

Japan's New Green Economy Framework and Practice

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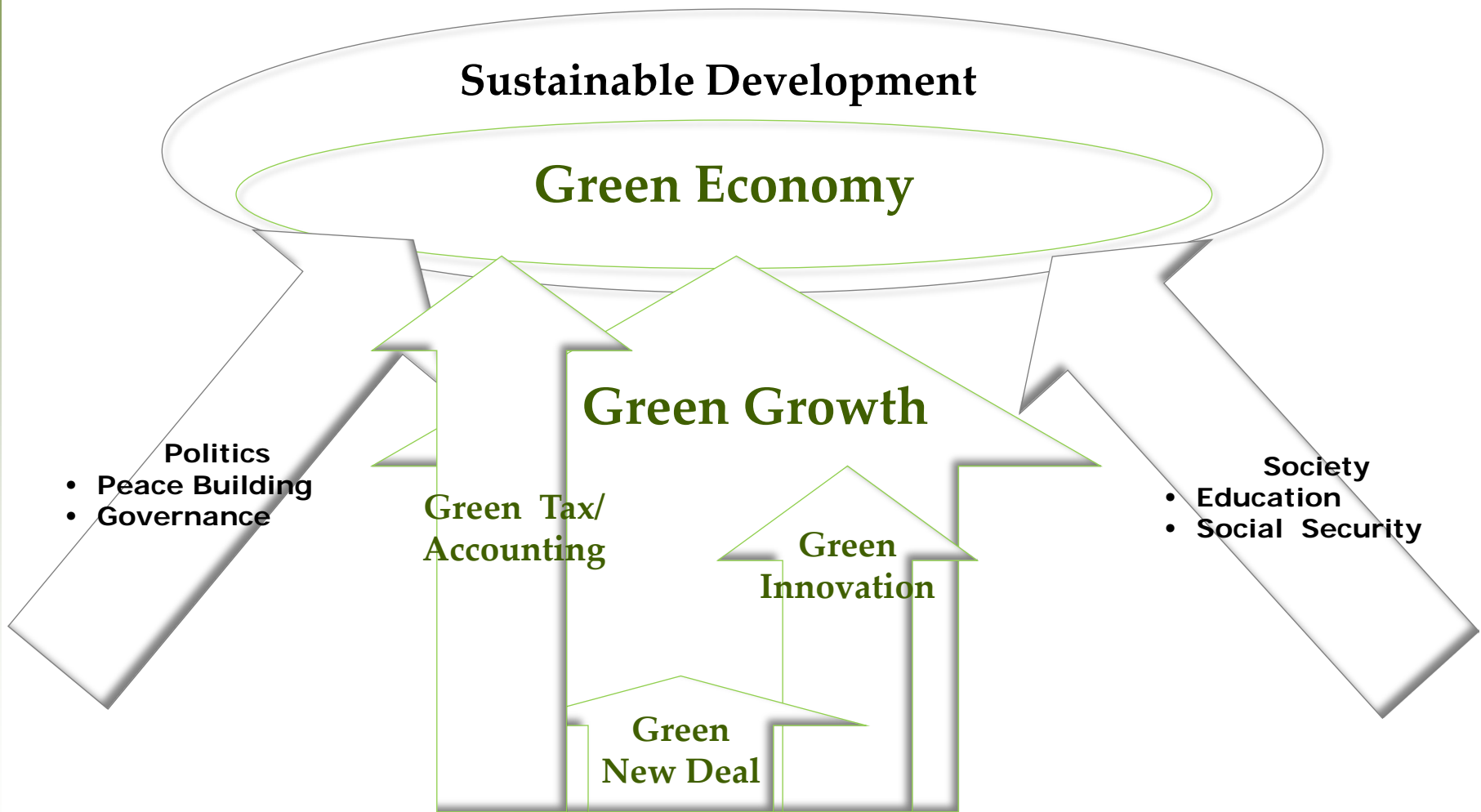
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**Tripartite Green Economic Policy Seminar
2-3 December 2010, Beijing, China**

Outline

- Green growth and green economy: conceptual framework
- Recent Japan's framework for green economy
- Policies for green economy and green growth
- Contribution to green economy in Asia
- Conclusion

