

Journey toward Green Growth

- Shaping the green future with GGGI -

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Major Milestones of GGGI's Journey

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“GGGI will significantly contribute to a variety of UN’s activities regarding climate change”

*- UN Secretary General
Ban Ki Moon*



The Creation of GGGI announced by President Lee Myung-Bak at the UNFCCC COP-15

“GGGI is just the right institution at just the right time.”

*-Inger Anderson, Vice President of Sustainability for the World Bank,
-December, 2010*



GGGI is launched at the East Asia Climate Forum



Opening of the Copenhagen Office

**Copenhagen, Denmark
December 2009**

**Seoul, Korea
June 2010**

**Cancun, Mexico
December, 2010**

**Copenhagen,
Denmark
May 2011**

Moving forward and Moving fast



**Global Green Growth
Summit 2011**

**Seoul,
South Korea
June 2011**



**1st Global Green Growth
Forum 2011**

**3GF, Copenhagen
October 2011**



**Opening of GGGI
Abu Dhabi Office**

**Abu Dhabi, UAE
July, 2011**



GGGI Event at the UNFCCC COP-17

**Durban South Africa,
December 2011**

Moving forward in 2012 and beyond...

A G20 Priority: Promote sustainable development with focus on infrastructure, energy efficiency, green growth and financing the fight against climate change.



RIO+20
United Nations Conference
on Sustainable Development



G20 Summit Los Cabos
June 18th-19th



Rio+20 June 20th-22nd

**Green Growth Knowledge
Platform Launch
Conference – Mexico City**
12th-13th January

**Global Green Growth
Summit**
May 2012

UNFCCC COP18 Qatar
26th November
to 7th December

Mexico
January 2012

Seoul, South Korea
May 2012

Mexico
June 2012

Rio, Brazil
June 2012

Doha, Qatar
Nov – Dec 2012

GGGI's International Partners

Countries



Organizations

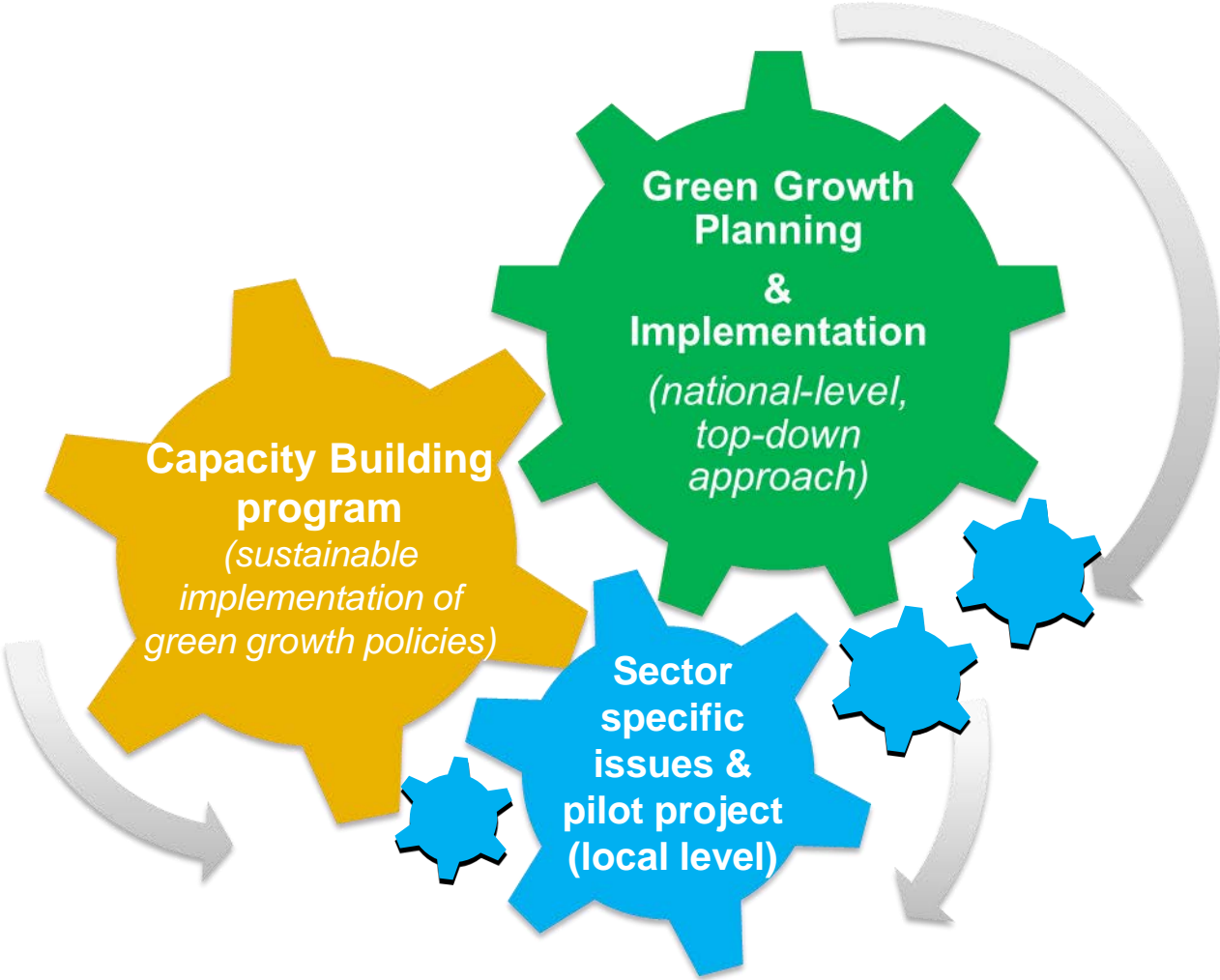


Private Sector



By end 2012 GGGI aims to get fully converted into an international, multi-stakeholder organization.

