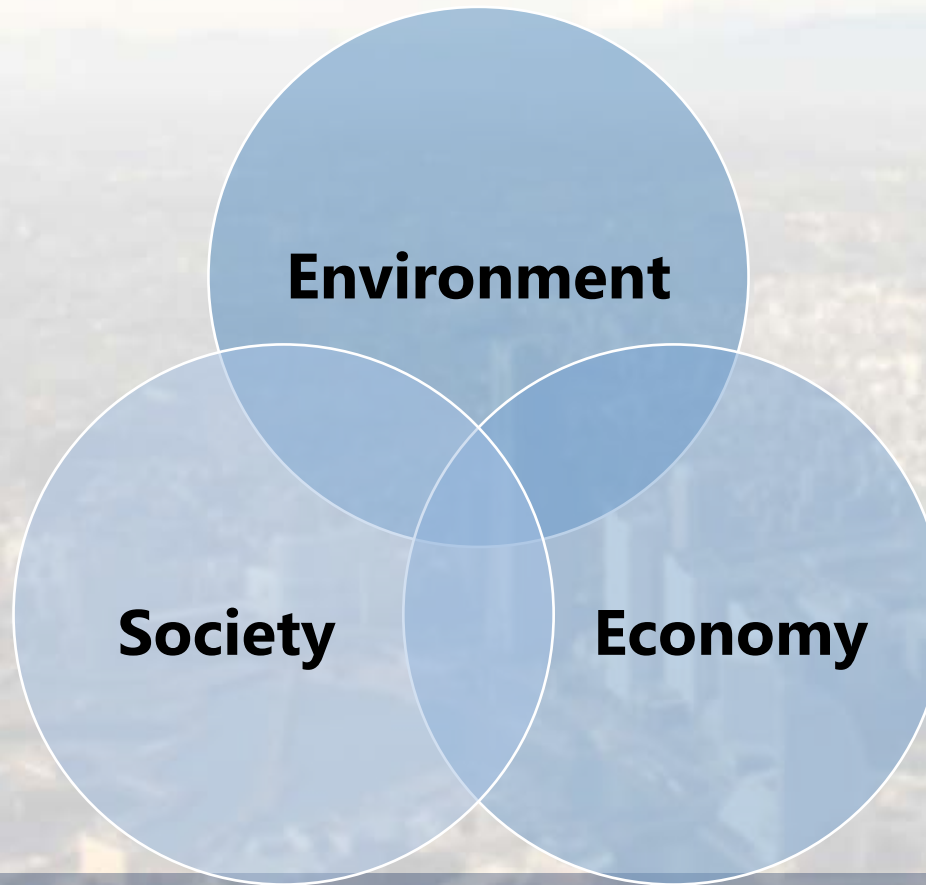
Nominal GDP
JPY 12.5050 trillion
USD 150.5 billion



Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Google earth

Vibrantly well balanced and prosperous city that everyone wants to live in



Increase the value of the city from the above 3 perspectives, and by doing so raise the quality of people's lives



Yokohama City Action Plan for Global Warming Countermeasures

Target : **80%** reduction by 2050 (Base year: 2005)



Established in 2011

Revised in 2014

To consider changes in the situation caused by **the Great East Japan Earthquake**.
(Responding to changes in energy situations. Determining the way of adaptation.)

Revised in
2018 (plan)

To consider the effectuation of **Paris Agreements**, trends in various countries, etc.

Yokohama City Climate Change Adaptation Policy

Established in 2016

- Determine 5 basic strategies.
- **Citizens, companies and government cooperate** to promote various actions and measures.

- **Accelerating Introduction of FCVs**

We are using 7 Toyota's FCV "MIRAI"
(at March 2017) as official car.



