

Actuelles de l'Ifri

Looking Ahead to COP21: What Korea has done and what Korea should do

Suh-Yong Chung

Korea's inconvenient truth on climate change

Korea is the world's 14th largest economy but the 8th largest emitter of CO2 as of 2013, due largely to an energy-intensive industry structure. Although it has continuously reduced its dependency on petroleum since it introduced the Energy Master Plan in 2008, the relative portion of non-fossil fuel sources, such as renewable energy, is still marginal at best (representing less than 10 percent of the total energy portfolio).¹ In particular, it is difficult for Korea to increase the portion of renewables for various reasons. In this context, Korea has tried to find an adequate role in fighting against climate change.

From a passive defender to an active leader?

According to various analyses, such as one by Catalyst Project, future success of the global efforts to combat climate change depends on how advanced developing countries, including Korea, will play constructive roles in mitigating GHG emissions.² However, Korea, as a Non-Annex I country, has not been in a position to join the Annex I group for fear of losing international competitiveness.

Korea's position began to drastically change when the previous Lee Myungbak government introduced its low carbon development policy called "Low-Carbon Green Growth Policy" as a future strategy of Korea. Based on this policy, Korea, on its own initiative, set the target of reducing GHG emissions by 30 percent relative to the level of BAU in 2020. It also went through extensive institutional changes, Suh-Yong Chung, Professor, Korea University.

June 2015

Les opinions exprimées dans ce texte n'engagent que leur auteur.

ISBN : 978-2-36567-399-0 © Tous droits réservés, Paris, Ifri



¹ In the case of nuclear energy, its portion was expected to be 28 percent in 2030, according to the 1st Ene Master Plan of 2008. Ministry of Knowledge Economy, Energy Mater Plan (2008).

² Catalyst Project, Technology, development and climate: the need for an integrated approach, available at https://www.ecn.nl/fileadmin/ecn/units/bs/IPCC/ECN-IVM_Symposium_Metz.pdf.

including establishing the Presidential Committee on Green Growth, introducing an Emission Trading Scheme (ETS), and adopting various laws and regulations in accordance with its low-carbon green growth policy. Korea strived to take an active role at the international level in various fields. For example, Korea is a non-Annex I country that sets the East Asia Climate Partnership as an ODA program,³ and established the Global Green Growth Institute, which became an intergovernmental organization in 2012 and successfully hosted the Green Climate Fund in the same year. In the post-2012 climate change negotiations context, Korea led negotiations by initiating discussions on NAMA Registry,⁴ which plays as a platform of recognition for mitigation actions by developing countries.

Despite some concerns regarding the continuity of Korea's active role in addressing climate change by the current Park Geun-hye administration, there are a good number of positive signals on Korea's prolonged proactive role in addressing climate change, notably under its Creative Economy Policy.⁵ President Park clearly stated that climate change is an integral part of the Creative Economy at the opening ceremony of the Secretariat of the Green Climate Fund (GCF) in December 2013. She reiterated similar statements on other occasions, including the Climate Summit Meeting in New York in 2014. Indeed, it is noteworthy that Korea became the first non-Annex I country to promise a significant financial contribution to the GCF, which would total of 100 million USD.

Need for more effective orchestration of domestic actions

Despite its positive contributions in tackling climate change by enabling low-carbon development policies both nationally and internationally, there are concerns regarding the extent of positive contributions that Korea can make in current negotiations on a post-2020 climate change regime. Recently, these cautious doubts have been growing as Korea has not actively addressed issues of its Intended Nationally Determined Contribution (INDC), that countries agreed to submit by the first half of 2015.⁶ This is because Korea has not been able to come up with a domestically agreed level of contributions due to sharp differences on the issues among different stakeholders. As a result, there has been an increasing possibility that the submission of Korea's INDC will be delayed beyond the first half of 2015.

In fact, the Korean government has commenced its domestic efforts in cooperation with the relevant ministries, such as the Ministry of Foreign Affairs, the Ministry of Trade, Industry and Energy, and the Ministry of Environment, to prepare for its INDC including its GHG emission reduction targets. In late January 2015, the Korean government finalized its National Greenhouse Gas Reduction Roadmap, which was developed by a series of relevant ministries and the prime minister's office. According to the roadmap, Korea will

³ East Asia Climate Partnership is an ODA program of Korea to assist developing countries in East Asia to fight against climate change by providing 200 million USD between 2008 and 2012. It was first announced by President Lee Myung-bak on the occasion of the G8 Extended Summit meeting in Japan

⁴ NAMAs means Nationally Appropriate Mitigation Actions which was heavily considered during the negotiations on a post-2012 climate change regime. Considering developing countries do not have any legally binding commitment to reduce GHGs, voluntary actions by developing countries to reduce GHGs were considered crucial for agreeing on an effective climate change regime which was supposed to be agreed by 2009 in Copenhagen.

