

# Supporting Efforts to Enhance Climate Change Adaptation in Korea

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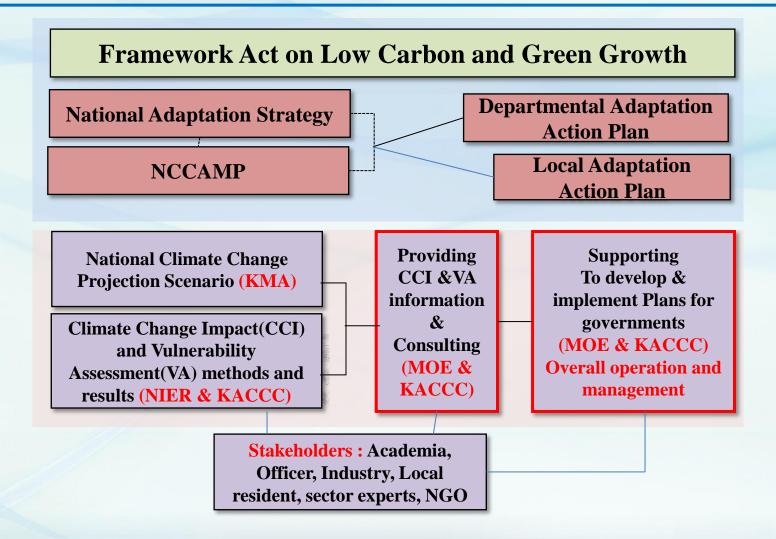
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- Support for establishing & implementing government plans : Central, Provincial, Local
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# A supporting system and related organizations for development of CCA in Korea



<sup>\*</sup>Climate Change Adaptation(CCA), Korea Meteorological Administration(KMA), National Institute of Environmental Research(NIER), the Ministry of Environment (MOE)

# Legal Bases and Roles of KACCC

# KACCC as a Legal and National Center for Climate Change Adaptation

#### **Establishment of KACCC**

- KACCC was established on July 1, 2009, based on "the Ministry of Environment Instruction No. 850".
- The items on the operation of KACCC was legalized by "the Clean Air Conservation Act" (Revised on May, 2012).
- KACCC is an agent of the Ministry of Environment and works closely with the MOE.

#### Main Roles of KACCC

- Support development and implementation of CCA policy and plans
- Provide information & enhance awareness on CCA
- Establish national and international networks
- Carry out researches regarding CCA

### Supporting Task of KACCC





Dissemination of Adaptation Awareness and Information

Operation of Climate Change Adaptation Information System

Public Awareness and PR on CCA

Support for Adaptation Policy

Research for Adaptation Policy

Support for Adaptation Policy Development and Implementation

Domestic & International Cooperation

Domestic Cooperation on Adaptation

International Cooperation on Adaptation

Leading Policy Development and Research for Enhancement of National Adaptation Capacity

# Support for Establishing & Implementing Government Plans : Central, Regional, Local

# Support for Establishing the NCCAMP



- Support to organize and operate an expert forum, a working level execution team, and a supervisory meeting to prepare a draft
- 2. Play a role of hub of actors, exchanging information and collaborating among departments
- 3. Publish and distribute the NCCAMP (in 5 year term)
  - \*NCCAMP: National Climate Change Adaptation Master Plan



[A printed copy of the NCCAMP and contents of the brochure]



### Support for Implementation of NCCAMP

- Organize the committee of an expert group for each area.
- 2. Support to set implementing and monitoring systems.
- 3. Provide a guideline how to assess the plan.
- 4. Review the NCCAMP and the annual action plan of each department.
- 5. Help to organize the departmental collaboration committee.

# Support for mega-city and provincial level CCA Korea Environment Institute Corea Environment Institute Institute Corea Environment Institute Institute Institute Institute Institute Institute Institu

- Support to establish and to operate CCA action plans in the mega city(7) and province(9) level
  - Help to organize and run the efficient support system for establishment and operation of the action plan
  - Provide training and host workshops to strengthen adaptation capacity of regional governments
  - Conduct VA and provide the results to prepare action plans

