

J-CODE's Efforts towards a Comprehensive Solution

**Introducing History of Urban Development
In Japan**



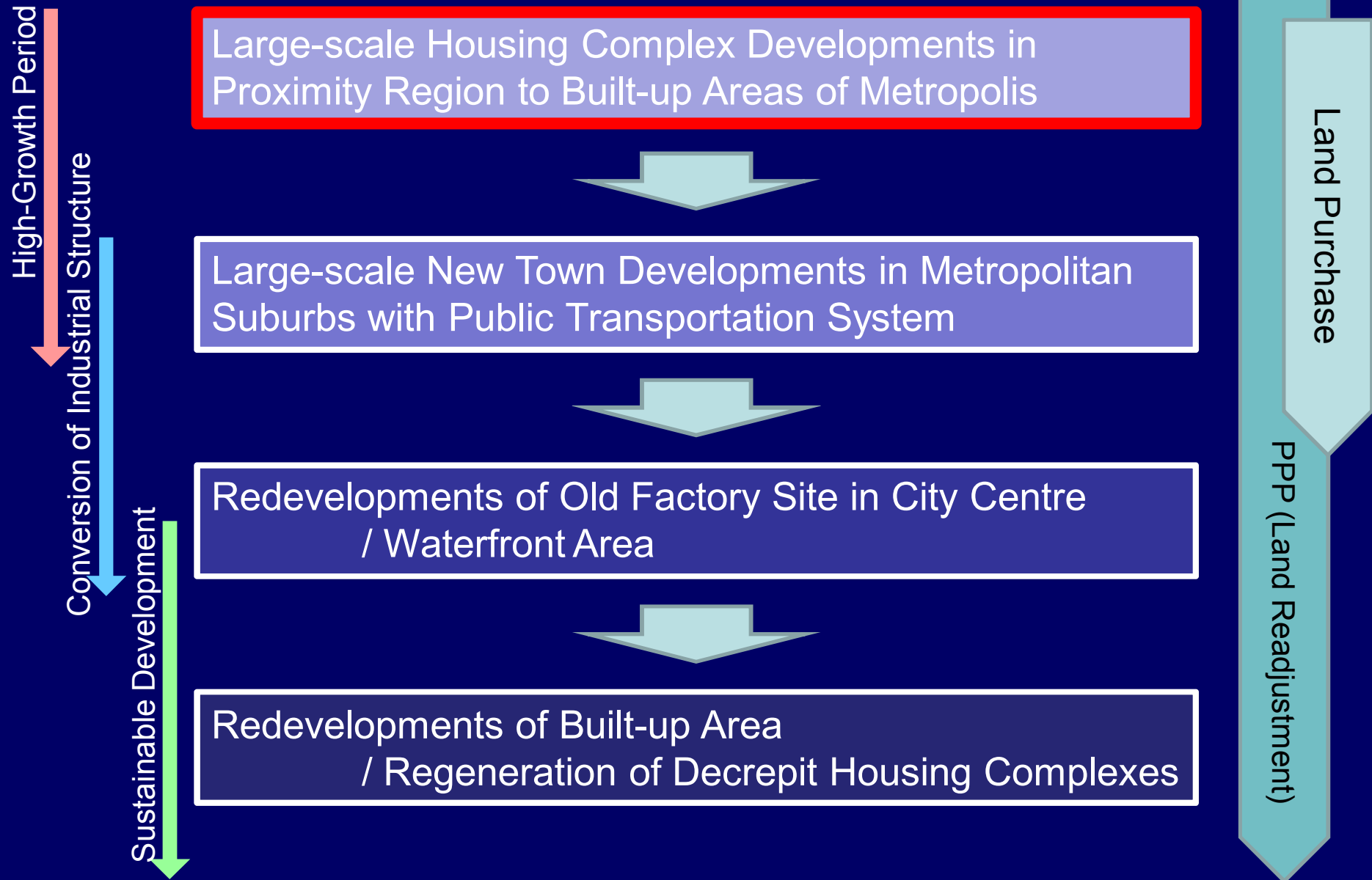
10 Oct 2016

YOSHIMURA Hiroyuki

Secretary General

**Japan Conference on Overseas Development of Eco-Cities
(J-CODE)**

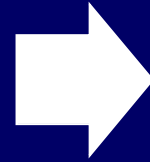
1-1 History of Urban Development in Japan



1-2 Examples of Large-scale Residential Area Development

Beginnings of Urban development (1955 to 1964)

- > High Growth Period
- > Serious Shortage of Housing



Large-scale Residential Area Developments in Proximity to Built-up Area of Metropolis

