

Affect of the activating Smartcity business in Asia to the global warming

Hisakazu Okamura,
Vice president for International affairs, Asia University
Prof. Urban Innovation,



Smart
Cities
Congress &
Awards



人を幸せにする『まち』をつくる——



AUI
ASIA UNIVERSITY
URBAN INNOVATION

Who Am I?

Hisakazu Okamura

1955	Tokyo Japan
1982-2015	Leader, Smarter city , IBM Japan
2015	Vice President for International Affairs Professor Urban Innovation, Smart city Asia University,

World Award

50 Most Impactful Smartcities Leaders 2017

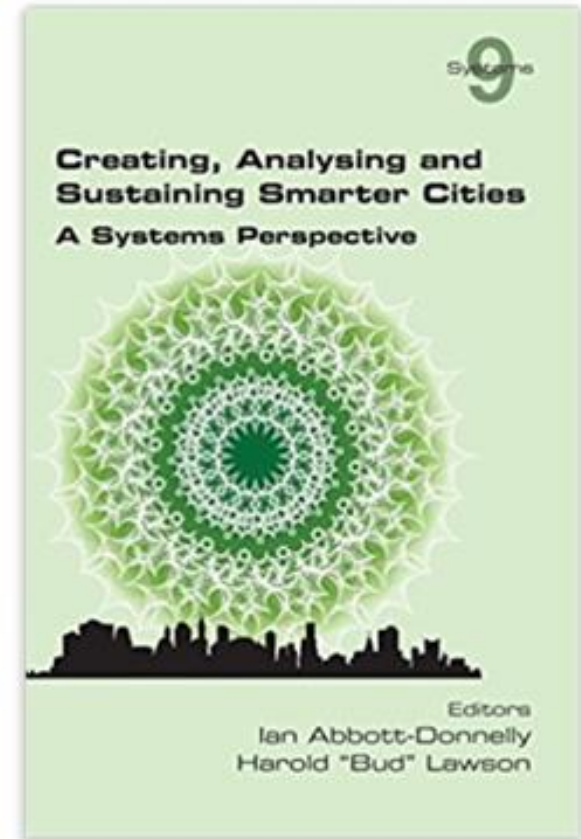
etc.

Books

Creating, Analysing and Sustaining Smarter cities
United Kingdom 2017

Smartcity
Ascii Media Works 2011

etc.



Smartcity Projects in Large scale 608

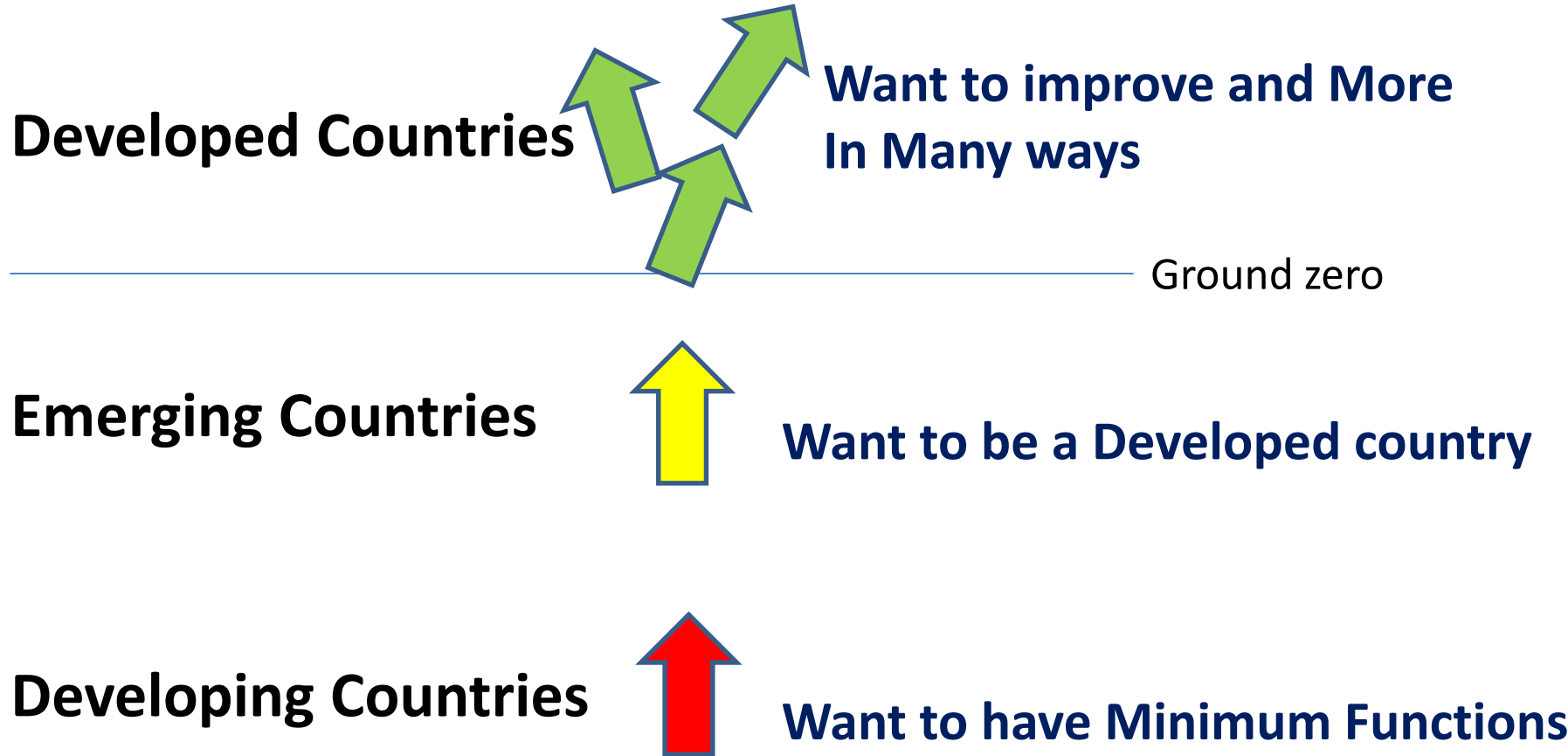
Increase the energy use (In Red)