⁵ Creative Economy is an economic policy initiative of the Park Geun-hye administration of Republic of Korea. By fostering the innovation and new engines of economic growth, this policy initiative will support Korea to continue to grow its economy and drive its competitiveness.

⁶ For the details on how to submit INDCs, please see the INDCs portal of UNFCCC at http://unfccc.int/focus/indc_portal/items/8766.php.

continue to keep its original plans developed by the Lee administration in 2011. In other words, Korea will reduce its GHG emissions by 30 percent relative to BAU in 2020 or 233 million tons CO2e. To achieve this target, the government set detailed reduction targets that are categorized into seven different sectors including industry (reduction of 18.5% or 81.3 million tons CO2e of BAU), buildings (reduction of 45 million tons or 27.5% of BAU), power generation (reduction of 64.9 million tons or 26.7% of BAU), and transportation (reduction of 34.2 million tons or 34.3% of BAU). According to the Ministry of Environment, the focal ministry of national policy on greenhouse gas emission reduction, several policy measures will be introduced. They include market friendly emissions reduction measures, the development of relevant science and technology, the creation of jobs and new markets through new emission reduction projects, and the promotion of grass root movements. Based on this roadmap, the Korean government expects to submit its INDC in September at the earliest.

While there are positive signs regarding Korea's willingness to continuously contribute to the negotiations on a new climate change régime, the Korean government may need to further address some specific issues to effectively implement this roadmap.

The foremost important issue is to transform the current greenhouse gas emissions reduction roadmap into one that reinforces economic perspectives by focusing market and growth-friendly measures. As Korea has been regarded as active at the international level for the last several years by promoting its low-carbon green growth policy and creative economy policy, domestic policies need to be realigned in this way. This will prove to be a sensitive and difficult issue as it requires effective inter-ministerial coordination. Ideally, it would be necessary for the Presidential Office to develop its own internal coordination mechanism to effectively coordinate among the relevant ministries. In other words, issues on international negotiations/diplomacy, national economy and environment must be considered and addressed together among the relevant offices of Senior Secretaries to the President. In order to ensure effective preparation and implementation of the policies, it seems to be equally important for the National Assembly to develop its coordination mechanism among relevant committees including the Foreign Affairs and Unification Committee, the Finance and Strategy Committee, the Trade, Industry and Energy Committee and the Environment and Labor Committee. Finally, as the host country of the Global Green Growth Institute, which has seemingly a role of assisting countries to develop their low-carbon development plans, Korea needs to develop a more effective policy on measures to utilize outputs of the GGGI in developing its own national plans, such as linking its ODA policy to better encourage the GGGI and developing countries to closely work together on appropriate national low-carbon development plans.

Secondly, Korea must develop and implement measures to smoothly implement the Emission Trade Scheme, which started in December 2014. Korea has become the first non-Annex I country to introduce a national ETS on a voluntary basis. According to a foreign source, the size of Korea's domestic ETS market ranks only second after that of the European Union. However, as the design of the Korean ETS is heavily dependent on that of the EU, it remains unclear whether the Korean ETS can overcome limitations that the EU ETS has experienced.

Thirdly, South Korea needs to develop more practically actionable plans (which will promote R&D on green technologies and develop global markets of green technologies in the context of its current Creative Economy policy). While Korea has continuously

emphasized the Creative Economy policy as a viable policy to address climate change and ensure healthy growth of the economy, Korea must demonstrate concrete evidences on curbing GHG emissions and promoting various low-carbon technologies in the market.