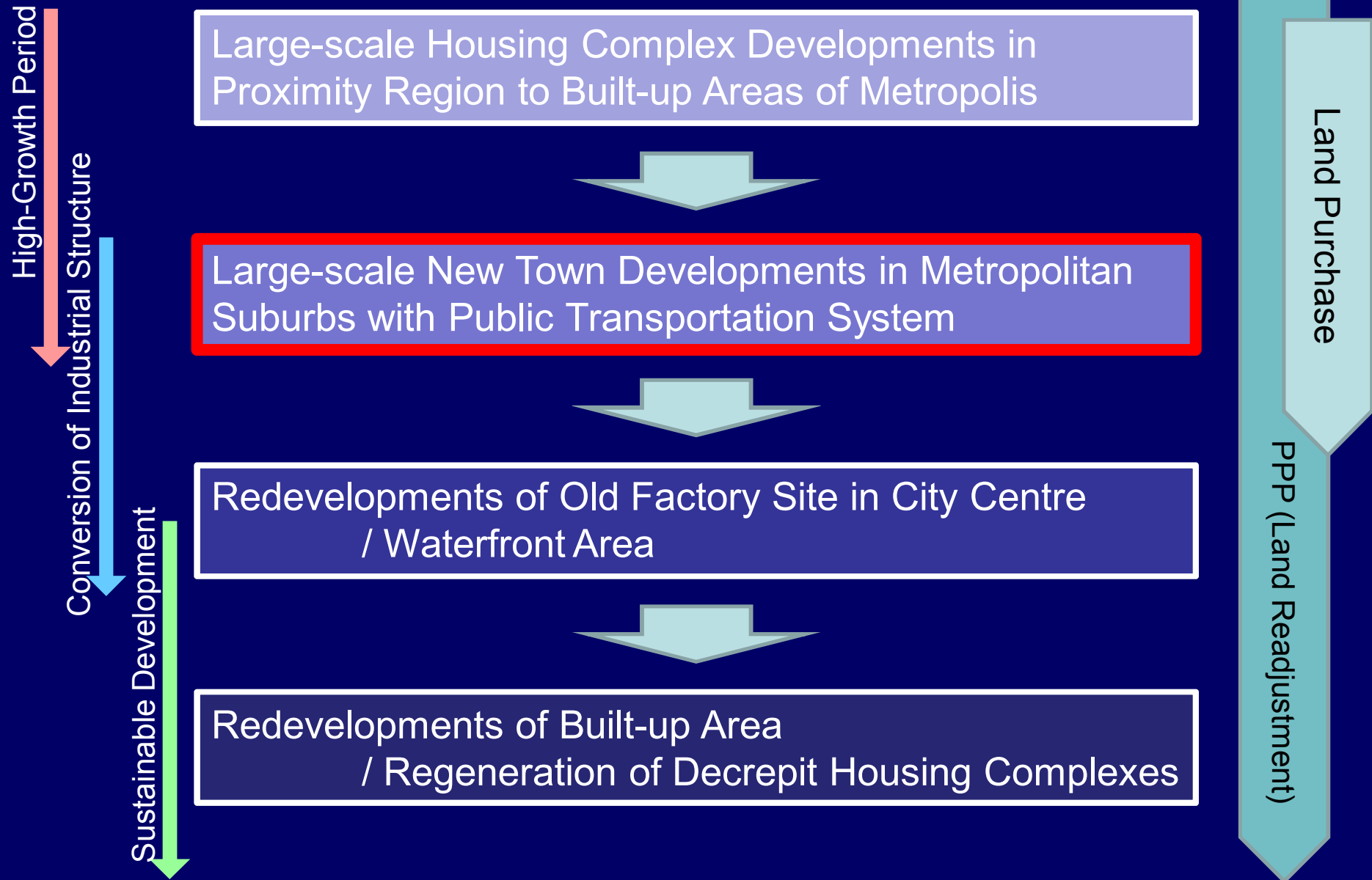
TOKIWADAIRA (Chiba) 169ha (1957)



KORI (Osaka)
155ha (1957)

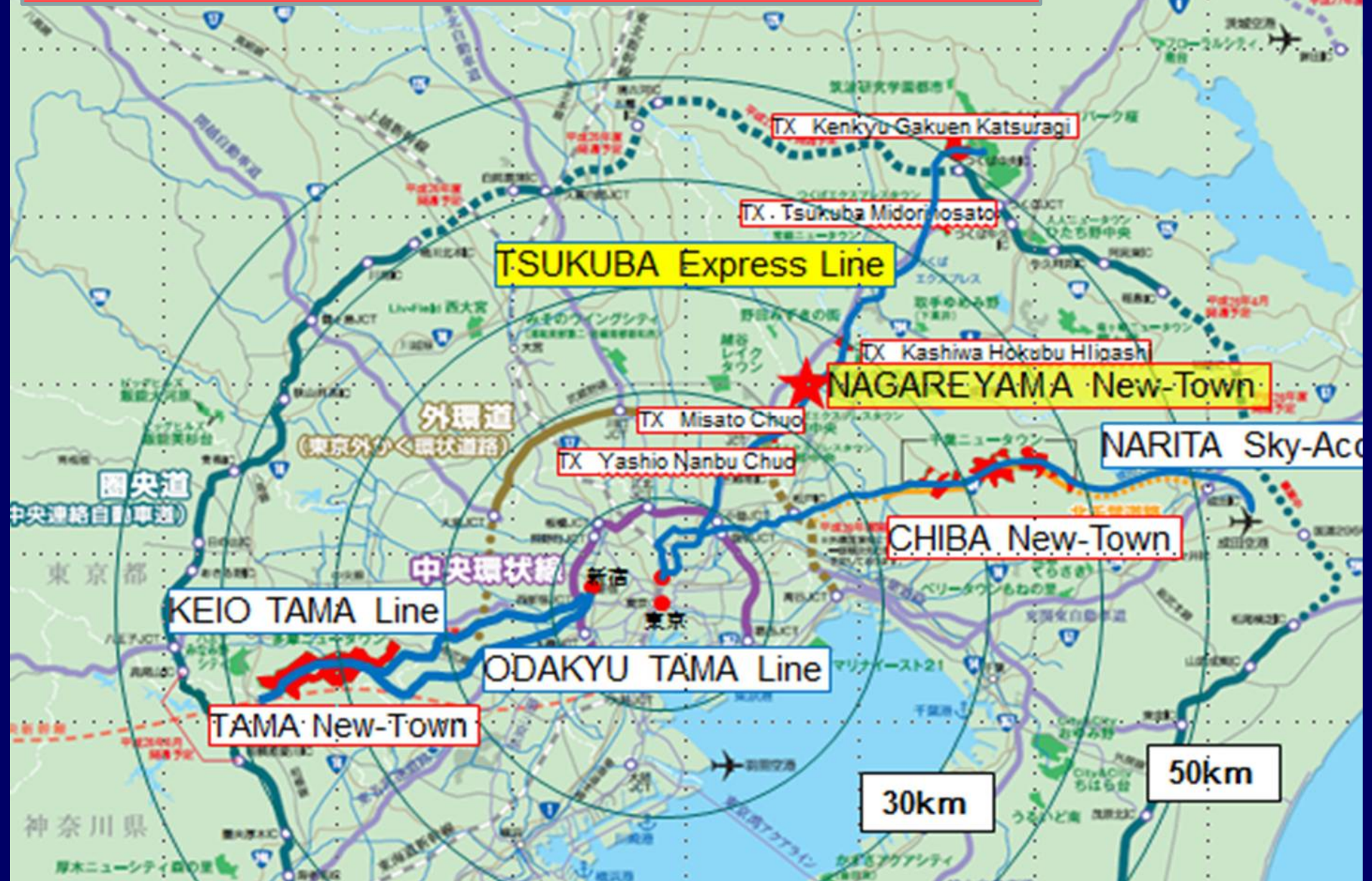


2-1 History of Urban Development in Japan



2-2 TOD Projects by Public Sector

New-Town Developments & Railways in Tokyo Metropolitan Area



2-3 Example of Large-Scale New-town Development

TAMA New-Town (Tokyo) 2,984ha (1969~)