Green economy: Conceptual framework



Recent Japan's framework for green economy

■ 2008

- ◆ Second Basic Plan for Establishing the Recycling-Based Society

■ 2009

- ◆ Green Economy and Social Change (Japanese green new deal)

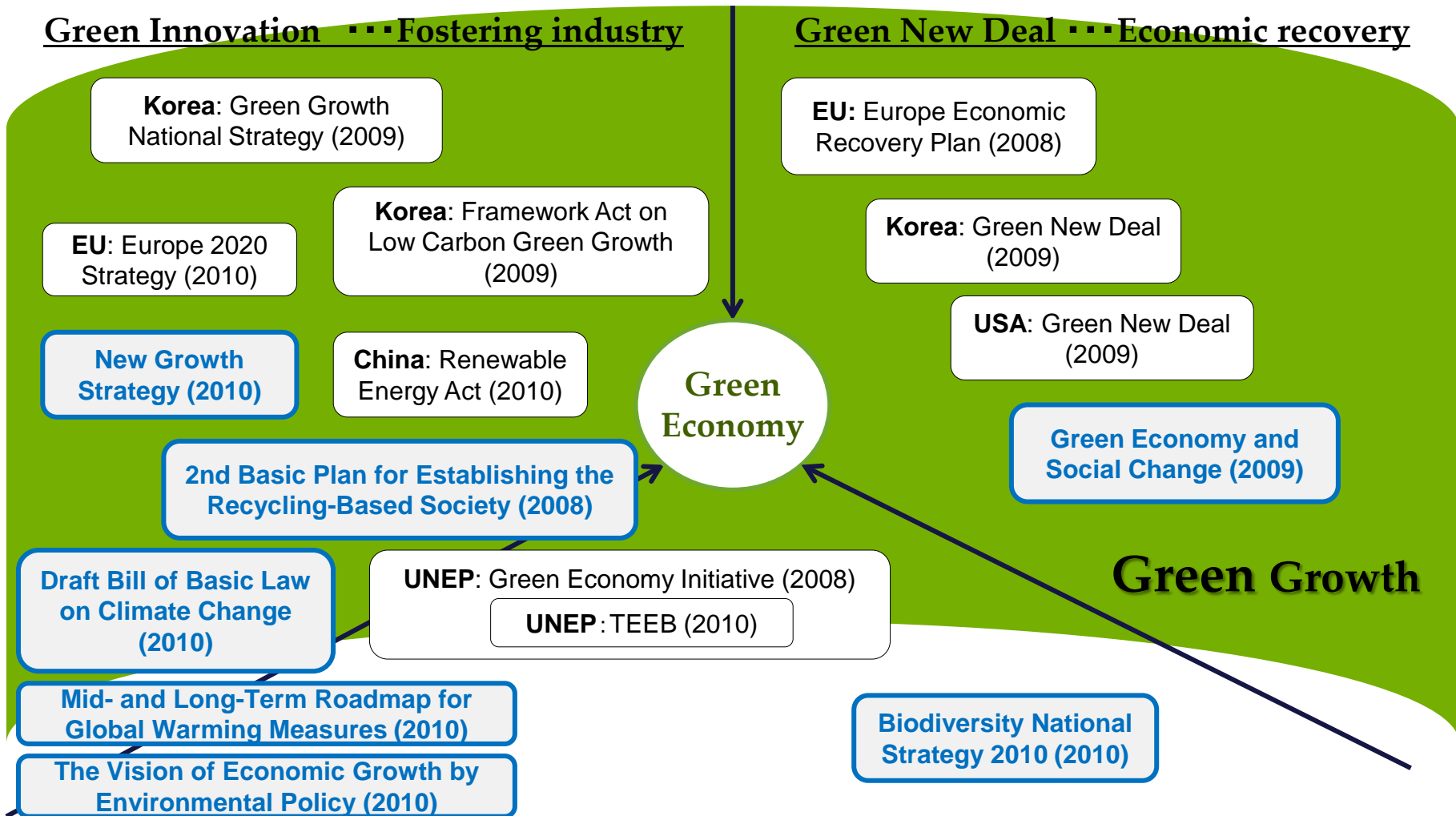
■ 2010

- ◆ Biodiversity National Strategy 2010
- ◆ Draft Bill of Basic Law on Climate Change
- ◆ New Growth Strategy
- ◆ Mid- and Long-Term Roadmap for Global Warming Measures (Draft)
- ◆ The Vision of Economic Growth by Environmental Policy