MIRAI (Yokohama City's official car)

- **Deployment of Hydrogen Stations**

We have 6 hydrogen stations in the city
(at March 2017)

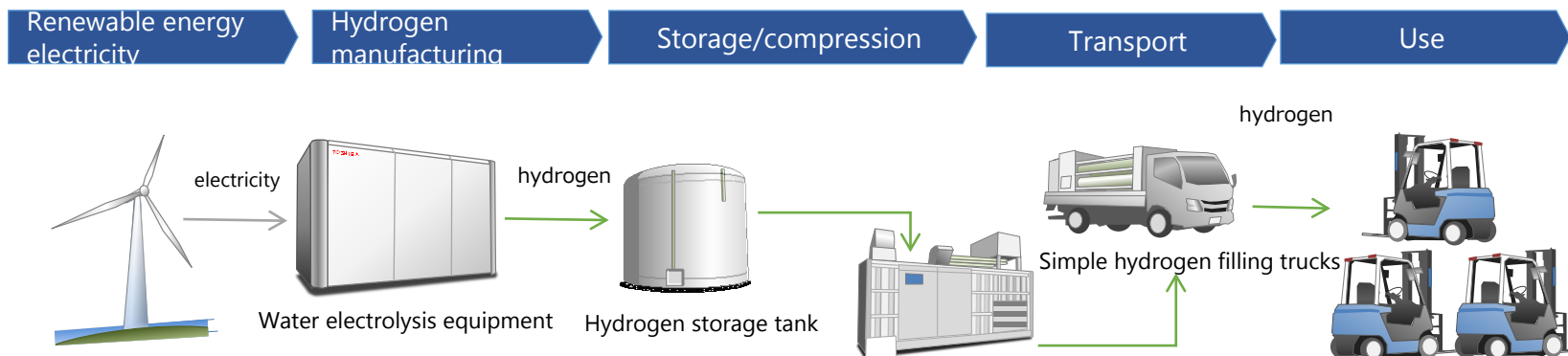


Yokohama Osanbashi Hydrogen station



Tsunashima Hydrogen station

- **Demonstration Project of utilization of hydrogen using Yokohama City Wind Power Plant(2015~2018)**



