

Korea's Response to Climate Change

1. A Fair and Ambitious Greenhouse Gas (GHG) Mitigation Target

- Korea has set a fair and ambitious GHG reduction target for 2030, to take responsibility of the international community and to lead towards a low-carbon economy.
- Korea plans to reduce GHG emissions by 37% from the business-as-usual (BAU, 850.6 million tons of CO₂eq) level by 2030 across all economic sectors. (including emissions reduction credits from International Carbon Market Mechanism)

2. Efforts on Greenhouse Gas (GHG) Mitigation

- Korea announced its mid-term national GHG reduction target —30% below its business-as-usual (BAU) level by 2020— in November 2009. The target was stipulated in the 「Framework Act on Low Carbon, Green Growth」 enacted in April 2010.
- After establishing National Reduction Targets through continuous efforts such as the implementation of GHG and Energy Target Management System (TMS), the increase rate of GHG emissions became lower than that of GDP growth in 2012, and emission per GDP began to fall from the upward trend that began in 2009.

■ Implementation of GHG and Energy Target Management System

- Since 2010, Korea has implemented the GHG and Energy Target Management System (TMS) to manage business entities that are both large GHG emitters and large energy consumers.
- According to the outcome of the TMS regulation in 2013, the reduction target was achieved by 402 of 459 controlled entities with the achievement rate of 87.6%, and its reduction amount of 36.5 million is twice the initial reduction target (April 2015).

■ Implementation of the Emissions Trading Scheme (ETS)

- Korea established the
 「Act on the Allocation and Trading of Greenhouse Gas
 Emission Permit」 in May, 2012 for a cost-effective reduction of GHG emission
 and has implemented the Emissions Trading Scheme (ETS) since 2015.
- Korea designated Korea Exchange (KRX) as an emission permits exchange (January 2014) which began operation in January 2015 (at the first day of trading, the traded volume amounted to 1,190 tons of carbon emissions, closed at 8,640 KRW).

■ New Energy Industry Development

- Korea has been promoting energy-related policies with a focus on developing new energy industry since 2014 in order to turn the crisis of climate change threats into a new development opportunity.
- The Korean government has set up an implementation plan of 'New Energy Industry Activation and Core Technology Development Strategy (2015-2017)' in April, 2015. It has invested to help boost eight new energy business market models.



■ GHG Mitigation Efforts in Non-Industrial Sector

 Local government and citizens have been making efforts to reduce GHG from non-industrial sector like building, business and transport sectors which account for 40% of national GHG emissions.

■ Emissions Reduction Technology and R&D Strategy

 In 2008, after selecting 'climate change response technology', annual R&D investment reached KRW 1.44 trillion(2014).

3. Building a 'Climate Friendly and Safe Society' for Strengthening Climate Change Adaptation Capacity

- Under climate change adaptation policy system of the National Municipal

 Local Government, Korea is strengthening the climate change adaptation
 capacity and expanding the response basis in all society sectors.
- The 1st national adaptation plan (2011-2015) was established and promoted (December 2010, 87 projects in 10 sectors) and Korea Adaptation Center for Climate Change (KACCC) has been in operation since its establishment in 2009.

4. Helping Developing Countries in Building Their Climate Change Response Capacity

- The Korean government is assisting finance, technology, and capacity-building in pursuit of active support for climate change response efforts in developing countries.
- The Korean government has been providing support to international organizations and associations related to climate change. In addition, the Korean government has carried out a wide range of energy technology cooperation projects with countries in Central and South America and Asia.
- The Korean government has offered the International Greenhouse Gas Professional Training Course as an annual education program since 2011, and provided support for policy-making and technology transfer through the projects of Korea International Cooperation Agency (KOICA) in order for developing countries to improve their adaptation capacity to climate change.



Republic of Korea, Pavilion Schedule (Nov. 30th - Dec. 4th)

