GREEN GROWTH 1.0 AND 2.0: TOWARDS MEANINGFUL ENVIRONMENTAL POLICY IN SOUTH KOREA

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I. INTRODUCTION

People do not deliberately set out to destroy the environment. Individual citizens, government officials, and corporate executives do not begin each day intending to do environmental damage. People, however, keep their houses overly warm or chillingly cold. Governments remain hesitant to enact national carbon-controlling legislation. Companies continue to generate electricity with coal power plants. Accordingly, accompanying the twentieth century's[1] vast economic expansion are major global environmental challenges, including climate disruption due to greenhouse gases (GHGs) and threats to human health from persistent organic pollutants.[2] These challenges can be divided into two broad categories affecting the natural environment: the dramatic increase of consumption of the Earth's natural resources and the exponential growth of pollution.[3] These global challenges are a serious threat to the Earth's natural endowment, productivity, and habitability. With globalization,[4] they are not easily solvable. Deliberate decision-making by policy makers and active participation by citizens will create the incentives and disincentives necessary to

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[1] Interestingly, the twentieth century has been marred by what some refer to as the "Five Nevers." Because of these actions: never before has humankind grown so dramatically, increasing demographic pressures; never before has humankind demanded so many resources; never before has humankind reached the post-industrial age or the space exploration stage; never before has humankind had such a global economic and information system; and never before has humankind come to the edge of self-termination. VICTOR K. TEPLYAKOV, *Global Forest Environmental Governance: Global Environmental Problems*, SEOUL NAT'L UNIV., COLL. OF AGRIC. & LIFE SCIENCES (2012) (on file with author). Although individuals at the local, national, and international levels have benefited from the "Five Nevers," these developments have created global environmental problems that touch the living conditions of the current generation and threaten future generations.

[2] JAMES GUSTAVE SPETH & PETER M. HAAS, GLOBAL ENVIRONMENTAL GOVERNANCE: FOUNDATIONS OF CONTEMPORARY ENVIRONMENTAL STUDIES 17 (2006). The "Ten Major Global Environmental Challenges" include: acid rain and regional-scale air pollution; ozone depletion by industrial and agricultural chemicals, including chlorofluorocarbons; global warming and climate change due to the increase in GHGs; deforestation, especially in the tropics; land degradation due to desertification, erosion, salinization, and other factors; freshwater pollution and scarcities; marine threats, including overfishing, habitat destruction, and pollution; threats to human health from persistent organic pollutants and other heavy metals; declines in biodiversity and ecosystem services through loss of species and ecosystems; and excessive nitrogen production and over-fertilization. *Id.*

[3] *Id.*

[4] Globalization is a contested topic, and thus, its definition varies by fields, issues, and target audiences. The author accepts "globalization" as presented by Manfred B. Steger in GLOBALIZATION: A VERY SHORT INTRODUCTION (2003) and GLOBALIZATION (2009). Thus, "globalization refers to a multidimensional set of social processes that create, multiply, stretch, and intensify worldwide social interdependencies and exchanges while at the same time fostering in people a growing awareness of deepening connections between the local and the distant." STEGER, GLOBALIZATION: A VERY SHORT INTRODUCTION 13.

addresses these threats. Moreover, these challenges must be examined from global, national, and local perspectives; each perspective has value to create the necessary changes for a stable environmental future.

Consequently, the United Nations and individual nations have cooperated, designed, and implemented plans to address increasing environmental challenges, while sustaining economic growth and ensuring social equity. These efforts were originally under the "sustainable development" concept. The 2008 financial and economic crises, however, brought new concepts to life. In 2008, the United Nations Environmental Programme (UNEP) advocated for a Global Green New Deal to achieve a "green economy," a term first derived in 1989. On the other hand, in 2005, the Fifth Ministerial Conference on Environment and Development (MCED) embraced "green growth," a short-hand term for "environmentally sustainable economic growth." Both "green economy" and "green growth" concepts exist under the sustainable development umbrella. As a result, both concepts not only address economic development and environmental degradation, but both are committed to social equity. This last pillar (of sustainable development) is represented by the adoption of the Millennium Development Goals (MDGs) in 2000. The MDGs are a set of eight goals—ranging from halving extreme poverty to halting the spread of HIV/AIDS, and providing universal primary education—to be accomplished by the target date of 2015. The goals and adjoining blueprints have galvanized unprecedented efforts to meet the needs of the world's poor.

