Creating Opportunities through Green Growth

June 2010

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I. Imperative for Change

Climate Impact
- average temperature rise 1.7°C (2 times more than world average)

Energy security vulnerability
- 140 billion USD energy bill

Economic slow-down
- growth rate declining since the Asian economic crisis in late 1990s
- growth without rise in employment

“New path is needed”
Creating New 60 years (announcement of a new national vision in the 60th anniversary of the founding of the Republic on August 15th 2008)

More than just an environmental policy
- a new paradigm of progress
- changing people’s behavior and way of thinking

“Low Carbon Green Growth”
II. Green Growth, Turning Crises into Opportunities

What are the distinctiveness of Korea’s green growth?

Strong Green Leadership
- Strong drive from the top leadership

Fast integration of the Vision in all sectors
- Partnership with private council (business, financial sector, technology experts etc.)

Strong industrial base in relevant areas
- Large competent players

Turning the vision into “real actions”
- Setting up Green Budget of 2% of GDP to enable real actions
III. Turning Grand Vision into Real Actions
What do we need to realize ‘Green Growth’ vision?

Sustained Drive
key role for the Presidential Committee on Green Growth

Legal Framework
- Legislation of the Framework Act on Green Growth

Strategy Plan
- Inheriting the spirit of the “Economic Development Plan” in the 60~80s
  * 5 year implementation plans
- New “green saemauel movement”

Green Budget
- Re-orientation of private-public finance toward green (policy, R&D, SOC)
- 2% of GDP government spending on Green Growth policy

National midterm GHG reduction target
- set this year -
III. Turning Grand Vision into Real Actions

Presidential Committee on Green Growth

Chairpersons (Co-chair)

Commissioners nominated by President (incl. Chairperson)
Commissioners designated by law
* Administrative commissioners: Senior Secretary to the President for State Affairs Planning

Green Growth & Industry Subcommittee
Climate Change & Energy Subcommittee
Green Life & Sustainable Development Subcommittee

Partnership & Leadership

Central Government
Local Government

PCGG

Public-Private Consultation Body
- Industry
- Sci-Tech
- IT
- Finance
- Green Lifestyle
Composition

- 7 chapters and 65 articles
- a framework act – it has priority over all relevant laws regarding Green Growth

Key provisions

1) legal ground for the Presidential Committee on Green Growth and mandates the committee to develop a national strategy for Green Growth.

2) mandates the government to foster and support green economy, green industry, and the transformation of conventional industry.

3) foster financing for green technology R&D and green investment, as well as, mandates to promote environment friendly tax reform.

4) mandates government to set concrete targets for GHG emission reduction, energy saving, energy security, and renewable energy supply.

5) mandates for mandatory reporting of GHG emission for businesses. Provides the legal framework to introduce cap & trade system in Korea.

6) articles on environment-friendly land use, green building, low carbon transportation, green consumption and production, and other issues related to sustainable development.
III. Turning Grand Vision into Real Actions
National Strategy for Green Growth & Five Year Implementation Plan

Current Status
- a multi-agency + research institute participating project
- strategy and 5 year implementation plan being developed (target date July 2009)

Key Framework

**Vision**

**A Model Green Nation**
- through creating virtuous harmony of environment & economy

**Objectives**

**Increasing Energy Security & Climate Adaptation**
- Build Low Carbon Society
- Enhance Energy Security
- Strengthening Climate Actions

**New Engine for Growth**
- Develop Green Tech.
- Foster Green Industry
- Greenovate Industrial structure
- Lay Foundation for Green Economy

**Enhanced Quality of Life & Int’l Leadership**
- Green Transportation & Land Management
- Green Life Revolution
- Global Green Leader
III. Turning Grand Vision into Real Actions

Green Growth Investment Plan

Total 107.4 trn. won from ’09 to ’13: (’09) 17.5 → (’13) 21.1 (trn. won)

* 2% of annual GDP (UNEP’s recommendation: 1% of annual GDP)

<table>
<thead>
<tr>
<th></th>
<th>total</th>
<th>2009</th>
<th>2010~2011</th>
<th>2012~2013</th>
<th>Increase</th>
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<tbody>
<tr>
<td>Green Growth</td>
<td>107.4</td>
<td>17.5</td>
<td>48.3</td>
<td>41.5</td>
<td>10.2%</td>
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<td>(Unit: Trn. KRW)</td>
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**Investment Allocation**