Cross-national comparison of GE/GG policies

Green Innovation ... Fostering industry

Green New Deal ... Economic recovery



Greening Institution ... Green tax/ accounting, education

Japan's relevant policies for green economy and green growth

- The Draft Bill of Basic Law on Climate Change
- New Growth Strategy
- Mid- and Long-Term Roadmap for Global Warming Measures (Draft)
- The Vision of Economic Growth by Environmental Policy
- Challenge 25 campaign
- Eco-point system for home electric appliances
- Subsidy for environmentally-friendly cars
- Green procurement law

The Draft Bill of Basic Law on Climate Change

■ The mid- and long-term targets of the draft bill

- ◆ 25% reduction of GHG emissions from the 1990 level by 2020 subject to the establishment of a fair and effective international framework which by all major economies and agreement on their ambitious targets
- ◆ 80% reduction of GHG emissions from the 1990 level by 2050

■ The draft bill proposes

- ◆ introduction of domestic emission trading scheme
- ◆ reform of tax system (e.g., the introduction of global warming tax)
- ◆ introduction of feed-in tariff system for renewable energy

New Growth Strategy: Policy targets

- Cabinet approved “New Growth Strategy” as the direction of Japanese economic/industrial policy on 18 June 2010.
Note: Its basic principle was approved by the Cabinet on 30 December, 2009.
- Aim to create new demand and employment through 4 priority areas.
- Green growth through green innovation is one of them.

	New demand	Job creation
Green innovation	JPY 50 trillion (US\$ 415 billion)	1.4 million jobs
Life innovation	JPY 50 trillion (US\$ 415 billion)	2.8 million jobs
Asian economy	JPY 12 trillion (US\$ 100 billion)	0.2 million jobs
Tourism	JPY 12 trillion (US\$ 100 billion)	0.6 million jobs

New Growth Strategy: Green innovation

<Energy sector>

- Renewable energy
- Nuclear power plant
- Efficiency improvement in thermal power generation
- Low power consumption ICT
- Smart grid

<Transportation>

- Promotion of modal shift
- Next-generation vehicle

<Targets by 2020>

- ¥50 trillion-scale environmental related new market
- 1.4 million new environmental related employment
- Reduction emission by 1.3 billion t-CO₂ at the global level

<Resource>

- Promotion of recycling
- Invention of alternative materials for rare-metal

<Building>

- Energy-saving home electronics
- Eco-house
- Heat-pump
- LED and organic EL
- Environmental concierge

Mid- and Long-Term Roadmap for Global Warming Measures (Draft)

■ The roadmap particularly focuses on

- ◆ our daily low-carbon lifestyle (housing and transportation)
- ◆ low-carbon cities/towns
- ◆ low-carbon manufacturing
- ◆ low-carbon energy supply
- ◆ low-carbon social system

■ The roadmap shows

- ◆ necessary policies to satisfy the environmental targets
- ◆ past, current and future GHG emissions and their sources
- ◆ ideal picture of our low-carbon life
- ◆ its economic impacts

Mid- and Long-Term Roadmap for Global Warming Measures (Draft)

■ The roadmap recommends

- ◆ environmental investment
- ◆ the practice of low-carbon lifestyle

■ The roadmap requires us to see

- ◆ not only the cost of GHG emissions mitigation but also benefits such as market and job creation, regional development and contribution to energy security of environmental measures/investment

The Vision of Economic Growth by Environmental Policy: Economic Growth through “Challenge 25 Campaign”

■ The vision presents

- ◆ specific environmental policies to meet the target in the New Growth Strategy (i.e., ¥50 trillion-scale environmental related new market and 1.4 million new environmental related employment)

■ The specific environmental policies include

- ◆ demonstrating Japan’s plan and research in order to take a global initiative for the realization of low-carbon society in the world
- ◆ increase in environmental investment and eco-business opportunity
- ◆ conformable eco-life based on consumption of eco-products
- ◆ creation of environmentally-friendly region
- ◆ creation of basis for economic growth by environmental policy

