

Unlocking the Future of a Prosperous Green Globe: With a Focus on the G-20 STI Summit

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ABSTRACT

Energy consumption is the largest contributing factor for the increase of CO₂ emissions and amounts for almost 85% of all emissions. The future energy consumption of Korea is projected to grow exponentially despite its heavy dependence on imported energy that represents 97% of its total energy supply. According to a recent OECD report the carbon emission level of Korea is currently ranked 9th in CO₂ emissions, and is growing by almost 3% every year. Against this background, the Korean government introduced the “low carbon green growth” policy in 2008. As the global challenges intensified in the wake of the world economic crisis, Korea has been working hard in raising the visibility of its efforts at the club governance meetings, in particular the G-20 summit. Because of cooperative efforts with major member countries, the G-20 summit agenda has been significantly diversified to include long-term issues such as climate change, development issues, and global health. To achieve an effective green recovery for a new green world economic order, the G-20 summit leaders should concentrate on a strategy of establishing green governance for a global STI cooperation. Korea as the host country is poised to leverage the Seoul G-20 summit to catalyze global efforts toward a new green economic order.

KEYWORDS: green growth, G-20 Summit, leadership, STI cooperation governance, green globe

1. INTRODUCTION

In commemoration of the 60th anniversary of the founding of the nation on August 15th, 2008 President Lee Myung-bak initiated "low-carbon, green growth" as Korea's new vision for long-term development.¹ Amid high expectations, President Lee unveiled an ambitious plan for a low-carbon society, pledging an unprecedented government commitment to reducing greenhouse gas emissions

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¹ Korea Herald, "The low-carbon green growth proclaimed," August 16, 2008.

and increasing the proportion of alternative energy sources by more than five times by 2030. Under the new national development paradigm, the government has begun a strong push for the Green New Deal drive aimed at securing new growth engines and creating green-collar jobs by developing green technology and renewable energy sources. For this, government investment will double by 2020.²

Korea has launched campaigns to increase global awareness of the importance of cooperation in promoting green growth in the international community. These initiatives resonated with many advanced and developing countries, all of which face formidable challenges of overcoming the global financial crisis and fighting climate change. Korea plans to create further support for green growth and demonstrate its leadership when it hosts the Seoul G-20 summit in November.³

Part 2 of this paper will provide context as to how the G-20 summits have evolved since 2008 and review the main features. In part 3 major strategies and STI proposals for the Seoul G-20 Summit will be presented in a simple but coherent fashion. The paper concludes with some thoughts on why the G-20 leaders should act now for the future of a green globe.

2. CURRENT G-20 SUMMIT STATUS AND PROGRESS

To put Korea's green growth campaign in perspective, some background on the G-20 summit meetings is needed. The first G-20 summit took place in Washington, D.C. in November, 2008 to seek ways to contain the worldwide financial and economic crisis. The major results are as follows. First, the need for cooperation between Industrially Advanced Countries (IACs) and Members of Emerging Markets (MEMs) was strongly recognized in the fight against the current economic crisis. Second, the status of the G-20 financial ministers meeting was strengthened as a principle global governing framework when it was elevated to the G-20 summit meeting for the first time since its inception in 1999. Third, the emergence of a new governance structure paved the way for the establishment of a new international economic and political order for the future.⁴

The Washington G-20 summit produced a series of policy measures to battle the crisis. These included closer coordination of macroeconomic policies among nations, five common principles for the reform of financial markets, and 47 short- to mid-term implementation practices, such as strengthening the role of the International Monetary Fund, bolstering the status of newly-emerging countries in the international financial regime, strengthening the G-20 framework, and discouraging the rise of trade protectionism.

Parallel to this, the Washington G-20 summit concluded that the leaders of the G-20 nations would continuously work together for sustainable growth in the world economy. To ensure full commitment, the G-20 leaders stipulated "low-carbon economic recovery" in Clause 15 of the Washington Declaration. They also acknowledged the need for international leadership in inducing strategic investment, heeded the call for the early conclusion of the World Trade Organization's Doha Development Agenda, acknowledged the need for joint action to create future jobs, and reaffirmed the importance of the Millennium Development Goals with the continued commitment to its implementation.

Five months later, in April 2009, the world leaders met again for the second G-20 summit in Lon-

² J. Jang, "S&T Policy Directions for Green Growth in Korea," STI Policy Review, Volume 1, Number 1, Spring 2010.

