

An aerial photograph of Kawasaki, Japan, showing a dense urban area with a prominent river system and several large industrial or commercial zones. The sky is clear and blue.

**UNIDO/Kawasaki-city Collaboration Forum**

**Kawasaki's Efforts  
for Environmental Business  
Overseas**

**Economic and Labor Affairs Bureau  
of Kawasaki**

**Nov. 24<sup>th</sup> , 2017**

# Changes in the Circumstances surrounding Environmental Business

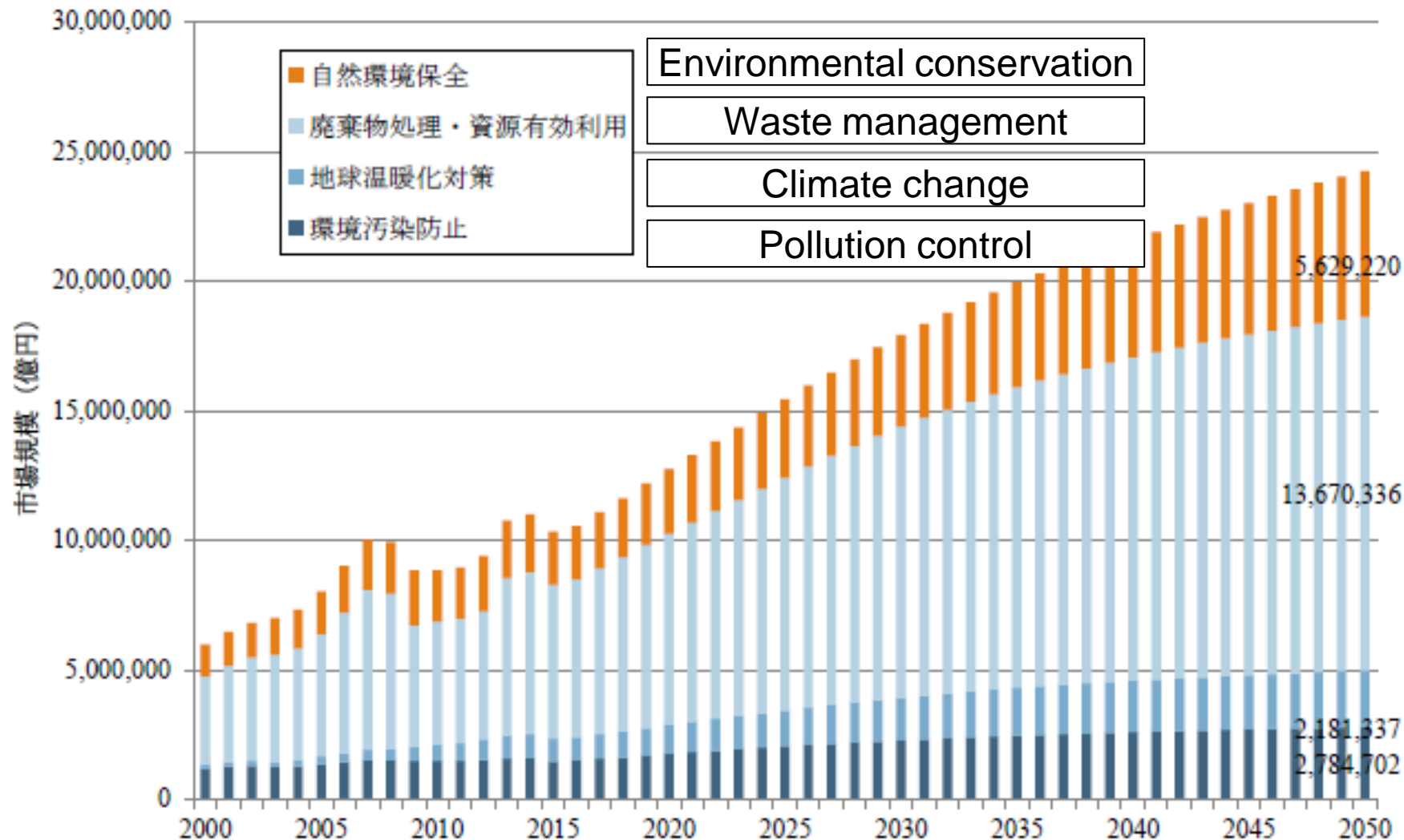
---

- **Nov. 2015** The Paris Agreement in COP21
- **Dec. 2016** Entry into effect of the Paris Agreement
- **Mar. 2017**  
Environmental business market research committee report conducted by MoEJ