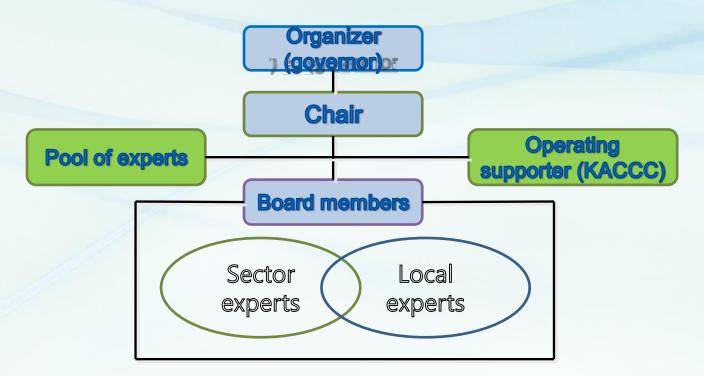




# Support for Local (community) Level CCA



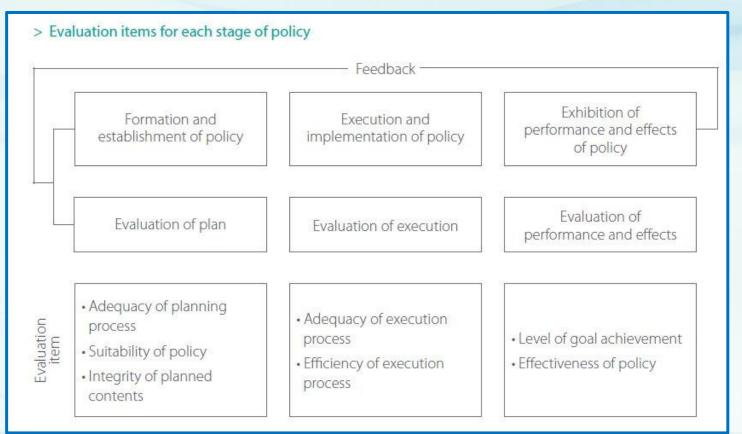
- 1. Help to conduct vulnerability assessments and support the establishment and operation of CCA action plans at local level
- 2. Provide the results of VA to prepare the action plan in the trial regions
- 3. Help to organize the advisory board (40 specialists for 10 sectors)



[Organization of the advisory board (TFT) to prepare the plan by local governments]

### Support for Local (community) Level CCA

- Korea daptation Center for Climate Change
- Systematize policy management and mainstream adaptation policies
- Monitoring and evaluation of adaptation policies
  - Build inventories of policies for monitoring
  - Suggest <u>evaluation items</u> for each stage of policy



# Information Providing Service

## The Role of Information Provider Korea Environment Institute



### Develop a supporting system for providing information

- Provide a supporting system for web-based adaptation policies and inventory search service
- Open the wizard page for adaptation to support the establishment of the adaptation policies

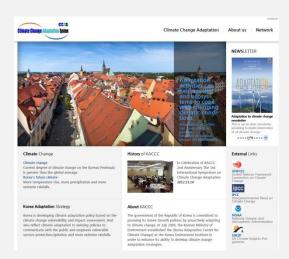


Supporting System for Climate Change Adaptation Policy (http://adapt.kei.re.kr)

### The Role of Information Provider



- Construct PR homepage and renew Climate Change Adaptation Portal (Korean/English)
  - Construct KACCC homepage in 2009
  - Renew it in 2010
  - Construct a portal of climate change adaptation in Korean/English in 2011
- Build a Climate Change Adaptation System
- Build a pilot site for the information delivery system in 2010
- Build "Climate Change Adaptation Intelligence System" in 2011



Climate Change Adaptation System in 2011 (http://ccas.kei.re.kr)

# Supporting Activities: Networking

# Domestic Adaptation Networking



#### \* Reinforce to collaborate with domestic organizations in Korea

- Sign MOU with them and set a foundation to reinforce partnerships







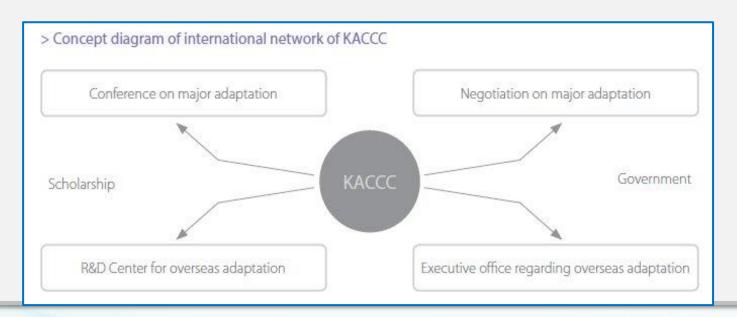
#### Share research results on CCA with them

- Host workshops to share achievements on adaptation researches
- Publish the research source book jointly with various organizations (2011)

# International Adaptation Networking



- Participate in the conference and international adaptation meetings and cooperate with delegates regarding CCA
  - Sign MOUs with overseas organizations related to adaptation
  - Visit, invite, interview, and try to execute collaboration with overseas organizations whose specialty is adaptation.
  - Try to participate major international meetings and support government level negotiations related to adaptation



### International Collaboration for Capacity Building Korea Environment Institute Korea Adaptation Center for Clarage

- Review the current international adaptation issues and host international symposium
  - Examine latest trends of adaptation (document survey)
  - Host international symposium on CCA (2009~2012)





# Supporting Activities : Public Relation

### Public Awareness: the Goal of PR



- Publish and distribute of adaptation newsletters (Korean/English)
  - Publish the Korean/English version of the newsletter each quarter since last year
  - Contribute to enhance awareness and understanding of climate change adaptation through the publication of newsletter



# Expansion of general public awareness on adaptation through PR



### Produce adaptation PR media and publicize information

- Select core adaptation information, make a point of it, and get the attention through distinct style and design.
- Expand PR contacts for the information using various distribution channels, such as academic events, international meetings, and field PR with the produced PR materials (video clip, brochure, etc.)



