

16th AIM International Workshop, NIES

*What we have done last 20 yrs,
What we will do in next 20 yrs*

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1 Introduction

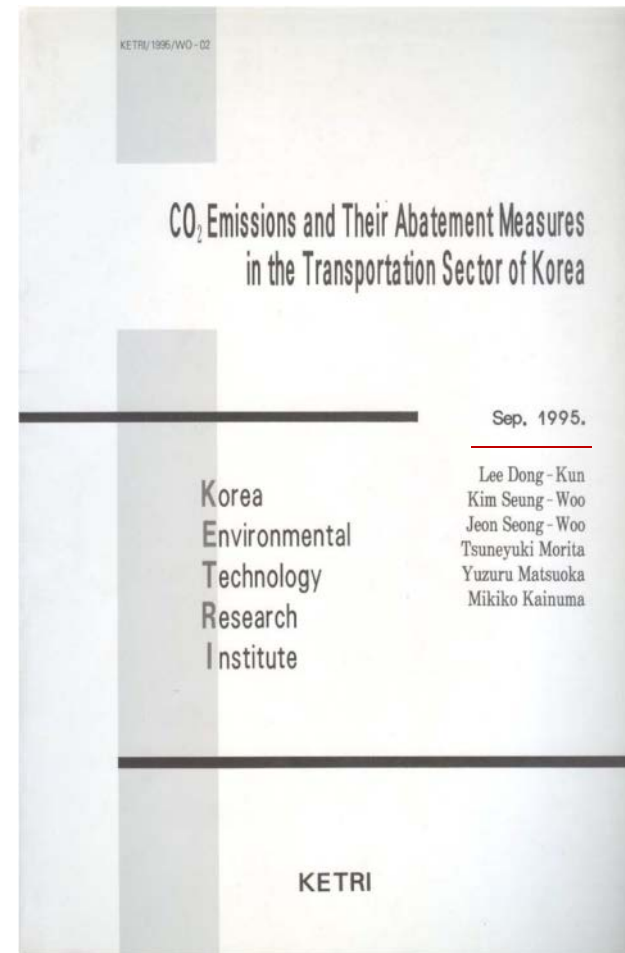
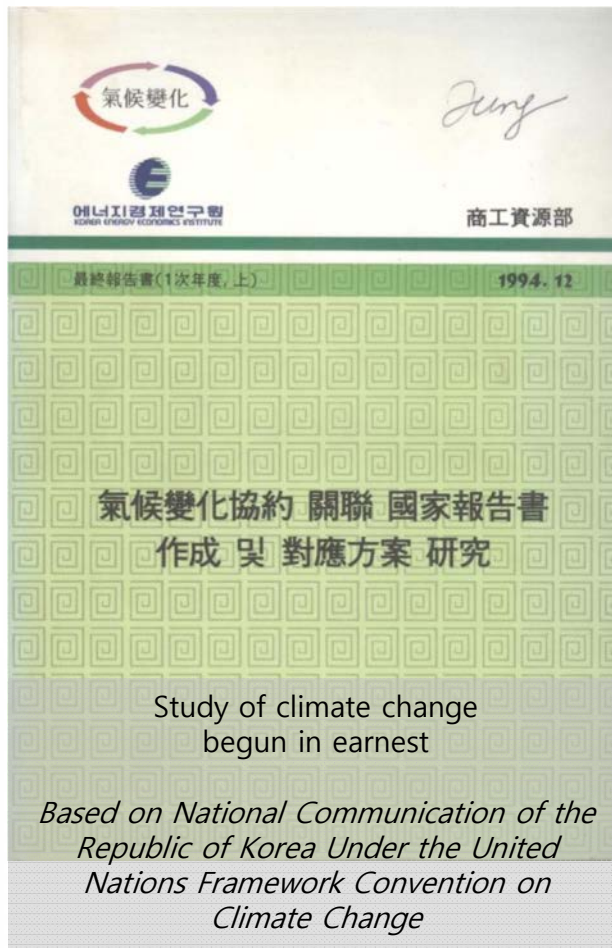
*AIM's achievements
over the past 20 years*