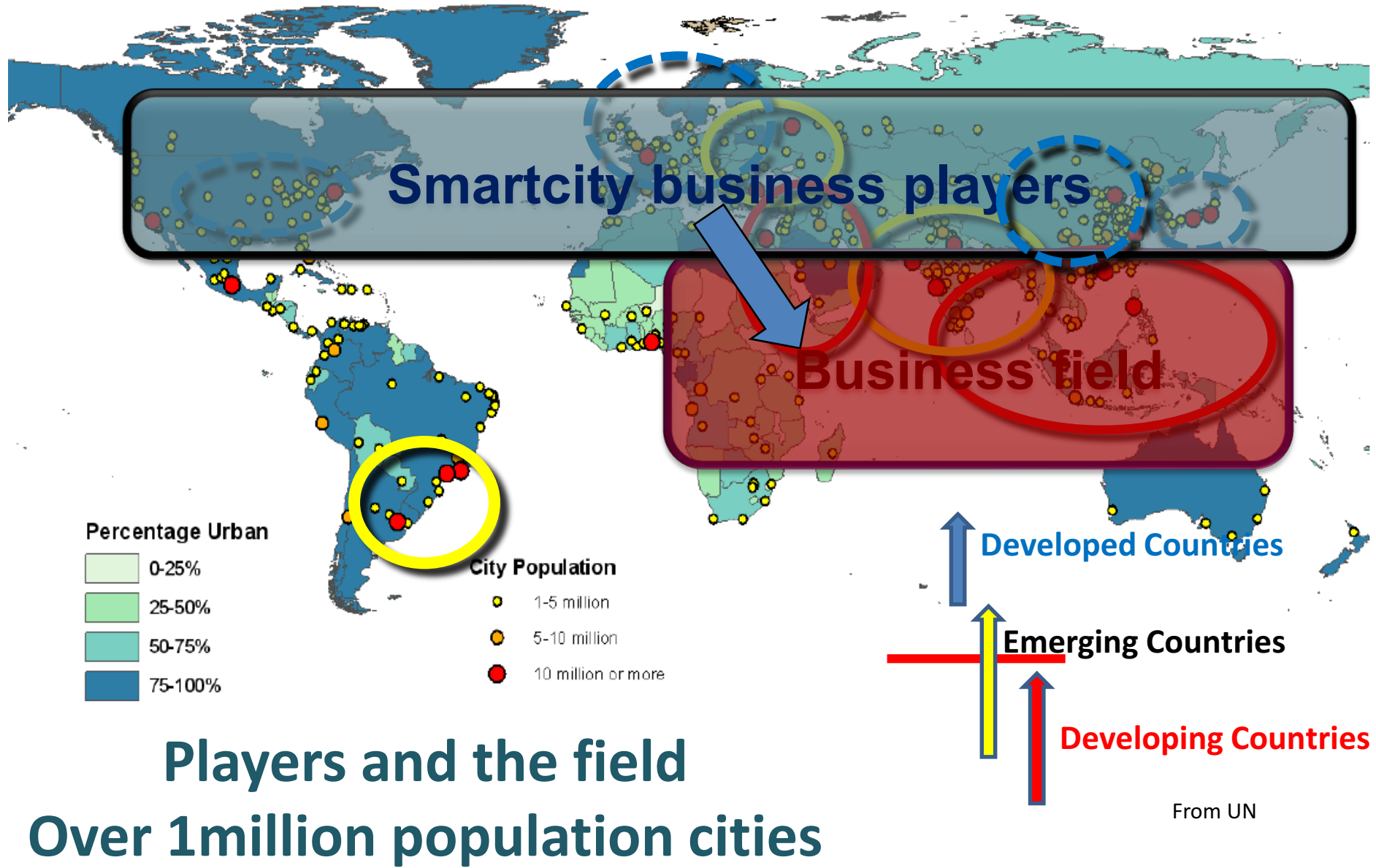
Green Energy Related (In Green)

<u>Classification</u>	<u>Number</u>	<u>Classification</u>	<u>Number</u>
Smart Grid type	188	Water treatment type	44
Renewable energy type	165	Heat supply type	37
Urban development/redevelopment	142	Aging measures type	35
Technology demonstration type	132	Health and Welfare type	32
IT development type	125	Smart building type	30
Urban development model new	100	Storage type	30
Industrial Zone Development type	74	Reconstruction type	16
Administrative services type	73	Smart Village type	13
Service demonstration type	71	Car sharing type	13
EV –implementation type	62	Hydrogen supply type	12
Next-gen transportation system type	57	Ancillary service type	4
Smart House type	52	Smart factory type	3
Environmental protection type	45	Marketing type	2

Goal for Smartcity?