South Korea has emerged as the primary proponent of the "green growth" concept. It is credited as initiating the term at the Fifth MCED. South Korea introduced a "Low Carbon, Green Growth" national vision for long-term development and adopted a "Five-Year Green Growth Plan (2009-2013)," following a "Green New Deal" in January 2009. Finally, South Korea enacted the "Framework Act on Low Carbon, Green Growth" in January 2010. Upon examination of South Korea's green growth efforts, the MDGs are notably absent. In fact, there is no mention of the MDGs in any South Korean documents addressing green growth. The sole exception is the "Seoul Initiative on Environmentally Sustainable Economic Growth." This document, however, was an outcome of the Fifth MCED and part of the "Regional Implementation Plan for Sustainable Development in Asia and the Pacific, 2006-2010." It was not the product of the South Korean government. Given this situation, this Note provides a critique of South Korea's green growth efforts, arguing that the green growth concept as envisioned by the Lee Myung-bak Administration of South Korea lacks a crucial component to achieve sustainable development: social equity. Although the engines to ensure economic growth and the means to prevent further environmental degradation through carbon reduction are overwhelming present, very little exists in the form of social equity. Specifically, none of South Korea's efforts address poverty eradication or the other MDGs.

This Note has a narrow scope. South Korea has three primary strategies to achieve green growth. This Note primarily addresses the third strategy, the targets of which include improving quality of life and strengthening the nation's

status as a green growth leader in the international arena. The decision to focus on the third strategy is two-fold. At the time of this writing, the majority of existing criticisms focus on the other two strategies. Also, of the three pillars of sustainable development, the social pillar is notably the weakest in South Korea's national vision. The third strategy has the most potential to address poverty eradication, the MDGs, and social equity in South Korea's green growth efforts. Given the separate, but interrelated nature of the three strategies, however, general information and commentary for the first and second strategies are included.

Following this introduction, Part II introduces the green growth concept. It provides a brief outline of the essential concepts: sustainable development, green economy, green growth, and green growth as an interrelated and interchangeable concept of green economy. Part III addresses South Korea's economic development, specifically its shift from a quantitative growth model to a qualitative growth model with low carbon, green growth as the national vision. Part IV is an overview of South Korea's green growth policies and legislations: the National Strategy, the Five-Year Plan, and the Framework Act on Low Carbon, Green Growth. This section details the three strategies and ten policy directions of the National Strategy and the Five-Year Plan, along with key aspects of the Framework Act on Low Carbon, Green Growth. Part V links green growth and green economy concepts with the United Nations Millennium Development Goals. Part VI examines the Green New Deal, the National Strategy, the Five-Year Plan, and the Framework Act on Low Carbon, Green Growth in light of their representations of the green growth concept. These four efforts are reviewed for their ability to achieve the MDGs. The green economy and green growth concepts are used as benchmarks. Part VII explains how green growth can become meaningful growth by national consensus and public participation. Finding that South Korea's green growth efforts have little to do with social equity, however, Part VIII, the conclusion, offers early signs of the end of green growth as outlined by the Lee Administration. This Note, nevertheless, ends with some optimistic remarks that South Korea's green growth efforts, coined 1.0 for the Lee Administration efforts and 2.0 for the Park Geun-hye Administration efforts, will not be easily forgotten.