- > Equipped Two Railways for New-Town Development



NAGAMINE (1995) :
Living Environment Conscious
Development



Early Developed Area

SUWA-NAGAYAMA (1971) : Mass-Supply Era

2-3 Example of Large-Scale New-town Development

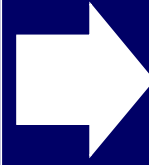
Tama New Town (Tokyo)



2-4 Example of Large-Scale New-town Development

Large-Scale Development / Mass Supply (1965 to 1980s)

- > Land Price Soaring
- > Urban Sprawl
(Disorderly Development)



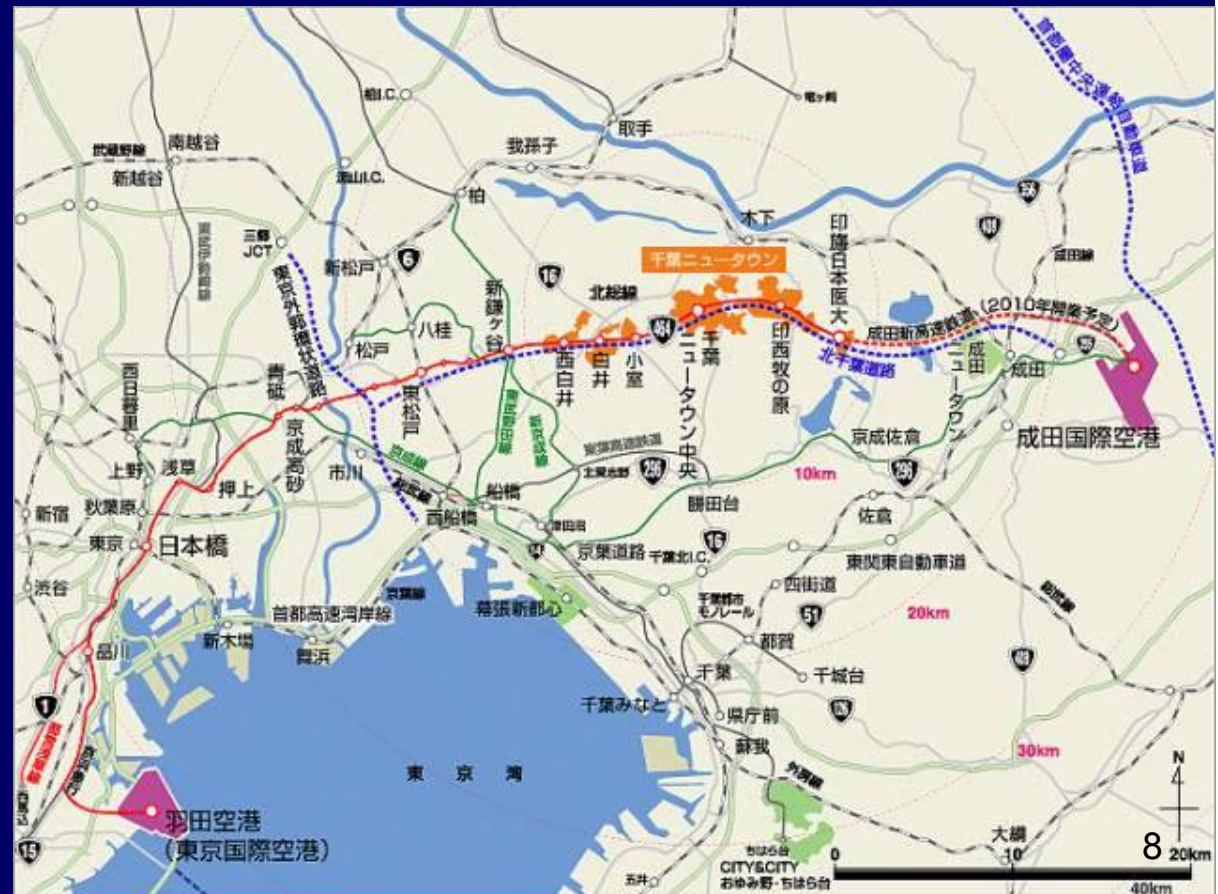
Large-scale New-Town
Developments in Metropolitan
Suburbs with Public Transportation
Systems

CHIBA New-Town
1,933ha (1969~)

- > Equipped 32km of New
Railway for New-Town
Development
- > 6 Stations in New-Town