Three Pillars of GGGI's Country Program



Green Growth Planning and Implementation Portfolio

(As of August 2012)



 17 Countries, 1 Region, 26 Projects

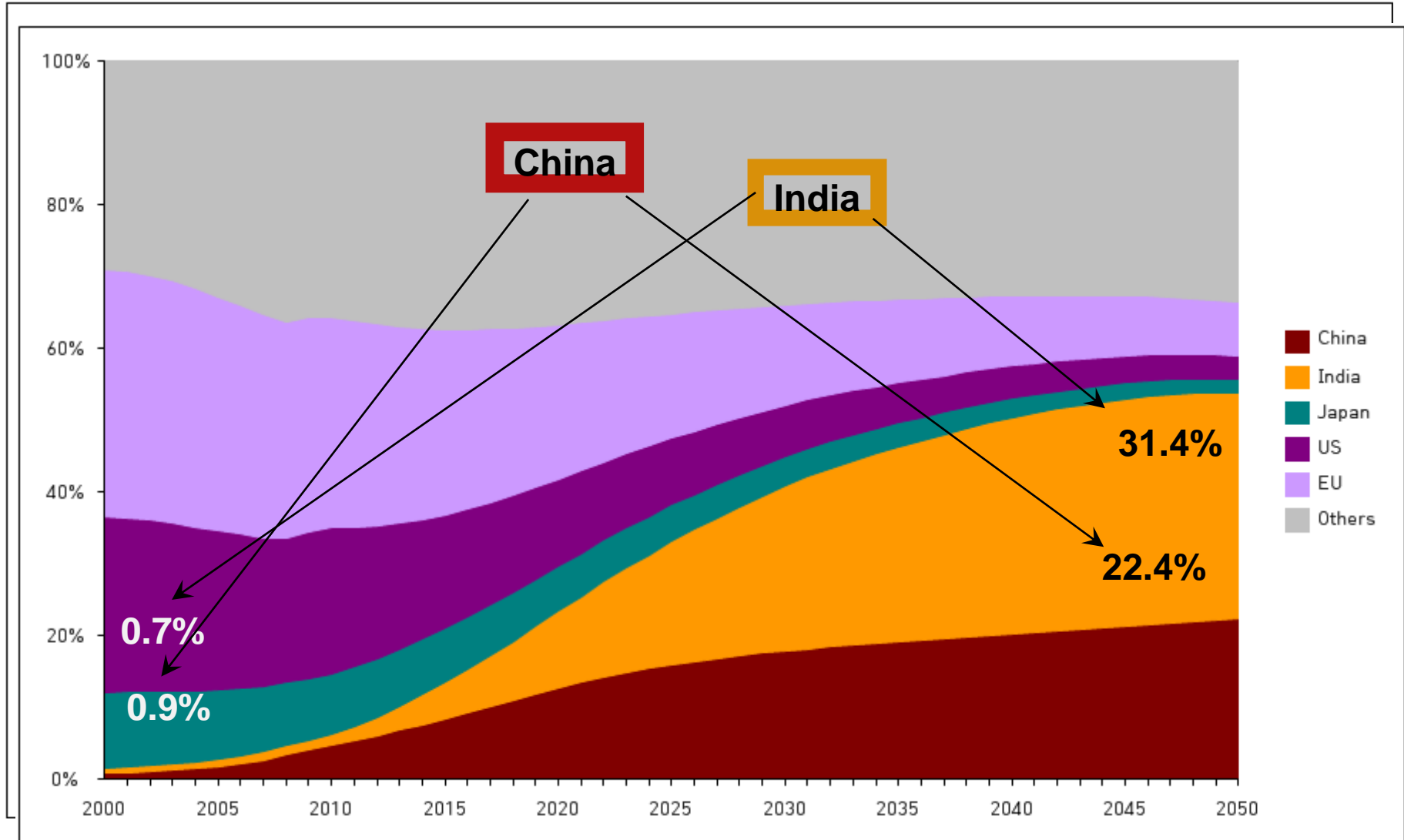


Green Growth as a New Paradigm of development

China and India Shock in Global Market



< Projected shares of global middle-income class consumption, 2000 to 2050 >



Source: Goldman Sachs

Concurrent Crisis in Resource, Energy and Environment



Resource Depletion

Resource Reserves
Oil 42 yrs
Gas 60 yrs,
Coal 122 yrs



Increasing Energy Consumption

Global energy consumption lever will increase up to 40% by 2030



Increasing GHG Emission

By maintaining the current economic system, World's GDP will annually decrease by 5~20%