Development of AIM enduse model

2 last 20 yrs

2.1 Before climate change was regarding a national policy

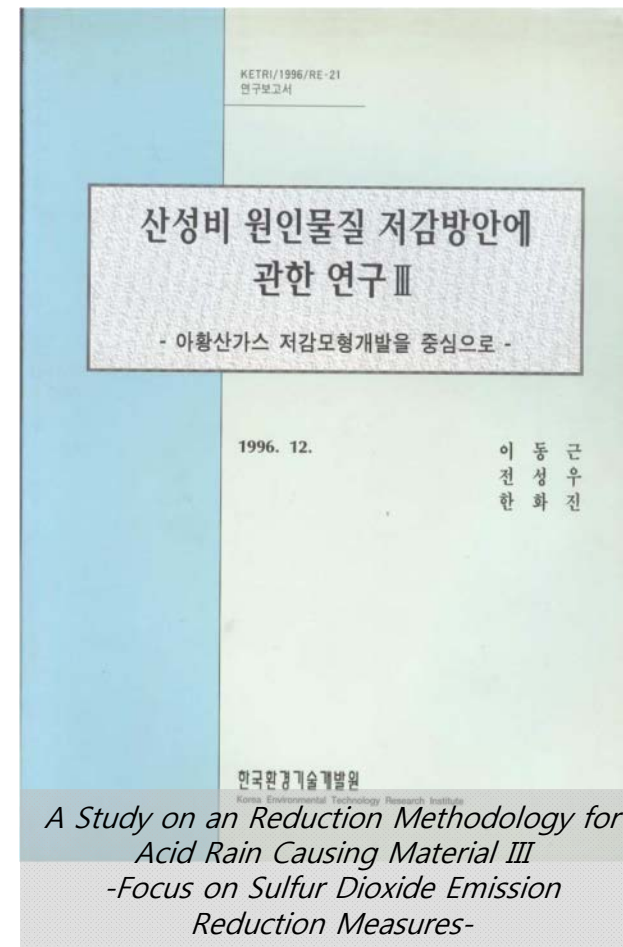
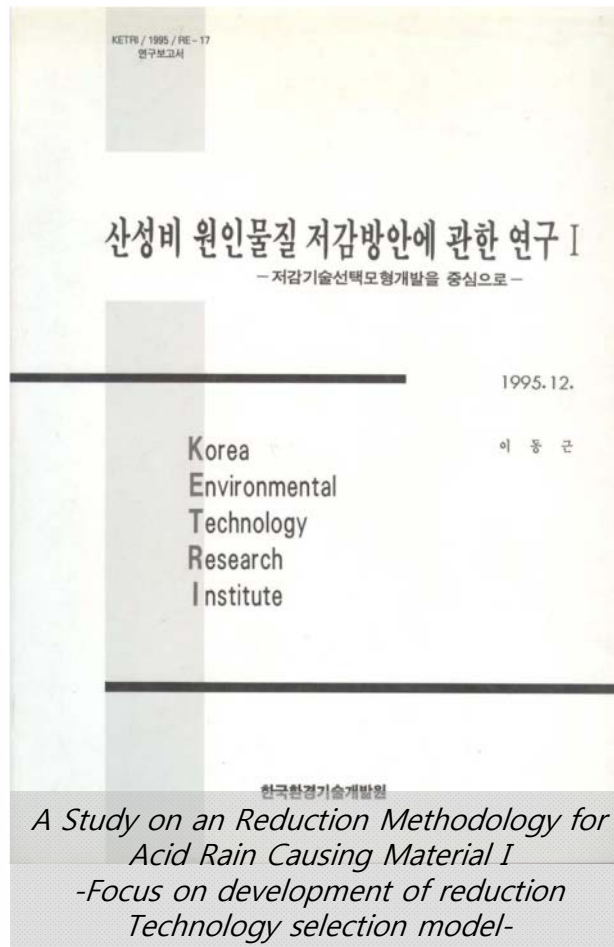
In the beginning, we only studied and researched using AIM models.