(2015) 1,000 trillion Yen  (2050) **2,500 trillion Yen**

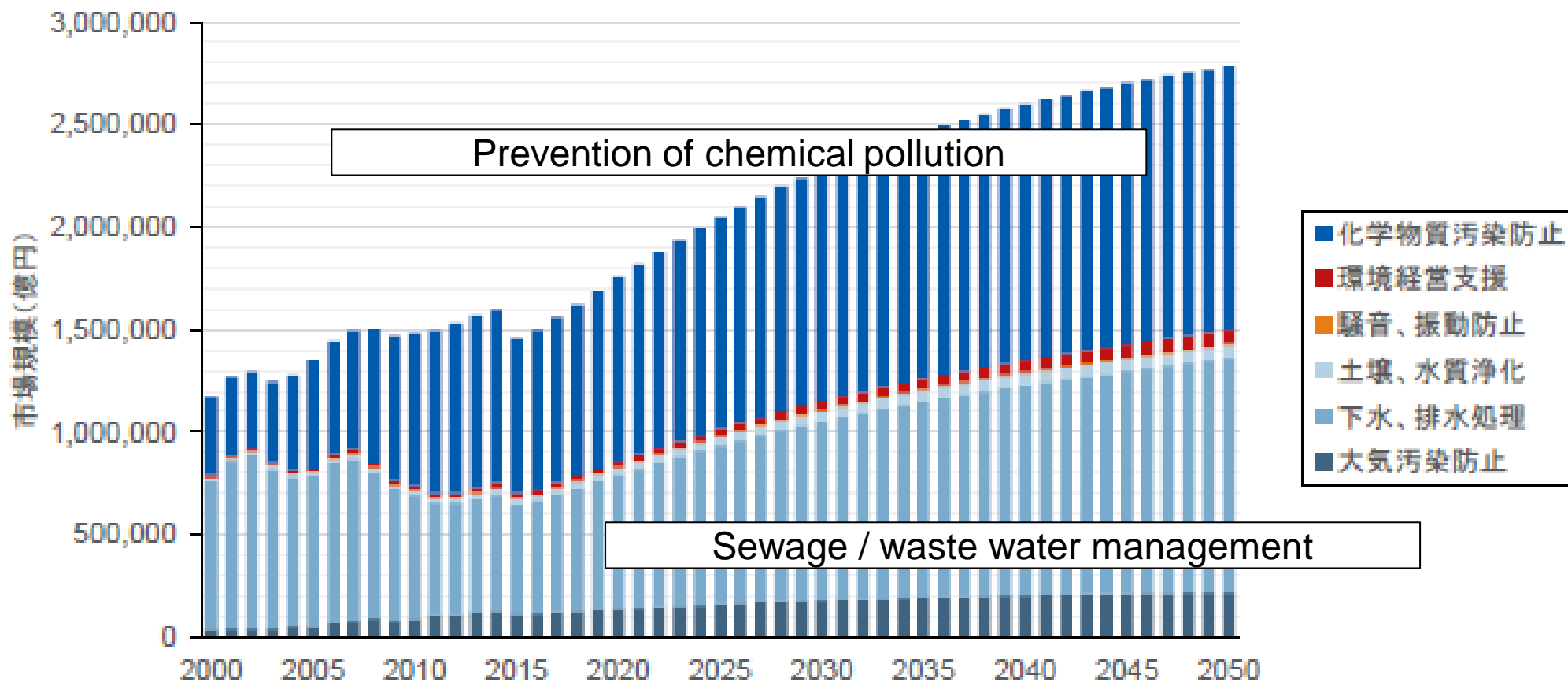
**Continuously expand environmental business market worldwide.**