Water Security

Fresh water supply per capita will decrease by 1/3 within 25 yrs

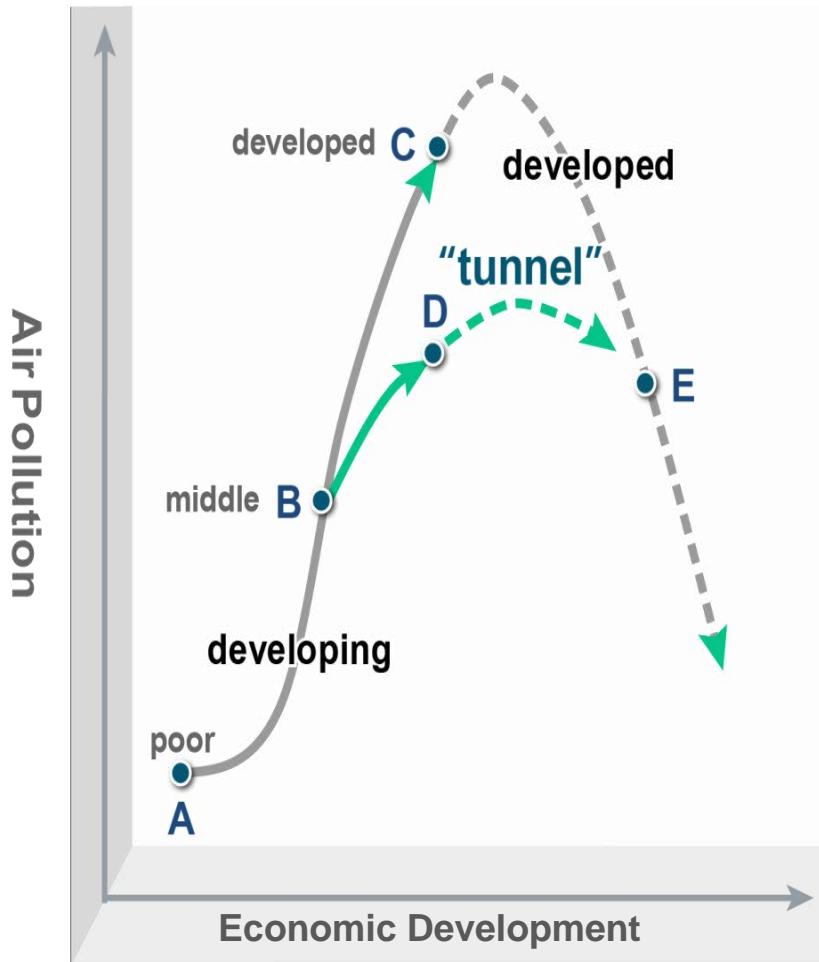


Food Security

1°C increase in Nyctotemperature leads to 10% decrease in Rice Production



What is Green Growth for developing world ?



Munasinghe (1995, 2008)