³ www.president.go.kr

⁴ The Washington Summit, Declaration Summit on Financial Markets and the World Economy, November 2008.

don, seeking to lay the foundation for reform to ensure that a global crisis does not happen again. They intensively discussed a "global deal" that would help stabilize financial markets, restore economic growth, and create jobs. The major results are as follows. First, an institutionalized framework was agreed upon to facilitate cooperation between the Industrially Advanced Countries and Members of Emerging Markets. Second, the momentum for the G-20 summit framework was wisely kept within the decision to hold the third G-20 meeting in September of 2009 to lay a solid foundation for future co-work toward the establishment of a new global governance structure. Third, an atmosphere of compromise and dialogue was expediently introduced by a new type of American leadership under the Obama Administration.⁵

The London G-20 meeting produced the following detailed policy measures: a \$1.1 trillion economic support package aimed at creating 19 million new jobs around the world, a combined \$5 trillion for public stimulus initiatives by the end of 2010, and a goal of attaining 4% growth in the global economy. To keep the financial crisis from recurring, the G-20 leaders also made the following agreements. First, the international financial bodies will augment capital to support newly emerging and developing economies. Second, the Financial Stability Board will have a strengthened mandate for stricter monitoring and regulation of financial systems. Third, newly-emerging and developing economies should have an increased voice and representation in multinational institutions such as the IMF and World Bank. Fourth, the "standstill" agreement would be extended to 2010 to prevent any new trade and investment barriers from being erected.

In particular, the term "green" was first used in the declaration of the London G-20. This was a valuable accomplishment in the sense that the G-20 summit has begun to balance its agenda by accommodating issues related to the post-crisis recovery of the global economy. The London declaration set forth specific policy measures in a more detailed fashion for the green recovery of the world economy. These policy measures included, public stimulus initiatives for low-carbon infrastructure and clean technologies development, the promotion of international trade, and financial support for the social safety nets of the poorest nations.⁶

Korea, as one of the G-20 coordination Troika, played an active role as a moderator between the advanced and newly emerging economies, in both the Washington and London summits. Korea spoke out on behalf of newly emerging economies on major issues concerning foreign currency, trade, and international finance. These developments significantly contributed to enhancing the global status of newly emerging economies. In addition, Korea shared its experience in successfully overcoming the Asian financial crisis with other participating nations.⁷ Lastly, Korea tried to concentrate its leadership on persuading the G-20 leaders to produce as many concrete, deliverable, and implementable policy measures as possible for a speedy recovery of the global economy from the worst crisis since the Great Depression.

In the Pittsburgh G-20 summit in 2009 successfully established a framework for a transition to recovery. To ensure a strong recovery and beyond, the G-20 leaders showed their strong resolve by drawing a consensus on the elevation of the G-2 summit meeting to a premier forum for a global economic cooperation. To support their initiative the G-20 leaders also made the following important agreements. First, the G-20 leaders agreed on the newly proposed framework for strong, sustainable, and balanced growth, by addressing dangerous imbalances that undermine long-term economic

⁵ The London Summit, The Global Plan for Recovery and Reform, April 2009.

⁶ Ibid.

⁷ www.G20.go.kr

growth. Second, to strengthen the economic recovery they also agreed on tough new financial market regulations that created strong international standards for bank capital, compensation and so on. Third, the G-20 leaders made specific commitments to increase access to food, fuel, and finance for developing states with a new World Bank Trust Fund to finance investments in food security, access to renewable energy, and the financial system.⁸

In a groundbreaking effort, the Pittsburgh G-20 summit exemplified extraordinary leadership to diversify its agenda to directly address global challenges such as climate change, energy security, and food security. In particular, the G-20 leaders agreed on important policy measures to enhance energy security by gradually reducing inefficient fossil fuel subsidies. The G-20 leaders mandated their Energy and Finance Ministers to report on their implementation strategies and timelines at the next G-20 summit in Toronto. In addition, they specifically asked their finance ministers to report back at the Toronto G-20 summit with a range of possible options for climate change financing. They also made those options available as a resource in the UNFCCC negotiations which were built on a number of successful international initiatives such as The Major Economies Forum (MEF) at the July L'Aquila G8 summit.

The Toronto G-20 summit marked the first 'premier forum' for international economic cooperation. Through in-depth discussions and deliberations on the implementation of the commitments from previous G-20 summits, the G-20 leaders produced important agreements for both short-term recovery and long-term growth, a framework for strong, sustainable, and balanced growth, along with financial sector reform, international financial institutions and development, fighting protectionism and promoting trade and investment, and several other long-term issues.