2 last 20 yrs

2.1 Before national interest in climate changes

AIM was used in *the Studies on an Reduction Methodology for Acid Rain Causing Material*
We also used AIM models *to reduce CO2 emissions of Korea's major private enterprises*
such as POSCO and LG Electronics.

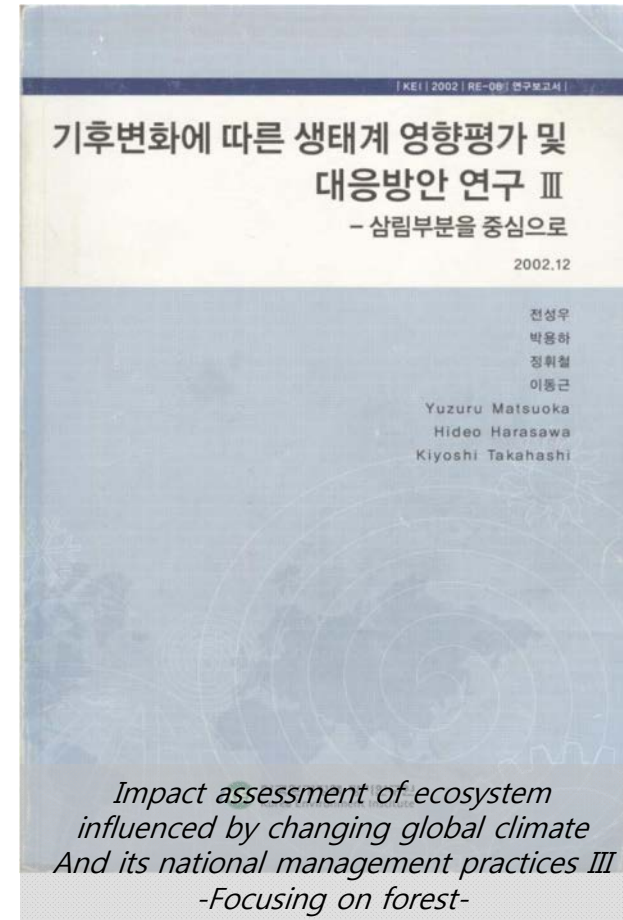
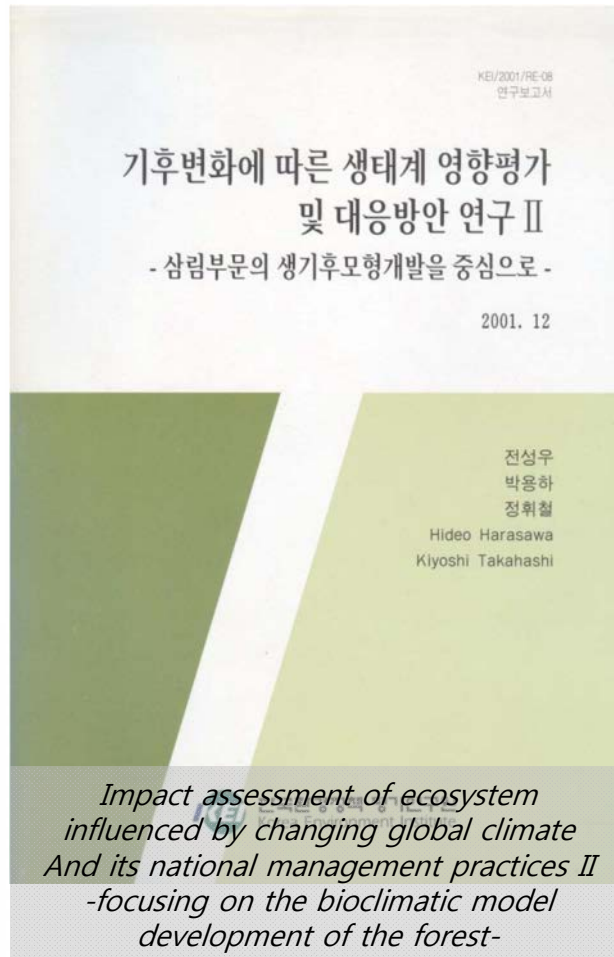