Goals of smart are different

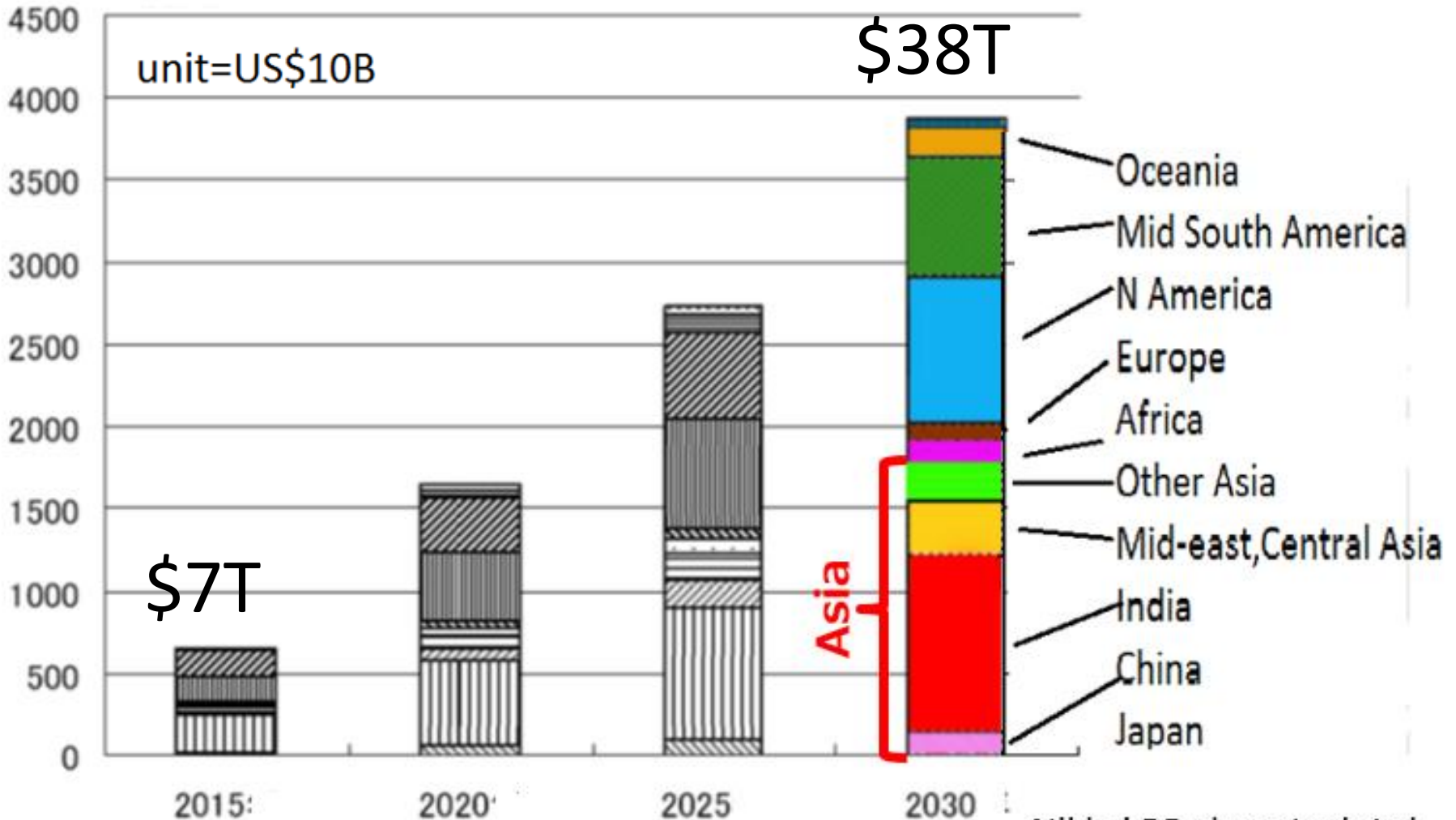




From UN

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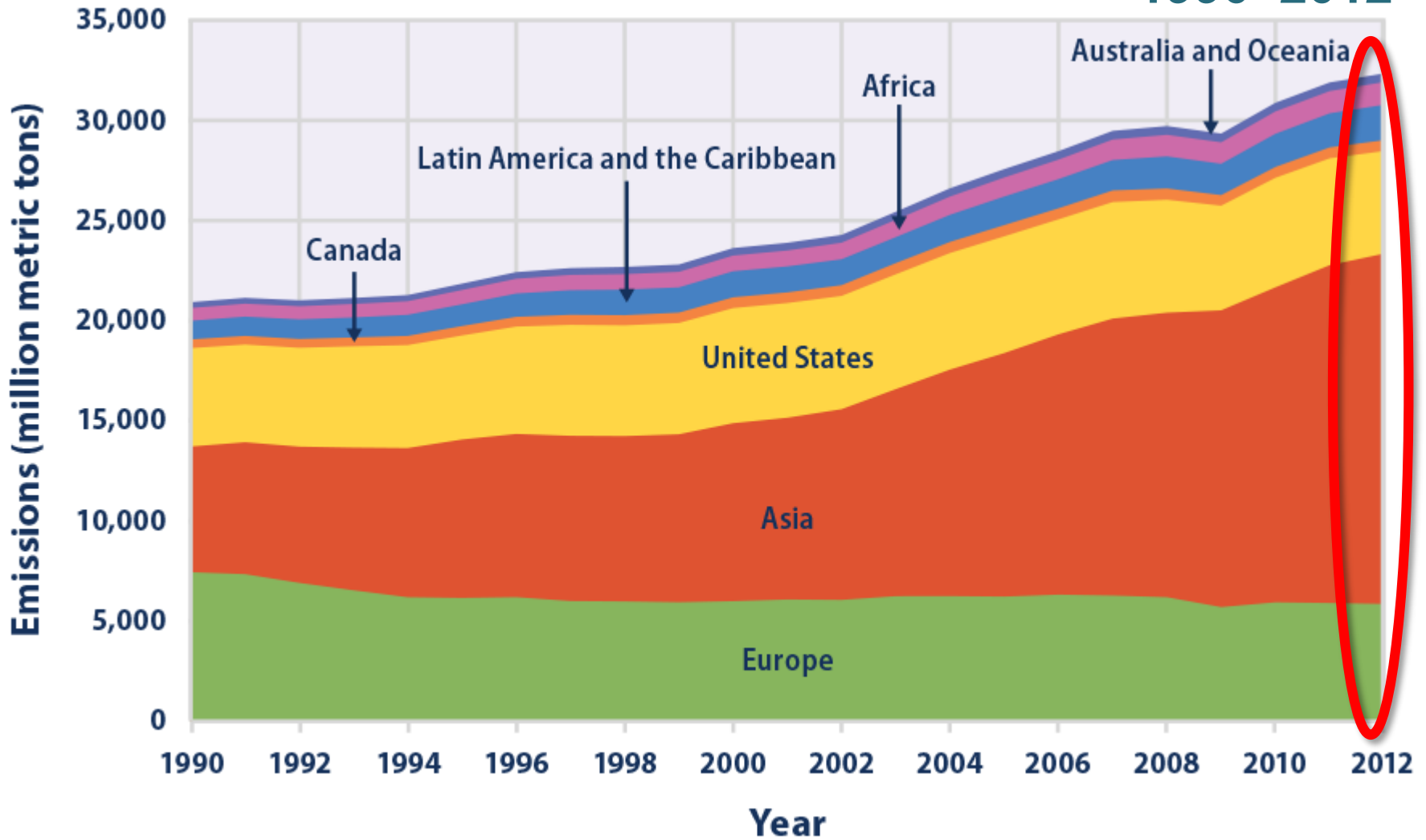
Smartcity Total Market Estimation