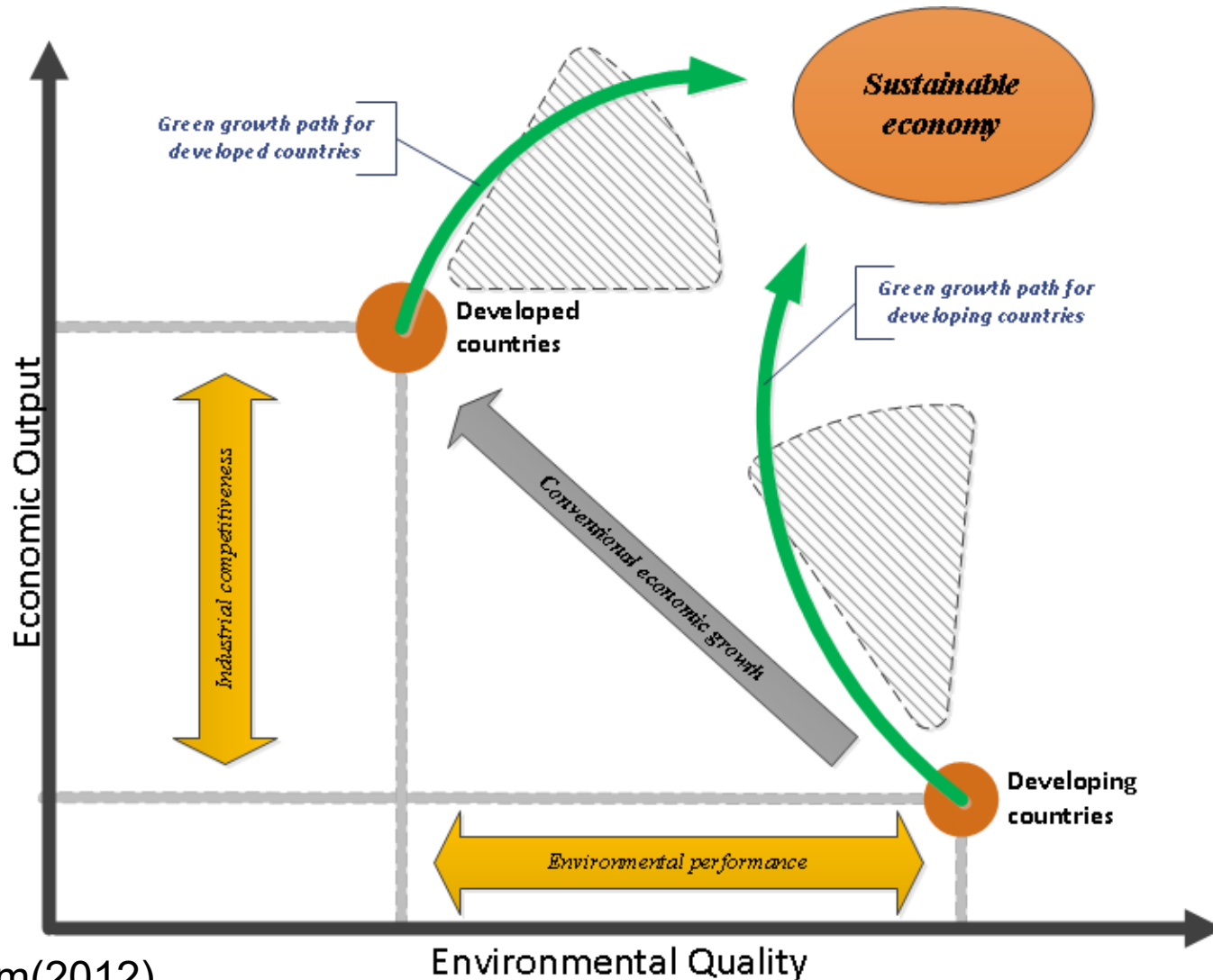
Old Path : A → B → C → E

Following the “*develop first, clean up later*” path of developed countries will widen the gap and not be able to catch up.

New Path : A → B → D → E

International cooperation through technology transfer and fund supports for measures against climate change will enable developing countries to choose the new path and “*act wise*” from the beginning.

“Green Growth” path to a sustainable economy



Hoseok Kim(2012)

Four building blocks of green growth strategy



Green productivity

- Productivity gains from eliminating inefficiency in the use of materials, energy and other natural capital (eg. material and energy efficiency, price signals)

Green opportunity

- New growth opportunities from the emergence of green markets and activities (eg. green innovation, consistent environment policy, green infrastructure)

Resilient economy

- Economic benefits from adaptation to ecosystem-related risks (eg. climate change, biodiversity loss, nitrogen cycles)

Resources for long-term development

- Economic gains from securing/developing natural and other relevant resources for future development (eg. renewable energy, bequest values, sustainable fisheries/forestry)

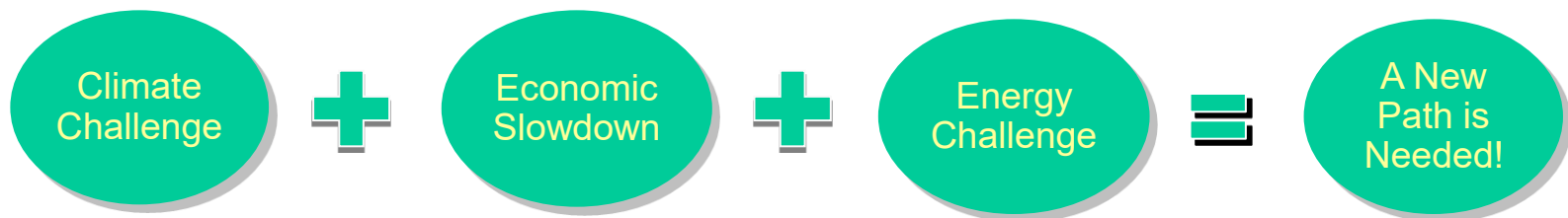
Green Growth as a New Paradigm



- Declaration of a New Vision (2008.8.15): **“Low Carbon, Green Growth” as a new paradigm of development**



- National Strategy for Green Growth : **Solving Triple Crunch**



Suncheon: From calm rural city to eco-tour hub



Suncheon: From calm rural city to eco-tour hub



Suncheon: From calm rural city to eco-tour hub



- Pull out more than 280 power poles inside bay areas

- Move restaurants outside bay areas through consultation

- No use of chemical fertilizer and pesticides to protect migrant birds

Annual visitors to Suncheon :
around 100 thousand(2000)
to 2 million(2011)

Volume-rate waste disposal system



(January 1995 ~ Present)

1. Polluter-Prepaid waste disposal system

- Household should buy(prepay) disposable plastic bag
- Illegal dumping without prepaid plastic bags shall be fined
- Strong enforcement from local government(revenue)

2. Reduce wastes and Promote Recycling

- Incentives to reduce wastes ("Reducing wastes" = "Saving money")
- Campaign for "Don't waste wastes!" (Considering wastes as resources)

