



GREEN
GROWTH
KOREA



Creating Opportunities through Green Growth

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U.S.-Korea/Korea-U.S. Business Councils

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Contents



I. About PCGG

II. Imperative for Change

III. Green Growth, Turning Crises into Opportunities

IV. Turning Grand Vision into Real Action

V. Recent Progress in Korea

VI. Challenge Ahead

I. Presidential Committee on Green Growth



Overview

- Established under the direct control of the President
- Implement the national project of 'Low-Carbon, Green Growth'



Tasks

- Coordinate and review low carbon green growth policies
- Setup action plans and policy measures for green growth



Milestones

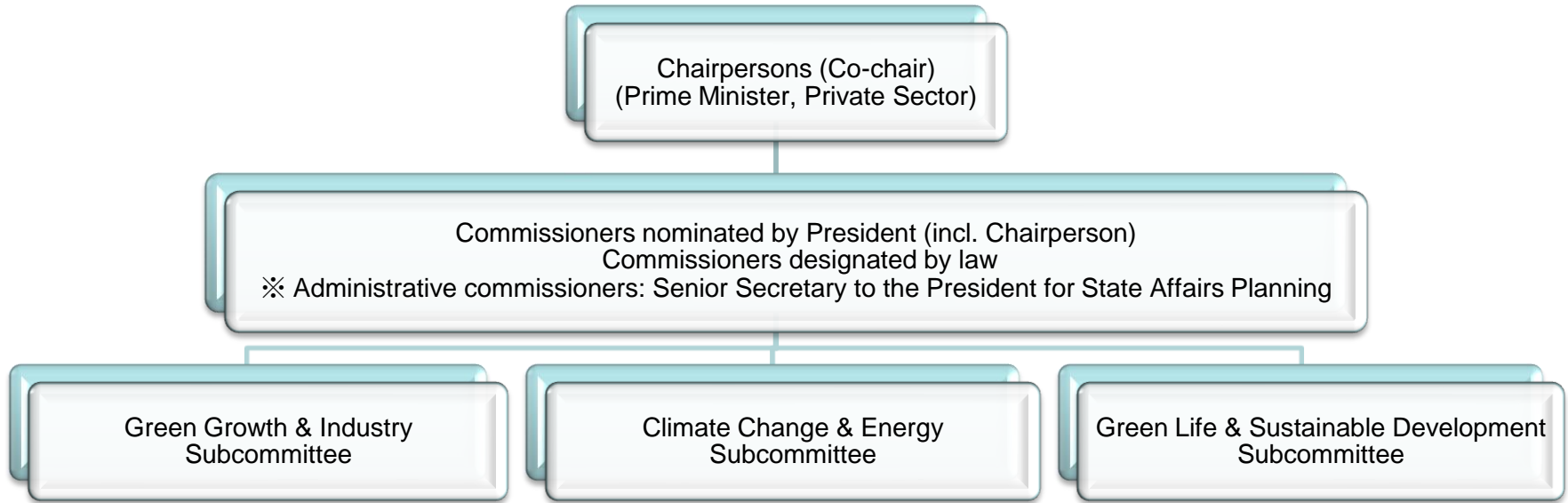
- Dec. 2008 Preparatory TFT organized
- Feb. 2009 1st PCGG meeting (6 meetings has been held)
- Feb. 2009 Government draft of 「Framework Act on Low Carbon Green Growth」 finalized
- Jul. 2009 Five-Year National Plan for Green Growth finalized
- Dec. 2009 「Framework Act on Low Carbon Green Growth」 passed by the National Assembly



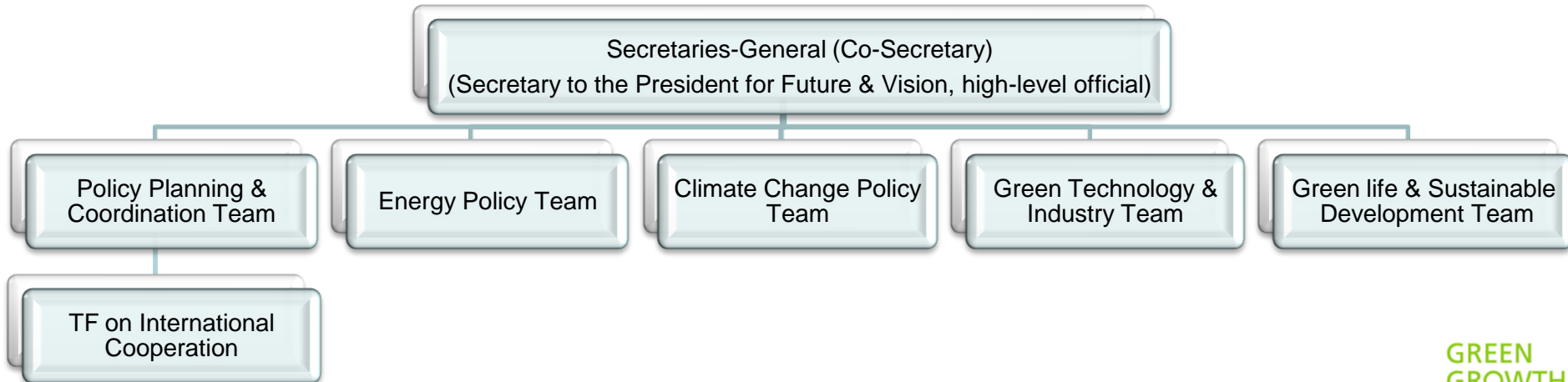
I. Presidential Committee on Green Growth