Nikkei BP clean tech Lab

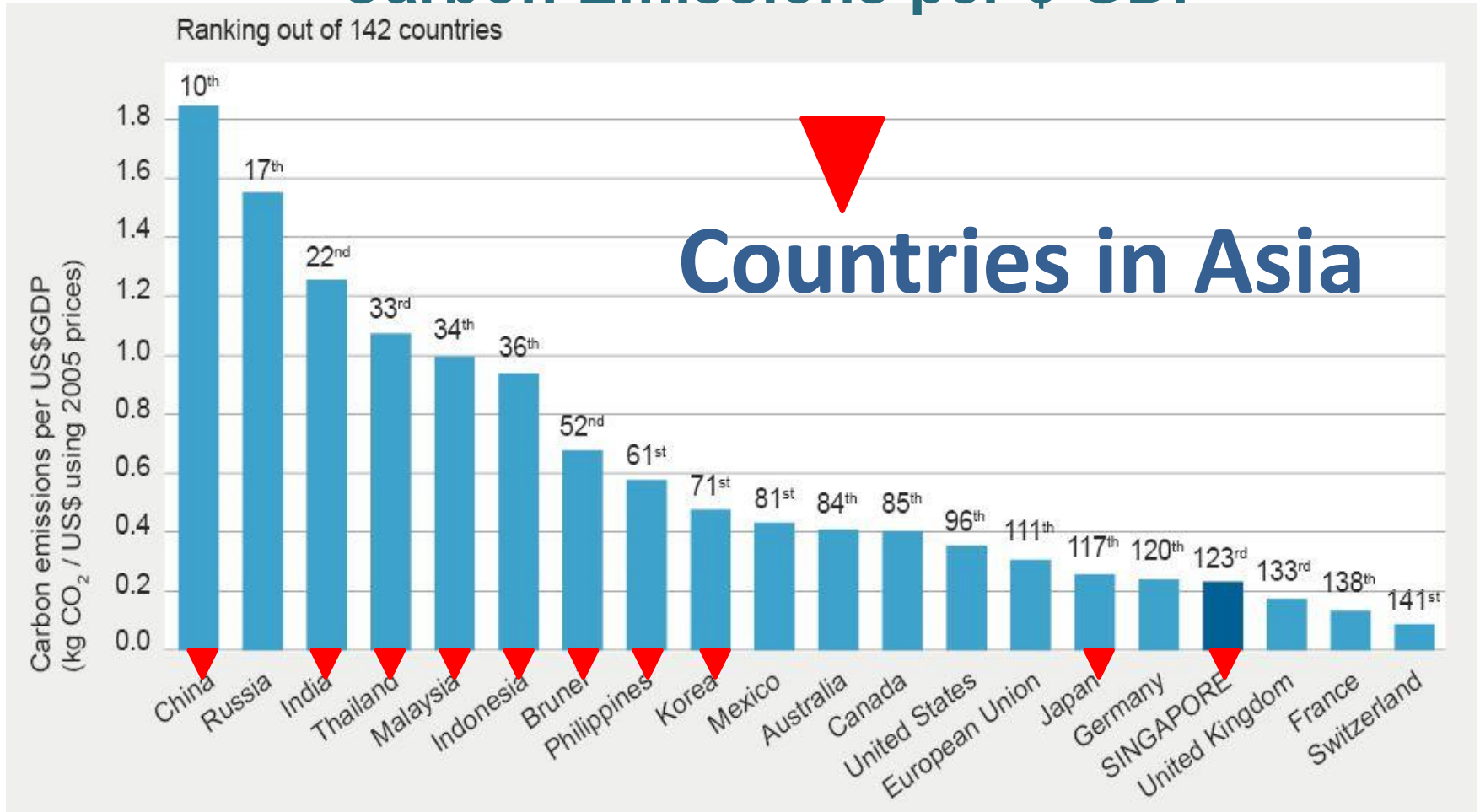
Hisakazu Okamura

Global Carbon Dioxide Emissions by Region, 1990–2012



Data source: WRI, 2015⁶
Web update: August 2016

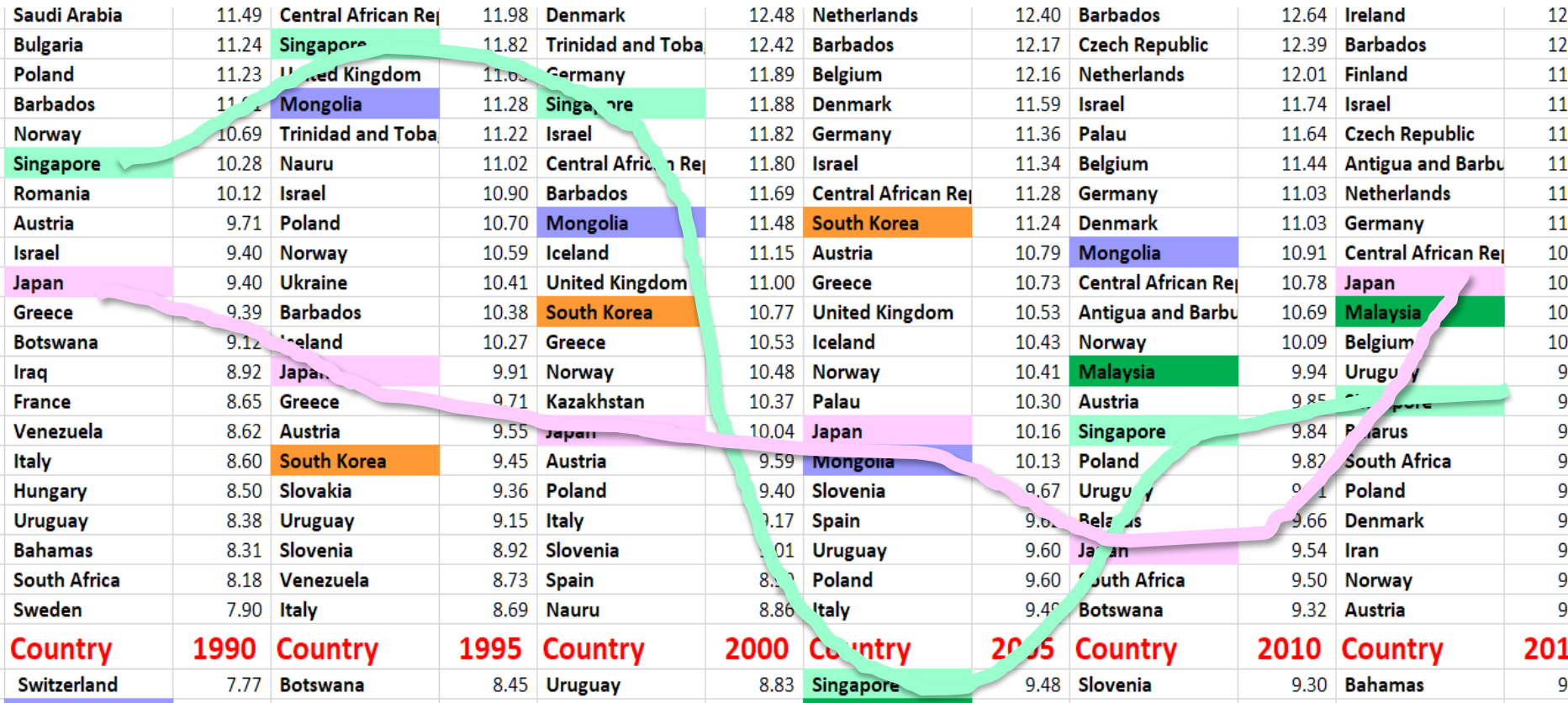
Carbon Emissions per \$ GDP



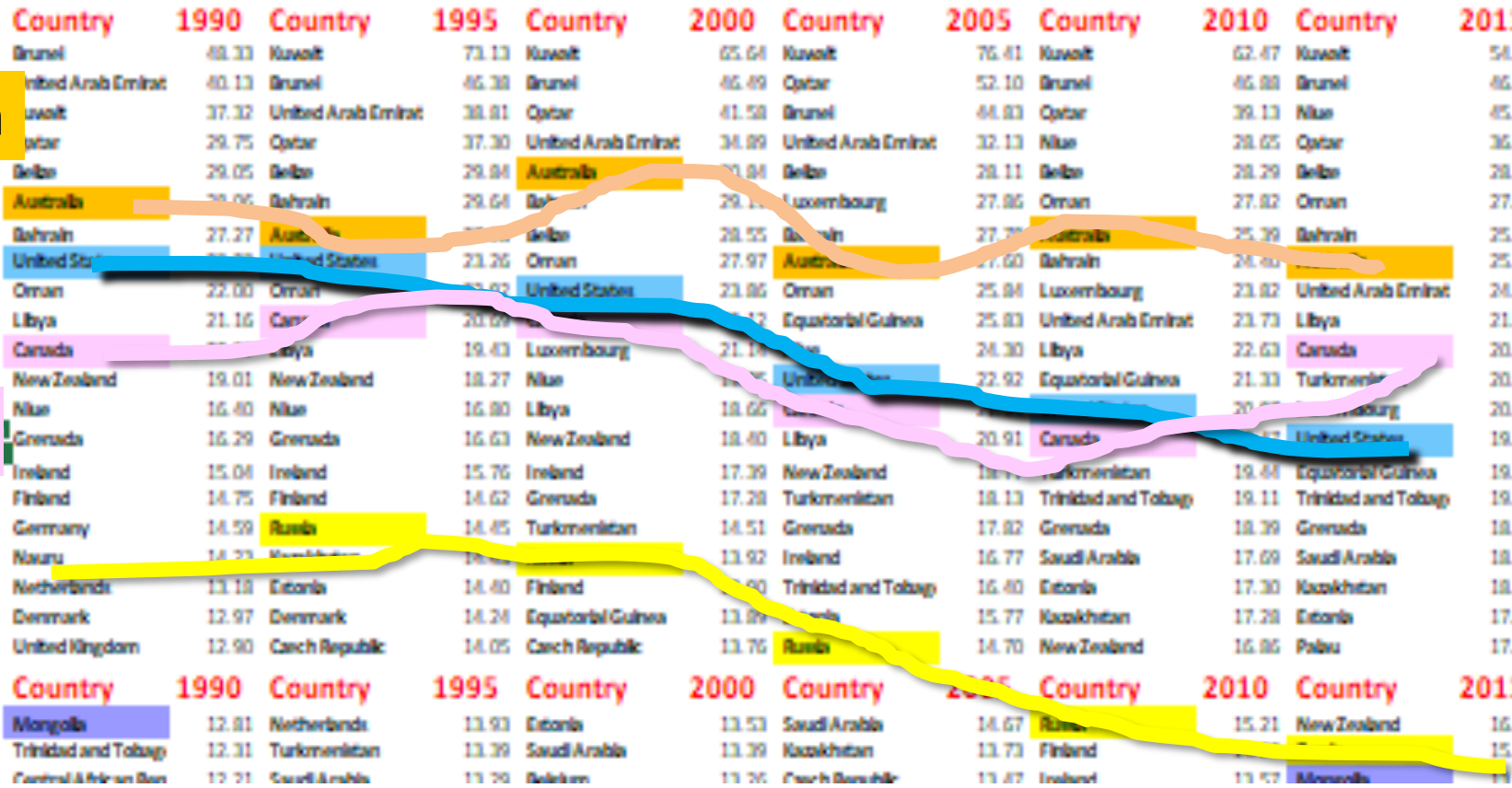
Source: CO₂ Emissions from Fuel Combustion - 2015
Highlights © OECD/International Energy Agency, 2015