II. THE EMERGENCE OF GREEN GROWTH

A. Sustainable Development as the Basic Framework

The concept of sustainable development gained global recognition in the early 1980s and gained widespread recognition after its inclusion in the United Nations Commission on Environment and Development—also known as the Brundtland Commission—1987 report, *Our Common Future*.[5] Sustainable development is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[6] The definition contains two key concepts: that of "needs," especially those of the world's poor, and that of limitations, especially ones imposed by technology and social organizations on the environment's ability to meet present and future needs.[7] In other words, the definition sought to balance continued economic development with its devastating impact on the natural environment. Sustainable development requires promoting values that encourage consumption standards within bounds of the ecologically possible and to which all can reasonably aspire.[8] Moreover, this concept requires that society meet human needs both by increasing productive potential and by ensuring equitable opportunities for all.[9]

In essence, sustainable development is a process of change such that the exploitation of resources, direction of investments, orientation of technological development, and institutional changes are all in harmony, and this harmony enhances both current and future potential to meet human needs and aspirations.[10] Practically, the idea of sustainable development reframed thinking in three ways.[11] First, it provided that poverty is a source of environmental degradation, and therefore, there is an inescapable connection between economics and the environment.[12] Second, it called for integrated thinking across disparate arenas and thus recognized that environmental outcomes are a function of policy choices in trade, agriculture, transport, energy, finance, and business activities.[13] Finally, sustainable development served as a reminder that environmental problems, such as GHGs, emerge over years, and therefore, it required a long-term view and careful balancing of intergenerational equities.[14]

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5 *See* U.N. Comm'n on Env't & Dev., *Our Common Future* ch. 2, U.N. Doc. A/42/427 (1987), *available at* http://www.un-docum ents.net/ocf-02.htm.

6 *Id.* at 43.

7 *Id.*

8 *Id.* at 44.

9 *Id.*

10 *Our Common Future*, *supra* note 5, at 46.

11 Daniel C. Esty, *A Term's Limit*, FOREIGN POL'Y, Sept.-Oct. 2001, at 74, *available at* http://www.jstor.org/stable/3183263.

12 *Id.*

13 *Id.*

14 *Id.*

Sustainable development has been the overreaching goal of the international community—for environmental issues—since the 1992 United Nations Conference on Environment and Development (UNCED), also known as the Earth Summit. The goal of the Earth Summit was to examine the progress since the United Nations Conference on Human Environment (UNHE), held in 1972 in Stockholm, Sweden, and to "elaborate strategies and measures to halt and reverse the effects of environmental degradation in the context of strengthened national and international efforts to promote sustainable and environmentally sound development in all countries."[15] The Earth Summit, which incorporated the policy measures outlined in the Rio Declaration and Agenda 2, called upon governments to develop national strategies for sustainable development.[16] These documents represent two of the major products of weeks of negotiations and compromises between 178 governments and 2,700 non-governmental organizations.[17] Despite the efforts of many governments to implement such strategies, recent global energy concerns, food and financial crises, and increasing poverty and health issues forced many of them to seek other ways to lead their nations out of these crises.[18] Thus, the concept of "green economy" was proposed as a means to catalyze renewed national policy development and international cooperation and support for sustainable development.[19]

Although there is an international interest in a green economy, an internally agreed upon definition or universal principle does not exist.[20] Over the years, interrelated but different terminology and concepts emerged.[21] This led to a

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[15] DIETRICH RAUSHNING ET AL., KEY RESOLUTIONS OF THE UNITED NATIONS GENERAL ASSEMBLY 1946-1996, at 525 (1997).

[16] U.N. BRIEFING PAPERS: THE WORLD CONFERENCES: DEVELOPING PRIORITIES FOR THE 21ST CENTURY, U.N. Sales No. E.97.I.5 (1997), *available at* http://www.un.org/geninfo/bp/worconf.html.

[17] *Id.*

[18] *Id.*

[19] *Id.*

[20] Cameron Allen & Stuart Clouth, *A Guidebook to the Green Economy, Issue 1: Green Economy, Green Growth, & Low-Carbon Development*, U.N. DIV. FOR SUSTAINABLE DEV. 8-9 (2012) [hereinafter *A Guidebook to the Green Economy*], http://sustainabledevelopment.un.org/content/documents/GE%20Guidebook.pdf.