Challenge 25 campaign

- **Objective:**
 - ◆ Promotion of the people's movement to mitigate global warming
- **6 recommended activities to reduce CO₂ emissions at home and work**
 - ◆ Selecting and practicing environmentally-friendly lifestyle
 - ◆ Purchasing energy-saving products
 - ◆ Using renewable energy
 - ◆ Spreading eco-housing and eco-building
 - ◆ Supporting CO₂ abatement measures
 - ◆ Participating/Practicing activities for environmental protection

Eco-point system for home electric appliances

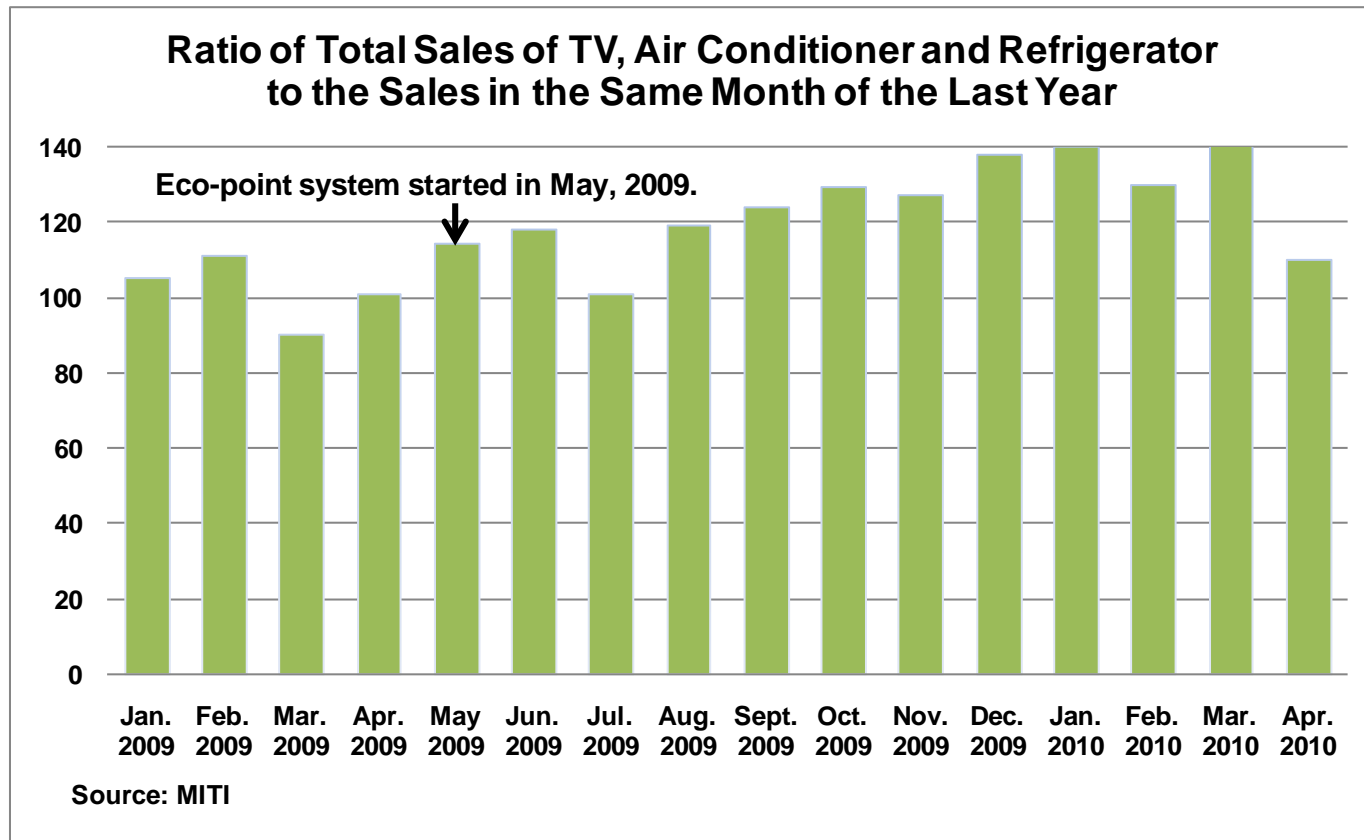
■ Objective

- ◆ To spread the global environmental measures
- ◆ To activate the economy
- ◆ To endorse terrestrial digital TVs

■ System

- ◆ Consumers of the energy efficient air conditioners, refrigerators and terrestrial digital TVs receive certain amount of eco-points.
- ◆ The consumers can exchange their eco-points with other commodities.