Organization

Presidential Committee on Green Growth



The Secretariat of the Presidential Committee on Green Growth



II. Imperative for Change

Crises forces 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”

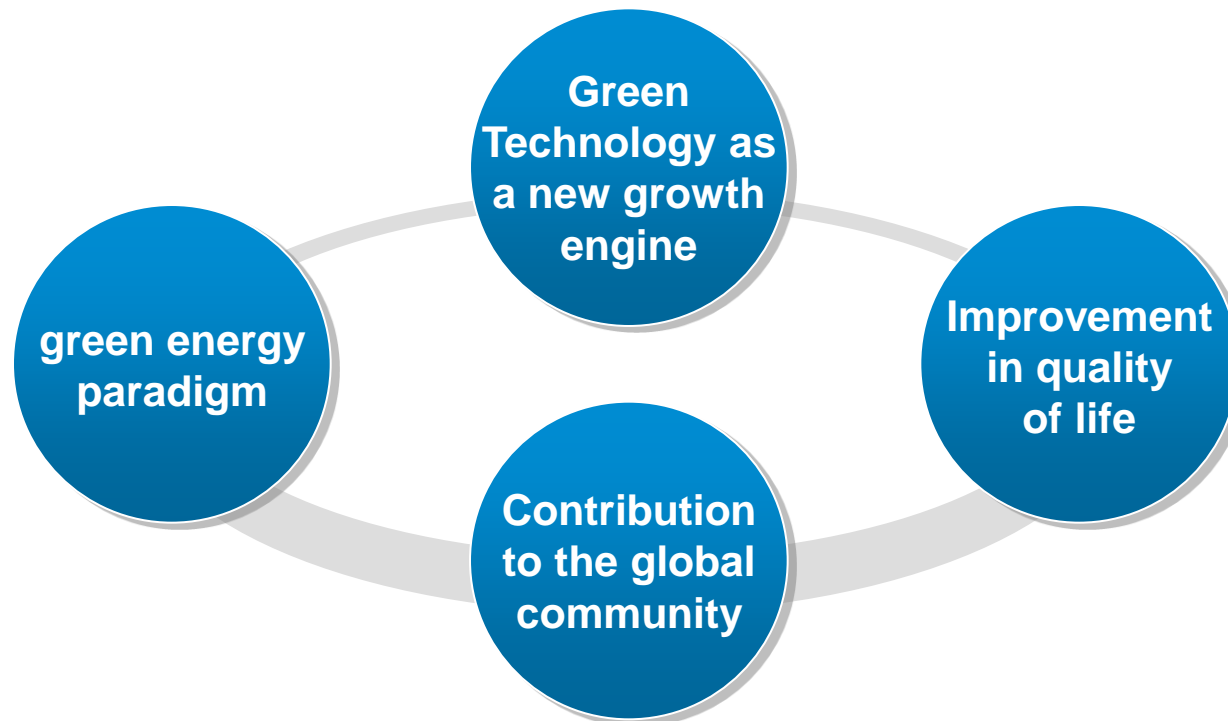
III. Green Growth, Turning Crises into Opportunities

What is Green Growth?

What do we mean by Green Growth?