2 last 20 yrs

2.1 Before national interest in climate changes

AIM was used in

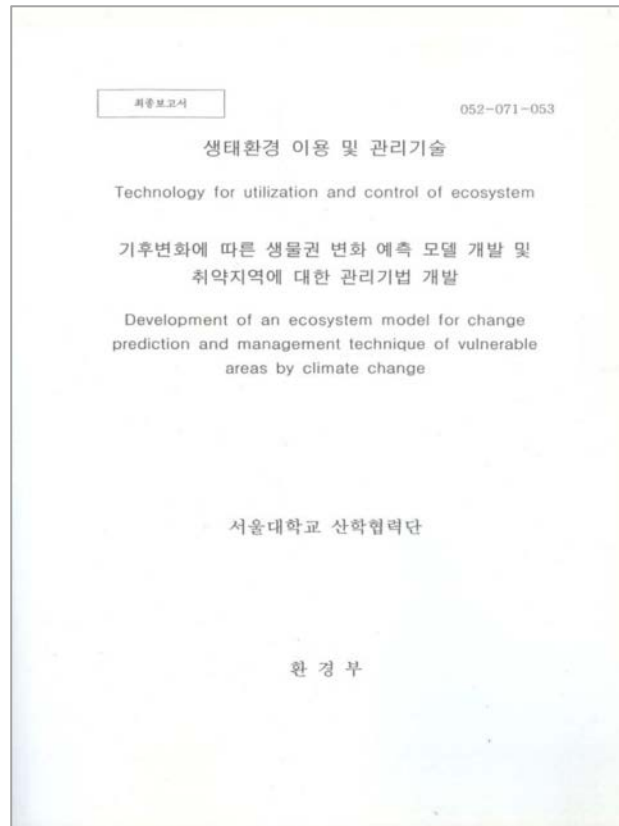
Impact assessment of ecosystem influenced by changing global climate



2 last 20 yrs

2.2 After national interest in climate changes

Since 2007, there has been a national interest in climate changes.
In regards to the impact of global warming and environmental vulnerability,
***“Development of an ecosystem model for change prediction and management
technique of vulnerable areas by climate change”.***

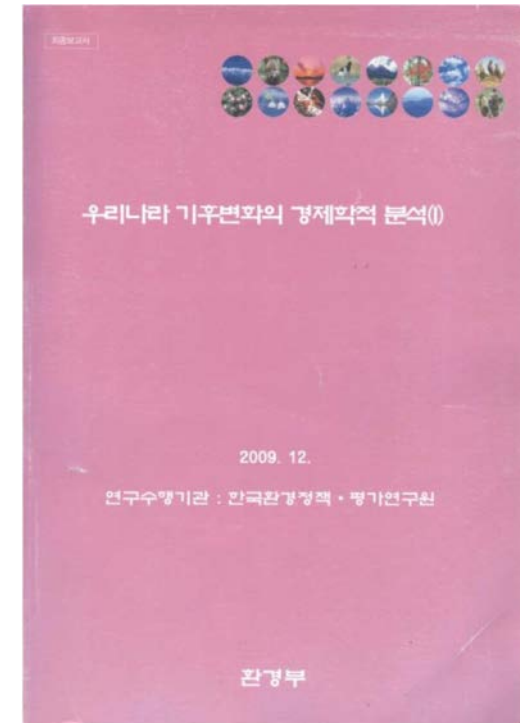
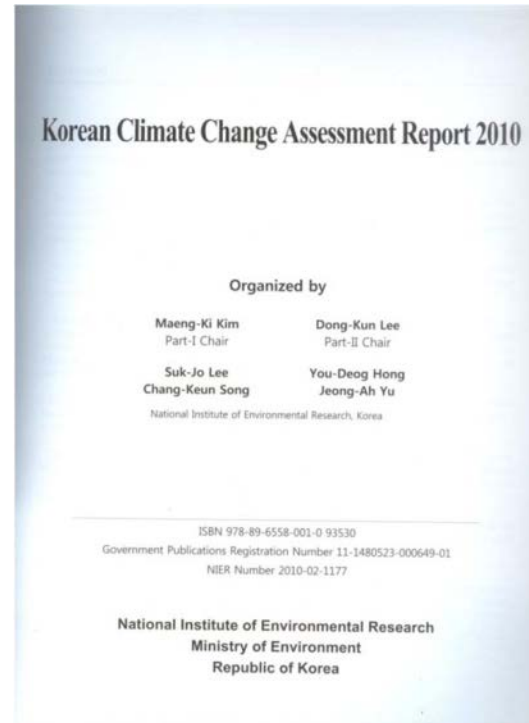
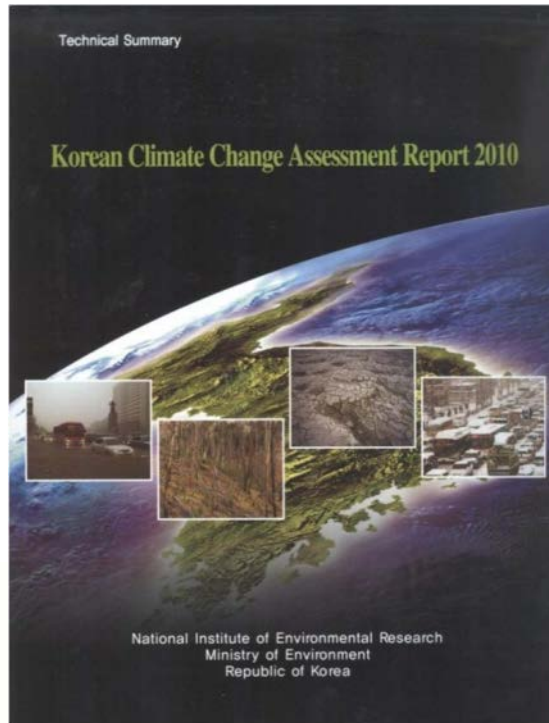