CO2 Per Capita trends

Singapore



Japan



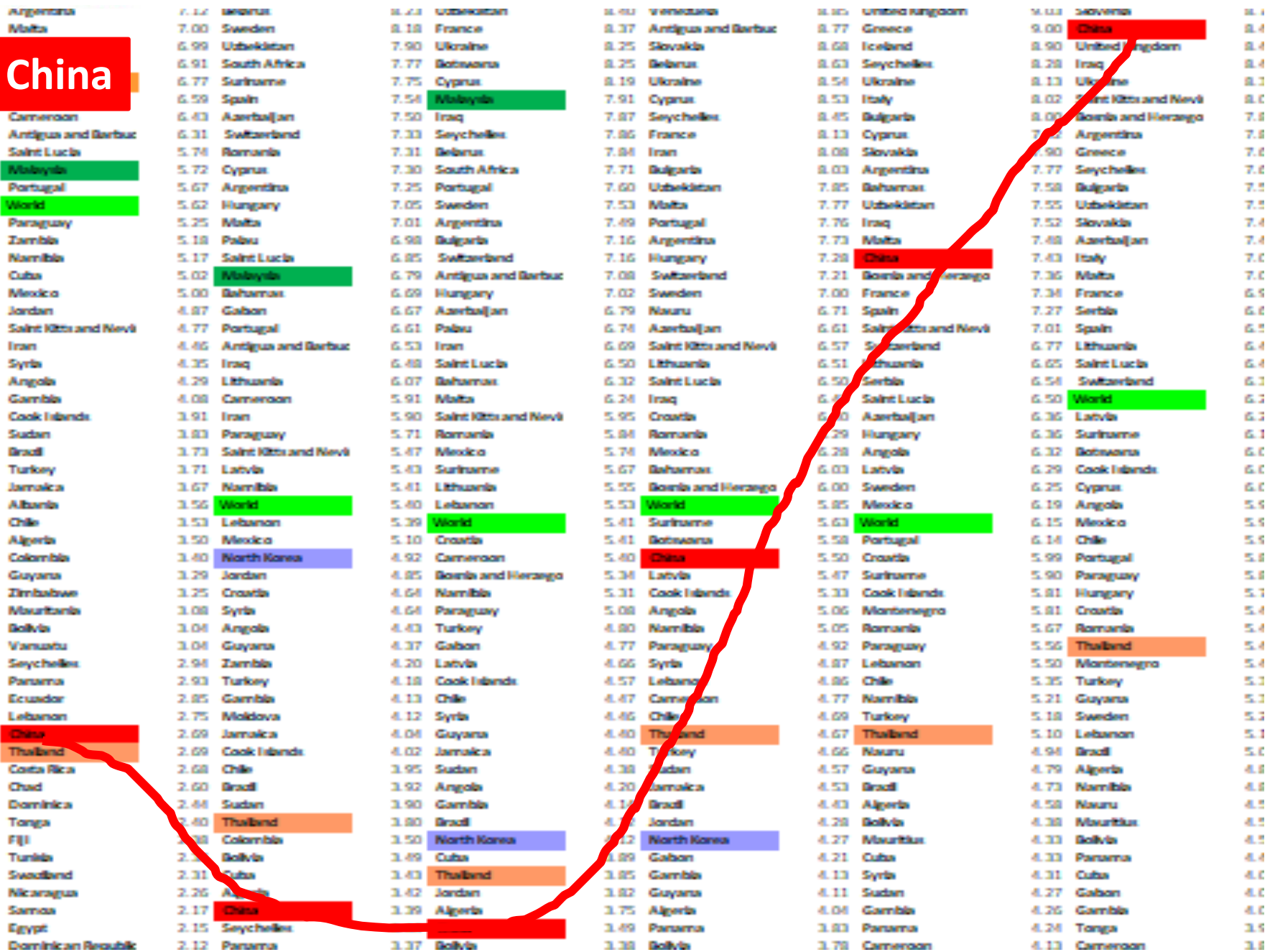
Australia

USA

Canada

Russia

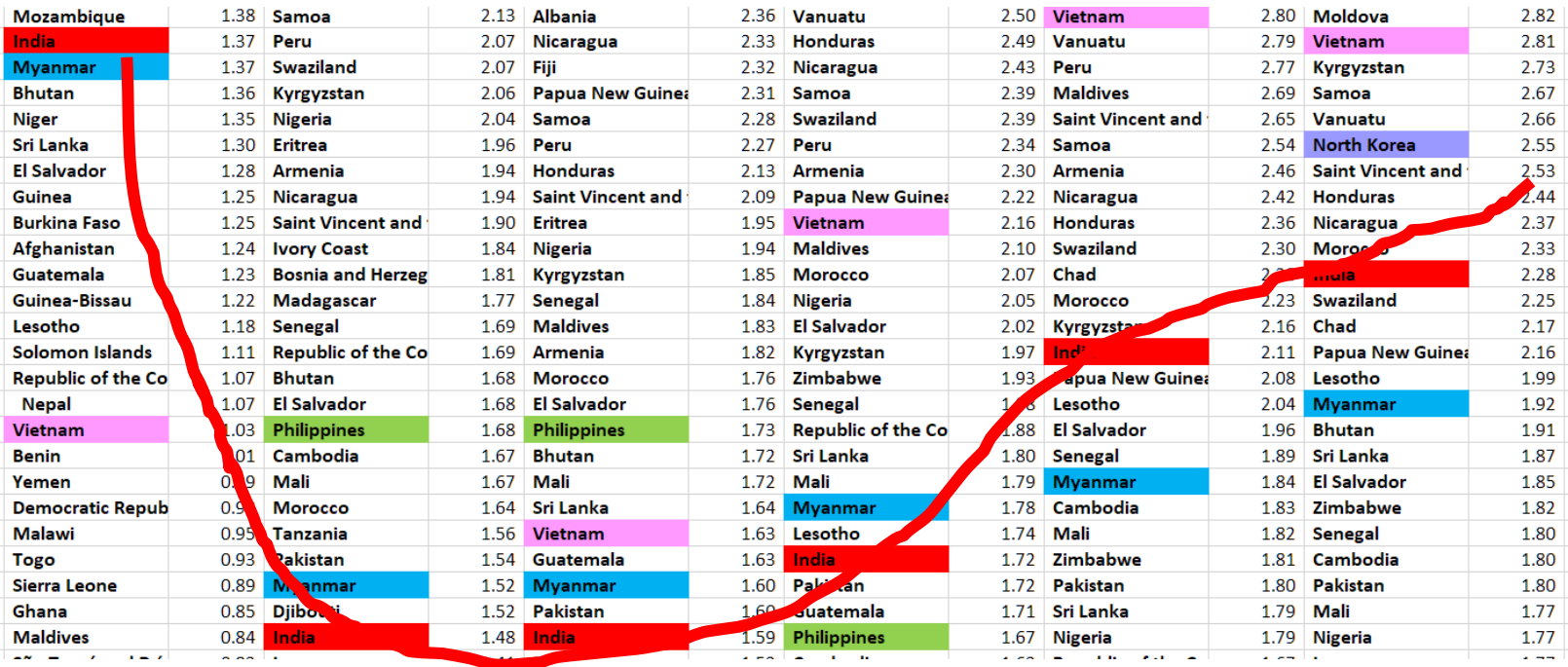
China



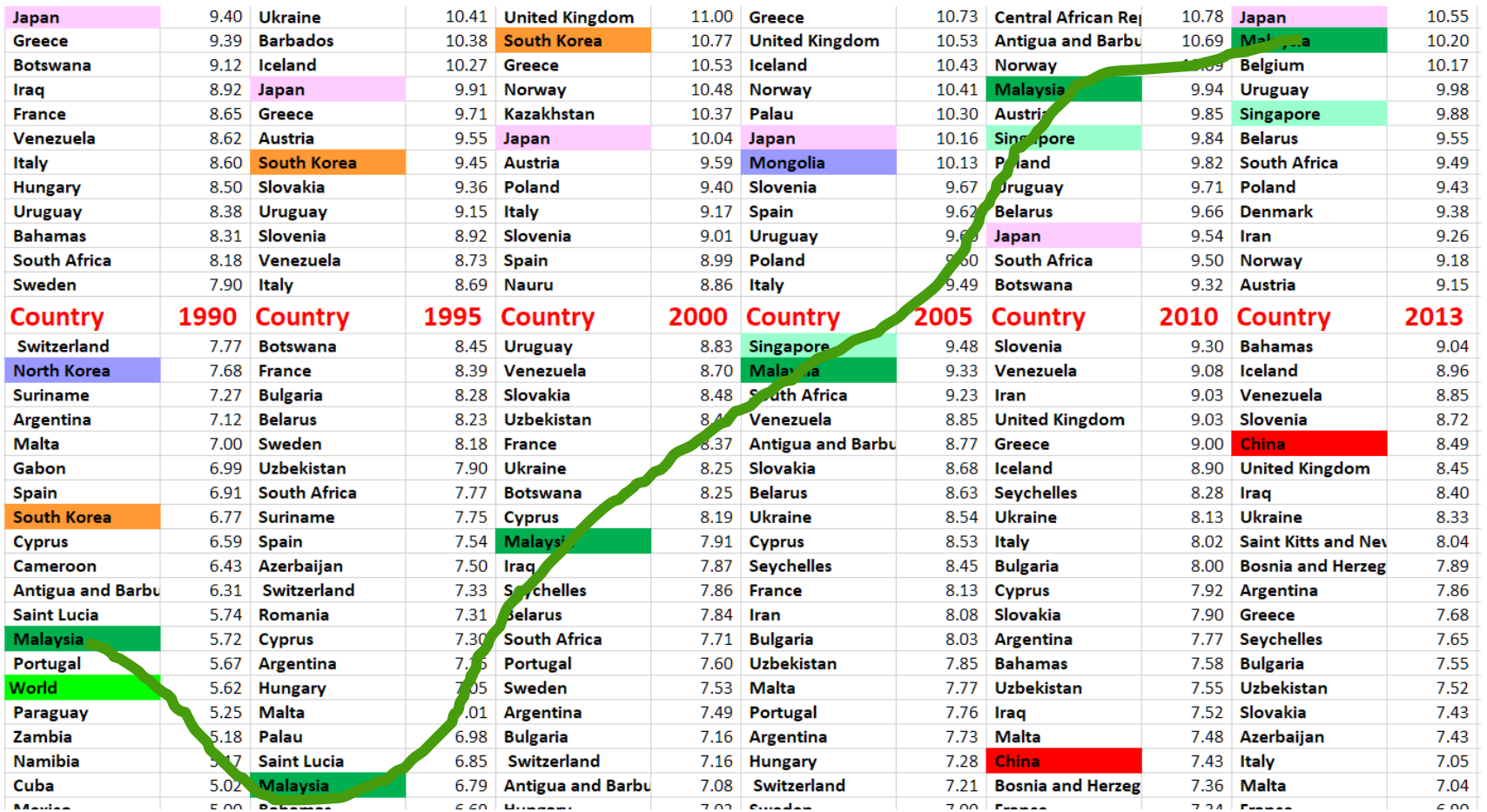
Thailand



India



Malaysia