[21] *Id.* For example, within the United Nations itself, the UNEP's definition is:

> One that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. It is low carbon, resource efficient, and socially inclusive. In a green economy, growth in income and employment should be driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystems services.

U.N. ENV'T PROGRAMME, *Forests in a Green Economy: A Synthesis* (2011), *available at* http://www.unep.org/greeneconomy/Portals/88/documents/research_products/Forest%20

lack of clarity of what green economy policies entail and how they are to be integrated with national policies on economic development and environmental protection.[22] It also led to a lack of perceived experience in designing, implementing, and reviewing the costs and benefits of green economy policies.[23] Despite this mystifying aspect of green economy, both developed and developing countries in Africa, Latin America, Asia, and Europe have engaged in designing and implementing national green economy strategies.[24]

B. Green Growth as an Interrelated and Interchangeable Concept

"Green growth" is viewed either as a spinoff of the green economy concept or as an entirely separate concept utilized by different organizations with different targets and audiences.[25] The United Nations attributes the origins of the green growth concept to the Fifth Ministerial Conference on Environment and Development,[26] an event co-hosted by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) and South Korea in 2005.[27] At the Fifth MCED, fifty-two governments and other stakeholders from Asia and the Pacific region met in Seoul, South Korea.[28] They agreed to move beyond sustainable development and "pursue a path of 'green growth.'"[29] This green growth approach sought to "harmonize economic growth with environmental sustainability."[30] The outcome document was the "Regional Implementation Plan

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final.pdf. In comparison, the U.N. Commission on Sustainable Development's definition of a green economy, also provided in 2011 and in the context of sustainable development and poverty eradication, is "[i]t can be seen as a lens for focusing on and seizing opportunities to advance economic and environmental goals simultaneously." United Nations Conference on Sustainable Development, Rio de Janiero, Braz., June 20-22, 2012, *Objectives and Themes of the United Nations Conference on Sustainable Development*, U.N. Doc. A/CONF.216/PC/6, at 4 (Dec. 22, 2010), *available at* http://www.uncsd2012.org/content/documents/N1070657.pdf.

22 *A Guidebook to the Green Economy*, *supra* note 20, at 5.

23 *Id.*

24 *See id.* at 26-33.

25 *See id.*

26 *Id.* at 33; U.N. ENV'T PROGRAMME, *Overview of the Republic of Korea's National Strategy for Green Growth* 51 n.2 (Apr. 2010) [hereinafter *Overview of the National Strategy for Green Growth*], http://www.unep.org/PDF/PressReleases/201004_unep_national_strategy.pdf.

27 *See Ministerial Conference on Environment and Development in Asia and the Pacific, 2005*, U.N. ECON. & SOCIAL COMM'N FOR ASIA & THE PACIFIC, http://www.unescap.org/mced/.

28 *A Guidebook to the Green Economy*, *supra* note 20, at 33.

29 *Id.*

30 *Id.*

for Sustainable Development in Asia and the Pacific."[31] This document provided a framework for addressing key sustainable development constraints in context of the needs and priorities of the Asia-Pacific region following the 2002 World Summit on Sustainable Development.[32] Regional implementation plans were proposed as elements of the implementation strategy, including the "Seoul Initiative on Environmentally Sustainable Economic Growth (Green Growth)."[33] In this implementation plan, and subsequent references to it, "environmentally sustainable economic growth" was followed by "green growth" in parentheses.[34]

Regardless of its sources of origins, the distinctions between green economy and green growth have been blurred.[35] While older definitions of both terms focused on the intersection of environment and economy, more recent definitions explicitly contain a social emphasis.[36] The United Nations compiled a

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[31] *See* Ministerial Conference on Environment and Development in Asia and the Pacific, Mar. 24-26, 2005, *Regional Implementation Plan for Sustainable Development in Asia & the Pacific, 2006-2010*, U.N. Doc. E/ESCAP/MCED(05)/5 (Feb. 21, 2005), *available at* http://www.unescap.org/mced/documents/presession/english/SOMCED5_5E_RIP.pdf.