A comprehensive research has begun

2 last 20 yrs

2.2 After national interest in climate changes

Last October, Korea published the Korean Climate Assessment Report 2010.



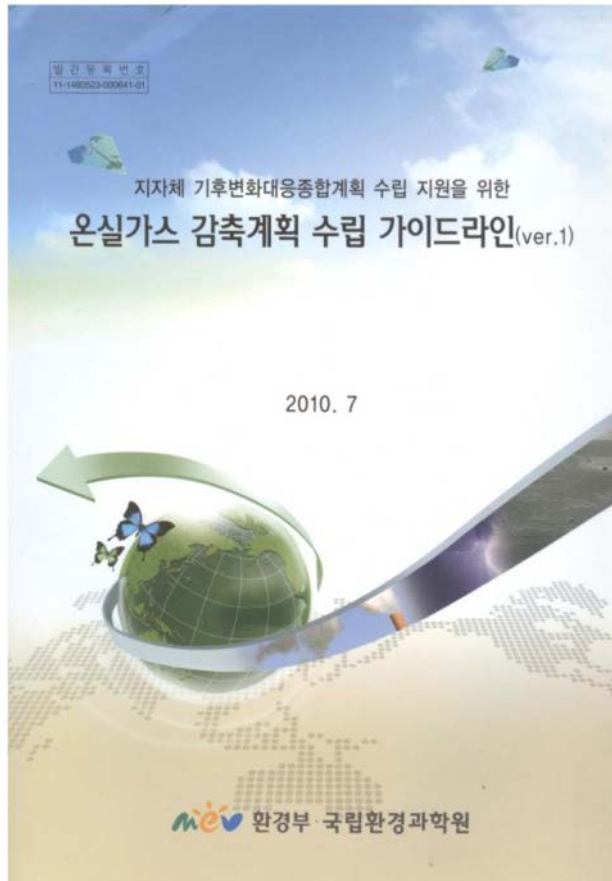
*Economic Analysis of Korea
by climate change impact*