To ensure a green recovery and a solid foundation for strong, sustainable, and balanced growth the G-20 leaders agreed on concerted actions to sustain the recovery, create jobs, and to achieve stronger, more sustainable and more balanced growth tailored to national circumstances. To build a more resilient financial system, they agreed on four pillars: a strong regulatory framework, effective supervision, resolution and addressing systemic institutions, and transparent international assessment and peer review. For a more stable and resilient international monetary system and development, the G-20 leaders agreed to task finance ministers and central bank governors to prepare policy options to strengthen global financial safety nets for consideration at the Seoul Summit. To fight protectionism and promote trade and investment they reaffirmed their support to bring the WTO Doha Development Round to a balanced and ambitious conclusion as soon as possible. Finally, the G-20 leaders also committed to maintain the momentum for Aid for Trade and ask international agencies to step up their capacity for trade facilitation to boost world trade.⁹

Parallel to this, the G-20 members confirmed their commitment to a green recovery and sustainable global growth by reaffirming their support for the implementation of the Copenhagen Accord and expressing their appreciation for Mexican efforts to facilitate negotiations for the COP 16 in Cancun in 2010. They also expressed their high expectations over the outcome of the UN Secretary-General's High-Level Advisory Group on Climate Change Financing to explore innovative financing. In recognizing that 2010 marks an important year for development issues, the G-20 leaders reaffirmed their support for the global development agenda, a global partnership, and actions for all at the September 2010 Millennium Development Goals (MDG) High Level Plenary. Finally, they wel-

⁸ The Pittsburgh Summit, Leaders' Statement, September 2009.

⁹ The G-20 Toronto Summit Declaration, June 26-27 2010

comed the Global Pulse Initiative's interim report that aims to find a way to narrow the development gap and reduce poverty by agreeing to establish a Working Group on Development and mandate it to elaborate a development agenda with multi-year action plans to be adopted at the Seoul G-20 Summit in November.

3. MAJOR STRATEGIES AND STI PROPOSALS FOR THE SEOUL G-20 SUMMIT AND BEYOND

To build on a new agenda, Korea should facilitate discussions on the ways to ensure a speedy implementation of the agreed global deal for economic recovery at the upcoming Seoul G-20 summit. This initiative will create a stronger momentum that can be generated for the G-20 agenda to actively address major post-crisis global issues.

To move forward with this initiative, Korea should closely consult with the other members of the G-20 Steering Group in devising a strategy to make the Seoul G-20 summit in November a notable success. Exceptional advancements will entail an in-depth analysis of the major changes in the stature and the power configuration of the G-20 summit meeting.

With this new strategy, Korea should lead the G-20 leaders to exercise a spirit of compromise in following up on the issues which stopped short of reaching a consensus at the Toronto G-20 Summit. First, the institution of new ways to reform the global financial system through strengthened regulations. Second, detailed action plans for the recovery of the world economy. Third, a systematic review of progress on the implementation practices to prevent the spread of trade protectionism. Fourth, the solid preparation of policy options to strengthen global financial safety nets and the adoption of multi-year action plans for development.

Aside from the achievements in drafting a short-term economic recovery plan, the G-20 leaders should work on a long-term economic growth strategy that is resilient, sustainable, and green by coordinating their fiscal stimuli to the direction of increasing investment in green growth. By way of ensuring these efforts, the G-20 leaders should issue a mandate for the next G-20 summit to focus on a post-crisis governance framework for global green growth. As a result, it is obvious that the ability Korea in driving the world toward a green future will be limited by its status and place in the international community. However, Korea will have a unique opportunity to facilitate a green dialogue as chair of the November G-20 summit.

Korea must first ready itself with a credible logic as to why the G-20 leaders must take the initiative to usher in the era of green growth. Korea should play the role of moderator between advanced and newly emerging economies in creating a framework of global cooperation that represents a new role for the latter in the global financial and economic decision-making process. This is in line with the backing of U.S. President Barack Obama for the increased influence of emerging economic powers.

Based on the new foundation of global cooperation, Korea should prepare for a global green deal at the Seoul G-20 summit meeting in November. A declaration should be issued that includes the following policy measures based on rigorous deliberations. First, political commitment of the leaders of the G-20 to the creation of green values for the establishment of a global green order, second, the principles for actions to achieve the goal of global green growth, and third, best practice guidelines for the implementation of a global green deal.

A global green market must be created for a successful implementation of a global green deal. This requires initiatives of G-20 leaders for the establishment of a global innovation system and a global cyber infrastructure. Based on this, the G-20 countries should elevate their cooperation to the level

of developing green technologies for sustainable economic growth. Previously, the original G7 held internal international forums on science and technology cooperation that pushed for programs such as the Human Frontier Science Program and Global Information Infrastructure. Now, a new framework is required for a cooperative program between advanced and emerging economies for green technology development that requires strong leadership. The G-20 framework should be expanded to include a G-20 summit on global green science as well as technology and innovation (STI) cooperation. This G-20 green STI summit should take the initiative in promoting the G-20 Partnership for Green Technology to jointly develop green technologies and Green Technology for All for the sharing of green technology with the rest of the world.