# Trend of environmental business market



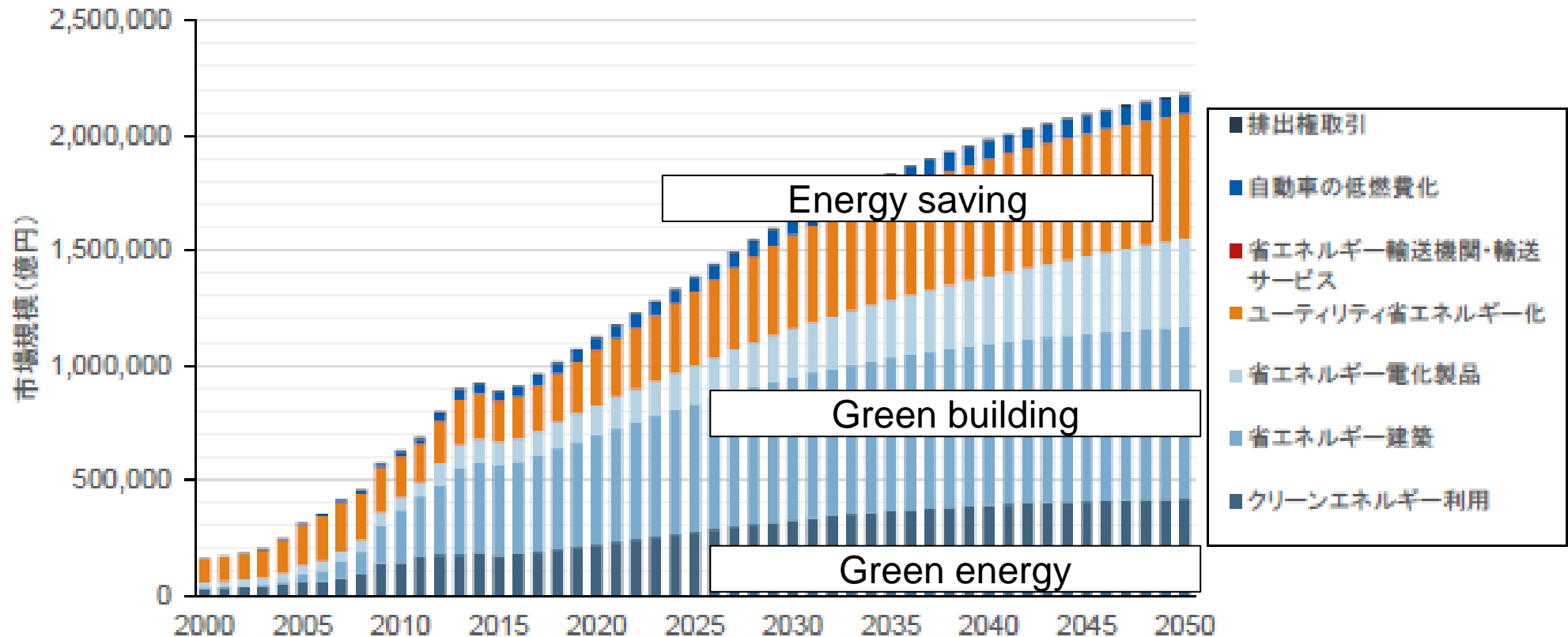
source: Environmental business market research committee report (MoEJ)

# Pollution control



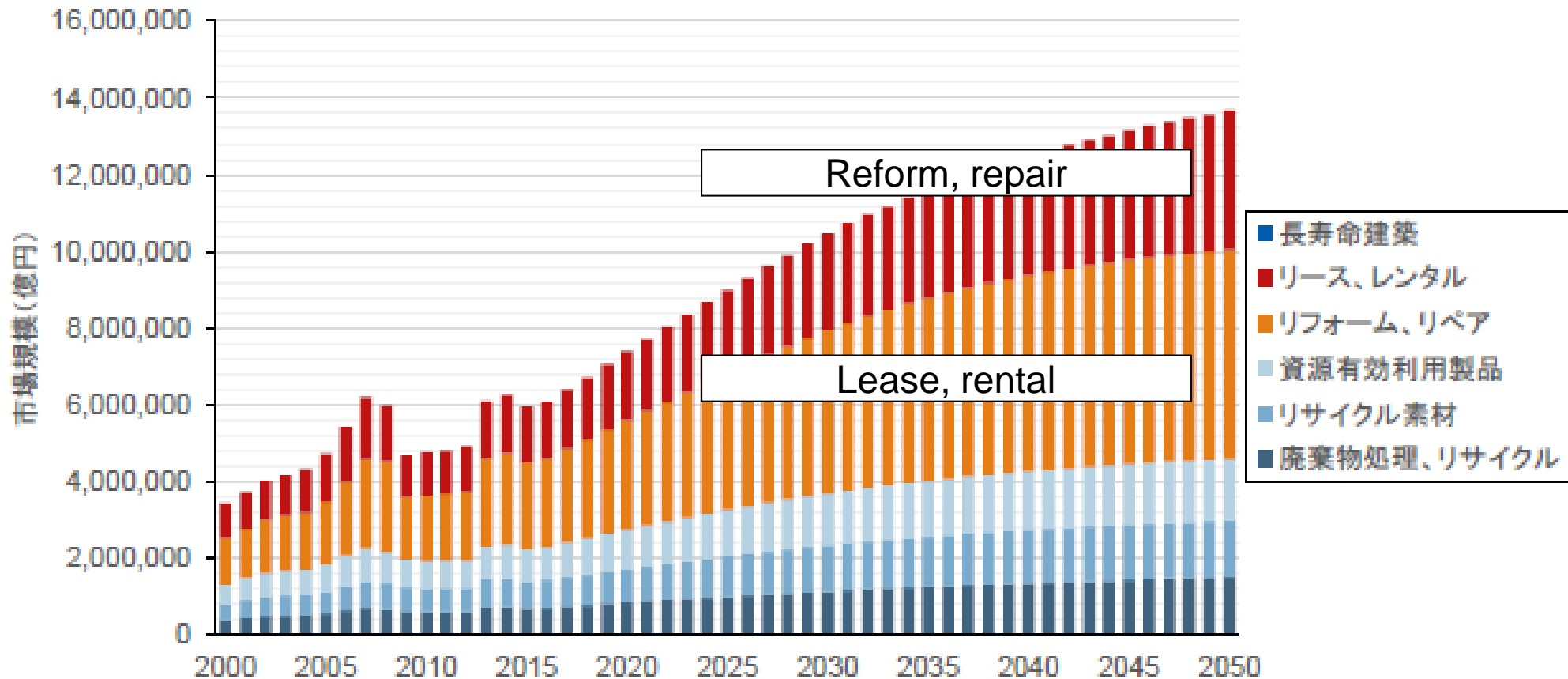
source: Environmental business market research committee report (MoEJ)