2 last 20 yrs

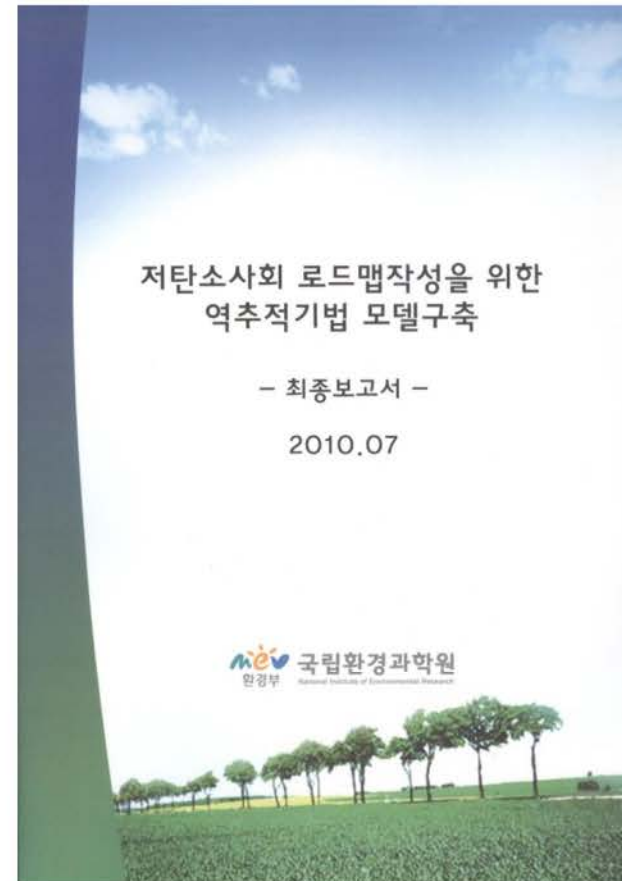
2.2 After national interest in climate changes

Korea also made a guideline of greenhouse gas abatement plan for local government to make the climate change overall action plan.

Also, the backcasting model was used for making a road map for low carbon society.



Guideline for Green house gas reduction



Development of backcasting model for low carbon society roadmap

2 last 20 yrs

2.2 After national interest in climate changes

In 2008, the Korean government announced that they would make sure the country adapts to climate changes.

In 2009, Korea Adaptation Center for Climate Change was established in KEI.

<http://kaccc.kei.re.kr/eng/>

: The Korean government is committed to ensuring Korea adapts to climate change in December 2008, the "Comprehensive plan for national climate change adaption" was established.



2 last 20 yrs

2.2 After national interest in climate changes

In 2008, Korea's new vision of "Low carbon, green growth" was announced.

The national greenhouse gas midterm reduction target was introduced in November 2009, and the "Framework Act on Low Carbon, Green Growth" was enacted in April 2010.

In June 2010, the Greenhouse Gas Inventory & Research was founded.

Greenhouse Gas Inventory & Research Center

<http://www.gir.go.kr/eng/main.do>

: The original announcement of Korea's new vision of "Low Carbon, Green Growth" at the 60th anniversary of the founding of the Republic on August 15, 2008. The national greenhouse gas midterm reduction target was introduced on November 2009, and the "Framework Act on Low Carbon, Green Growth" was enacted in April 2010.



2 last 20 yrs

2.2 After national interest in climate changes

In June 2010, the global green growth institute was established as well.

GGGI

<http://www.gggi.org/>

: Founded in June 2010, the Global Green Growth Institute is a globally represented, non-profit institute dedicated to the promotion of economic growth and development while reducing carbon emissions, increasing sustainability, and strengthening climate resilience.