Eco-point system for home electric appliances



- Up to April of 2010, 193.5 billion eco-points (in total) were issued.
- From May of 2009 to April of 2010, the total sales of TV, air conditioner and refrigerator increased 30% from the same period of the previous year.

Subsidy for environmentally-friendly cars

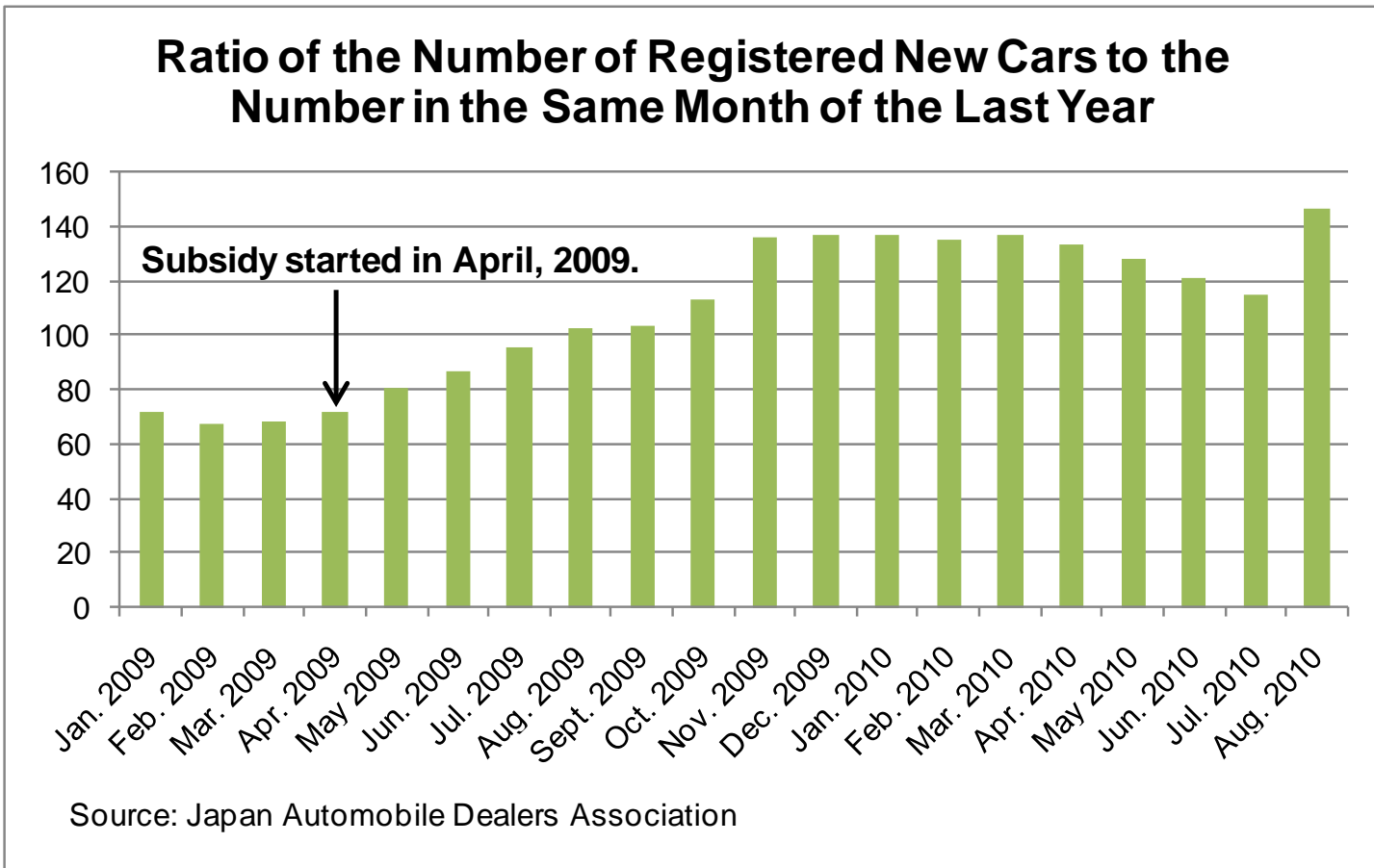
■ Objective

- ◆ To carry out both environmental protection and economic stimulus effectively and simultaneously

■ System

- ◆ Subsidy is given to the purchase of environmentally-friendly automobiles.

