

City's Role in Leading Toward a Greener Future

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Yokohama's Strategy Toward Green Society

Around **64–90%** of
Japan's CO₂ is
Emitted From **Cities!**

4 Pillars of Our Climate Actions

1. Empowering Citizens
2. Empowering Businesses
3. Implementing Innovative Tech
4. Taking Actions As Local Gov.

GREEN × EXPO ...2027

Transition to
Circular Economy

Realizing Net-Zero Emission

Net-Zero GHG Emission ...2050

50% GHG Reduction ...2030



Achieving
GREEN SOCIETY

- **Develop KPIs** in each measure
- **Double** the budget on climate actions (yr 2025 vs. 2024)

**IPCC AR6 Synthesis Report SPM.7 (b) and LR Figure 4.4 (b):
Potential of demand-side mitigation options by 2050**

Demand-side measures and new ways of end-use service provision can reduce global GHG emissions in end-use sectors (buildings, land transport, food) by 40–70% by 2050 compared to baseline scenarios, while some regions and socioeconomic groups require additional energy and resources.

<https://doi.org/10.7927/5869-rz42>. Accessed 14 MARCH, 2025

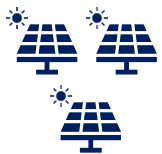
How to incorporate the views of demand-side (i.e. citizens & businesses) into climate policies, and lead their behavioral changes?

***General Role of
Cities***

***Yokohama's
initiatives***

Whole Net-Zero Business District by Year 2030

Onsite Action



Renewable Energy



Energy Management with District Heating Provider

Heat **Aggregator** Electricity

Net-zero heating

Electricity demand response

Hydrogen, Carbon-Neutral Gas (CCU)



Energy-Saving Improvements



Net-Zero Energy Building (ZEB)

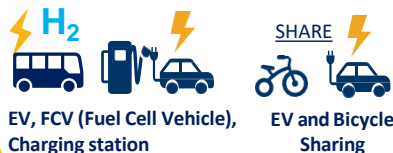


Central Business District (MM 21)