- **Increasing Energy Security & Climate Adaptation**
  - 2009: 8.6
  - 2010~2011: 29.2
  - 2012~2013: 19.1
  - Increase: 14.0%

- **New Engine for Growth**
  - 2009: 4.8
  - 2010~2011: 10.8
  - 2012~2013: 13.1
  - Increase: 9.4%

- **Enhanced Quality of Life & Int’l Leadership**
  - 2009: 5.2
  - 2010~2011: 10.5
  - 2012~2013: 12.2
  - Increase: 3.6%
1. Low Carbon Society

Strategies

- National GHG info Management System
  - set emissions reduction goal
  - enhance carbon visibility
- Encourage Carbon-3R Activities

Indicative target

| (’50) | 19.8% |
| (’20) | 17.6% |
| (’09) | 15%   |
2. Energy Security

Strategies

- Energy Conserving Society
- Expand Clean Energy Development & Deployment
- Expand Safe Nuclear Energy
- Expand off-shore Energy Source Development

Indicative target

Reduction of energy intensity (toe/1,000 USD)

- ('50): 0.101
- ('20): 0.233
- ('09): 0.317
3. Strengthen Climate Actions

Strategies

- Improve monitoring & early warning system
- Improve climate adaptation & address related health risks
- Improve food security
- Improve water resources management

Indicative target

Secure Water Resources

\[\text{('50)} \quad 22.2\text{billion m}^3\]
\[\text{('20)} \quad 21.4\text{billion m}^3\]
\[\text{('13)} \quad 18.6\text{billion m}^3\]
4. Develop Green Tech

**Strategies**

- Strategic Promotion of Green tech innovation
- Strategic Investment in Green R&D
- Core Green technologies
  - LED, CCS, Clean Cars, Renewables

**Indicative target**

Invest in Green tech R&D by government (trn.won)

- ('50) ... 20.0
- ('20) ... 12.0
- ('09) ... 1.95
5. Fostering Green Industries

Strategies

- Resource-circulating economy & society
- Green conversion of industries
- Foster green SMEs
- Build green clusters

Indicative target

- Green goods export in the major industries

- (’50) 35%
- (’20) 22%
- (’09) 10%
6. ‘Greenovate’ Industrial Structure

Strategies

- Foster high tech fusion industry
- High value added service industry

Indicative target

Export in IT fusion industry
- $349 billion ('50)
- $144 billion ('20)
- $75.5 billion ('09)

Export in contents
- $50 billion
- $10 billion
- $5.8 billion
7. Build Green Economy Basis

Strategies

• Invigorate Carbon Market
  - Cap & trade, Emissions related business
• Green Financial Infrastructure
  - Sustainable banking, Green fund
• Eco-tax
• Create green jobs

Indicative target

Domestic Carbon Market

('50) 5 trillion won
('20) 2 trillion won
('09) Getting ready
8. Green Land·Transportation

Strategies

- Expansion of Green Home & Green Buildings
- Green cities
- Expand Eco space
- Green Public Transportation bicycles & Promote Green Cars

Indicative target

- UN Green Model Cities
- Proportion of railway transportation

- 10 ('50) 30%
- 5 ('20) 26%
- 0 ('09) 18%
9. Green Life Revolution

**Strategies**

- Introduce Eco-point system & expand Carbon labeling
- Promote green consumption & green lifestyle
- Promote green growth education & public awareness

**Indicative target**

- Carbon label certified products
- ('50) 4,000 items
- ('20) 1,000 items
- ('09) 50 items
10 Global Green Leader

Strategies

- Enhance int’l cooperation for green growth and climate action
- Increase Green ODA & support developing countries
- Build Green Hub Korea

Indicative target

40% \(\rightarrow\) (’50) \(\rightarrow\) 8th
30% \(\rightarrow\) (’20) \(\rightarrow\) 20th
14% \(\rightarrow\) (’09) \(\rightarrow\) 51st
IV. Beginning of Green Market

- **Samsung**
  - To invest total 23 trn. won until 2020
    - (solar cell, LED, bio-medicine, medical device)

- **LG**
  - To invest total 20 trn. won until 2020
    - (solar cell, next-gen lighting system, smart grid, LED material, cell for fuel cell car, AMOLED, e-paper)

- **SK**
  - To promote development of non-pollution coal, solar cell, hydrogen fuel cell, and green car until 2015

- **Hyundai** and **Kia Motors**
  - To develop environment-friendly automobiles by investing 4.1 trn. won until 2013