# Sustainability Assessment of Cities based on Paris Agreement and SDGs

Activities of FutureCity Initiative in Japan

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# Global policy issues for a sustainable society



## The Paris Agreement (2015.12)

Reduction of environmental load, L (Emission of CO<sub>2</sub>)

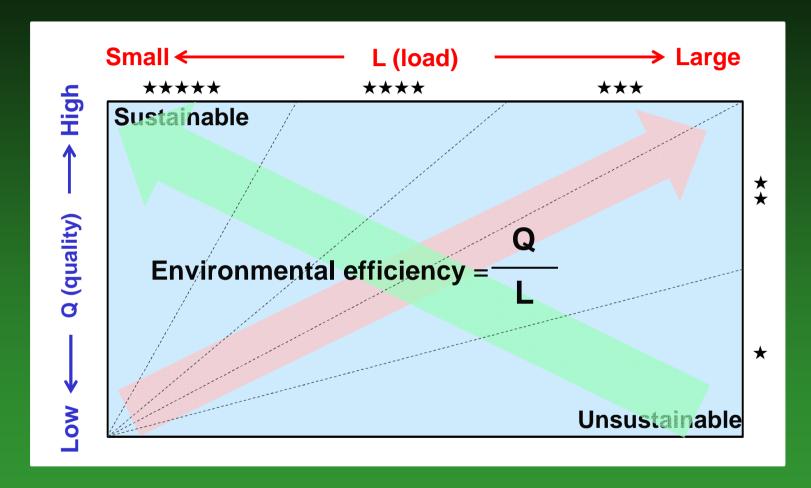


SDGs (Sustainable Development Goals) (2015.9)

□ Improvement of environmental quality, Q

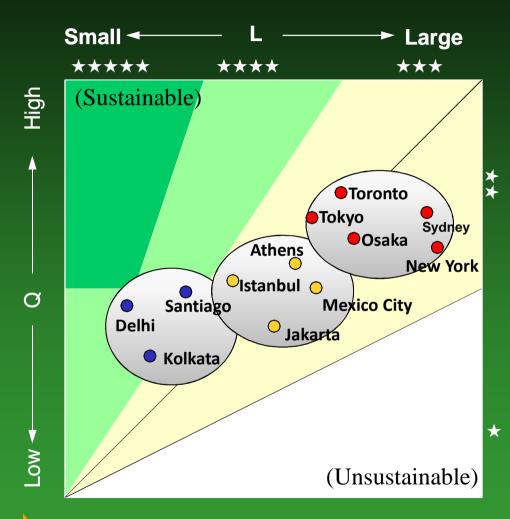
□ Q and L are the two major factors for sustainable society design

# Integrated assessment of the two policy issues based on Q - L chart



Realization of a sustainable society based on reduction of L and improvement of Q

## Sustainability assessment of cites based on Q - L chart (tentative, by CASBEE-City)



**Group Red** (e.g., Tokyo) (in developed countries)

**Group Yellow** (e.g., Jakarta) (in emerging countries)

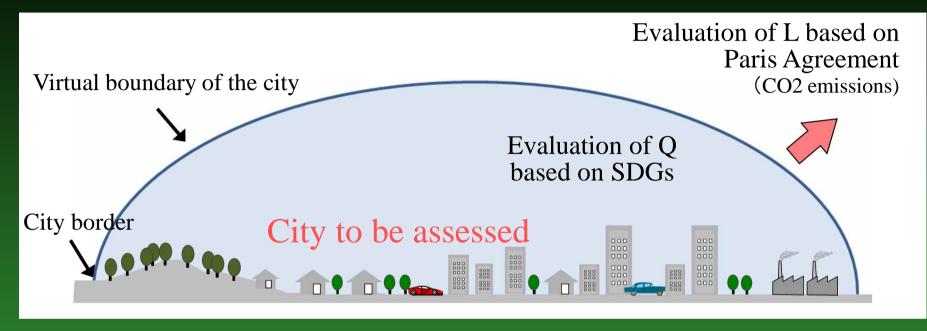
**Group Blue** (e.g., Kolkata) (in developing countries)