Outside of Japan, Example Railway company develops a city in Vietnam

1,000ha

KAZE SHUTTLE

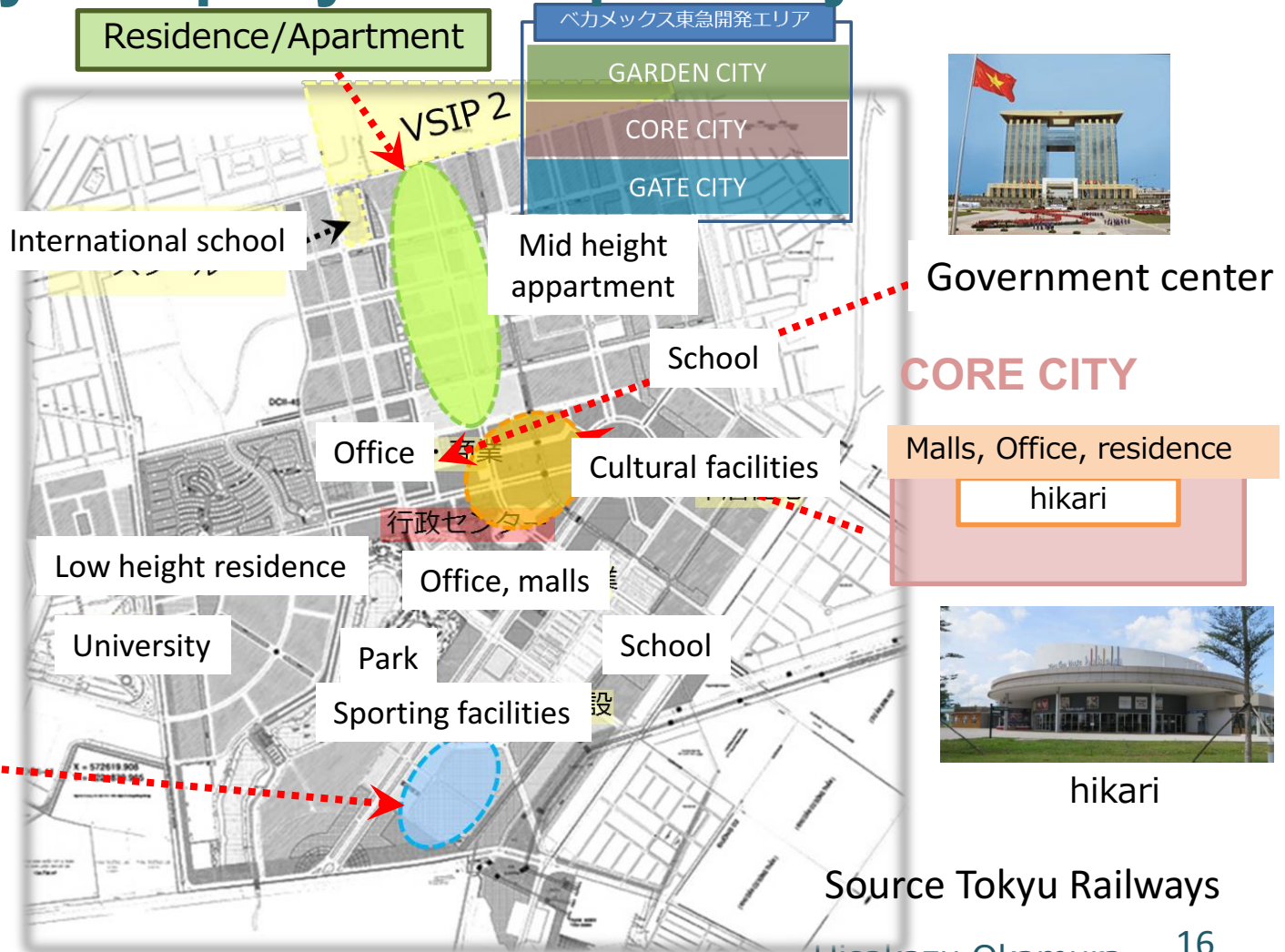


SORA gardens I

GATE CITY

Malls, Amusement, Apartment

SORA gardens I



Government center

CORE CITY

Malls, Office, residence

hikari