# Climate change



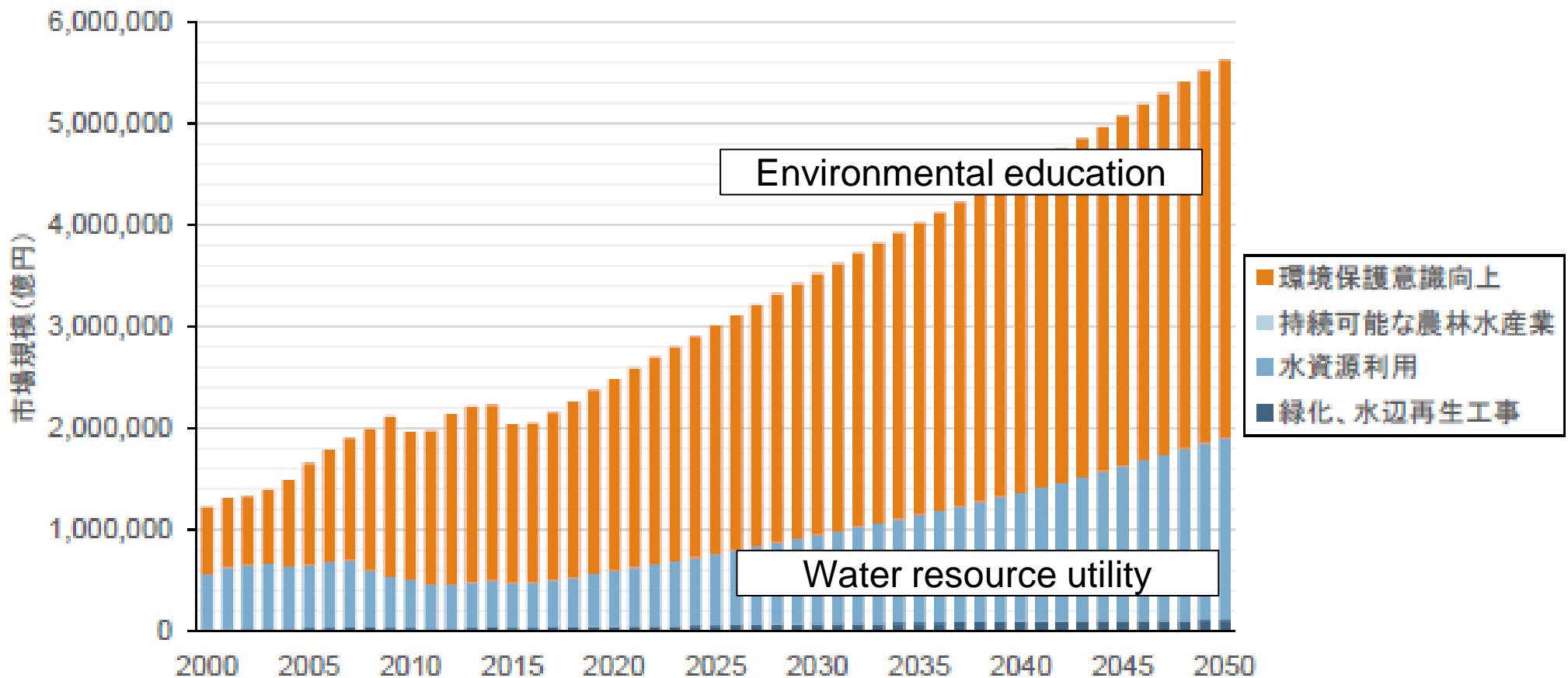
source: Environmental business market research committee report (MoEJ)

# Waste management



source: Environmental business market research committee report (MoEJ)

# Environmental conservation



source: Environmental business market research committee report (MoEJ)