A leading role in narrowing the gap between developed and developing countries

At the international level, there is more room for Korea to play a constructive role. The necessity for Korea's increasing contributions through promoting low-carbon economy and emphasizing green technology may be best executed by selecting climate change issues as the key driving force to the success of its middle-power diplomacy. As a country that has transformed itself from one of the poorest countries to an OECD and G20 member, the world's 14th largest economy and 8th biggest GHG emitter, Korea has developed its diplomatic strategies by playing a bridging role between developed and developing countries. In this context, the climate change issue has been identified as one of the most suitable issues to be pursued. Korea can demonstrate a clear case of a country that does not have legally binding obligations to reduce GHG emissions but is nonetheless leading initiatives to tackle climate change by further enhancing its proactive low-carbon development policies. In other words, Korea can lead a group of advocates who share the same value of the policies by implementing low-carbon development plans. In this sense, Korea has made a series of contributions to the UNFCCC negotiations by participating in the Environment Integrity Group with Mexico, Switzerland, Liechtenstein, and Monaco. Leading the agenda on NAMA Registry during post-2012 negotiations is a good example. However, due to the diversified positions within the limited number of participating countries, it seems there are limitations on maximizing contributions to the UNFCCC negotiations only with the EIG group.

In this sense, Korea should consider strengthening its cooperation with other member countries of the Global Green Growth Institute on promoting low-carbon green growth policies both within and outside the UNFCCC negotiations framework. In fact, Korean Foreign Minister Yun Byung-se emphasized in his remarks at the Davos Forum this year that Korea has been a leading country in showing the possibilities for creating business opportunities by tackling climate change. In this context, Korea's leading role in the Global Green Growth Institute is critically important. The GGGI was created under the strong leadership of Korea as an intergovernmental organization to demonstrate cases in which developing low-carbon national development plans for developing countries will contribute not only to advancing the economy, but also to global efforts to address climate change. In order to achieve this goal, Korea must continue to lead the GGGI by allocating equal importance to both advanced developing countries and least developed countries. Korea also needs to actively engage with the GGGI by further developing plans on how to provide balanced services regarding both planning and implementing national low-carbon development policies for developing countries.

In addition, Korea can make valuable contributions by utilizing MIKTA, which has been formed recently by Mexico, Indonesia, Turkey, Australia and Korea, in order to maximize the efficiency of middle-power diplomacy in relevant fields such as climate change. By realizing low-carbon economic growth and thereby reducing greenhouse gas emissions, MIKTA can be a strong platform for demonstrating its bridging role in narrowing the gap between developed and developing countries. It is remarkable that Korea was the first G20 member country to emphasize the importance of (low-carbon) green growth to tackle climate change in the context of the G20. Since 2012, when Korea hosted the G20 and designated (low-carbon) green growth as an agenda, this market-based bottom-up approach to tackle climate change has been considered by many leaders in various forms. Korea must continue to lead this agenda with all the members of the G20, since this group emits more than eighty percent of the world's total greenhouse gas emissions. Furthermore, Korea has to continuously emphasize the G20's role in terms of securing adequate financial contributions to the Green Climate Fund and promoting national macro-economic policies that may promote green investment and financing.

Indeed, as the host country of the Green Climate Fund, Korea must continuously strive to proactively encourage countries in order to secure adequate funding for the GCF through various diplomatic channels. In 2013, Korea was one of the first two countries, along with Germany, to make financial contributions to the GCF. Considering that it has been extremely rare for developing countries to make significant financial contributions to the financial mechanisms of UNFCCC regime to assist other developing countries, Korea indeed made a remarkable precedent as a Non Annex I country. And this has already ignited other developing country contributions to the GCF.

Further measures that Korea should take to prepare the COP21 in Paris

Korea can make additional constructive contributions on the way to the COP21 in Paris this year. Korea's positive contributions have generally led its leading role in strengthening a bottom-up approach through low-carbon development and related policies. It is now time for Korea to lead the discussions and negotiations on the relevant issues. In this sense, Korea must be more active in promoting the agenda of Low-Carbon Development Strategy or Low-Emission Development Strategy. Considering that the outcome in Paris is more likely to incorporate bottom-up components than previous negotiations, it is important for Korea that countries reach the 2015 agreement in order to provide a legal basis on the Low-Carbon Development Strategy.

Furthermore, Korea must make every effort to submit its INDC as soon as possible, hopefully by the end of June 2015. Based on its national targets included in the National Greenhouse Gas Reduction Roadmap, Korea must develop ambitious plans for reducing its GHG emissions, promoting low-carbon development through the implementation of its Creative Economy, and possibly demonstrating its contributions to reducing GHG emissions in other developing countries by its close cooperation with several international organizations, including the GGGI.

Korea can also make further contributions to progressing on common accounting rules. Korea suggested the concept of a Registry as a basis to recognize a country's effort to reduce GHGs during the post-2012 negotiations. Korea can continue to lead negotiations on this agenda and also on other issues on common accounting rules. In other words, Korea can participate in further discussions on adopting common accounting rules that could be integrated later into the lending policy of the GCF, which would likely increase the effectiveness of GCF in terms of reducing GHG emissions.