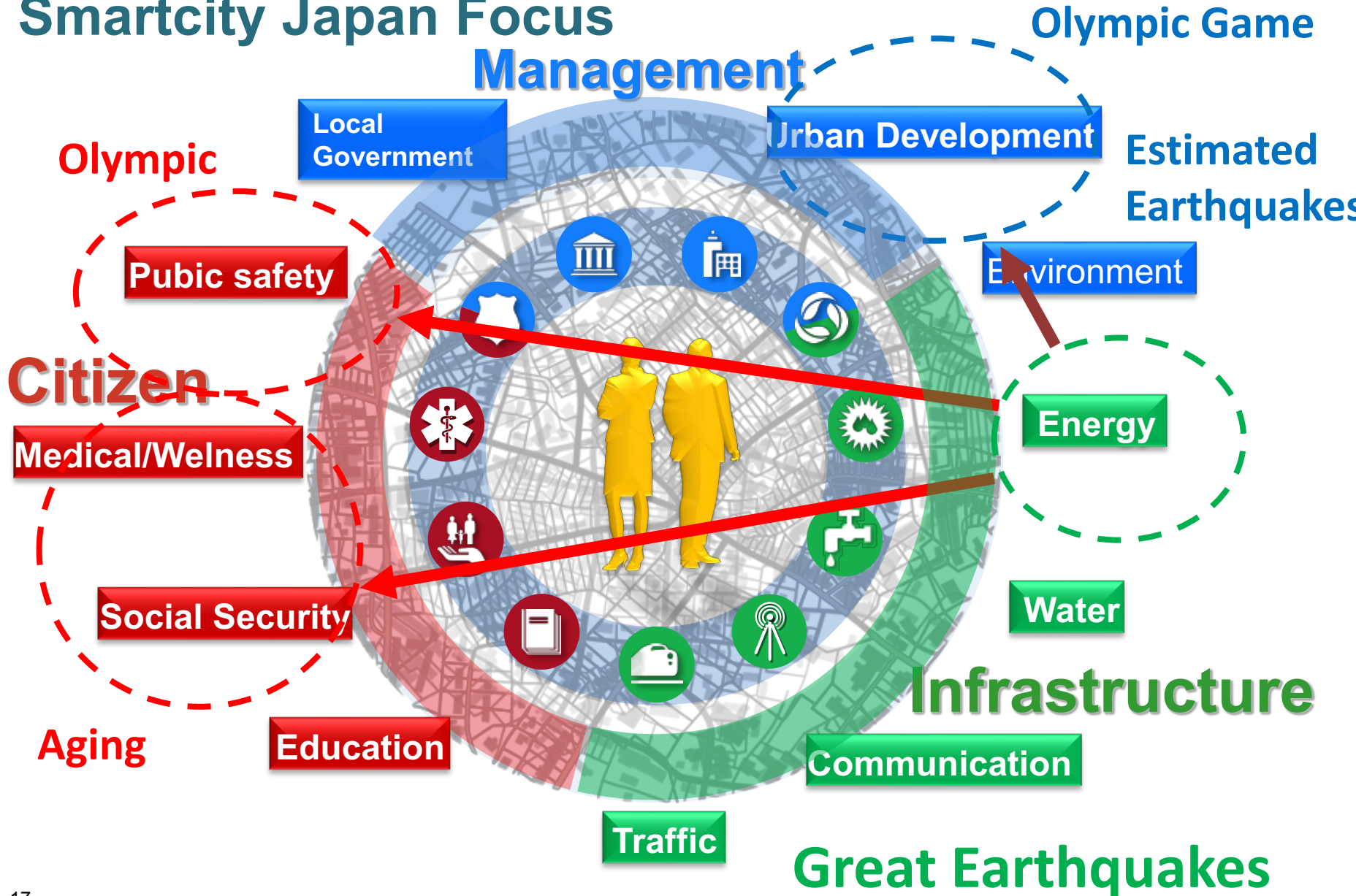


hikari

Source Tokyu Railways

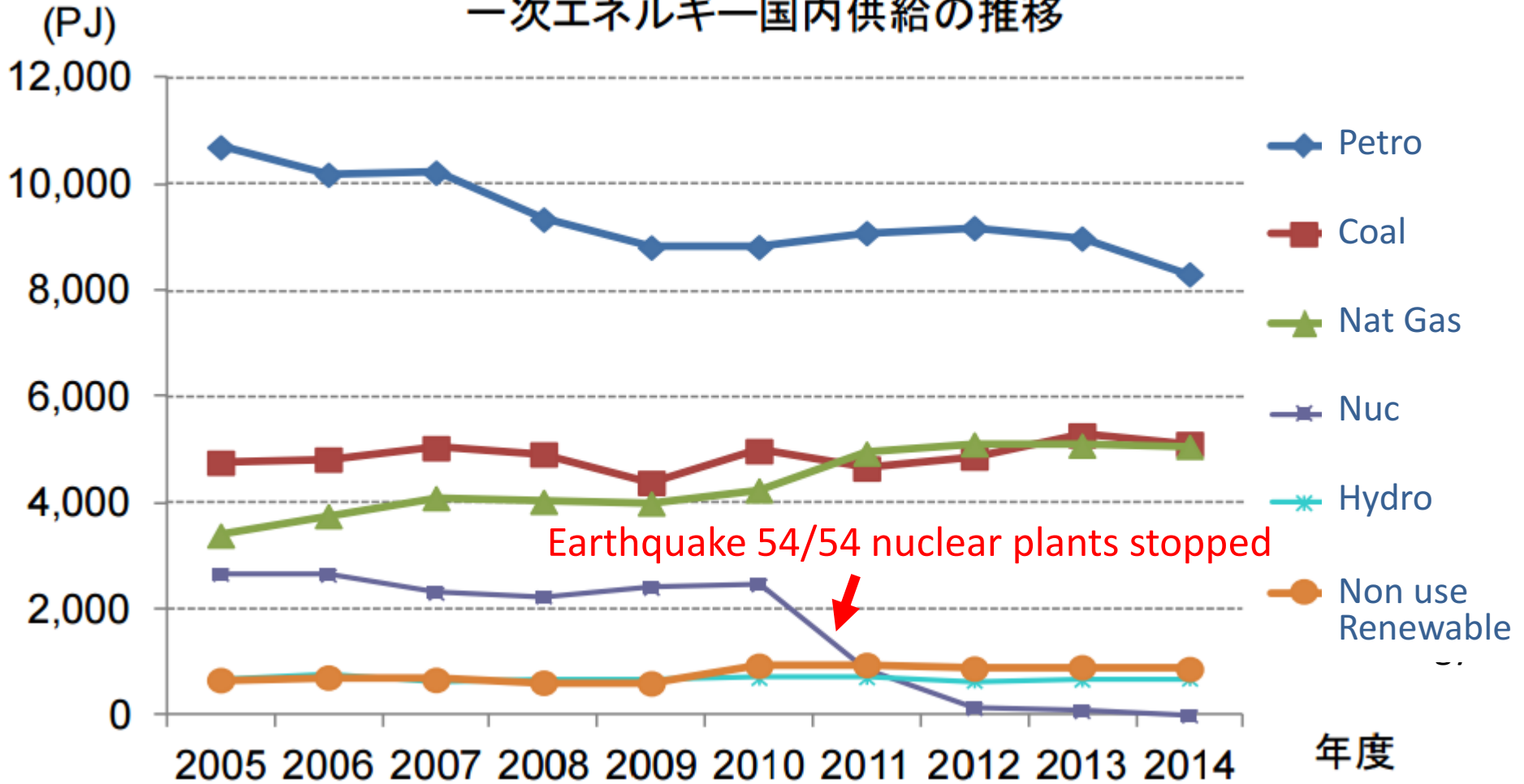
Smartcity Japan Focus

Management



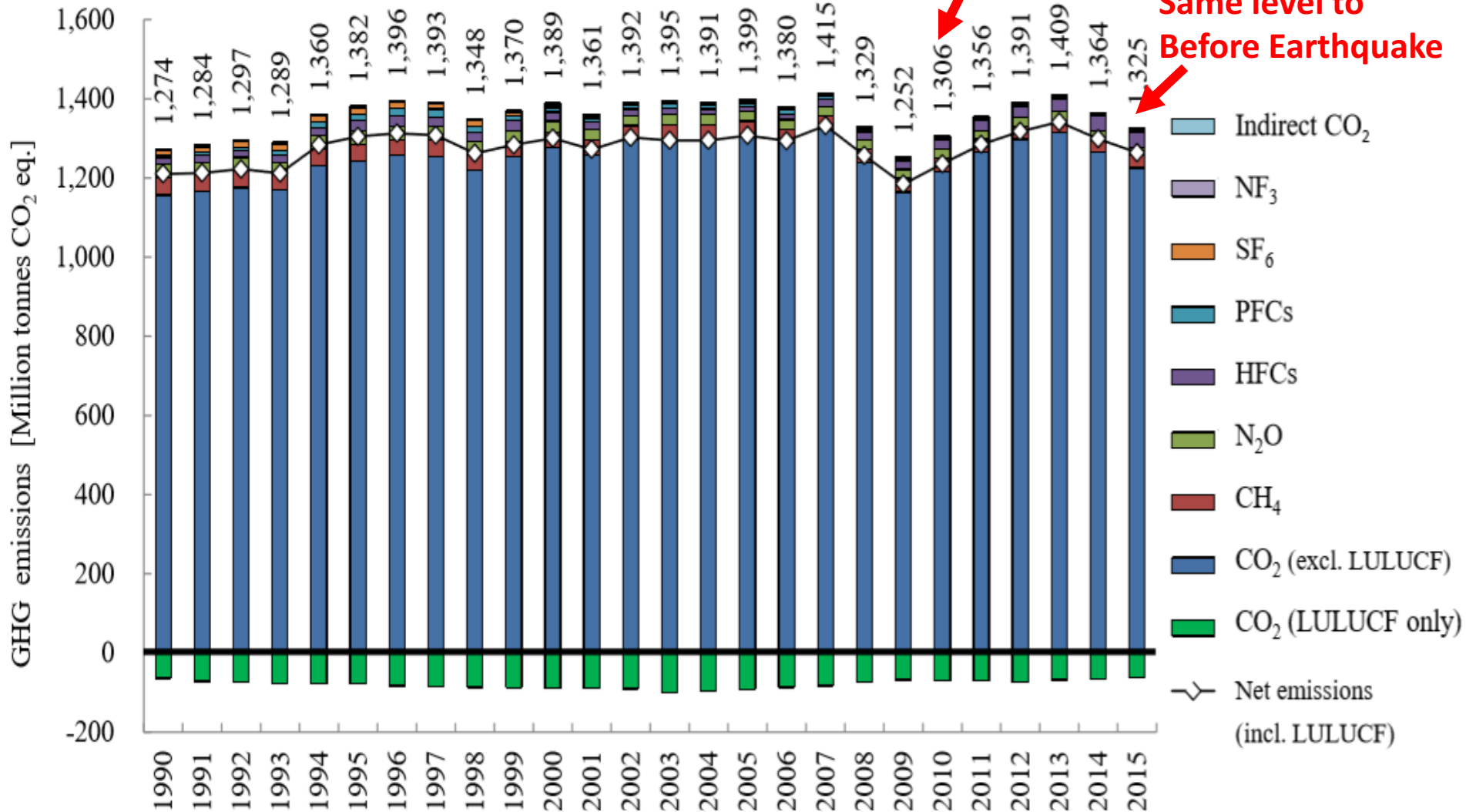
Japan Primary Power supply transition

一次エネルギー国内供給の推移



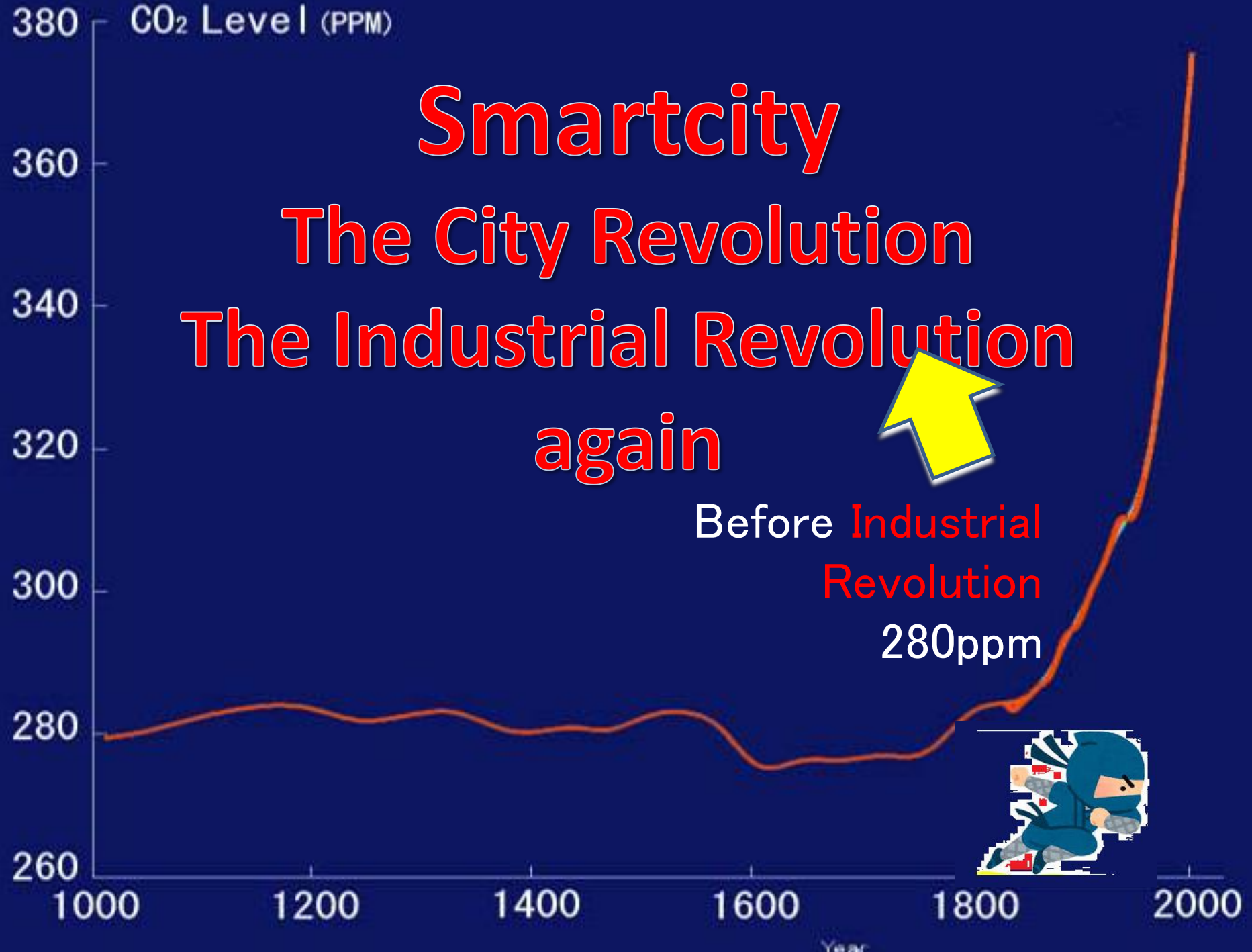
Earthquake 54/54 nuclear plants stopped

**Same level to
Before Earthquake**



Trends in GHGs emission and removals in Japan

Smartcity The City Revolution The Industrial Revolution again



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THANK YOU