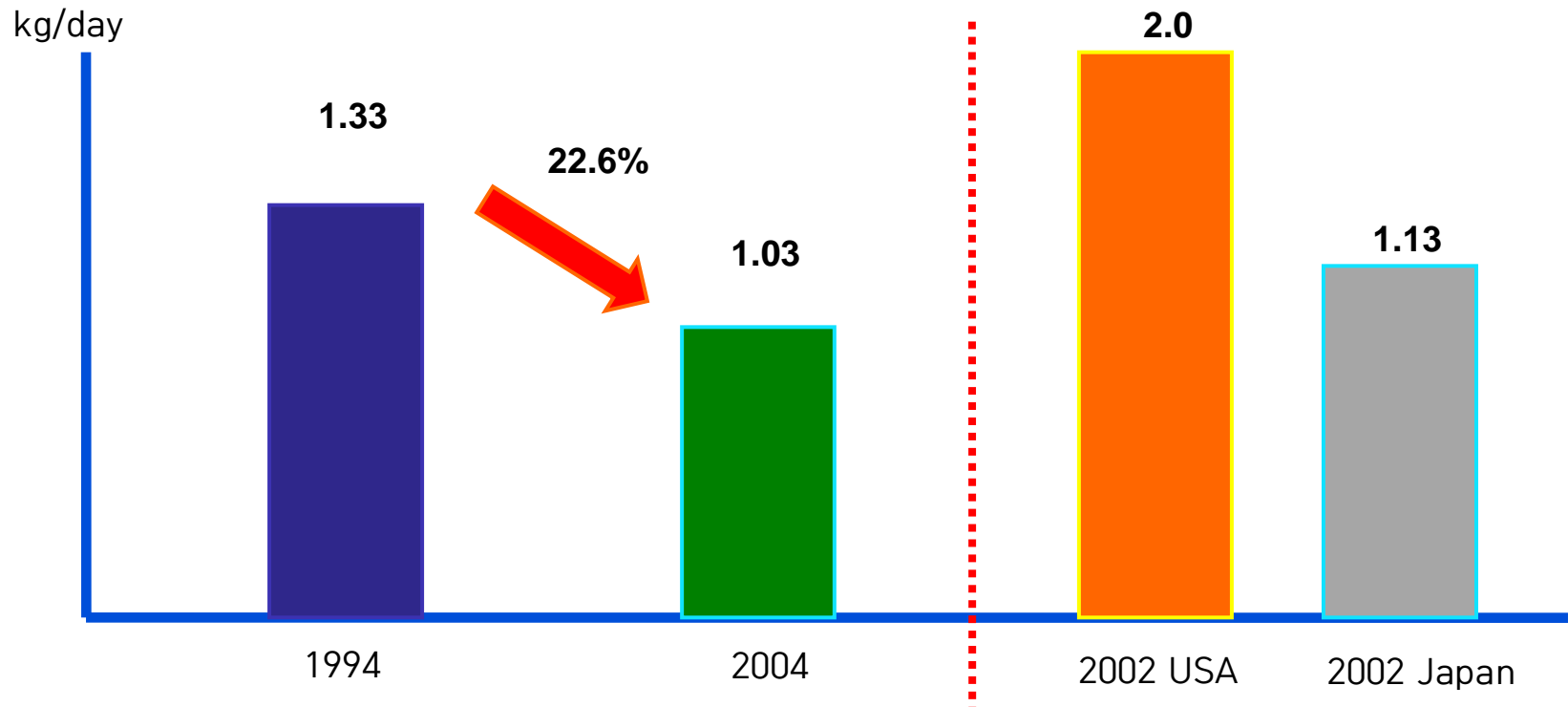


Volume-rate waste disposal system

(January 1995 ~ Present)



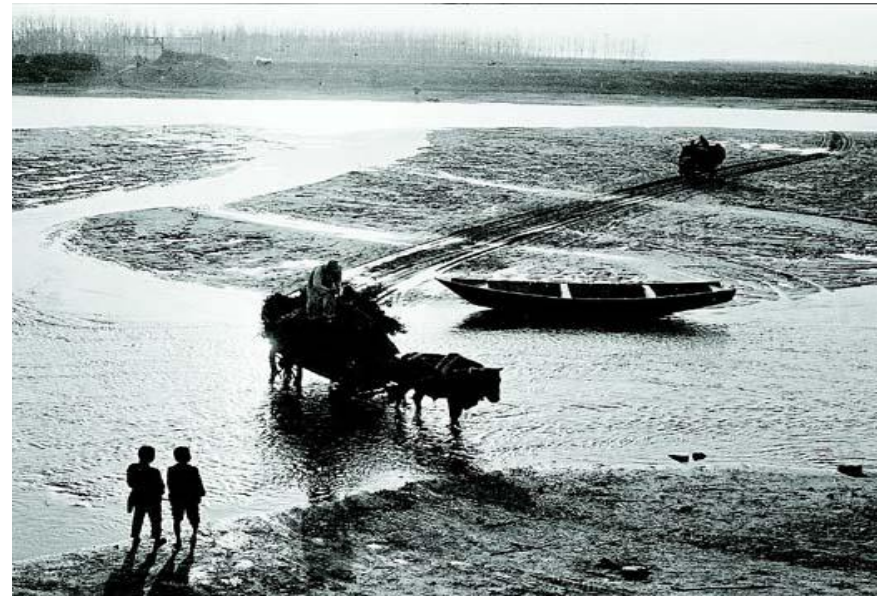
Per Capita daily wastes
before and after Volume-rate waste disposal system