Finally, Korea must promote relevant policies such as low-carbon development policy that have been supported with close climate change allies and partners. This can be done particularly with the member countries of the Global Green Growth Institute, MIKTA and the

Green Climate Fund. This could facilitate the emergence of a new leading (negotiation) group within UNFCCC, particularly after the Paris COP, when implementation would become more important.

Conclusion

In the international arena, it is true that Korea has not been regarded as an agenda builder, although it has been recognized as a very fast learner. But as a middle power that gave birth to several global business giants and some global leaders, such as the current Secretary-General of UN, Korea has begun to feel its responsibility in developing and leading a global agenda. And climate change has been one of the few areas where Korea has begun to show its potential in this context. As a country that has actively implemented its low-carbon green growth policy and creative economy policy, hosted two major global climate change organizations (the GGGI and GCF), and has become the first non-Annex I country to introduce a nation-wide ETS, Korea must further demonstrate its ability to make valuable contributions in shaping the new climate change régime that must be agreed in Paris this year.

Bibliography:

- Barbier, Edward B., A Global Green New Deal: Rethinking the Economic Recovery (2010)
- Bloomberg, White Paper: South Korea's Emissions Trading Scheme (2013)
- Bowen, Alex and Sam Fankhauser, "The Green Growth Narrative: Paradigm Shift or Just Spin?" Global Environmental Change, Volume 21. pp. 1157-1159 (2011)
- Catalyst Project, Technology, development and climate: the need for an integrated approach, available at https://www.ecn.nl/fileadmin/ecn/units/bs/IPCC/ECN-IVM_Symposium_Metz.pdf.
- Chung, Suh-Yong and Joy Aeree Kim, The Role of the G20 in governing the climate change regime, International Environmental Agreements Vol. 12 (2014)
- Chung, Suh-Yong ed., Post 2020 Climate Change Regime Formation (Routledge, 2013)
- Climate and Development Knowledge Network, "Green Growth: Debates and Resources." Visited on February 10, 2015, http://cdkn.org/2011/07/greengrowth (2012)
- Ekins, Paul, Economic Growth and Environmental Sustainability (2000)
- European Commission, Joint Research Centre (JRC)/PBL Netherlands Environmental Assessment Agency. Emission Database for Global Atmospheric Research (EDGAR), release version 4.2. http://edgar.jrc.ec.europe.eu, 2014
- Global Green Growth Institute, GGGI Strategic Plan 2015-2020: Accelerating the Transition to a New Model of Growth (2014)
- Government of Mexico, "G20 leaders Declaration." Visited on February 6, 2015, http://g20.org/images/stories/docs/g20/conclu/G20_Leaders_Declaration_2012_1.pdf
- Green Economy Coalition, "Background Paper: Surveying the Green Economy Landscape Post-Rio+20."http://www.greeneconomycoalition.org/updates/background-papersurveyinggreen-economy-landscape-post-rio20 (2012)

- Hepburn, Cameron and Alex Bowen, "Prosperity with Growth: Economic Growth, Climate Change and Environmental Limits." In Handbook on Energy and Climate Change, edited by R. Fouqet. Cheltenham, UK: Edward Elgar (2013)
- International Center for Climate Governance, Green Growth Policy in Korea: A case study (2011)
- Kang, Sang In, Jin-gyu Oh and Hongseok Kim, Korea's Low Carbon Green Growth Strategy (OECD Development Center, 2012)
- Kim, Yi-Jin and Soo-Chul Lee, A Study on National Plans on Reduction (Korea Environment Institute, 2013) (in Korean)
- Ministry of Environment, National Greenhouse Gas Reduction Roadmap (2015) (in Korean)
- Ministry of Knowledge Economy, Energy Mater Plan (2008) (in Korean)
- Ministry of Strategy and Finance, White Paper of Hosting Green Climate Fund (2013) (in Korean)
- Presidential Committee on Green Growth, Materials for its Reporting Sessions for the President (in Korean)
- Proceeding of Green Korea 2012, Green Growth: Achievements and Way Forward
- Schreurs, Miranda A., 'Multi-level Governance and Global Climate Change in East Asia," Asian Economic Policy Review Vol. 5 Issue 1, pp. 88-105 (2010)
- UNEP, Global Green New Deal (2009)
- UNEP, Overview of the Republic of Korea's National Strategy for Green Growth (2010)