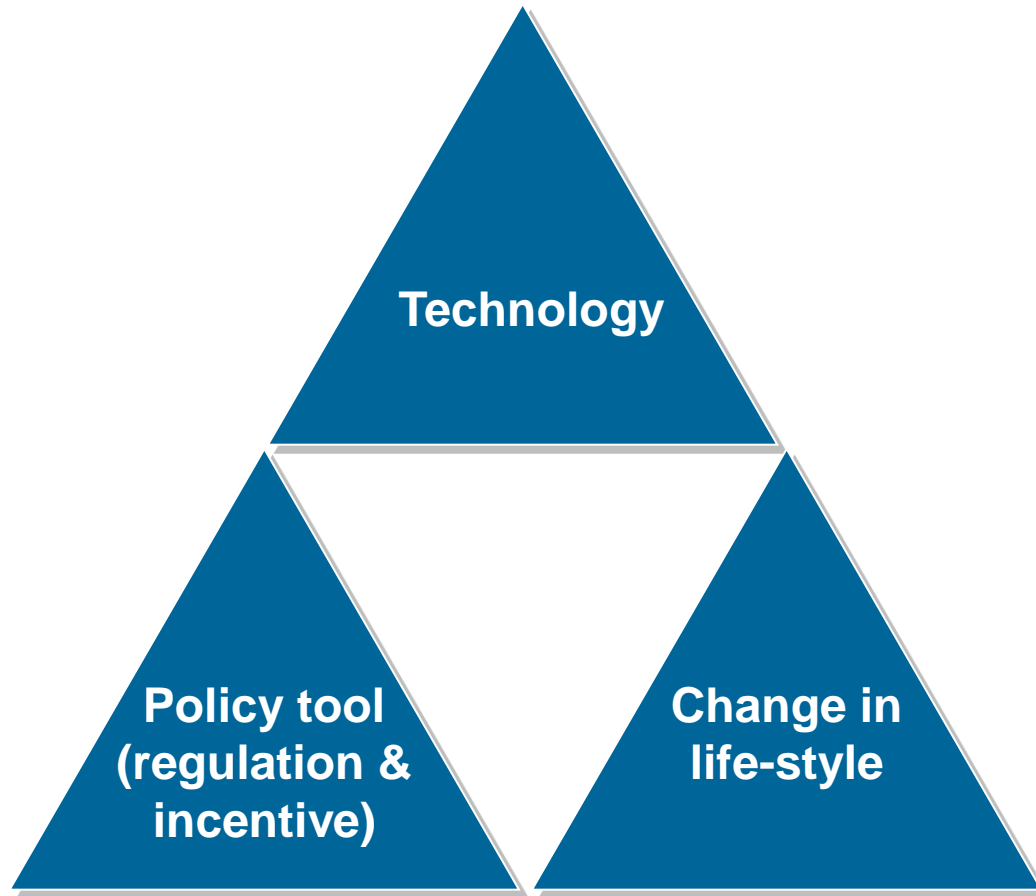
'as we go green - we generate money & jobs'

<Elements of Green Growth>



III. Green Growth, Turning Crises into Opportunities

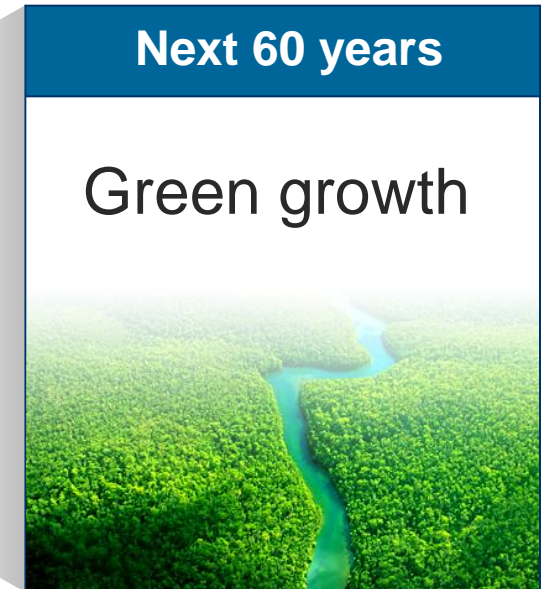
How can we achieve Green Growth?