Subsidy for environmentally-friendly cars



- From April of 2009 to March of 2010, the total number of registered new cars increased 10% from the same period of the previous year.

Green procurement law

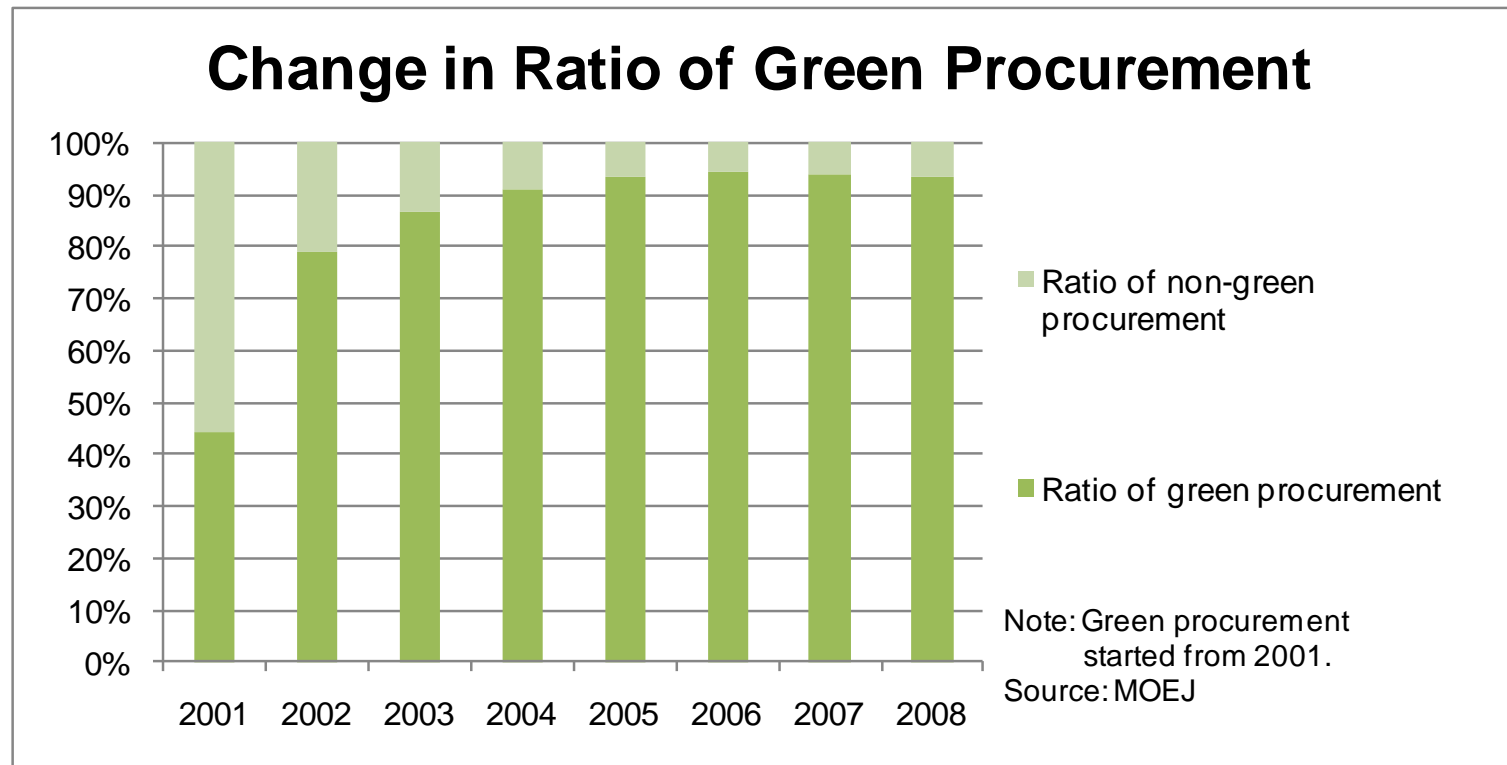
■ Objective

- ◆ To promote the establishment of sustainable society
- ◆ To promote the use of eco-products

■ System

- ◆ The law requires public institutions to play a leading role for the purchase of eco-products and provide their information to public. .