# Kawasaki Green Innovation

## Industrial fields expected to grow in future

### Life science

Aging society

- ・ 高度な医療ニーズに対応し、国際的な課題解決に寄与
- ・ 日本経済の持続的な発展を牽引

### Welfare

Products development

- ・ 利用者ニーズに応えた福祉製品を創出し、国内のみならずアジア諸国の高齢化の課題解決に寄与
- ・ 福祉産業の拡大と活性化

### Green

Advanced environmental technologies

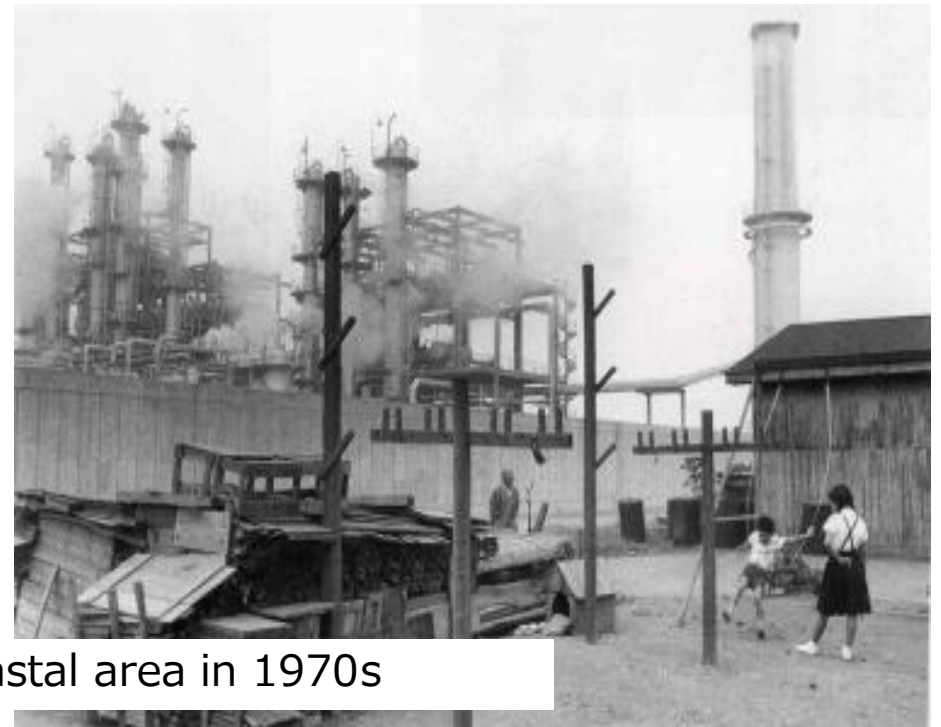
- ・ promote Low-carbon society
- ・ support local industries



# Origin of Kawasaki Green Innovation

- Experience of overcoming industrial pollution

- ✓ Economic growth and environmental problems
- ✓ Similar situation in Asia's emerging countries