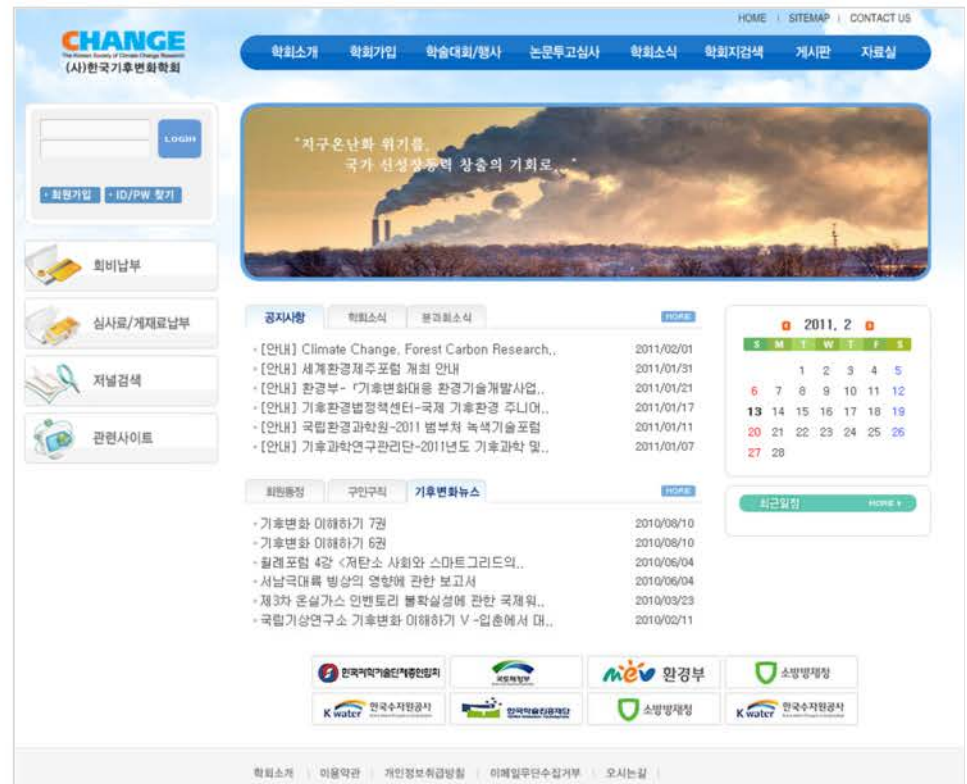
2 last 20 yrs

2.2 After national interest in climate changes

In 2009, the Korea Society of Climate change research was founded.

The Korea Society of Climate change research

<http://www.kscrc.re.kr/>



20 years of accomplishments

*First, through **various network activities**, such as international workshop and training workshop, we have built a rapport with many countries and renowned experts.*

*Second, we have had both **professional and personal growth***

*Third, **AIM models** were used in Korea for research before, but now, it is also the main source for developing national policies.*

3 next 20 yrs

- ***Adaptation & abatement plan from local government***
 - : We are currently developing a ***standardization methodology of vulnerability evaluation*** regarding climate changes for the adaptation plan. Based on this methodology, the vulnerability of Korea's forest, health and water will be established and this data will be used for the plan.
 - ***Adaptation plan*** : Korea Adaptation Center for Climate Change
 - ***Abatement plan*** : Greenhouse Gas Inventory & Research Center (national level)
National Institute of Environmental Research (regional level)

- ***GGGI(Global Green Growth Institute)*** is in charge of international cooperation for green growth, which is related to climate change.

- To solve global environmental problems, the ***scientific result*** is important first of all, and then through ***economic evaluation, political priority*** is decided. And lastly, the ***decisions to put them into practice and understanding*** of the civilians are needed.

Therefore, we should...

- ***Keep doing what we've been doing***, in other word, networking, training experts and model development. Korea just started to reflect climate changes in our policy. For example, Greenhouse gas reduction is also included in the Environmental impact assessment from 2010.

- Future model should make a decision-making process easier. We need a tool to communicate with local residents and people, which is ***a practical model***. Nowadays, we need to consider about the vulnerability and adaptation model of climate change even including more detailed regional planning.

- We need to plan a concrete project with ***international organization*** like World Bank, ADB and GGGI, IGES. Since low carbon society can be made by international cooperation, technical support and sharing core sources are needed.

Other than the Model...

- To figure out the cost of low carbon society, and how to allocate this burden, the ***decision-making model*** and other related models should be developed.

- ***Overall emission calculation model*** should be set up, which includes the data of the actual spatial plan and land use.

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- A model, which can show ***socio-economical effect from the performance of low carbon society*** should be developed, so that we can encourage the effort for abatement.