Area	186 ha
Working Population	130,000
Annual Visitors	80 million

Net-zero Mobility



Circular Economy



Offsite Renewable Energy

Yokohama's Suburbs



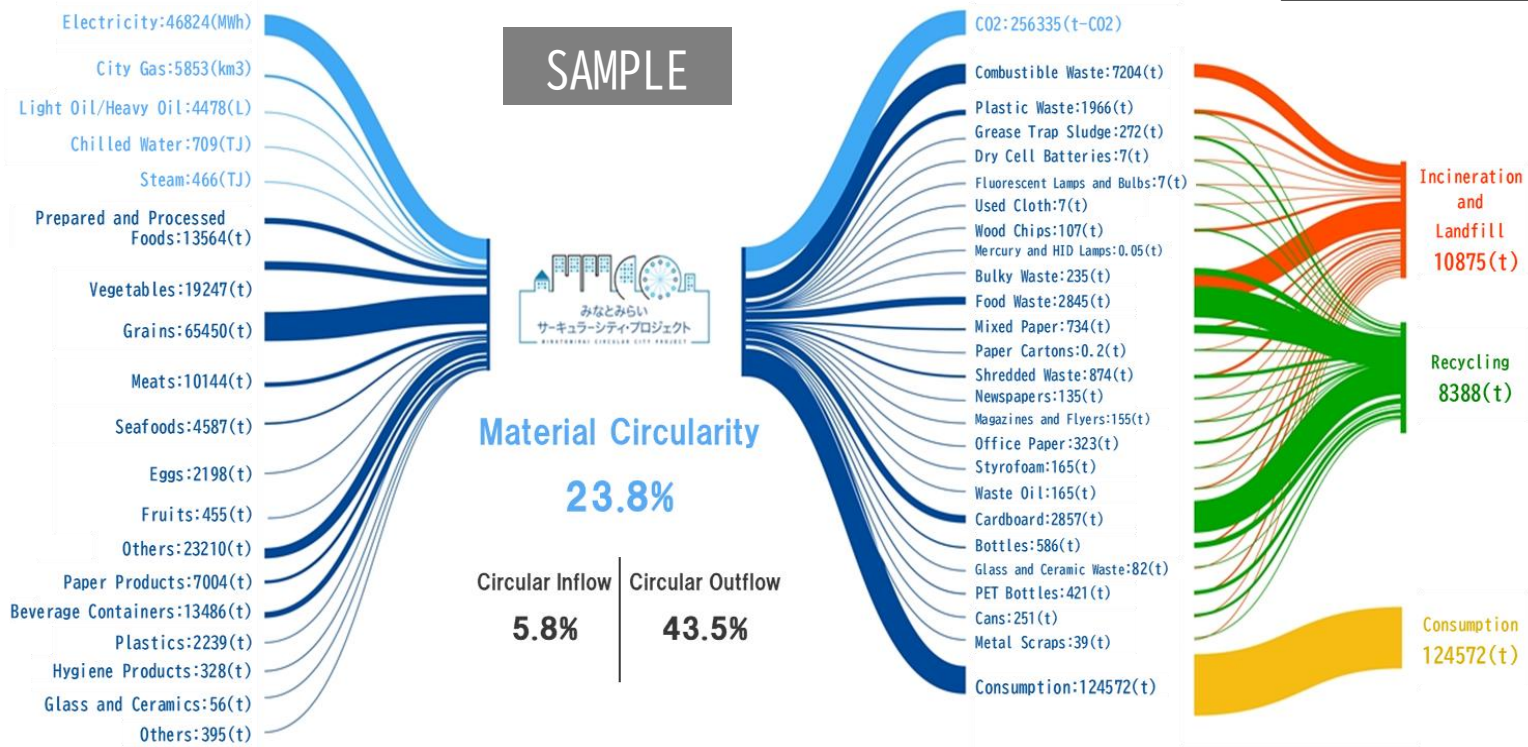
Other Cities



Quantifying the “Circularity” of Business District

- Develop Material Flow Diagram
- Evaluate Inflow/Outflow Circularity in the District
- Raise Awareness of Citizens on Resource Circulation

t : weight (ton)
TJ: energy consumption (tera-joule)



General Role of Cities

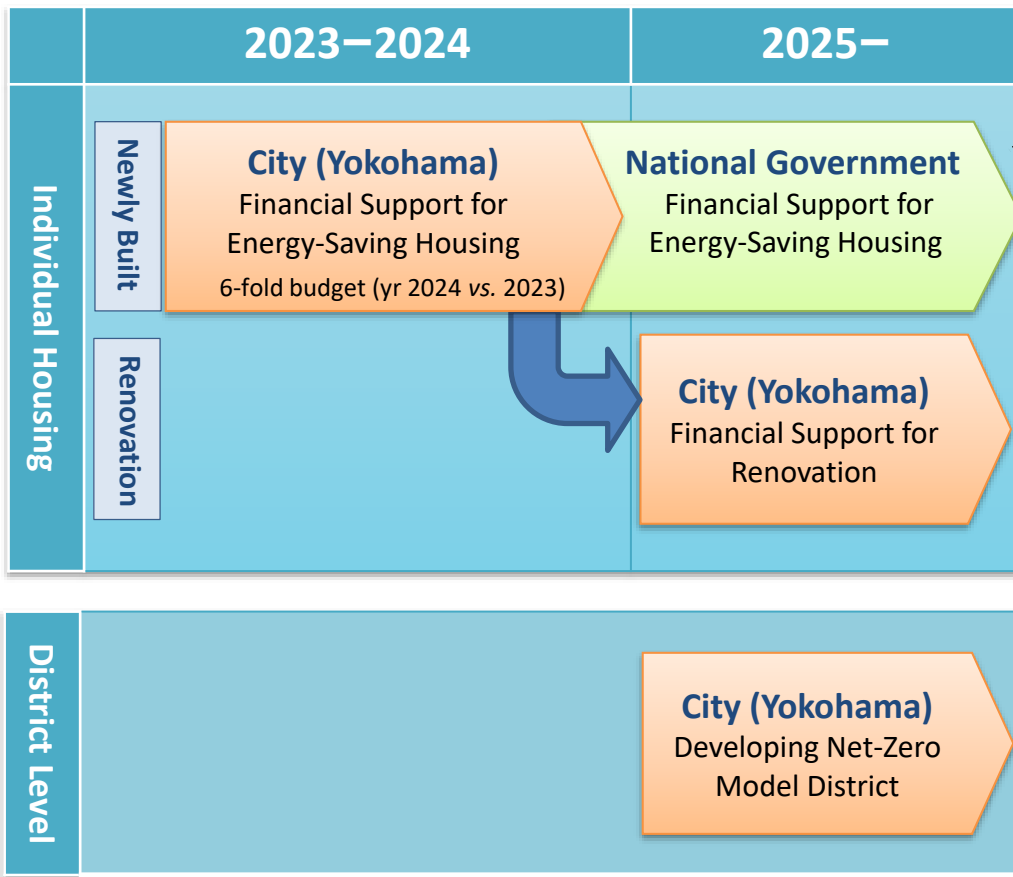
- **Cities are the only entities that oversee & optimize certain districts.**
- **Cities can connect various actors across the District through daily interactions.**