Kawasaki coastal area in 1970s

# Kawasaki Green Innovation Promotion Policy (2014)

---

1 . Promotion of environmental technologies and industries

2 . Mechanism development for environmental technologies

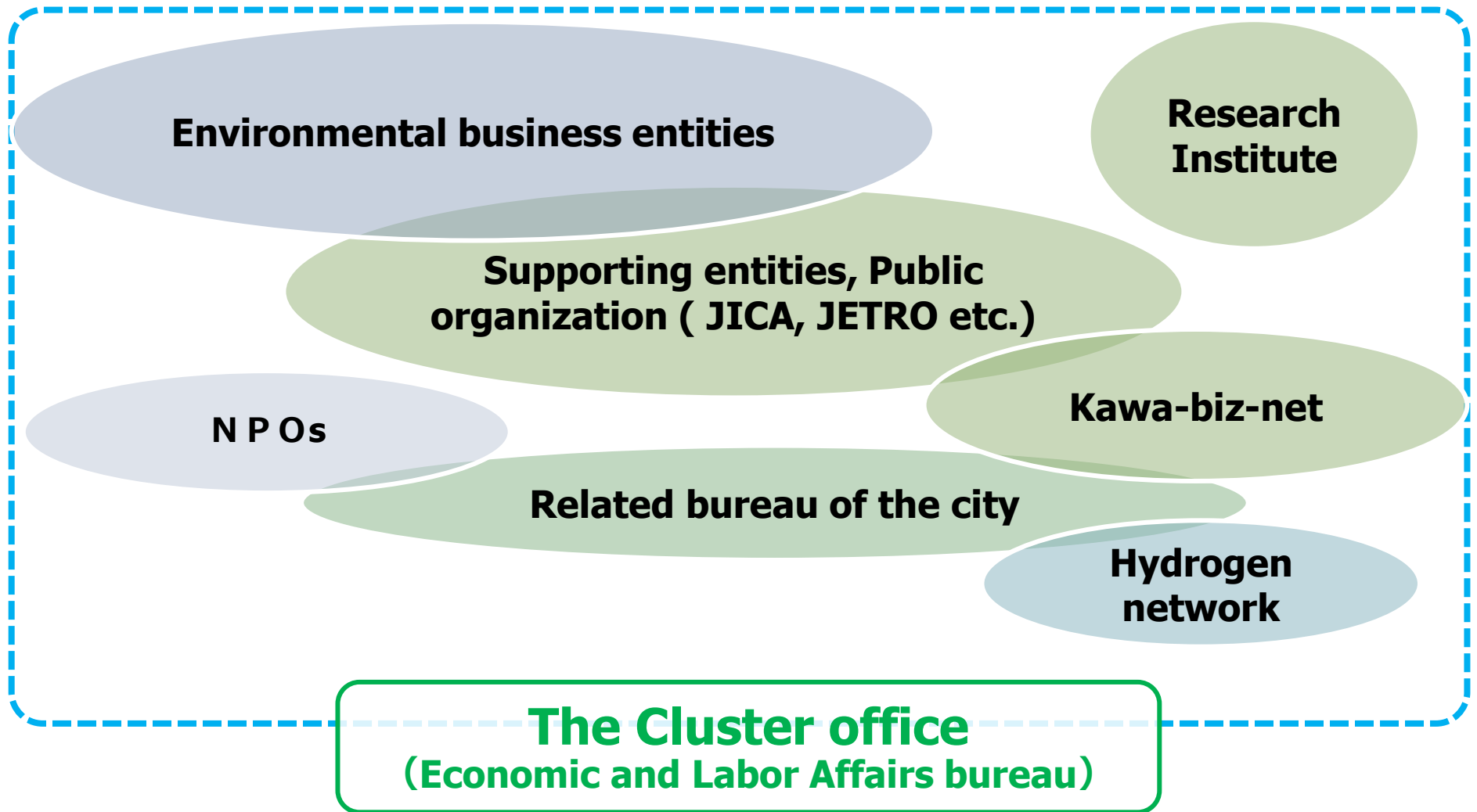
3 . Cooperative action among various entities

4 . International cooperation through environmental technologies