Date	Time	Title	Organizers	Contact
Monday Nov. 30	10:00 ~ 12:00	[Roundtable Discussion] Shared Efforts for Climate Change Adaptation (TBC)	Korea Environment Institute (KEI)	Young-Il Song yisong@kei.re.kr
	13:00 15:00	Climate Change & Youth Jobs	National Assembly Forum on Climate Change	Lee, Sungjo climateforum@ climateforum.or.kr
	16:00 ~ 18:00	Global Cooperation for Climate Technology Development and Transfer	Ministry of Science, ICT and Future Planning	Ami Woo amiwoo@msip.go.kr
Tuesday Dec. 1	10:00 ~ 12:00	The Global Strategy for Carbon Resources Utilization in Korea	Korea Research Institute of Chemical Technology (KRICT)	Dr. Hee Dong Park hdpark@krict.re.kr
	13:00 15:00	Towards Nearly Zero Energy Building	Korea Institute of Civil Engineering and Building Technology (KICT)	Suwon Song swsong@kict.re.kr
	16:00 18:00	Strategy under a New Climate Regime of the Non-Industrial Sector	Keco (Korea Environment Corporation)	Jae-Woon Hwang skueen@keco.or.kr
Wednesday Dec. 2	10:00 	Appropriate CCU (Carbon Capture Utilization) Technologies for Developing Countries Responding to Climate Change; focused on Low-carbon, High- functional GREEN Cement' and 'Waste Paper Pulp In-Situ'	Korea Institute of Geoscience and Mineral Resources	Dr. Ji-Whan Ahn ahnjw@kigam.re.kr
	13:00 ~ 15:00	Technology & Finance Linkage: Lessons-learned from Cooperative Cases on Climate Technology Transfer to Developing Countries	Green Technology Center	Changsun Jang cs_jang@gtck.re.kr
	16:00 ~ 18:00	Taking Actions for Low Carbon Lifestyles to Achieve 2°C Target: Identification, Replication, and Scale-up of Good Practices	Korea Environmental Industry and Technology Institute (KEITI)	Ms. Hyunju Lee hjlee@keiti.re.kr
Thursday Dec. 3	10:00 ~ 12:00	Korea-China-Japan Youth Trialogue for INDCs of Each Country	GEYK (Green Environment Youth Korea)	Seajin Kim bluegulcy@gmail. com
	13:00 ~ 15:00	Joint Seminar between Vietnam and KOICA for Climate Change Response & Green Growth Strategy	KOICA and Ministry of Natural Resources and Environment, Vietnam	Dohyun Park dohyun224@gmail. com
	16:00 18:00	Carbon Free Island Jeju by 2030 - Global Showcase of Green Big Bang	Jeju Special Self- Governing Province	Kim, Mi-young kmy3033@korea.kr
Friday Dec. 4	10:00 ~ 12:00	Event schedule to be decided		
	13:00 ~ 15:00	Korea's Efforts to Cooperate with Developing Countries in Responding to Climate Change	Greenhouse Gas Inventory & Research Center of Korea (GIR)	Tae-yeon Kim bleumind@korea.kr
	16:00 ~ 18:00	Sun, Water and Photovoltaics : New Opportunity for Converging Appropriate and Modern Technologies	Electronics and Telecommunications Research Institute	Hunkyun Pak pak@etri.re.kr, hunkyunpak@gmail. com

Republic of Korea, Pavilion Schedule (Dec. 7th - Dec. 10th)

Date	Time	Title	Organizers	Contact		
Monday Dec. 7	10:00 ~ 12:00	Energy Technology Development Status against Climate Change	Korea Institute of Energy Research	Jongkyu Kim rnokim@kier.re		
	13:00	Advancing Forestry Cooperation to Tackle Climate Change in Northeast Asia	Green Asia Organization, Korea University	Kim, Sohee shkay@climate changecenter.ki		
	15:30 ~ 18:30	Launch of Inclusive Green Growth Partnership	Global Green Growth Institute (GGGI)	James Sheppard james.sheppar gggi.org		
Tuesday Dec. 8	10:00 12:00	Institutional Linkages for the Life Sector to Reduce Greenhouse Gas Emissions	Korea Climate & Environment Network, Climate Change Center	Sang Yub, Ki ksy@kcen.kr		
	12:30 ~ 14:30	Event schedule to be decided				
	15:00 ~ 18:30	What's Next after COP21: Issues for Low Carbon Economy	Climate Change Center, Center for Climate and Sustainable Development Law and Policy (CSDLAP)	Youn, Choa cyoun@climate changecenter.ki		
Wednesday Dec. 9	10:00 12:00	Event schedule to be decided				
	13:00 15:00	Capacity Network for Climate Change Adaptation and Resilience in Mid-Latitude Ecotone	Korea University BK21Plus Eco-Leader Education Center, OJeong Eco- Resilience Institute (OJERI), Global Carbon Project (GCP) Korea Office, Yonsei University Graduate School of International studies, MOTIVE (Model Of inTegrated (Climate Change) Impact and Vulnerability Evaluation) Research Team	Woo-Kyun Lo leewkkorea @gmail.com		
	16:00 ~ 18:00	Climate-Smart & Green Urban Development	Incheon Metropolitan City, Incheon Green Climate Forum, Institute for Global Sustainability	Seo-yeon Ch sydnee418@ korea.kr		
Thursday Dec. 10	13:00 ~ 15:00	Creating New Industries through the Development of Clean Energy Technology	Korea Institute of Science and Technology	Sun-Mi Lee smlee@kist.re.l		
	16:00 18:00	Developing Countries- targeted Application and Localization of Environmental Technology for Climate Change Adaptation	Korea Institute of Industrial Technology	SangWoo LE opeth@kitech. re.kr		