III. Green Growth, Turning Crises into Opportunities

Presidential Vision

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



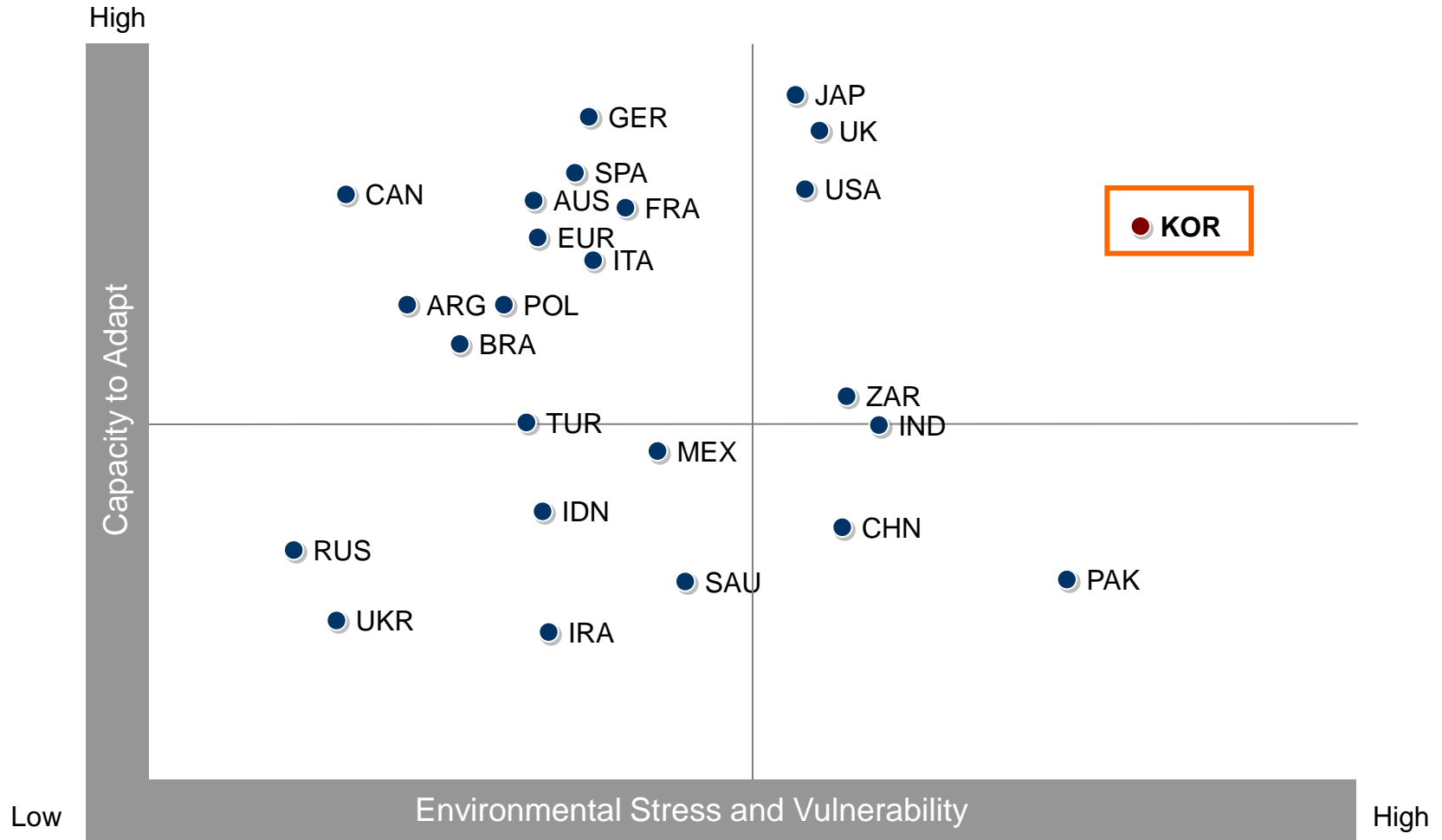
More than just an environmental policy

- a new paradigm of progress
- changing people's behavior and way of thinking

"Low Carbon Green Growth"