Yokohama's Municipal Renewable Energy Facilities

Biomass power
generation
(sewerage treatment)
2

Hydroelectric
generation
3

Biomass power
generation
(waste treatment)
4

Wind power
generation
4

Solar power
generation
249

Electric generation amount **approx. 3.9billion kWh**※ / per year

※approx. 40% of electricity use in whole city / 0.1million households

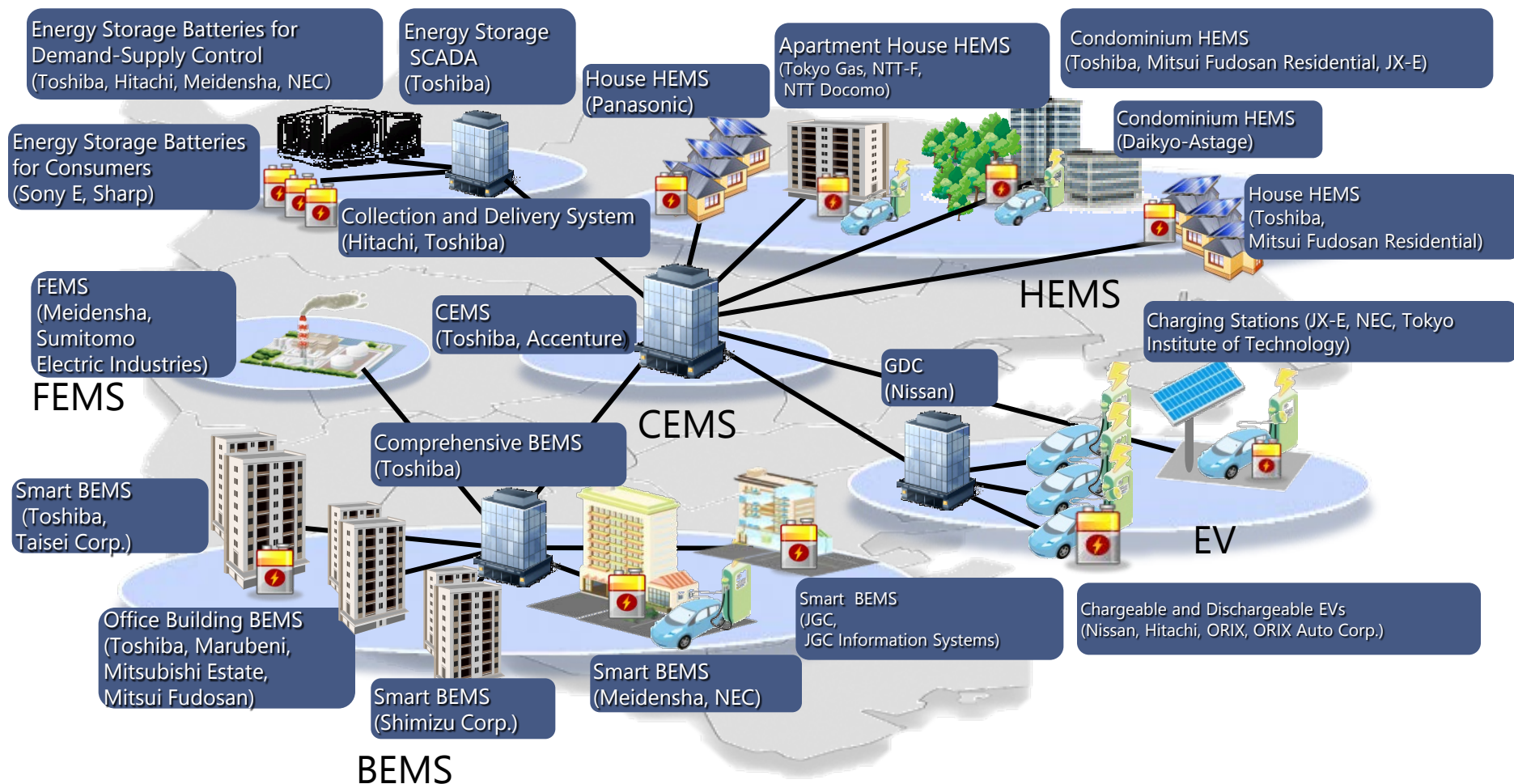
Yokohama Smart City Project (YSCP)