UNFCCC COP 21

Paris-Le Bourget, France Events at the Republic of Korea Pavilion November 30th - December 10th, 2015



Climate-Smart

KOREA

UNFCCC COP 21



Paris-Le Bourget, France Events at the Republic of Korea Pavilion November 30th - December 10th, 2015



Monday, November 30th



[Roundtable Discussion] Shared Efforts for Climate Change Adaptation (TBC)

Organizer | Korea Environment Institute (KEI)

This event will provide bring high-level discussants, and discuss about currents efforts for adaptation to climate change and areas for further collaboration. It will be a roundtable discussion with 4 short presentations and intense interactive discussions with audience. The session is expected to provide the audience with the best grasp of adaptation status in the world, and stir up the discussion for cooperation including not only north-south but also south-south cooperation.

Climate Change & Youth Jobs

Organizer

National Assembly Forum on Climate Change

The aim of the event is to share the status of youth jobs on climate change and to introduce successful cases of startup youth, and discuss to make the better way and opportunity on it.

Global Cooperation for Climate Technology Development and Transfer

Organizer | Ministry of Science, ICT and Future Planning

Introduce Korea's technology innovation and global cooperation policy and discuss how to enhance it with the technology mechanism (TEC and CTCN)

Tuesday, December 1st

The Global Strategy for Carbon Resources Utilization in Korea

Korea Research Institute of Chemical Technology (KRICT)

This forum will give details on the strategy for carbon resources utilization in Korea to settle climate change issues including relevant technologies, policies, and projects.

Organizer

Towards Nearly Zero Energy Building

Korea Institute of Civil Engineering and Building Technology (KICT)

The purpose of this event will provide challenges and opportunities towards nearly zero energy buildings of Korea with respect to climate change. This event will present an overview of measures for building sectors towards low carbon green cities, a best practice of zero carbon green home, new energy efficient technologies, and strategies for zero energy smart buildings.

Organizer

Strategy under a New Climate Regime of the Non-Industrial Sector

Keco (Korea Environment Corporation)

The efforts to reduce GHG in the non-industrial sector have been highlighted for actions to enhance post-2020 action.

In this session, we will provide various experiences and good practices in Korea. Keco, ICLEI and Jeju city of Korea will present policies and efforts on non-industrial sector to reduce greenhouse gas emissions, and also share valuable experiences.

Wednesday, December 2nd



Appropriate CCU (Carbon Capture Utilization) Technologies for Developing Countries Responding to Climate Change; focused on 'Low-carbon, High-functional GREEN Cement' and 'Waste Paper Pulp In-Sitú'

Organizer | Korea Institute of Geoscience and Mineral Resources

- Direct accelerated carbonation technology by using flue gases from coal power plant • CO2 sequestration and Low-carbon, High-functional Green Cement by
- utilization of bauxite residue
- Utilization of waste paper and CO2; the produce of high quality pulp by

Technology & Finance Linkage: Lessons-learned from Cooperative Cases on Climate Technology Transfer to Developing Countries

Organizer Green Technology Center

The transfer of climate technologies to developing countries requires not only scaled-up financial mobilization but also the close linkage and coordination among technology providers, technology recipients, and financing sources, and local stakeholders. The lessons-learned from cooperative cases on technology transfer and financial linkage will be shared and discussed.

Title

Taking Actions for Low Carbon Lifestyles to Achieve 2°C Target: Identification, Replication, and Scale-up of Good Practices

Organizer | Korea Environmental Industry and Technology Institute (KEITI)

This event will explore GHG emission reduction impacts and potentials of low carbon lifestyles. Good practices on effective policy tools will be identified around the world, and a panel discussion on how to scale up low carbon lifestyles through

increased collaboration will follow. Thursday, December 3rd



Korea-China-Japan Youth Trialogue for INDCs of Each Country

Organizer | GEYK (Green Environment Youth Korea)

This event is to provide an overview of INDCs of South Korea, China, and Japan, and to share the perspectives of youth. The presenters will analyze reduction targets, and look into the process of submission and implementation plans of INDCs. Also, the presenters will deliver consolidated opinions of youth from each country.

Title

Joint Seminar between Vietnam and KOICA for Climate Change Response & Green Growth Strategy

Organizer KOICA and Ministry of Natural Resources and Environment, Vietnam

The objective of this joint seminar is to share idea as well as strategy for developing countries to transit to a new, low carbon future.