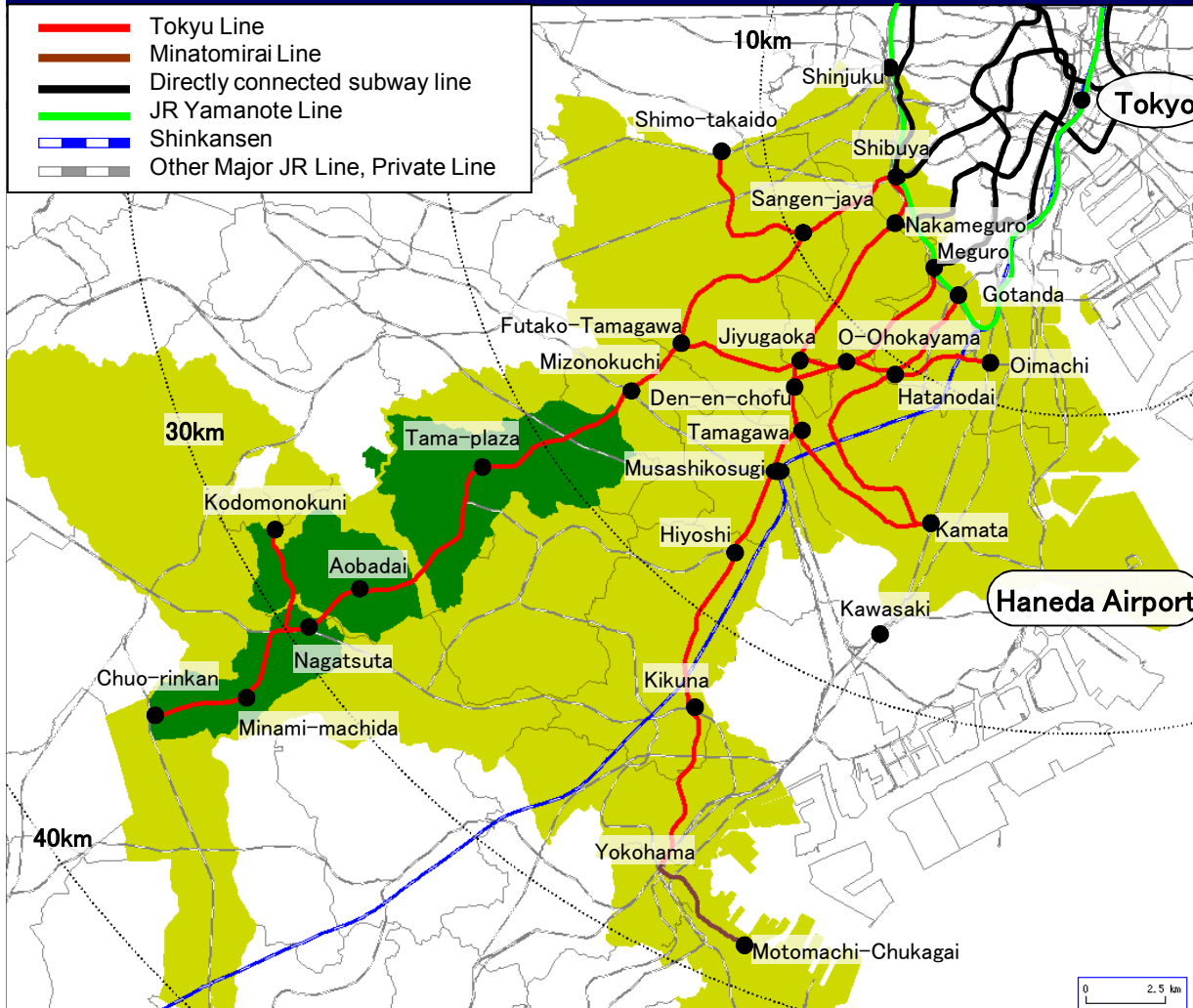


Chiba New-Town Chuo Sta.



2-6 Example of TOD Project by Private Sector

(Tokyu Corporation)