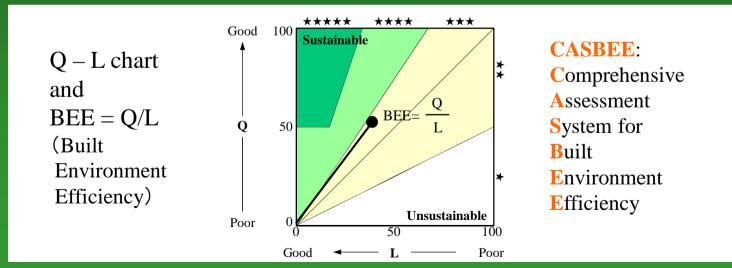
L = Environmental Load as CO<sub>2</sub> emissions (per capita)

Q = Quality of City Environment based on the SDGs, etc.

Built Environment Efficiency Q/L:
★★★★ for blue cities while only ★★/★★★ for red cities

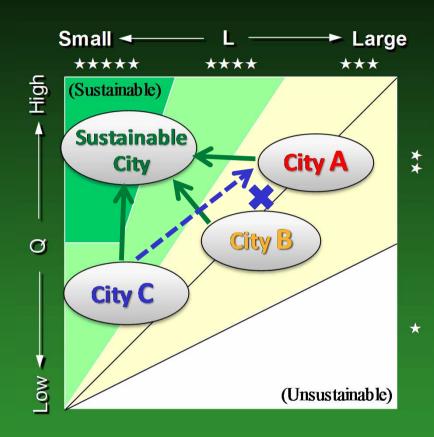
### **CASBEE-City**: Assessment tool developed in Japan





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# Direction for reform of City Environment (based on reduction of L and improvement of Q)



City A (in developed countries):
Necessary to reduce L

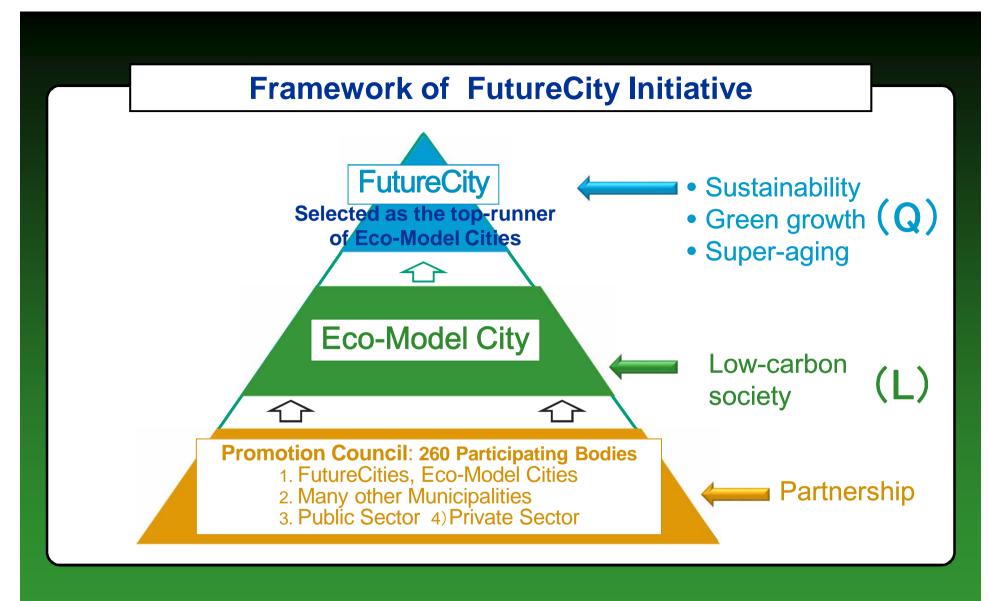
City B
(in emerging countries):
Necessary to improve Q,
while reducing L

City C (in developing countries):
Necessary to improve Q without increasing L

- Duty of developed countries: present the models for realizing sustainable cities as quickly as possible to developing countries.
- □ Urgency for reduction of CO₂ emissions in developed countries by 80% by 2050