Yokohama's Initiatives

1. **Proposed from City to Businesses toward a *whole net-zero district*.**
 - Started a close collaboration b/w City and National Government (2022).
2. **Developing onsite & offsite energy management in the District.**
3. **Will quantify circularity in the District for facilitating dialogue with Businesses there.**

Energy-Saving Housing at Individual and District Levels

Example of City Policies Inspiring National Gov.



【Individual Housing】

Financial support to promote citizens to energy-saving housing with top-level insulation

【Model District】

Collaboration and dissemination to surrounding areas



General Role of Cities

- **Cities flexibly develop policies for demand-side mitigation or new ways of providing services, which will be potentially followed by nationwide policies.**

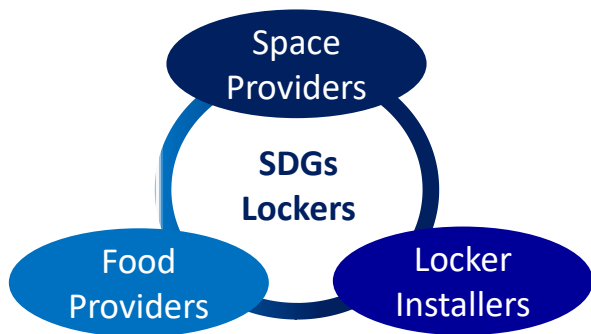
Yokohama's Initiatives

1. **Launched financial support for energy-saving housing to create choice for citizens (2023).**
 - **National Government starts similar support nationwide after our achievement (2025).**
2. **Launched financial support for energy-saving renovation (2025).**
3. **Will build a net-zero model of a whole residential area.**

Empowering Citizens for Concrete Actions

Encouraging civic actions are key to unlock the potential of demand-side.

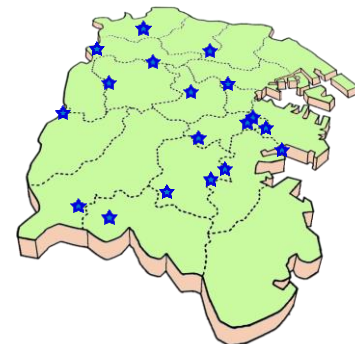
"SDGs lockers" to Reduce Food Loss & Waste



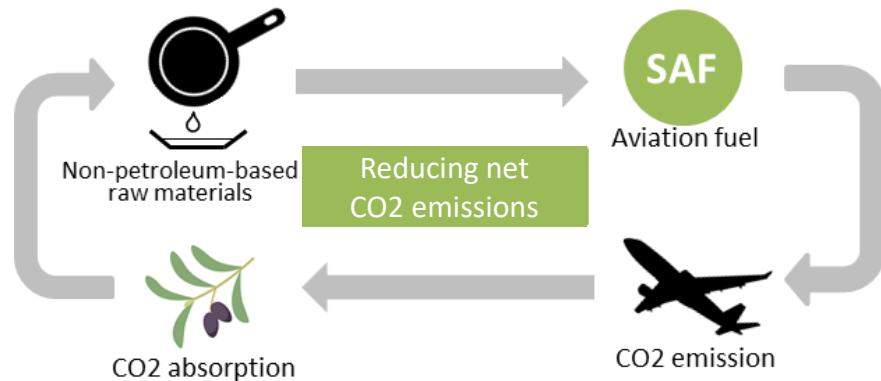
Sustainable Aviation Fuel from Cooking Oil



Citizens bring in used cooking oil



Used oil collection sites in Yokohama



General Role of Cities

- **Cities are coordinators that are close to local residents.**
- **Cities can promote citizens' behavioral changes in their lifestyle by policies.**

Yokohama's Initiatives

1. **Initiatives to offer unsold bread from bakery in vending machines to reduce food loss.**
 - In a country with the culture of vending machines and train commuting 😊
 - City connects citizens, locker installers, food (bakeries) & space providers.
2. **Initiatives to collect used cooking oil for SAF.**
 - City connects citizens, commercial facilities, and airlines.