III. Green Growth, Turning Crises into Opportunities

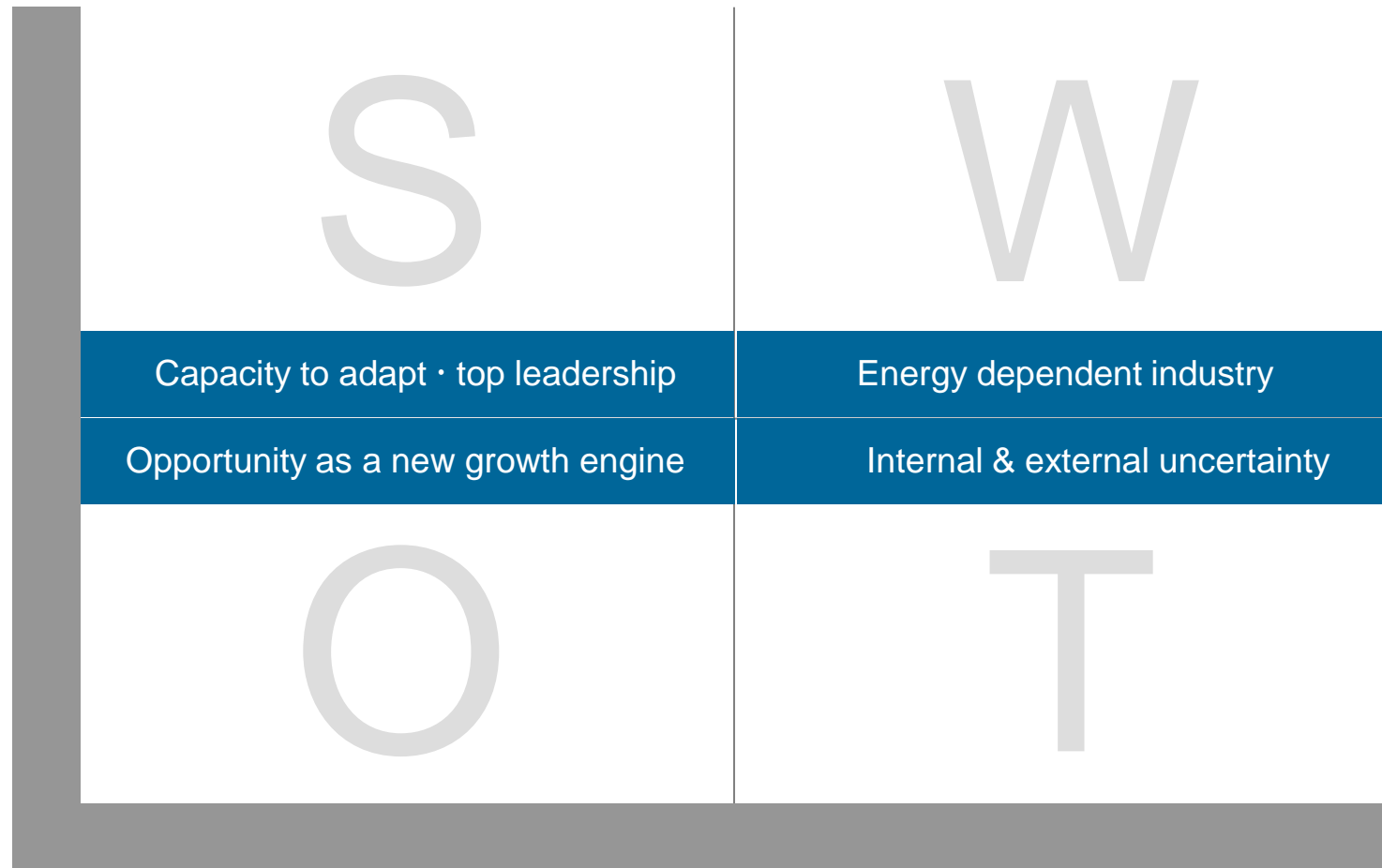
The logic



Source : ESI, Morgan Stanley Research

III. Green Growth, Turning Crises into Opportunities

The logic



III. 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

IV. 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

early ratification of
the Framework Act on Green
Growth

Strategy Plan

- inherits the spirit of the "Economic Development Plan" in the 60~80s
 - * 5 year implementation plans
- new "green saemaueul movement"

Green Budget

- Green New Deal
- Re-orientation of private-public finance toward green (policy, R&D, SOC)

National midterm GHG
reduction target
- set this year -

IV. Turning Grand Vision into Real Actions

Framework Act on Low Carbon Green Growth

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.

IV. Turning Grand Vision into Real Actions

Green New Deal

Background & Key projects

- Green New Deal announced on Jan. 2009 - 9 key projects and supporting projects
- focused on job creation as well as building the foundation for low carbon economy transition

Category	Budget (trillion KRW, %)				Rate of Increase
	Total	'09	'10~'11	'12~'13	
total sum	107.4	17.5	48.3	41.6	10.2
•Adaptation to climate change & energy independence	56.9	8.6	29.2	19.2	14.0
• Creating new engines for economic growth	28.6	4.8	10.7	13.1	9.4
• Improvement in quality of life and enhanced international standing	27.9	5.2	10.5	12.2	3.6

IV. 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

New Engine for Growth

Enhanced Quality of Life & Int'l Leadership

10 Key

Agenda

- Build Low Carbon Society

- Enhance Energy Security

- Strengthening Climate Actions

- Develop Green Tech.
- Foster Green Industry

- Greenovate Industrial structure

- Lay Foundation for Green Economy

- Green Transportation & Land Management

- Green Life Revolution

- Global Green Leader

Public sector's own investment on infrastructure and R&D technology

- Infrastructure: improving mass-transit system, water quality, green-home project, etc.
- R&D in low emission vehicles

Regulation along with Incentives

- RPS (Renewable energy Portfolio Standard)
- Eco-friendly Tax System

Moral Suasion

- Carbon point, carbon cash-back

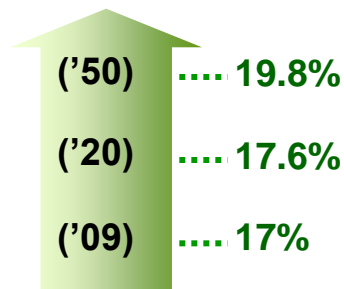
1. Low Carbon Society

Strategies

- National GHG info Management System
 - set emissions reduction goal
 - enhance carbon visibility
- Encourage Carbon-3R Activities
- Inter-Korea Cooperation for the Green Korean Peninsula