Green procurement law



- From 2004 to 2008, more than 90% of public procurement is green procurement (i.e., commodities whose ratio of green products is over 95% in total purchase).
- In 2008, green procurement saved 0.3 million ton-CO₂ of GHG emissions.

Contribution to green economy in Asia

- **Utilise green innovation in Japan to greening economy in Asia**
 - ◆ Promote infrastructure development as a package in Asian countries, e.g. high speed train (Shinkansen), urban transportation, water infrastructure, energy infrastructure, and eco-city.
 - ◆ Not only increased export of green products for infrastructure development but also consequent economic growth in Asian countries will provide larger market for Japanese producers.
- **Clean Asia Initiative (Ministry of the Environment)**
 - ◆ Realise green economy (low carbon economy, sound material-cycle economy and economy in harmony with nature) in Asian countries through ODA.

Classification of green industry

Matured: Industry with

- well-developed technology
- tangible success in both domestic and foreign markets

Example: Car industry (Hybrid car)

Take-off: Industry with

- well-developed technology
- tangible success in domestic market
- no entry or only a short-period of entry in foreign market

Example: Energy (nuclear energy), Transportation (high-speed rail), Construction (low-carbon housing), Water, Recycling

Premature: Industry with small domestic market

Example: Car industry (Electric car), Energy (Biomass energy)

Supportive:

Industry which support industrial sectors listed left for their smooth promotion of green activities

Example:

Financial institution, Trading company

Example of Japan's integrated approach for promoting the 3Rs in Asia

National level

Formulation of 3R National Strategy
Support prioritization of recycling policy

Local level

Bridge between central governmental policy and recycling activities

Firm level

Know-how regarding waste retrieval and its logistics
Environmentally sound technology for waste treatment

International framework for integrated approach for promoting the 3Rs in Asia

■ 3R National Strategy

- ◆ Japan supported the formulation of 3R National Strategy for Bangladesh, Cambodia, Indonesia, Malaysia, the Philippines, Thailand and Vietnam.
- ◆ Japan also coordinated efforts among the Ministry of Environment of Japan, JICA and other research institute such as IDE/JETRO, IGES and NIES.

■ Regional 3R Forum in Asia

- ◆ High-level policy dialogue
- ◆ Support for promotion of 3R projects
- ◆ Share of information on 3R
- ◆ Reinforcement of network

International framework for integrated approach for promoting the 3Rs in Asia

■ Local level cooperation

- ◆ Kawasaki city cooperates to build eco-town and study on feasibility of plastic bottle and sludge recycling with Shenyang city in China.
- ◆ Kitakyushu city also cooperate with Tsingtao city in China.

■ Firm level cooperation

- ◆ Dow Chemical Co. is now expanding its waste management business in ASEAN countries.
- ◆ Fuji Xerox operates its own international recycling network of its photocopiers in Asia.

Conclusions

■ **Conceptual framework to understand GE/GG policy**

- ◆ It seems useful to sort out on-going discussion on GE/GG issues.
- ◆ Classification of green economy policy based on the relation with existing economic policy is useful to understand direction of various players/countries.
- ◆ Redirection of existing policies to green economy (stimulus package as GND, industrial development policies as Green Innovation, etc.) is relatively easy to implement.

■ **Characteristic and challenge of Japanese GE/GG policy**

- ◆ Japan particularly pursues comprehensive green economy policies which include innovation and the 3Rs.
- ◆ Japan, as one of the most developed economy, tries to establish green economy underpinned by qualitative development rather than conventional economic growth.
- ◆ Japan should demonstrate a model for achieving such a qualitatively-progressed sustainable society in the world through research.

Thank you for your attention.

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