Boosting SMEs to Climate Actions

Step 1

Net-Zero Declaration (since 2024)

- Registration of SMEs willing to reduce CO₂ emissions

Step 2

Support for visualizing CO₂ Emissions

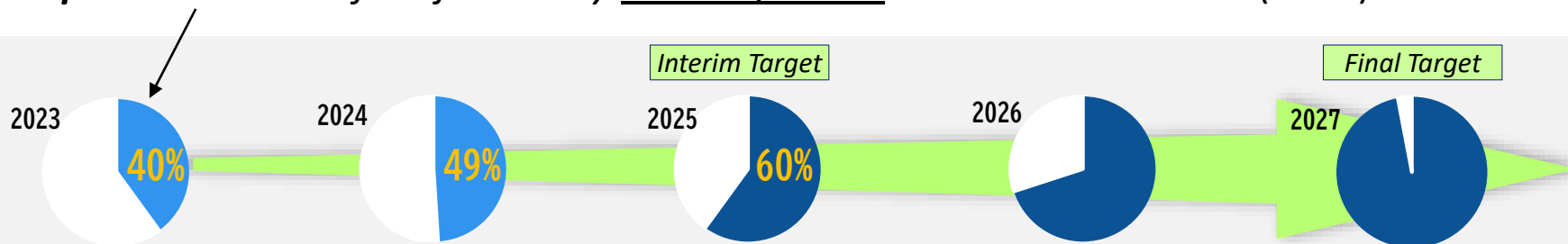
- Support for visualizing CO₂ emissions from each SME.

Step 3

Financial Support for reducing CO₂ Emission

- Individual consultation
- Financial support for equipment

Step 1 at the start of Project: Only 40% of SMEs took climate actions (2023)



- Declared & registered SMEs: More than 3,800 (As of Feb 2025)
- SMEs taking climate actions increased from 40% to 49% (As of Feb 2025)

General Role of Cities

- **Cities are coordinators that are close to regional SMEs.**
- **Cities can promote SMEs' behavioral changes in their business activities by policies.**

Yokohama's Initiatives

1. **Launched registration system for SMEs demanding energy-saving.**
2. **Initiatives to offer financial support for Energy Diagnosis, Detailed Consultation, and other incentives for energy-saving.**
3. **Will assist declared SMEs in estimating their GHG emissions according to size and type, addressing to the understanding of SMEs.**

Scaling & Speeding Up Climate Actions among Asian Cities

Asia Smart City Conference in Yokohama (since 2012)



- **A matching platform*¹ to launch climate projects among stakeholders** incl. Asian cities, international organizations, and businesses.
- **Led to concrete environmental projects** in Bangkok (Thailand), Cebu (Philippines), Da Nang (Viet Nam), Zamiin Uud (Mongolia), Balikpapan (Indonesia), Mandaue (Philippines) etc.

*1 250+ matchings at ASCC 2024

Developing Master Plans On Climate Change (2015, 2022)



- **20+ mutual visits among Asian cities after matching**

Example of Interactions:

- *Technical advice for buildings and transportation*
- *Advice for collaborative initiatives with citizens, such as waste reduction and energy-saving.*

Example: Energy Action Plan in Bangkok Released (2024)



With Governor Chadchart

Yokohama has had long-term cooperation in environmental technology with BMA to make Bangkok a sustainable city.

This (two-city cooperation) includes the creation of the first Bangkok Energy Action Plan to concretely control carbon emissions in both the transportation and energy sectors.

From Local Press (Bangkok Post) reporting on the release

Citation: <https://www.bangkokpost.com/thailand/pr/2817341/bma-and-yokohama-unite-for-environmental-solutions>

General Role of Cities

- **Cities face common urban challenges and opportunities.**
- **Cities can inspire each other for scaling and speeding up climate actions.**

Yokohama's Initiatives

1. **Advance city-to-city cooperation for cities from planning to implementing concrete actions.**
2. **Exchange views and experiences through international platforms (GCoM, ICLEI etc.) for further collaborations in Asia against climate change.**

World EXPO Toward a Greener Society in 2027

Climate & Environmental Solutions at GREEN × EXPO 2027



YOKOHAMA
GO GREEN