Indicative target

Carbon-3R Rates



Reduce GHGs



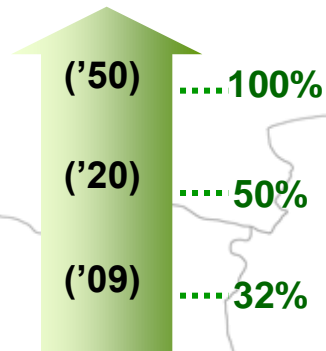
2. Energy Security

Strategies

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

Indicative target

● Enhance Energy Independence



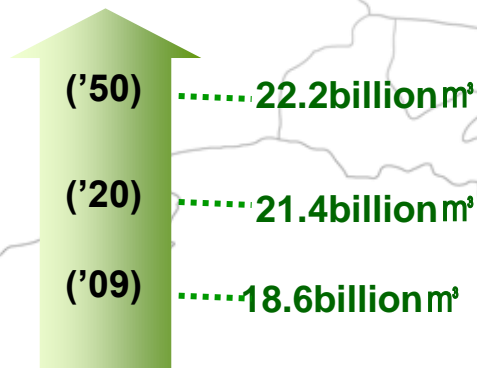
3. Strengthen Climate Actions

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



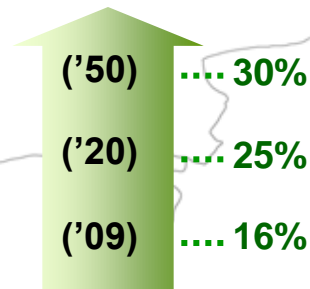
4. Develop Green Tech

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



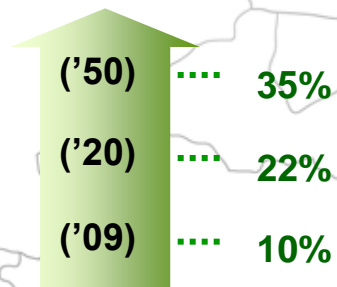
5. Fostering Green Industries

Strategies

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

Indicative target

Export in Green Products



6. 'Greenovate' Industrial Structure

Strategies

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

Indicative target

● Export in IT fusion industry



\$349billion ('50)
\$144billion ('20)
\$ 75.5billion ('09)

● Export in contents



\$50billion
\$10billion
\$5.8billion

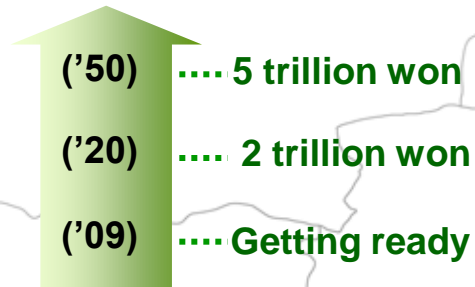
7. Build Green Economy Basis

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



8. Green Land-Transportation

Strategies

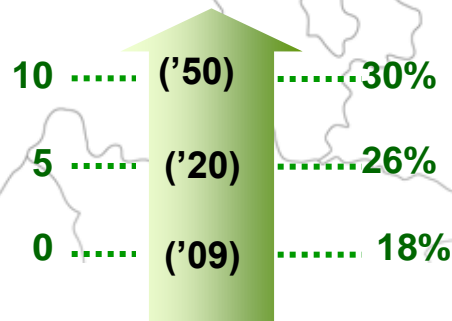
- Expansion of Green Home & Green Buildings
- Green cities
- Expand Eco space
- Green Public Transportation bicycles & Promote Green Cars