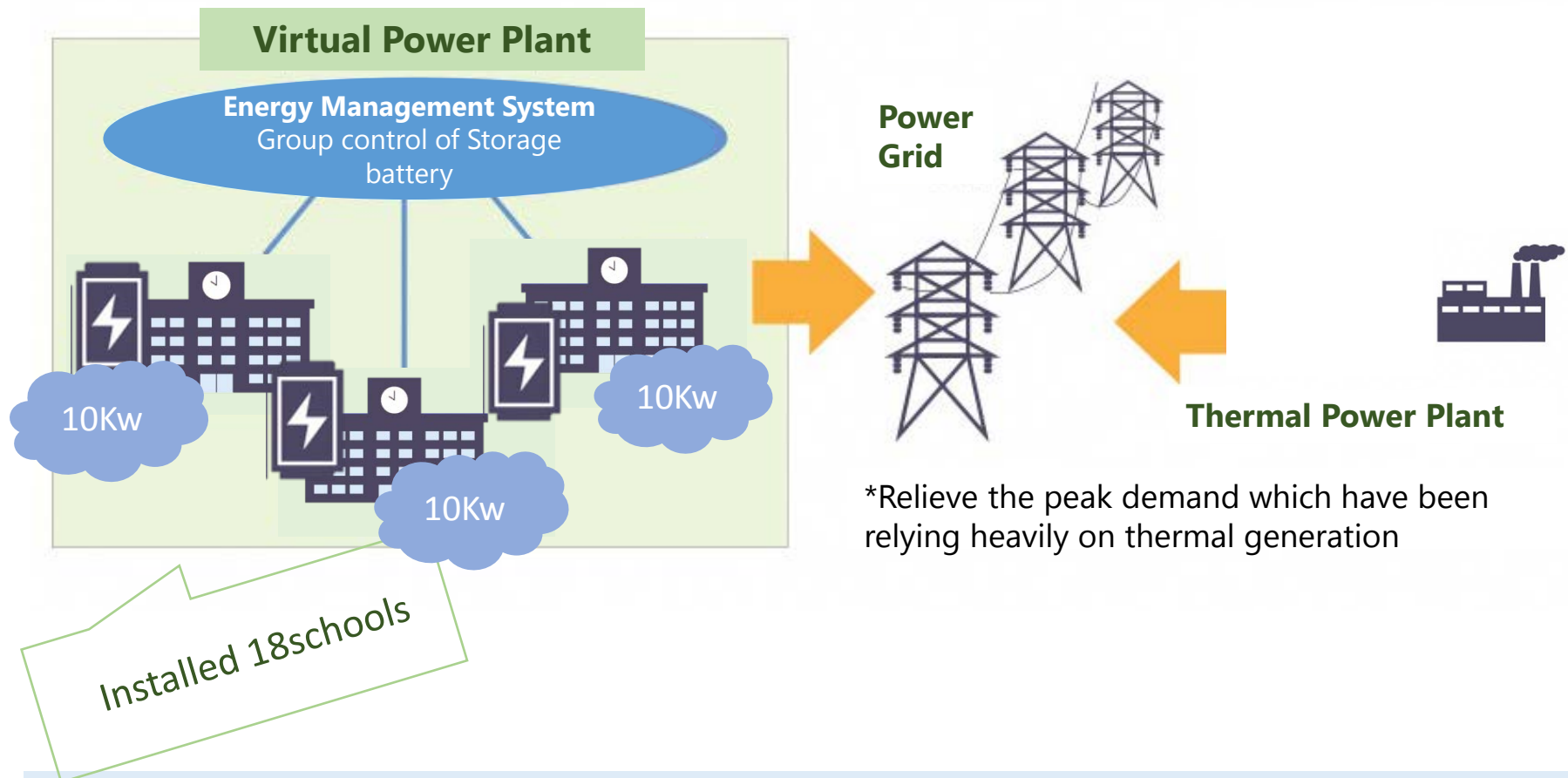


Target (~2013) / Result (2010~2014)

HEMS (Home energy management system) (4,200/4,000) PV (37MW/27MW) EV (2,300/2,000)

Energy Storage SCADA



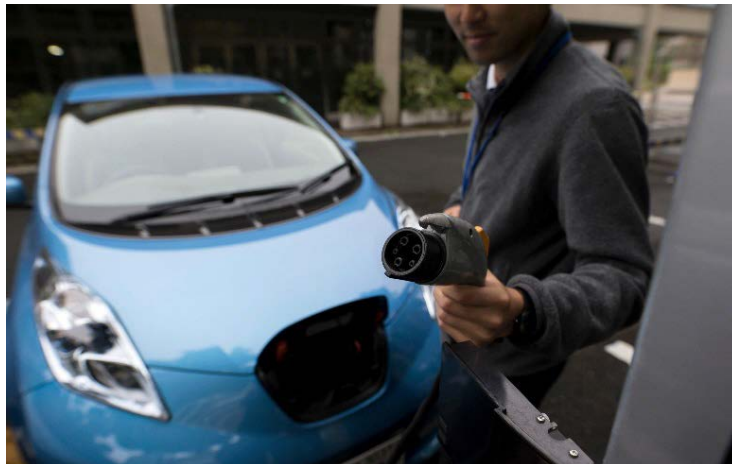


Yokohama "Virtual Power Plant" Features:

- 1) **PPP Cooperation**| Toshiba, TEPCO, City of Yokohama
- 2) **Improve the Resilience, Environment**(Saving Energy),**Economy**(New Service)

Virtual Power Plant Project – Future Perspective

If half of
1,300,000 cars
will be change to
EVs and all of
them has 40kw
storage
batteries..



If all of
1,500 stores
install storage
batteries..



*I am looking
forward to seeing
you again in
Yokohama!*

Photo at "Smart Illumination Yokohama"