

[Changing Vision into Action]

Leadership on Sustainable Development and Climate Change

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I. Background



Background

- **Global warming and climate change have become some of the most critical and pressing issues for mankind**

- From 1992-2010, global emissions rose 36% (UN, 2012)
- **Commitments on climate change have not yet been fully implemented**



- **Increasing need for sustainable development**

- International agreement: AGENDA 21 at the Rio Summit in 1992
- Evaluation in 2012 (Rio+20): only 5 of 40 chapters are deemed good
- **Sustainable development has had limited success, included in South Korea**



II. Vision into Action

- Korea's experience

Korea's Experience

In 2009, **the Committee on Green Growth** was established

- **Purpose**

- To develop and implement the national plan and strategies on Green Growth and Climate Change



- **Members**

- 40 people
(17 from government, 21 nongovernmental members
: Ministers, environmental NGOs, academics, the private sector, etc.)

➤ **Strong Presidential Leadership on Low-carbon Green Growth**

❖ **The Presidential Commission on Sustainable Development** (since 2000)

- First attempt to create a coordinated environmental body among the Ministries to develop and implement the national plan and strategies on sustainable development (Members are about 50 people - Ministers, environmental NGOs, academics, the private sector, etc.)

Low-carbon Green Growth

- **Strategies and policy directions**

Strategies	Ten policy directions
Adaptation to climate change and energy self-sufficiency	<ol style="list-style-type: none">1. Effective reduction of greenhouse gas emissions2. Reduction of the use of fossil fuels and enhancement of energy self-sufficiency3. Enhancement of the capability to adapt to climate change
Creation of new growth engines	<ol style="list-style-type: none">4. Development of green technology for the creation of new growth engines5. Greening of traditionally-supported industries and nurturing green industries6. Advancement of the industrial structure7. Laying the foundation for a green economy
Improvement in the lives of people and enhancement of national prestige	<ol style="list-style-type: none">8. Creation of a green homeland and transportation9. Green life revolution10. Becoming a role model for the international community as a green growth leader

The Five-Year Plan(2009-2013) : Outcomes and Issues

- **Outcomes**

- Provision of the Green Growth Framework and long-term plan
- Contributed to the public's understanding of climate change and green growth
- Built social infrastructure to support Green Growth
 - ✓ Legislation : Act on low carbon, green growth, Act on carbon emissions trading
 - ✓ Green Growth Triangle : GCF (Funding), GGGI (Strategy), GTC (Technology)
- Encouraged green energy, green technology and green industry
 - ✓ e.g. Smart grid, LED, Litium secondary battery, etc.
 - ❖ Smart Grid is a next-generation electrical network that optimizes energy efficiency by allowing the supplier and consumer to exchange electricity information in real time

- ❖ **Emerging Issues**

- Continuing pace of climate change and increasing extreme weather events
- Increasing energy demand due to development and responses to extreme weather

Current Priorities

- **Continuity** of the green growth strategy and plan
- **Provision of scientific and technical information based on region-specific data**, including short- and mid-term impacts to everyday life
- Empowerment to the **coordination body** to ensure more efficient and effective operation
- **Bottom-up strategy**
Participation of the public and local government at the implementation stage
- **Mid-level officers' active participation**





III. Activities of APCC related to Climate Change



Overview of the APEC Climate Center

In **2005**, during the 13th APEC Economic Leaders' Meeting in Busan, Korea, APCC was formally launched

➤ **Mission**

- **Climate information products and services**
- **Interdisciplinary research** for applying climate information to benefit society and end-users
- **International cooperation** and **capacity building** to support climate prediction and adaptation among member economies
- ❖ **To cope effectively with climate-related problems, it is crucial to provide **the most reliable and relevant climate change information** to local decision-makers and stakeholders **in a suitable format** to inform their planning and decision-making**



Activities of the APEC Climate Center

- **Climate information**

- Seasonal temperature and precipitation outlook · Drought and flood monitoring
- 6-month lead coupled MME outlook (ENSO, SST, IOD)
- Subseasonal forecasts to predict intraseasonal climate volatilities

- **Societal applications**

The application of region-specific data, derived from global climate change scenarios, to various sectors is being carried out around the world

- ✓ **[Cambodia] APCC-CARDI Project**

“Strengthening Climate Resilience of the Agriculture Sector in Southeast Asia through the Development of an Integrated Modeling Framework”

- ✓ **[Indonesia & Malaysia] APCC-Asia Pacific Network (APN) Project**

“Toward a Fire and Haze Early Warning System for Southeast Asia”

- ✓ **[Pacific Islands] APCC-Pacific Island Countries (PICs) Project**

“Strengthening Capacity for **Climate Prediction and Climate Change Adaptation** in the Pacific Islands”

→ A symposium will be held in 2014 to discover the **specific needs of the Pacific Island countries** regarding their responses to climate change

Activities of the APEC Climate Center

- **Capacity building programs**

- ✓ **APEC Climate Symposium (APCS)**

- Highlights and shares state-of-the-art climate prediction techniques, as well as applications of climate information for social welfare and economic prosperity
- In 2013, “Regional Cooperation on Drought Prediction Science to Support Disaster Preparedness and Management” (120 people from 20 countries)

- ✓ **Training Programs** ('11-'13: 153 people from over 40 countries)

- Enhance the capacity of scientists from developing countries' to predict and apply climate information through expert training

- ✓ **External Training Programs**

- In response to requests from developing countries and institutional partners, we support training programs in the requested countries
- Singapore (2011), Bangladesh (2012), Costa Rica (2012), Thailand (2013)

- ✓ **Young Scientist Support Program (YSSP)** ('11-'13: 44 people from 17 countries)

- Supports the research of outstanding young scientists from developing countries as visiting scientists for a period of approximately 3 months

APCC Mid-term Development Plan 2013-17

Climate science for **sustainable development** and
improvement in quality of life

Goal

- Bridging the gap between climate science and the community of end-users
- Amplifying APCC's contributions through national and international cooperation

Strategy

**Production and
Distribution of
User-defined Climate
Information**

**Implementation of
Practical
Inter-Disciplinary
Research**

**Reinforcement of
International Cooperation
and Public Policy
Partnerships**

THANK YOU!