# FutureCity Initiative promoted by the Japanese Government towards a low-carbon society

- 1. Certification and commendation of top-runner cities by the Central Government
  - Dissemination of best practices achieved in FutureCity Initiative to other cities in Japan and overseas
  - □ Global Partnership
- 2. Present a clear image of a sustainable society of the future to the public
  - FutureCities as a target to be achieved
  - Partnership between citizens and local governments
- 3. Establishment of a nationwide council for promotion of "FutureCity" Initiative
  - Partnership between private/public sectors and local governments
- 4. Evaluation of activities of each city by the Central Government
  - □ PDCA by local governments
  - ⇒ Facilitate improvement of the governance of mayors



FutureCity initiative is a practice field for city management towards a sustainable society

# Aim of FutureCity Initiative: (1) Raise the peak and (2) Boost the base

(1) Raise the peak: select and certify top-runner cities by Central Government (2) Boost the base: dissemination of best practices and promotion of partnerships



## Eco-Model Cities selected by the Government (23 cities: 2008 ~ 2013)

#### **Selected in 2008: 13cities**

No.	Name of cities	Population (thousands)
1	Shimokawa Town	3.6
2	Obihiro City	168
3	Chiyoda City	50
4	City of Yokohama	3,690
5	Iida City	103
6	Toyama City	420
7	Toyota City	420
8	Kyoto City	1,470
9	Sakai City	840
10	Yusuhara Town	3.8
10	City of Kitakyushu	970
12	Minamata City	27
13	Miyakojima City	52



No.	Name of cities	Population (thousands)
1	Niigata City	808
15	Tsukuba City	217
16	Mitake Town	19
1	Amagasaki City	451
18	Kobe City	1,542
19	Nishiawakura village	1.6
20	Matsuyama City	513

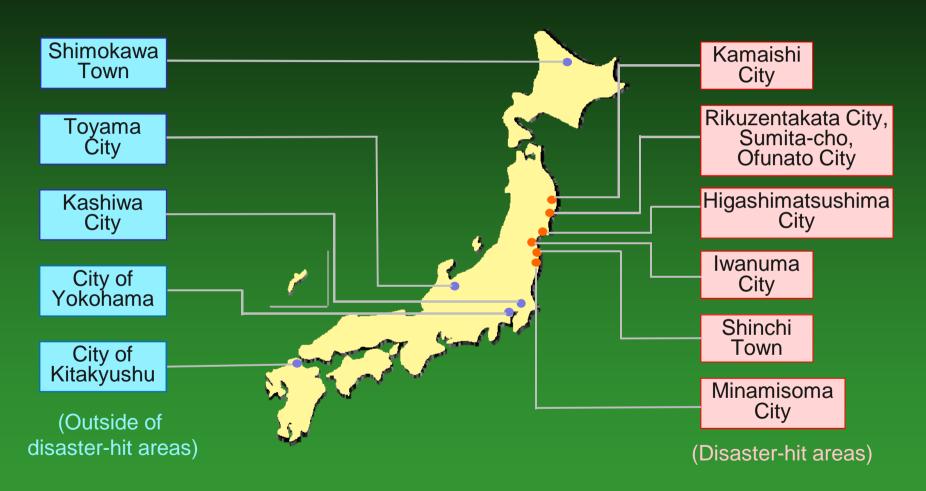
#### [Selected in 2013: 3cities]

No.	Name of cities	Population (thousands))
<b>21</b>	Niseko Town	4.8
<b>2</b>	Ikoma City	121
<b>23</b>	Oguni Town	7.9

Many best practices achieved towards a low carbon society 10



## FutureCities selected by the Government (11 cities: 2011)



A variety of ambitious proposals towards a sustainable society



#### International dissemination at the Rio+20 (2012)

Official side-event hosted by the Japanese Government: "Future Cities We Want"



Greeting by the Minister of Foreign Affairs





Shuzo Murakami (Chair of Promotion Council of FutureCity):

Introduction of the FutureCity Initiative



# Why has such great success been achieved with the FutureCity initiative?

- 1.The Central government presents a clear image of a future sustainable society to citizens
  - ⇒ Local governments are motivated and incentivized by receiving the prestigious title of "FutureCity"
- 2. FutureCities promoted their action-plans on their own initiative
  - ⇒ They created self-sustaining models for city management
- 3. Establishment of a global partnership among cities around the world

### **Next Stage of FutureCity Initiative**