### Supporters of CCA





### Operate CCA Supporters

- Develop training materials that are specifically customized to climate change adaptation using various ideas and teaching methods
- Improve the response on education and concentration level through customized classrooms with help of supporters



<sup>\*</sup>Supporters are composed of university students who participate in KACCC's PR program and educate elementary school students on CCA.

# Capacity Building and Education

### Capacity Building and Education



### Train local government officials and run the expert forum

- Support adaptation policies and reinforce capacity through experts' forum on CCA
- Reinforce capacity of people who is in charge of adaptation of local governments through the training and education regarding the establishment of action plans



### Capacity for Industries on CCA



- Improve awareness of CCA in the <u>private sector</u> and revitalize the execution of adaptation plan for <u>industries</u>
  - Hosted the forum for finding new industries and promising industries regarding CCA (2011)
  - Hosted the workshop to improve the capacity of CCA for the industries (2012)







workshop

# Support reinforcement of adaptation capacity of Korea Environment Institute ASEAN countries

Train government officials in ASEAN on climate change adaptation

Establish adaptation network with ASEAN regions and secure global leadership by training government officials in ASEAN on climate change adaptation (2010~2012)





# **Adaptation Researches**

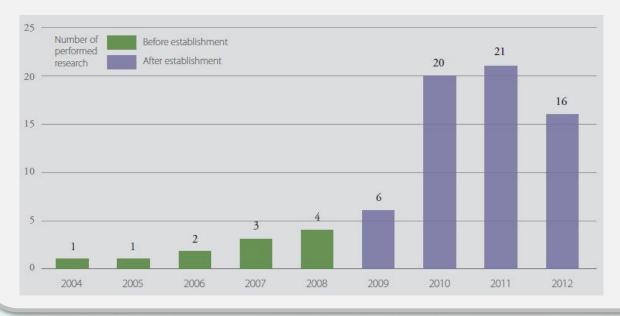
### Researches on CCA





### Adaptation researches had been increased since 2009

Total number of research projects for five years before the establishment of the center (2004–2008): total of  $11 \rightarrow 63$  research projects are either completed or ongoing three years after the establishment of the center



Change in the research execution performance before and after the establishment of the center

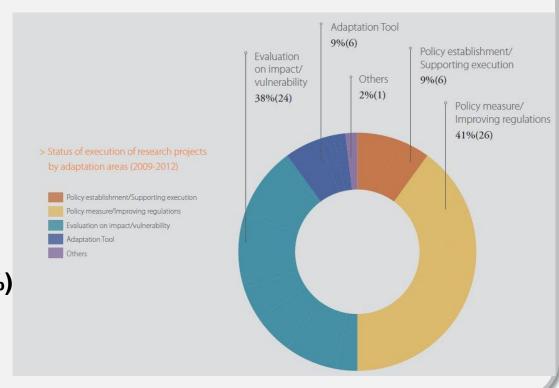
### **Areas of Researches**





Status of execution of research projects by adaptation areas (2009–2012) (all in the web site)

- Policy measure/ improving regulations 26 (41%)
- Evaluation on impact/ vulnerability 24 (38%)
- Adaptation tool 6 (9%)
- Policy establishment/ supporting execution 6 (9%)
- Others 2 (2%)



Future Challenges...





#### **Support Direction for Adaptation**

- Support for the policy on the private sector and vulnerable social groups will be focused.
- Adaptive capacity to impacts by extreme climate change should be enhanced.
- Our support system should consider that climate change adaptation should be mainstreamed in national security and resource management.
- We should support new business opportunity induced by climate change to be discovered and nurtured.

#### Reinforcement of Adaptation Researches

- R&D on adaptation should be reinforced for more effective and efficient policies without insufficient scientific researches and be more focused to improve policy implementation and to develop measures.
- Further researches on risk management strategies responding to climate change should be conducted.
- Studies on climate change impacts and vulnerability assessment should be improved to reduce uncertainty and to upgrade adaptation policy.





#### Leap forward to Hub of Adaptation Network

- Cooperative researches and projects with national and international adaptation organizations should be enhanced. A successful module needs to be developed through collaboration among them.
- An integrated climate change adaptation information supporting system should be developed.

#### Reduce barriers to implement adaptation practices

- Reduce uncertainty and lack of knowledge about climate impacts
- Promote short-term approach to impacts, costs and benefits of adaptation measures
- Raise lack of political will and public support
- Support to resolve shortage of financial and human resources for adaptation
- We should endeavor to improve efficiency of researchers and practitioners' performance.



# Thank you for your attention!