Indicative target

UN Green Model Cities



Proportion of railway transportation



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

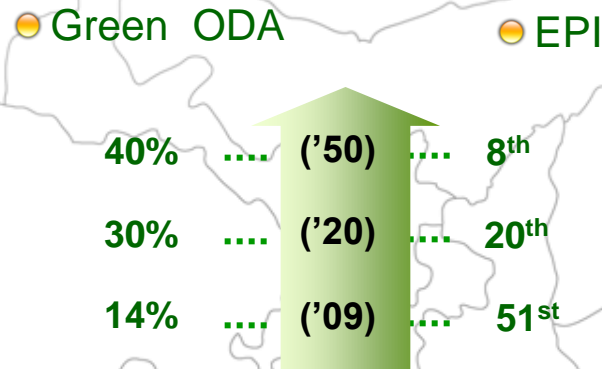


10 Global Green Leader

Strategies

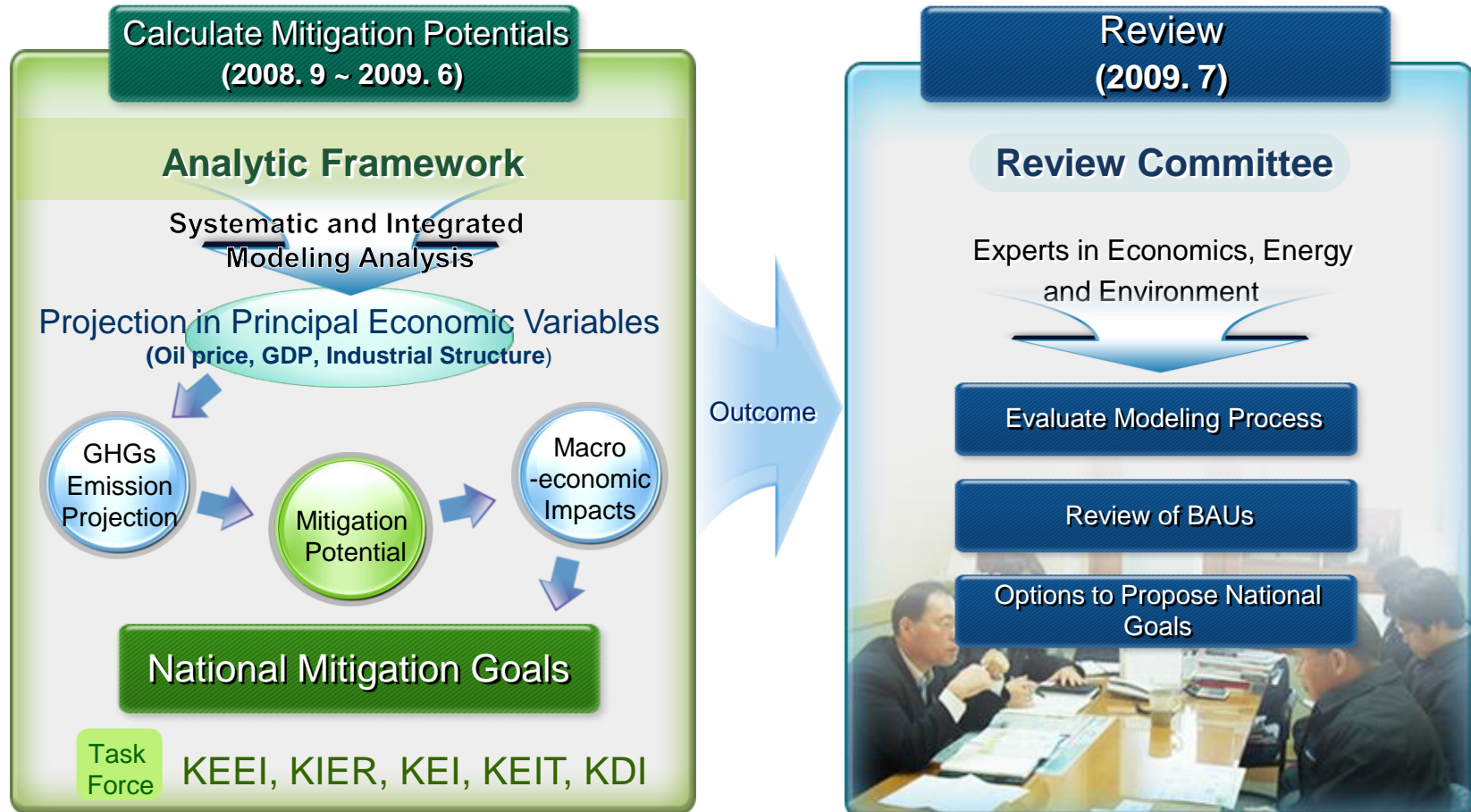
- Enhance int'l cooperation for green growth and climate action
- Increase Green ODA & support developing countries
- Build Green Hub Korea

Indicative target



Analytic Framework

Systematic Approach by Research Team, Review Committee and Public Hearing



V. Recent Progress in Korea

Mid-term Reduction Target

Mid-Term Reduction Goals and Measures

Scenario	Goals w.r.t. BAU	Criteria in Policy	Exemplary Mitigation options
1	Δ21%	Cost Effective Policy and Technology Option	<ul style="list-style-type: none"> ▪ Promotion of Green Homes, Green Buildings ▪ Rapid Penetration of Efficient Electric Equipments and Lightings(LED) ▪ Shifts to Low Carbon – High Efficient Transportation System ▪ Innovation in Manufacturing Processes into Green Process ▪ Promotions of Renewables and Nuclear Power ▪ Introduction of Smart-Grid
2	Δ27%	Mitigation Cost Up to \$50/TonCO ₂ -e	<ul style="list-style-type: none"> ▪ Destruction of F-Gases ▪ Promotion of Hybrid Cars ▪ Increase in use of Bio Fuels ▪ Application of CCS in Power Plants
3	Δ30%	Upper Bound of Reductions Range by EU	<ul style="list-style-type: none"> ▪ Introduction of Electric and Fuel Cell Vehicles ▪ State of the Art Efficiency Technology and Equipments in Households

* Sinks are not included.

Impacts on GDP and Consumption

	Scenario 1	Scenario 2	Scenario 3
GDP	-0.29%	-0.37%	-0.49%
Consumption per Household	115.8 USD	147.8 USD	193.3 USD

Setting National Mid-term Reduction Goal(2009.11.17)

Decision Made on Mid-Term GHG Reductions Goal by 2020 at the Cabinet Meeting:
To Cut GHG Emissions by 30% from BAU



Cabinet Meeting

Decision Made for the Bigger National Interest (Historic Cabinet Meeting)

Removing Trade Barriers, Enhancing Energy Security, Preoccupying Global Green Markets

Transformation to Green Lifestyle with Concerted Efforts Among Citizens, Firms and Governments

Creating More Conducive Atmosphere for all Countries' Active Participation

Unilateral and Voluntary Goal

- Announcement of Unilateral and Voluntary Mitigation Goals to Share the Global Mitigation Efforts

- Proactive Participation in Global Efforts Against Climate Change as an Early Mover
- Implementation of the Goals Independent of the Outcome of COP 15 in Copenhagen

- Goal Set at Maximum Level of GHG Mitigation Potential of Korea

- Core Quantitative Target for Low Carbon Green Growth
- Accelerating Transition to Low Carbon Green Growth Economy with Implementation of Ambitious Goal



Background & Goal

- Korea announced a plan to launch East Asia Climate Partnership to help developing countries in East Asia combat climate change
- To create win-win synergy between the climate and the economy in East Asia
 - By exploring **Low Carbon Green Growth** paradigm
 - By promoting regional adaptation & response to adverse impacts of climate change