From 1994~2004,

- ❖ Reduced amount of wastes : 53,670 thousand ton
- ❖ Saved cost (2004 PV) : 6.72 billion USD(7,731.6 bil. KRW)
- ❖ Increase in recycled wastes : 16,470 thousand ton

the Story of Seoul Metropolitan landfill site



**The island of
"Orchid and
Fragrance"**

the Story of Seoul Metropolitan landfill site



the Story of Seoul Metropolitan landfill site



The island of
"Order and Garbage"
since the year 1978



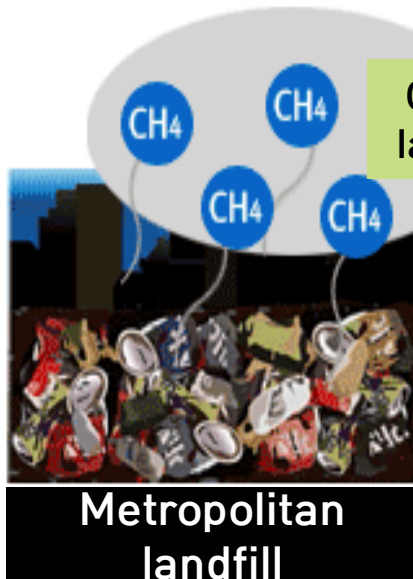
the Story of Seoul Metropolitan landfill site



- ❖ Home of the 2002 World Cup Opening Game
- ❖ More than 9.8 million annual visitors
- ❖ World-class ecological park



the Story of Seoul Metropolitan landfill site

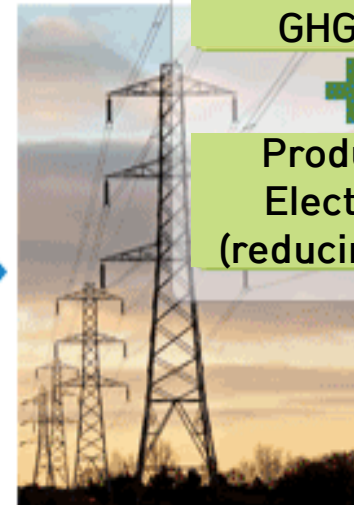


Metropolitan landfill

Collecting landfill gas



500MW-sized power plant



Capturing Landfill GHG gas



Producing Electricity (reducing CO2)

Green Growth Planning, Governance & Policies

New & Bold move toward Green



2008

New & Bold Initiative: Low Carbon Green Growth

Proclaimed Green
Growth as Korea's
National Vision
(`08. 8. 15)



Established National
Energy Plan to
increase share of
renewables to 11%
by 2030 (`08. 8. 27)



Overcame the global
financial crisis through
the Green New Deal
(`09. 1. 6)



Create Momentum for a National Response to
Climate Change, Resource Depletion & Stuttering Economy