**Kawasaki Green Innovation Cluster**

# Network of “Kawasaki Green Innovation Cluster”



# How to create new environmental business

---

✓ **Private companies' technologies & products (Hardware)**

+

✓ **Municipalities' policies & administrative know-how (Software)**

+

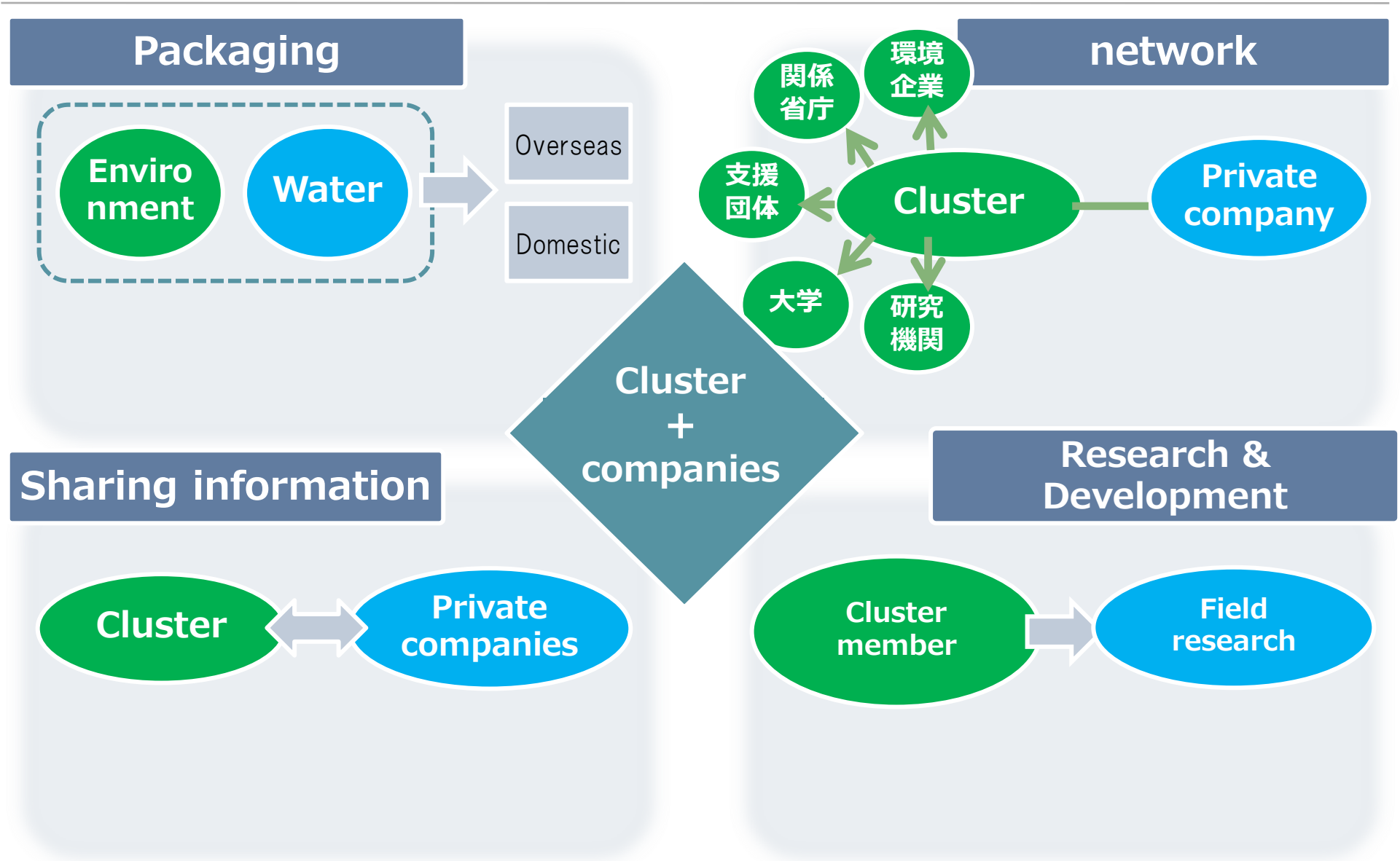
✓ **Expertise and support system (subsidy etc.)**