Implementation

- Focus on Cooperation – energy efficiency, clean & renewable energy, sustainable water & Forest management
- Implementing Institutions – KOICA in consultation with East Asian Countries and Int'l organizations



1st East Asia Climate Forum

- High-level economy climate forum participated by ministerial-level officials from 5 East Asian countries and high-level representatives of ADB, UNEP, ESCAP and green experts from US, UK, and Japan
- Adopted **Seoul Initiative for Low Carbon Green Growth in East Asia**

VI. Challenges Ahead

Continued support from the public

- the key to success of Green Growth

Support from business community

- meeting its needs to adapt & change
- setting a price on target
 - : emission trading & carbon tax



IV. Challenges Ahead

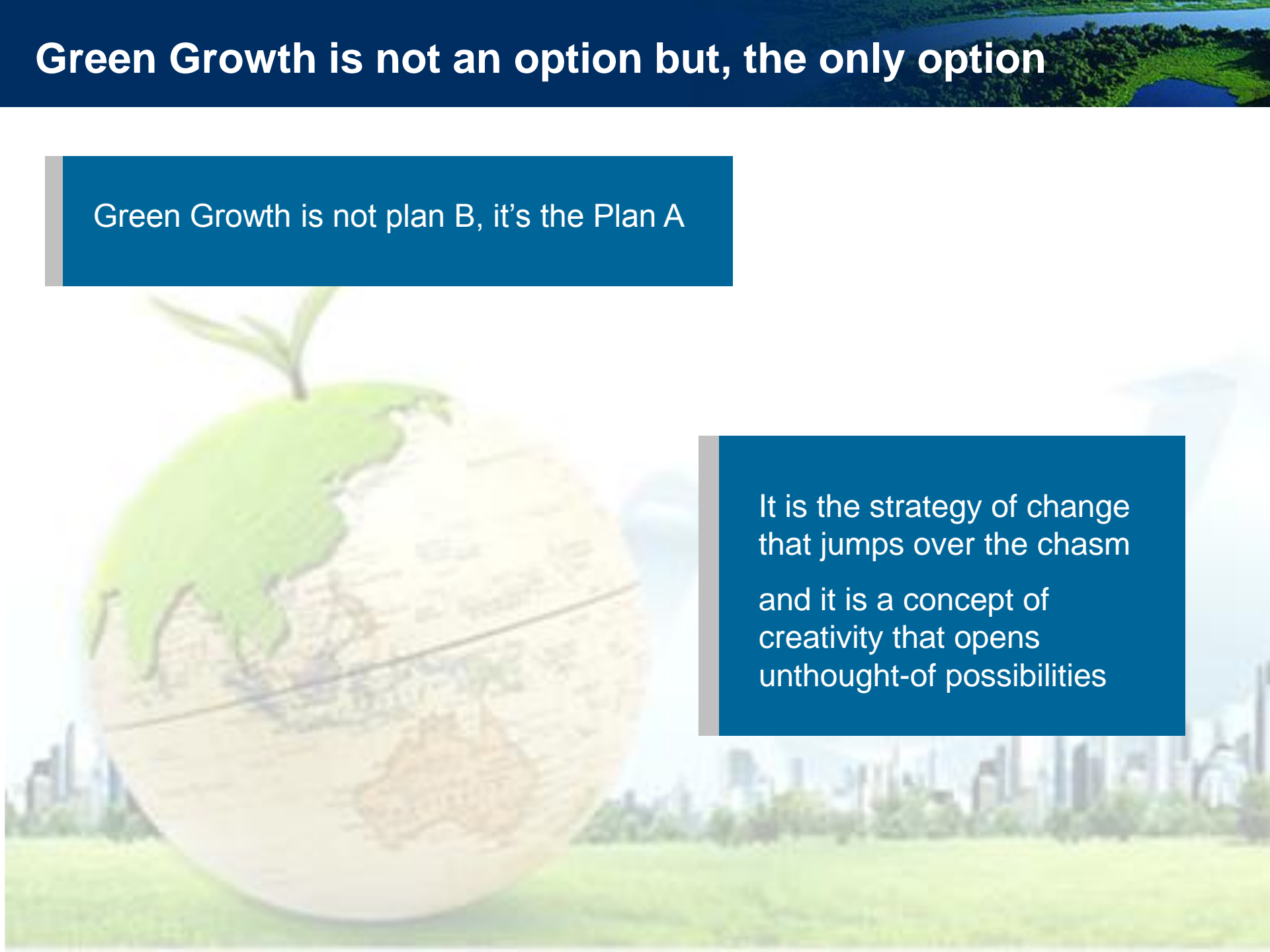
**M.L. King didn't stir people to action by proclaiming,
“I have a nightmare.”**

A. Giddens, 『*The Politics of Climate Change*』



Green Growth is not an option but, the only option

Green Growth is not plan B, it's the Plan A



It is the strategy of change that jumps over the chasm and it is a concept of creativity that opens unthought-of possibilities