Institutional Set up for Green Growth

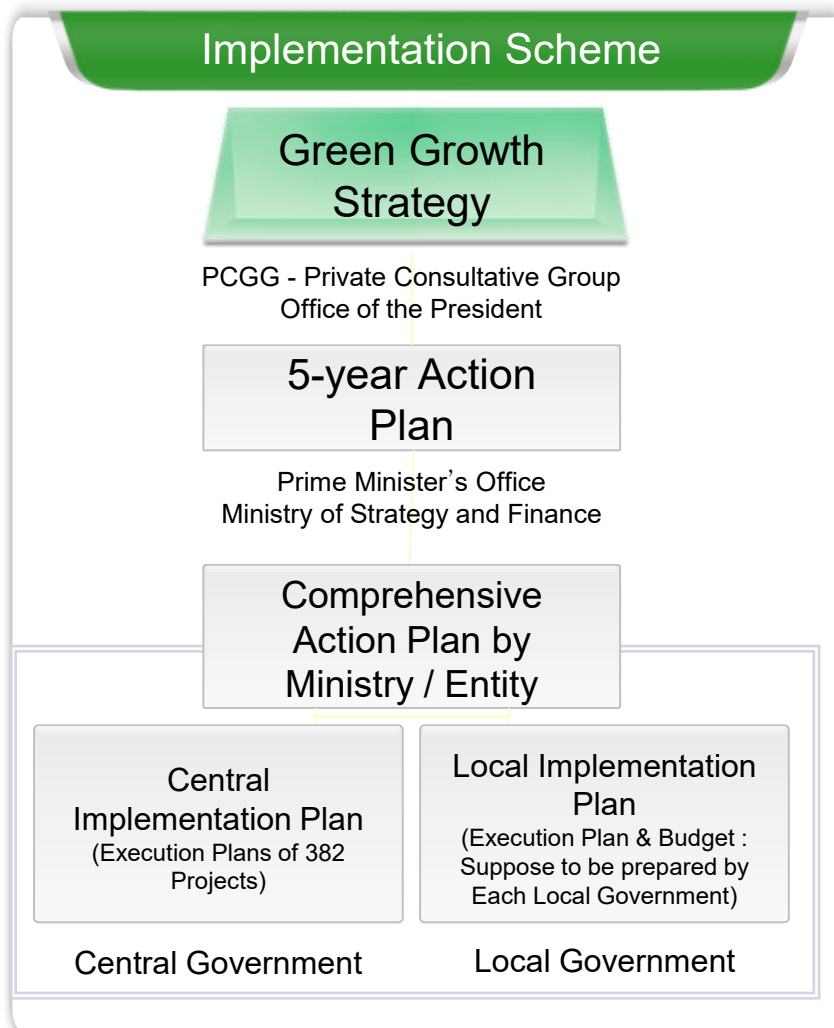


2009

Institutional Foundation for Green Growth Policies



Green Growth Policy Implementation Org. in Korea



Central Government

- PCGG : Control Tower for Green Growth
- Ministry : Designation of green growth officer to control its own projects and coordinate with PCGG

Local Government

- Designation of local green growth officer
- Consisting Local Committee on Green Growth including local government, academy, industry, NGO, and others
- Holding local green growth council quarterly basis. (Participants : Chairs of each LCGG)

Private Consultative Group

- Carrying forward Green Growth through Public-Private Partnership
- Consisting Private Consultative Group :
 - Industry, Science & Technology, Finance, Green Life, Green IT

Overcoming Barriers of Green Growth Strategy

10 Key Barriers in Green Growth (OECD)



1. *Understanding Gap*

- Green growth has not yet been widely discussed or fully considered at any level – from politician to the public, from farmer to major business

2. *An information gap and invisibility of GG opportunities*

- Green growth opportunities are still largely hypothetical: there is very weak evidence of what works, how and where – and of associated costs and risks

3. *A technology gap*

- For many low-income countries, the shift to low-carbon and resource-efficient production models is constrained by poor affordability, limited access and capacity to adapt and use green technologies', as well as a lack of recognition of effective indigenous technologies and barriers to trade in green technologies

4. *Labour/skills gaps*

- Developing countries, particularly LDCs, stress that their labour forces have neither experience nor capacity to shift to green production techniques

5. *A time(investment) gap – e.g. Lack of financial resources*

- The pace at which developing countries can shift towards green economies is constrained by the scale of upfront and long-term investment required, especially for green infrastructure and energy systems, and the inability to capitalise longer term benefits that will accrue

10 Key Barriers in Green Growth (OECD)



6. An incentives gap

- Producers and consumers in many markets do not face incentives to account for the full environmental and social costs of their activities.

7. A political and political economy gap

- There are frequently too many vested interests in the brown economy's *status quo*.

8. A national institutional gap

- Fragmented governance makes it difficult to co-ordinate integrated green growth approaches, although the experience of sustainable development strategies can be built on.

9. An intergovernmental institutional (coordination) gap

- Global governance of environmental and social standards is already a complicated and demanding policy arena involving numerous reporting requirements.

10. International market gaps

- For many developing countries, the main green growth prospect is valorizing environmental assets, especially those which produce global public benefits, but such regimes and markets are thin and unable to recognize the value of natural capital.



1. Capacity Building for implementing green growth policies

- Build up statistics, data gathering systems, operational know-how, etc.

2. Greening Production (innovating factors of production)

- Move up the value-chain / Strategic R&D
- Strong policy measures toward clean-technology devices or pollution-reduction devices for newly set-up enterprises

3. Regulatory Reforms and Proper Incentives

- Incentivize private sector investors and consumers
- Promote Entrepreneurships in private sectors / Reforms in SOEs

4. Institutional and legal set-up

- Establish appropriate policy coordination bodies
- Enhance intact monitoring and evaluating systems

5. International Collaboration

- Raise the right voices in international arena
- Focus on the issues of the ecosystem payment

Tips for effective Implementation



- **Regular review (political support), check and announce**
 - Monthly Comprehensive Export Promotion Report meeting
 - Strong support from top political leadership
- **Multi-layer evaluation and supervision**
 - Ministry of Planning and Investment, Prime Minister's Office, Supervisory body, National Assembly
 - Internal review mechanism
- **Incentives for Ministers and related officials**
 - Evaluation tools, index, goals
- **Clear goals & targets**
- **Division of Labor + Check & Balance**
- **Systematic approaches**
(codification and professional skills)

Tips for effective Implementation



- **Using external resources for reviewing**
 - Voices from business sectors
- **Opening-up and sharing core information**
 - Supervision from the public
- **Clear goals setting and Prioritizing the issues**
 - Focusing on core value, vision, goals and projects
 - Keep the goals simple and easy to understand
- **Freedom to achieve clear goals**
 - Do not define the detailed tools or methods to achieve goals
- **Legal authority and effective enforcement**

Lessons learned from the journey

7 Habits of successful Green Growth



1. High-level Political Engagement

“Transformational Changes are necessary”

- Decisive resolution for transformational changes & reforms in institution, incentive systems, organization, etc.
- Power to coordinate various views and different interests

2. Active Government Intervention

“Long-term consistent perspectives and balanced approaches”

- Build strong legal & institutional frameworks for green growth
- Policy and regulatory reform & Consistent signal
- Active upfront investment to trigger private engagement