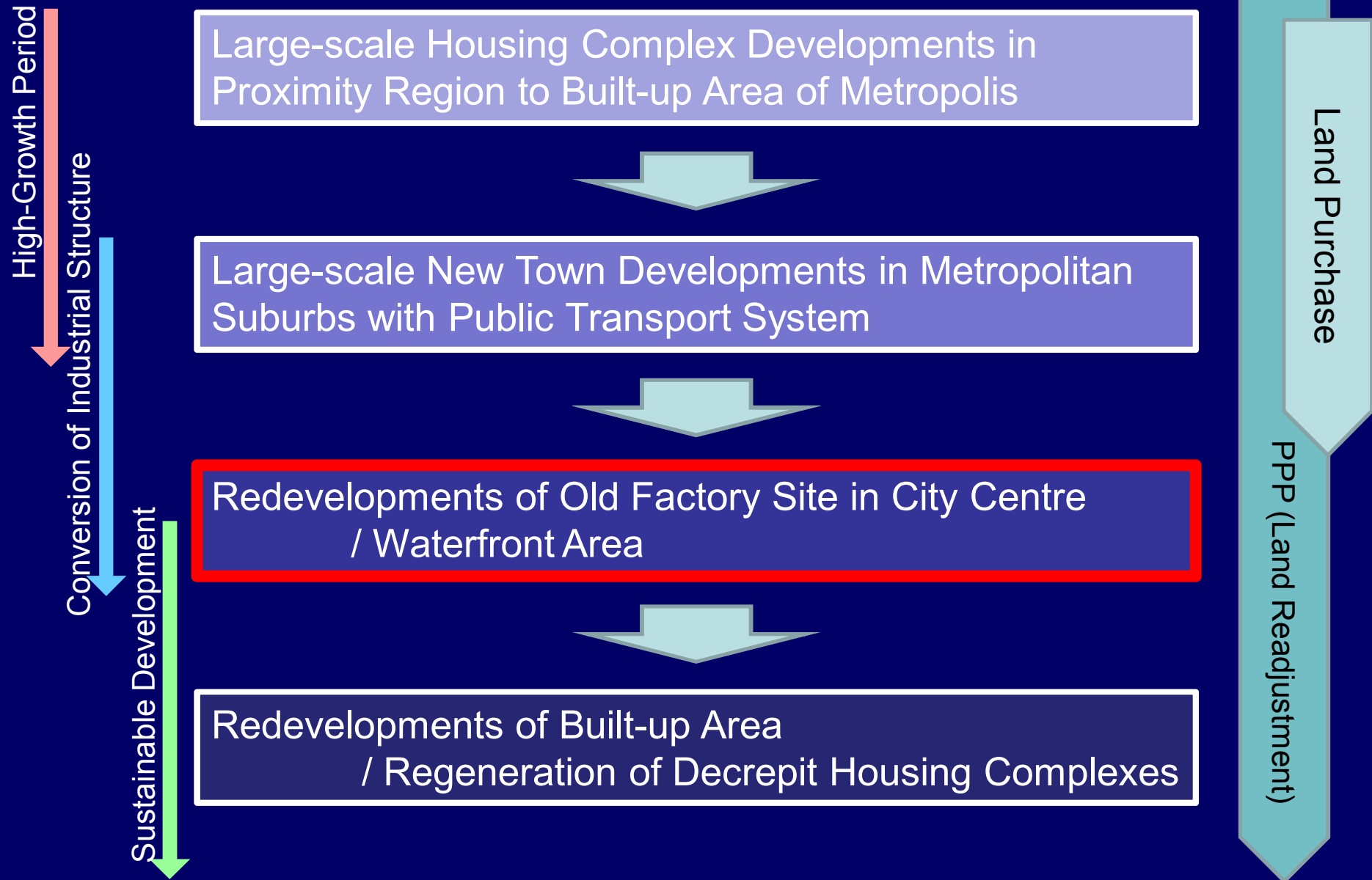
■ Area along the Tokyu Rail Lines

- Area : 490 km²
(1/3 area of London)
(8 times area of Manhattan)
- Population : 5.06 million
(2/3 population of London)

■ Tokyu Tama Garden City

- Area : 5,000ha
- Population : 600,000

3-1 History of Urban Development in Japan



3-2 Example of Redevelopment of Old Factory Site

Redevelopments of Old Factory Sites in City Centers

SHINONOME (Tokyo)

Before



3-3 Example of Redevelopment of Old Factory Site

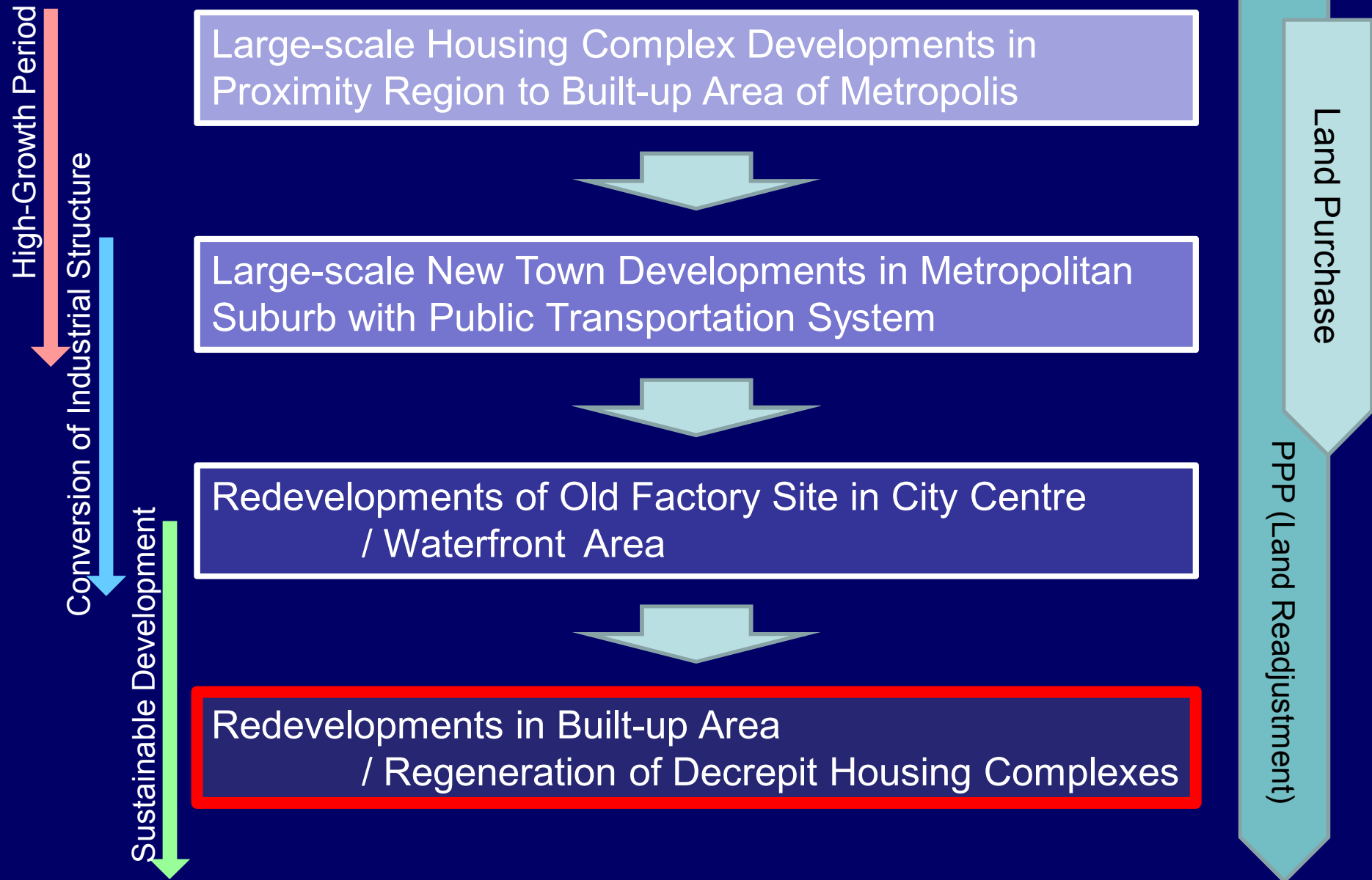
Redevelopments of Old Factory Sites in Waterfront Areas

SHINONOME (Tokyo)