As an example of a joint G8-MEMs (members of emerging markets) cooperation, Korea, China, and Japan should take the lead in securing renewable energy sources by jointly developing clean energy technologies.¹⁰ Secondly, the green ODA (official development aid) programs should be designed to closely cooperate in disseminating green technologies to the developing world. Thirdly, Korea should support various green cooperation initiatives, including the East Asian partnership on climate change proposed at the G8 summit meeting in Japan last year. In addition, the green ODA (official development aid) programs should be designed to closely cooperate in spreading green technologies to the developing world. Third, Korea should support various green cooperation initiatives, including the East Asian partnership on climate change proposed at the 2008 G8 summit meeting in Japan.¹¹ As a part of efforts to form a green growth belt in the region, Korea should strengthen the Korea-ASEAN ties for green growth.

According to a recent International Energy Agency report, it will take at least two decades before a new era of green technologies emerge. In the meantime, the greening of nuclear energy, which accounts for about 15% of global power production, can take the lead in efforts to achieve green economic growth and ensure global security. For this reason, a Global Partnership for Green Nuclear Technology should be initiated by the G-20 leaders for safer nuclear power.¹²

To effectively prepare for the Seoul G-20 summit 2010, a new working group on green growth should be created under the current G-20 governing body. For domestic purposes, Korea should also make a number of preparations. First, strengthen the role of the Korean G-20 Coordinating Committee Office¹³ to make systematic preparations that include a concrete roadmap for Korea to become a global green growth role model in addition to the appointment of a science and technology advisor to the President as an additional member of the Korean G-20 Coordinating Committee Office.¹⁴ Second, a special ambassador for green growth should be appointed to establish a global network of international cooperation. Third, a cohesive strategy for science and technology diplomacy should be drawn up to promote special cooperation for the joint development of green technologies that will drive green economic growth. Fourth, the concept of green corporate social responsibility should be promoted among startups and in small and medium-sized enterprises. Various projects can also be considered to promote the green mindset among corporate citizens so that companies

¹⁰ China, Korea and Japan reportedly consume 23 percent of the world's energy.

¹¹ The Ministry of Foreign Affairs and Trade, Annual Report, 2009

¹² Nobuo Tanaka, "International Energy Cooperation and Sustainable Economic Growth," Global Korea 2009, February 2009

¹³ www.G20.go.kr

¹⁴ The Presidential Committee on Green Growth. "National Strategy and 5-Year Plan for Green Growth.", Korea, 2009.

quickly adapt to the new paradigm of green production. In addition, a public campaign for green growth that involves all of society should commence to bring about real changes in Korea. Lastly, the two Koreas should cooperate on science and technology to help ease tensions on the Korean peninsula and pave the way for a green economic miracle. The two should start working together in areas such as green IT and renewable energy technology for green growth. Fundamental efforts should be undertaken for cooperation between the two Koreas, as well as the United States in developing green nuclear technology that is key to the greening of and a lasting peace on the Korean peninsula.

4. CONCLUDING REMARKS

It is possible that once the current economic crisis is over, the enthusiasm for and commitment to international cooperation will quickly lose momentum, as countries begin to act on national interests. Some people also warn that by pursuing green growth for crisis-hit economies, the world may see negative growth for a longer period than it would otherwise have to endure. We do not intend to disrespect such views based on realistic economic reasoning. However, we need to weigh the costs and benefits of action or no-action on green growth as we face the tough task of preventing an economic crisis from recurring, and subsequently achieving sustainable growth. Moreover, the world would suffer more serious damage from a global environmental crisis than the latest financial crisis has caused, unless our "business as usual" attitude is redressed now.

This may be an opportunity for Koreans to show the world that they have a knack for pulling out of crisis and prove themselves by making Korea a model of green growth. The Seoul G-20 green summit 2010 can be such an opportunity, as world leaders gather to forge a "Seoul Consensus" on the future direction of the post-crisis world economy.

Does all of this apply to Korea only? Our new mission for green growth cannot be accomplished without exceptional cooperation among G-20 members. Therefore, all 20 nations will get the same opportunity to demonstrate their leadership in turning the major causes of the current crisis such as interdependence and globalization into a transparent power source for our successful green growth enterprise.

G-20 leaders are now given the historic task of putting a human face on the fight to find solution to global challenges. This task can only be accomplished when sharp economic minds and warm political hearts work in harmony with green technology. Therefore, we strongly urge the G-20 leaders to consolidate their leadership¹⁵ to make the following G-20 summit a principal platform to promote science and technology cooperation for a green globe.

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