3. Comprehensive Approaches (Top-down)

- **Green Growth Planning** :
tools to Share Vision and clear mid-to-long term goals
- **Continuous consultation** and coordination efforts to persuade stakeholders in public and private sectors
- Efficient **inter-ministerial coordination** among relevant authorities

4. Active Participation from the Public (Bottom-up)

- Increase **public awareness** on green growth
- Actions and Policy based on **public participation**
- Take active measures to lead behavioral changes of people
- Efforts to disseminate green growth focused on **local and rural areas and Community**



5. Using Market mechanisms and right incentives

- Utilize the power of market in green growth policy making
- Appropriate incentive systems for private stakeholders

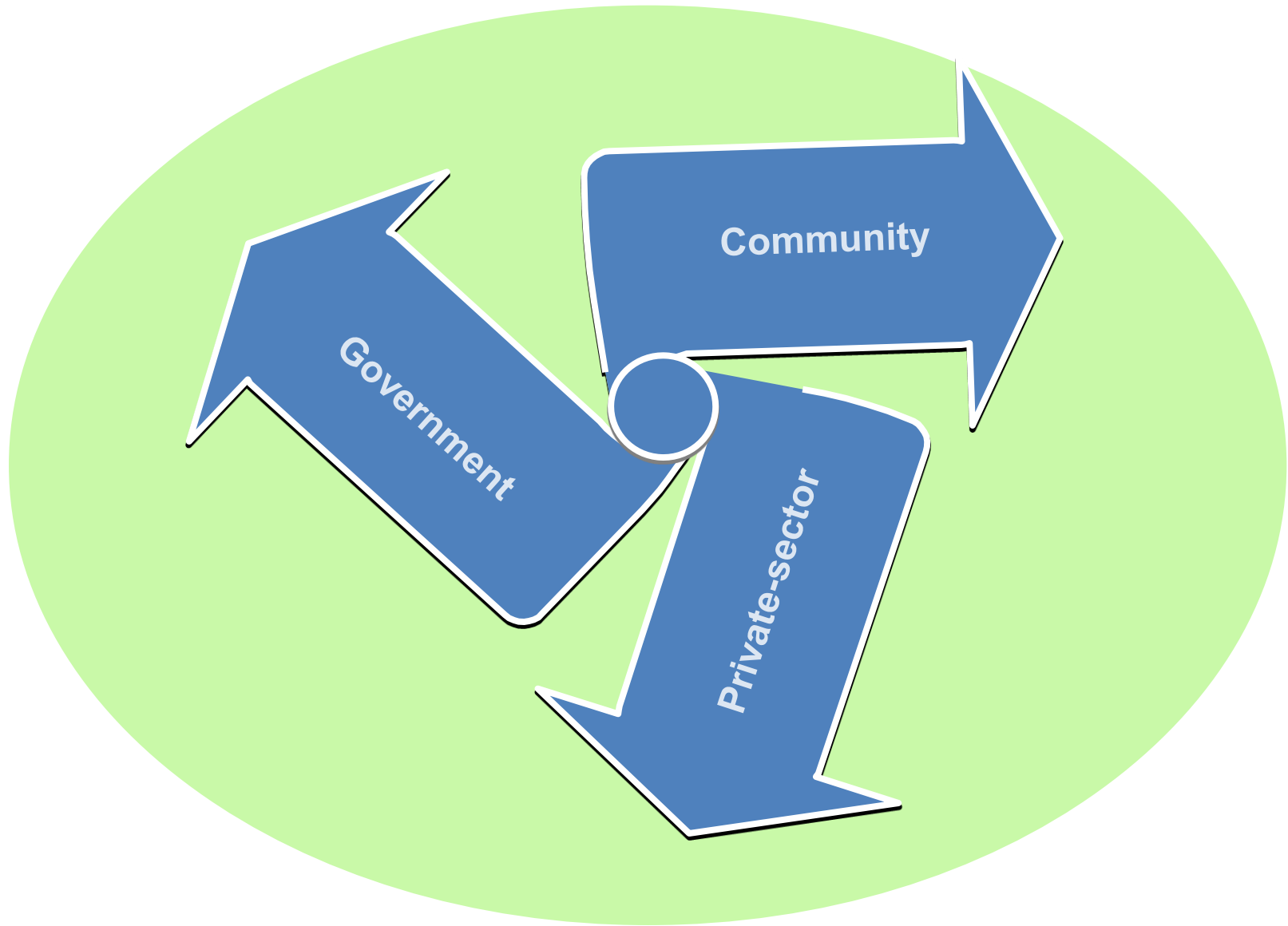
6. Finding New Opportunities in Public-Private Cooperation

- Build institutional frameworks for covering the risks and initiating co-finance for the projects
(e.g.) Key factors of green finance : covering risk and stable revenue frameworks
- Raising awareness in private sectors (opportunities in Green Growth)

7. Mobilizing Global and Local Partnership

- Trans-boundary effects on climate change
- Mobilizing resources from various partners overseas
- Sharing Knowledge among regional neighbors and leaders
- Disseminating Best Practices & Case study

Green Growth Trinity





Thank you.