After



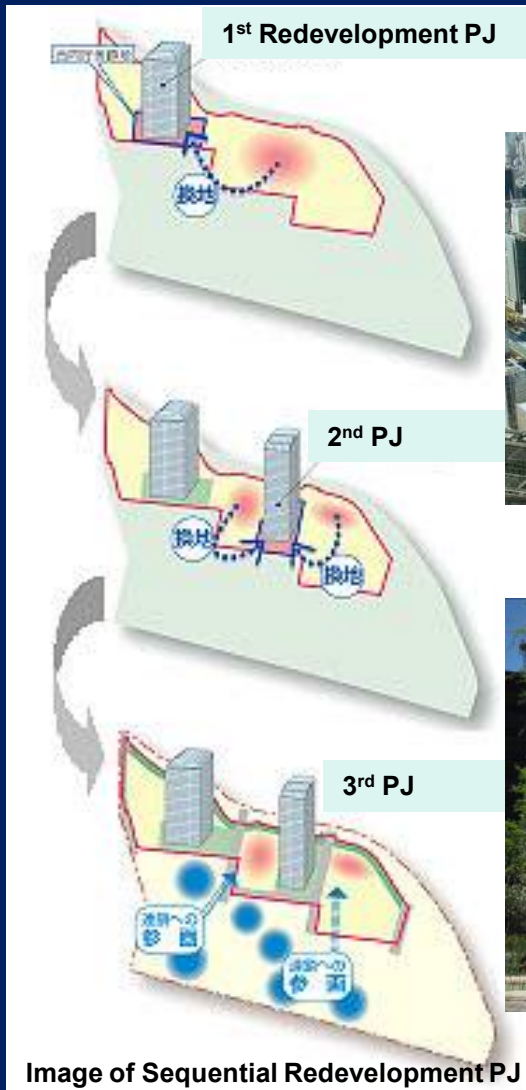
4-1 History of Urban Development in Japan



4-2 Example of Redevelopment of Built-up Area

Renewal of National Financial Center

OHTEMACHI 1 CHOME (Tokyo)



JA Building

Nikkei Building

Keidanren Building

4-3 Example of Old Housing Complex Regeneration

AKABANEDAI Danchi (Tokyo) (1962)

Before

(3,373 units)



Mainly 5-storey Apartment
(without Lift)

“Danchi” means a Housing Complex in Japanese

4-3 Example of Old Housing Complex Regeneration

Nouvelle Akabanedai (2007~)

After

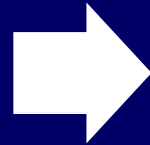


10-12 story Apartment
(with Lift)

4-4 Example of Sustainable Development

Diversification & Sustainability of Development (1990s to Today)

To Meet Various Needs



> Eco-Conscious
> Safety & Security etc.

KOSHIGAYA LAKE-TOWN
(Saitama) 226ha
(1999~)



4-4 Example of Sustainable Development

> To Reduce CO₂

KOSHIGAYA LAKE-TOWN

> To Oblige Housing Developers to Reduce more than 20% of CO₂



> To Request Commercial Enterprises to Make Facility Plans which Realize CO₂ Reduction



4-4 Example of Sustainable Development

Koshigaya Lake Town(Saitama)



5 History of Urban Development in Japan

High-Growth Period

Conversion of Industrial Structure

Sustainable Development

Large-scale Housing Complex Developments in Proximity Region to Built-up Areas of Metropolis

Large-scale New Town Developments in Metropolitan Suburb with Public Transportation System

Redevelopments of Old Factory Site in City Centre / Waterfront Area

Redevelopments of Built-up Area / Regeneration of Decrepit Housing Complexes

Land Purchase

PPP (Land Readjustment)

6-1 Traffic Congestion and Congested Train during the High Economic Growth Period



Source: "Easy to Understand Urban Transportation (1988)"
Society for the Study of Urban Transportation

7-1 Outline of J-CODE

Japan Conference on Overseas Development of Eco-Cities

Establishment: October 2011

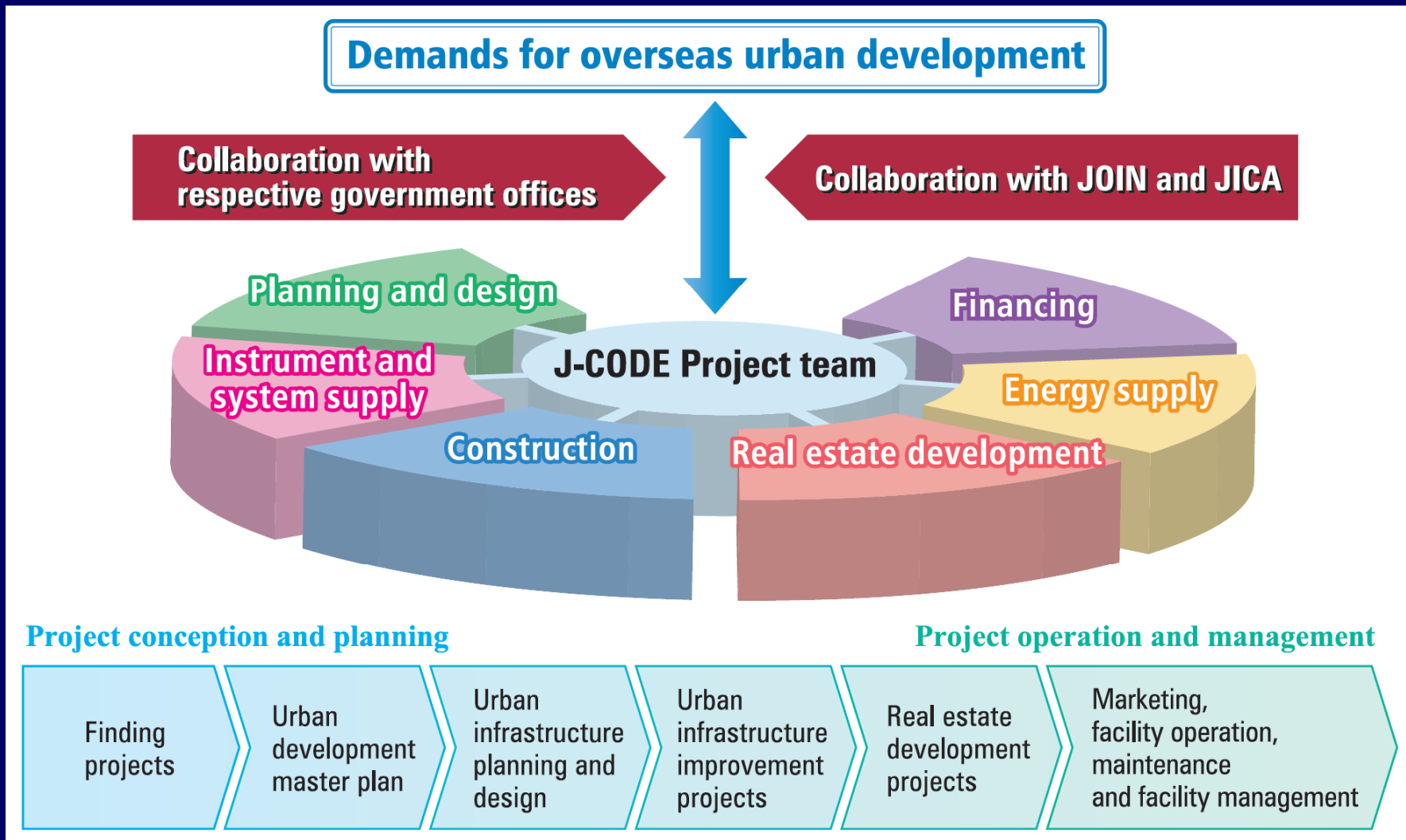
Members: 58 companies (As of May 2016)