✓ **Collaboration among various players with various strength**

✓ **Local government will play a roll of creating new environmental business**

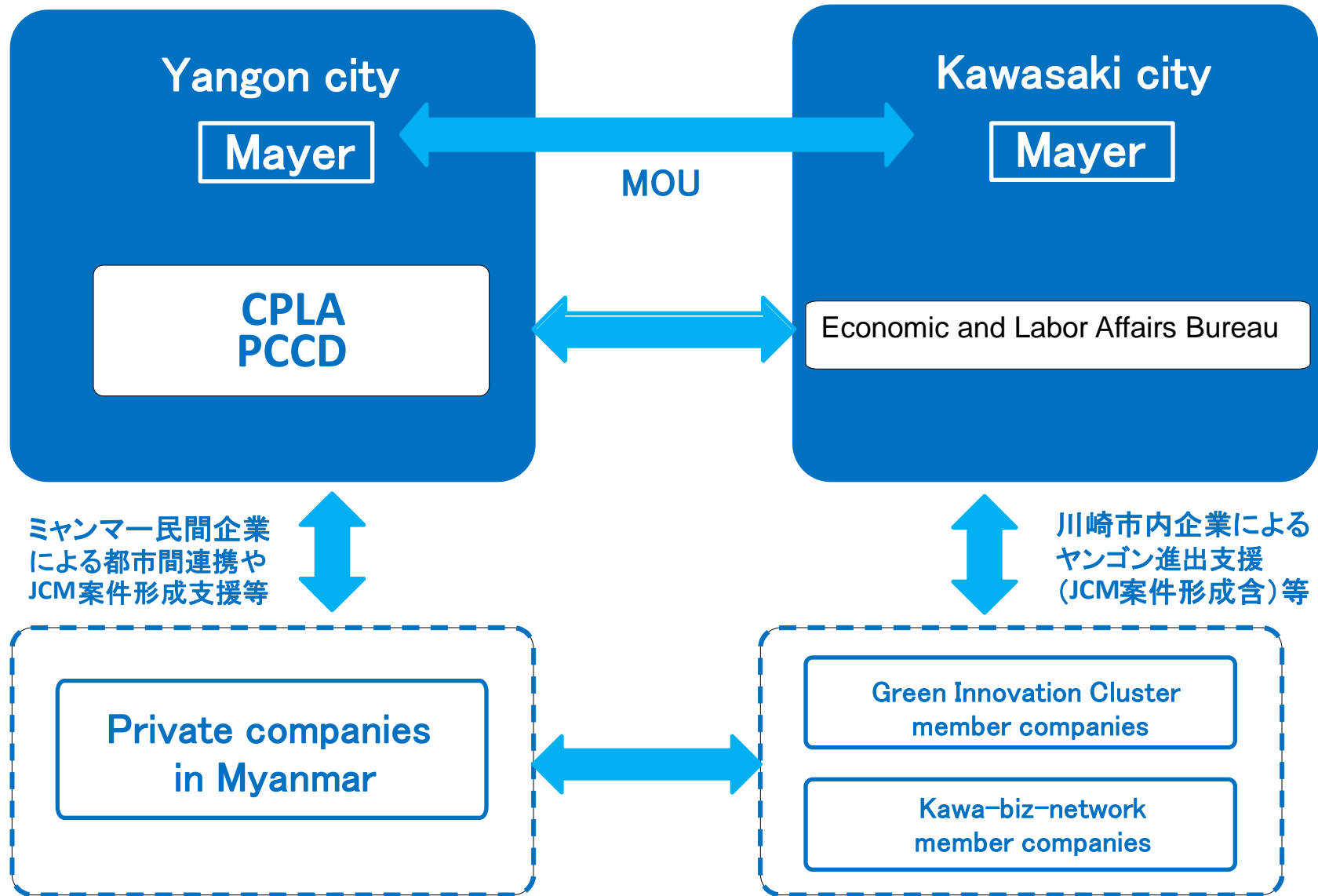
# Utilization of the Cluster's network



# Joint Crediting Mechanism (JCM) of MoEJ

- ✓ JCM stands for Joint Crediting Mechanism promoted by MoEJ
  - ⇒ 1) promoting Japan's low-carbon technologies to Asia's emerging countries.
  - 2) MoEJ provides subsidies for low-carbon project maximum 50% of the initial cost.
  - 3) MoEJ gains low-carbon credit from the project.
- ✓ In 2015, Kawasaki-city started JCM project in Yangon city, Myanmar.

# City-to-city collaboration project (1) : Yangon city, Myanmar





# City-to-city collaboration between Yangon and Kawasaki



*"Trust" and "mutual understanding"*  
*Through the collaboration*





# MoU for realization of low-carbon society in Yangon

## Memorandum of Understanding Between the City of Kawasaki, JAPAN and the City of Yangon, Myanmar on the City to City Collaboration

In order to promote city to city collaboration between Kawasaki and Yangon for achievement of low carbon city in Yangon and thus to contribute to the further prosperity of both, the City of Kawasaki and the City of Yangon hereby agree upon the following:

1. Both parties shall be committed to promote city to city collaboration for achievement of low carbon society in Yangon and contribute to the further prosperity of Kawasaki and Yangon within the fields of technical cooperation, information exchange, economic exchange as well as develop cooperative framework based the cities are on win-win and equal relationship.
2. In order to achieve the aforementioned objectives, both parties shall cooperate on the following:
  - (a) Excavating and supporting of low-carbon projects utilizing Joint crediting mechanism (JCM) scheme
  - (b) Technical cooperation and information exchange for realizing low-carbon society of Yangon
  - (c) Supporting creation of new business in a field of environment
3. According to this Memorandum of Understanding (MOU), there shall be back to back missions to have exchanges and study visits in both cities.
4. This MOU shall become effective on the signed date and remain valid for three years. If one country wants to terminate the MOU, they shall inform in writing before one month, otherwise the MOU will be continued automatically.
5. The contents of this MOU can be amended in accordance with a written agreement of both parties.
6. Any disagreement which comes from interpretation of the MOU shall be solved in a friendly way based on both parties' trust and discussion.
7. This MOU shall be made in two original copies in English.

March 25<sup>th</sup>, 2016



H.E U Hla Myint  
Mayor of Yangon



Mr. Norihiko Fukuda  
Mayor of Kawasaki

- 1) Excavating and supporting of low-carbon projects utilizing JCM scheme
- 2) Technical cooperation and information exchange for realizing low-carbon society of Yangon
- 3) Supporting creation of new business in a field of environment





# City-to-city collaboration project (2): Jakarta city, Indonesia



## “Green Innovation” in DKI-Jakarta



### MOEJ Programme

JCM city-to-city collaboration between DKI-JKT and Kawasaki city in phase-1 (FY2017)

1) JCM project formulation

2) Green Innovation actions, supported by Kawasaki city  
(site visit in Kawasaki, support for capacity development etc.)

JCM subsidy project

JCM city-to-city collaboration in phase-2 (FY2018)



### Other Programme

#### JICA Programme

JICA technical assistance

JICA grassroots prj.

#### Others

Other project scheme



# Needs from Jakarta city in terms of Green Innovation

## Green building

- High efficiency air conditioning system
- High efficiency lighting system
- Solid waste energy system
- Back-up power supply system
- Heat shield film/panel
- Solar power system etc.



## Low carbon water supply/sewerage management system

- High efficiency water pump system
- High efficiency waste water pump system
- Solid waste energy system etc.



## Project identification of renewable energy /new energy

- Solar power system
- Biomass power generation system
- Biogas power generation system
- Back-up power supply system
- Application of natural gas etc.





Thank you for your attention.



Colors, Future!

いろいろって、未来。

川崎市