Title

Carbon Free Island Jeju by 2030 - Global Showcase of Green Big Bang Jeiu Special Self-Governing Province

In 2012, Jeju has announced its plan for 'Carbon Free Island by 2030,' which consists of three sectors; 100% Renewable Energy, 100% Electric Vehicle, and the creation of Smart Grid cities all around the Jeju Island by the year of 2030.

Friday, December 4th

of Korea (GIR)

Organizer

Organizer

responding to climate change.

Following contents would be presented:

1. Low cost carriable micro solar desalination system;

Event schedule to be decided

in Responding to Climate Change

This seminar is to promote GIR's various forms of international cooperation which

contributes to developing countries in reducing GHG emissions and managing

GHG inventory, and to share GIR's experience in supporting developing countries

Organizer | Electronics and Telecommunications Research Institute

2. Integration of the desalination technology to photovoltaics cooling and cleaning;

3. Low cost drinking water treatment by plastic bottles with SODIS and PAK filter

UNFCCC COP 21

Paris-Le Bourget, France

Events at the Republic of Korea Pavilion

November 30th - December 10th, 2015

Sun, Water and Photovoltaics

Modern Technologies

Greenhouse Gas Inventory & Research Center

New Opportunity for Converging Appropriate and

Korea's Efforts to Cooperate with Developing Countries





Monday, December 7th

Climate Change



Organizer | Korea Institute of Energy Research

 Activities on the development of renewable thermal energy hybrid system for eco-friendly energy town and zero-energy solar house

Low Rank Coal Upgrading Technology with Biomass: Hybrid Coal by Korea Institute of Energy Research (HCK)

• Status of CO₂ Capture Technology in Korea Institute of Energy Research

Title

Advancing Forestry Cooperation to Tackle Climate Change in Northeast Asia

Organizer Green Asia Organization, Korea University

This seminar is to explore possible reforestation projects adopting REDD+ mechanism in Northeast Asia; develop agroforestry management-based landscape restoration framework responding to regional and local needs for food and energy; promote forestry cooperation among multi-stakeholders from

Title

Launch of Inclusive Green Growth Partnership

Organizer | Global Green Growth Institute (GGGI)

The heads of the MDBs, UN regional commissions and GGGI will launch an Inclusive Green Growth Partnership to support developing countries mainstream green growth. Panel discussion will also focus on innovative solutions and overcoming policy barriers to support green growth.

Wednesday, December 9th

Event schedule to be decided

Organizer

Organizer

Capacity Network for Climate Change Adaptation and Resilience in Mid-Latitude Ecotone

• Korea University BK21Plus Eco-Leader Education Center OJeong Eco-Résilience Institute (OJERI)

• Global Carbon Project (GCP) Korea Office

 Yonsei University Graduate School of International studies • MOTIVE (Model Of inTegrated (Climate Change) Impact and Vulnerability Evaluation) Research Team

This event aims to share ideas for climate change and spatial resilience across the Mid-Latitudes. It will contribute to build framework for climate change mitigation, adaptation, and sustainable development.

Organizer

Climate-Smart & Green Urban Development Incheon Metropolitan City, Incheon Green Climate

Songdo, a district in Incheon Metropolitan City of Korea, is a test bed for the idea of smart and green urban development is materialized. Incheon introduces its journey toward a low-carbon climate-resilient city with ICT embedded across the city operations.

Forum, Institute for Global Sustainability

Tuesday, December 8th



Institutional Linkages for the Life Sector to Reduce Greenhouse Gas Emissions

Organizer | Korea Climate & Environment Network, Climate Change Center

greenhouse gas reduction performance

Share a variety of practices for reducing greenhouse gases in the living areas - National Movement (Reducing 1ton of GHG per person), incentives (carbon point system) and international practices, etc. Discussion of individual institutional development and linkages of the

Organizer

Event schedule to be decided

Title

What's Next after COP21: Issues for Low Carbon Economy

Climate Change Center, Center for Climate and Sustainable Development Law and Policy (CSDLAP)

This international symposium will discuss how to promote low carbon economy as a way of tackling climate change. Particular focus will be given to implications of new climate agreement in implementing low carbon development strategy and Deep Decarbonization Pathways Project.

Thursday, December 10th

Creating New Industries through the Development of Clean Energy Technology

Organizer Korea Institute of Science and Technology

This conference provides information about issues related to creating new industries through development of clean energy technologies, such as fuel cells, solar cells, bio-energy, and artificial photosynthesis.

Developing Countries-targeted Application and Localization of Environmental Technology for Climate Change Adaptation

Korea Institute of Industrial Technology

Korea Institute of Industrial Technology (KITECH) is a government-run research institute focusing on application & commercialization of technologies to support SMEs. It has also provided emission-mitigating technology support to developing countries. This seminar briefly introduces KITECH and its cases of environmental