Mission: To use Japanese experience and accumulated technology to develop Eco-Friendly / Self-Sustainable cities.

Major Activities:

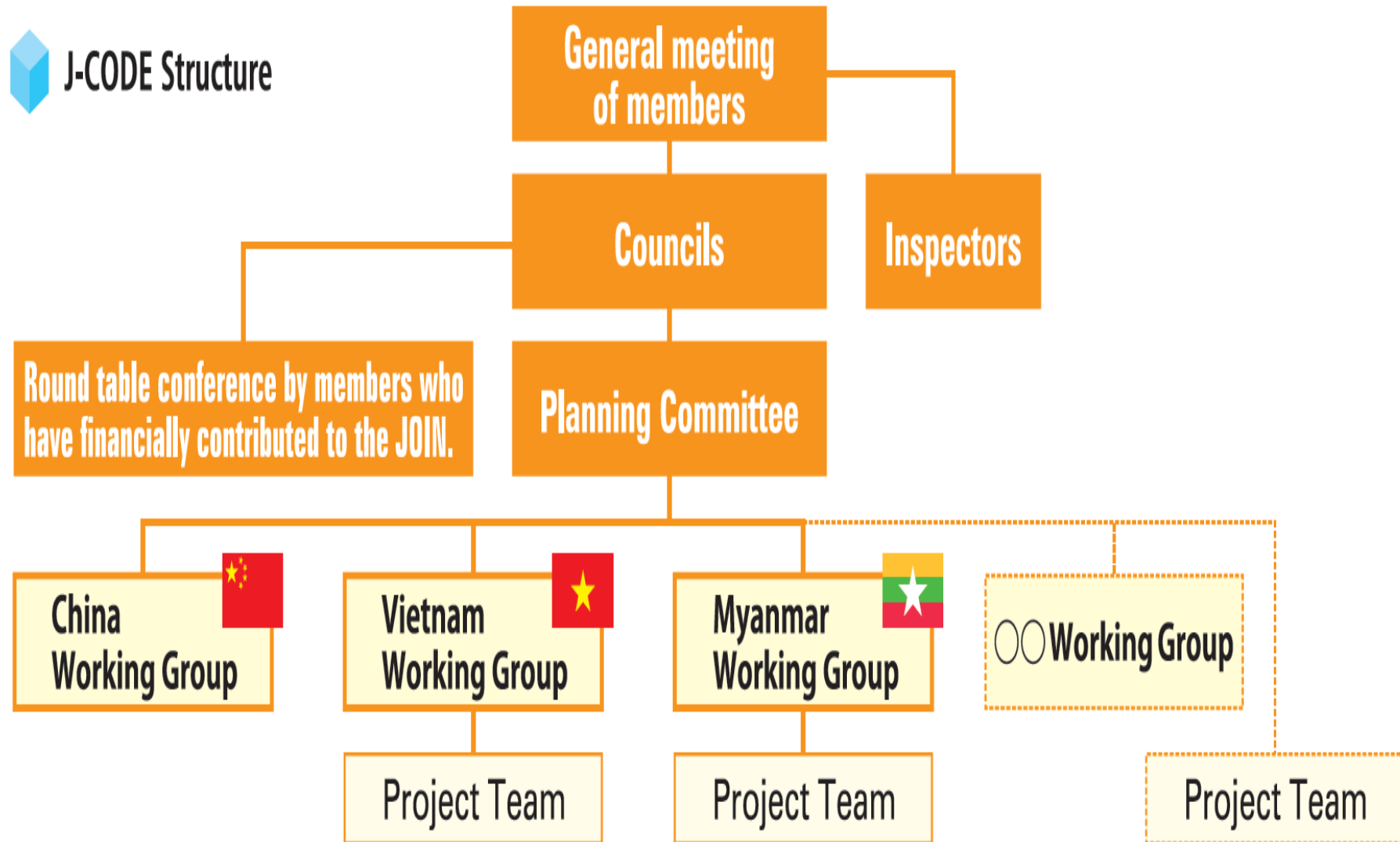
- > Planning
- > Information Collection and Sharing
- > Proposing institutions and policies for promoting for Overseas Eco-Friendly Urban Development Projects

7-2 Project Image of J-CODE



7-3 Organization Structure of J-CODE

 J-CODE Structure



7-4 J-CODE Keywords of Eco-City

1 Transit oriented development (TOD)



2 Efficient and comprehensive use of land



3 Human-centered design in urban space development

4 Utilization of environmental resources of wind, water and green spaces



5 Effective use of environmental technology in architecture

6 Energy management based on the latest technology

7 Water management infrastructure



8 Construction of safe and secure systems

9 Creation of eco-friendly lifestyles in urban culture

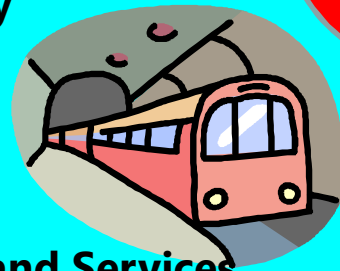


10 Advanced urban business administration and management system

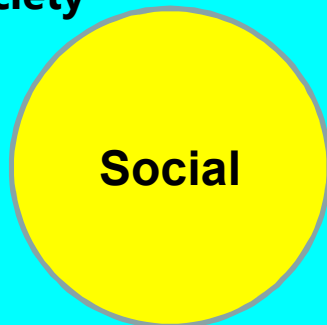
7-5 TOD as a Comprehensive Solution for Smart City

- >> A True Smart-City Promotes Sound Economic Activities and Sustains Growth with Reducing Environmental Impacts and consequently Enhances 'QOL'.
- >> Most Large-scale Urban Development Projects in Metropolitan Area in Japan are 'TOD's. 'TOD' Greatly Contributes to materializing the Elements of Smart-City in Economical, Social and Environmental Aspects

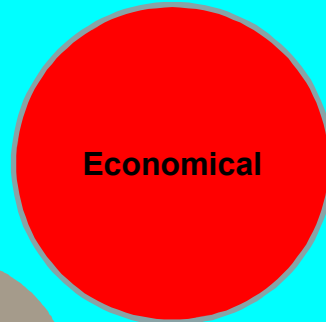
- Time Saving
- Energy Saving
- Space Efficiency



- Access to Jobs and Services
- Affordable Housing
- Easy and compact for aging society



Economical



Accessibility & Mobility



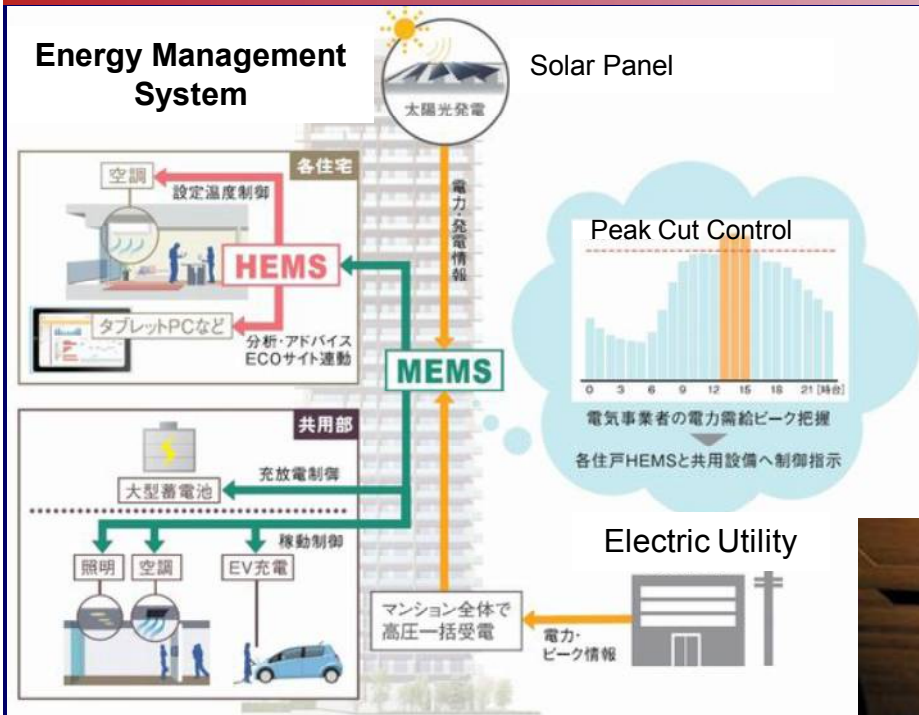
- Infrastructure Cost Saving
- Functionality
- Agglomeration Economy
- Synergy & Creativity

- Air Pollution Reduction
- CO2 Reduction
- Land & Green Preservation
- Biodiversity



Source: World Bank

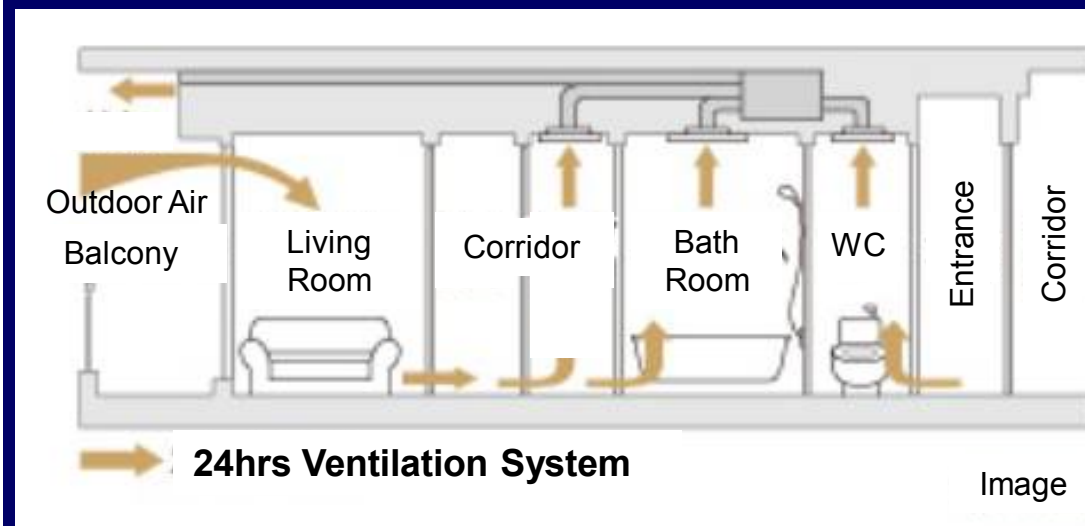
7-5 Examples of Available Solutions for Eco-City Development



7-5 Examples of Available Solutions for Eco-City Development



Potable Water System



END

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