[32] *See id.*

[33] *Id.*; *see also* Ministerial Conference on Environment and Development in Asia and the Pacific, Mar. 24-26, 2005, *Seoul Initiative On Environmentally Sustainable Economic Growth (Green Growth)*, U.N. Doc. E/ESCAP/MCED(05)/6 (Mar. 21, 2005) [hereinafter *Seoul Initiative*], *available at* http://www.unescap.org/mced/documents/presession/english/SOMCED5_6E_Seoul_Initiative.pdf.

[34] *See Seoul Initiative*, *supra* note 33; *A Guidebook to the Green Economy*, *supra* note 20.

[35] For example, in 2012 for the Rio+20 Summit (formally known as the United Nations Conference on Sustainable Development), the U.N. Division for Sustainable Development stated, "Green growth provides a positive agenda for pursuing the three pillars of sustainable development . . . by seeking to develop synergies instead of focusing on the trade-offs and trying to balance them . . . ." U.N. REGIONAL COMM'NS, *Green Growth & Sustainable Development: Regional Perspectives* 4 (2012), *available at* http://www.regionalcommissions.org/riobrochurefinal.pdf. This statement aligns with green economy definitions, rather than green growth definitions, since it explicitly includes the social dimension of sustainable development. *Id.*

[36] UNESCAP, UNEP, and the Asian Development Bank (ADB) have together defined green growth as "economic progress that fosters environmentally sustainable, low-carbon and socially inclusive development," whereas the World Bank's definition assumed that green growth inherently involves social inclusiveness, that is, green growth is "growth that is efficient, clean, and resilient—efficient in its use of natural resources, clean in that it minimizes pollution and environmental impacts, and resilient in that it accounts for natural hazards and the role of environmental management and natural capital in preventing physical disasters." *Compare* Green Growth, Resources and Resilience: Environmental Sustainability in Asia and the Pacific, U.N. Doc. ST/ESCAP/2600 (2012), *available at* http://www.unescap.org/esd/environment/flagpubs/GGRAP/documents/Full-Report.pdf, *with* WORLD BANK, INCLUSIVE GREEN GROWTH: THE PATHWAY TO SUSTAINABLE DEVELOPMENT 30 (2012), *available at* http://siteresources.worldbank.org/EXTSDNET/Resources/ Inclusive_Green_Growth_May_2012.pdf. *See also* note 35 and accompanying text.

table of keywords published in recent definitions of green economy and green growth, categorized under the three pillars of sustainable development. This table demonstrates a significant overlap between the two concepts, including the common languages of growth and economic development, environmental protection, low-carbon development, resilience, resource efficiency, ecological sustainability, human wellbeing, inclusiveness, and equity.[37]

Table 1
Unite Nations Summary of Published Keywords in Green Economy and Green Growth Definitions[38]

Dimension	Green Economy	Green Growth
Social	Human wellbeing; social equity; socially inclusive; reduced inequalities; better quality of life; social development; equitable access; addressing needs of women and youth	Wellbeing, socially inclusive, access to basic commodities for the impoverished; meeting demands for food production, transport, construction, housing, and energy
Economic	Growth in income and employment; public and private investments; resilient economy; economic growth; new economic activity	Economic growth and development; technology and innovation; environmentally sustainable economic progress; more resilient; sustained economic growth; driver for economic growth; new growth engines; green technology; new job opportunities; quantitative growth rather than simply increasing GDP; job creation or GDP growth
Environmental	Reducing environmental risks and ecological scarcities; low carbon; resource efficient; reduce carbon emissions and pollution; enhance energy and resource efficiency; prevent loss of biodiversity and ecosystem services; within ecological limits of the planet; environmental responsibility; finite carrying capacity	Protection and maintenance of natural assets and environmental services; provision of resources and services; low carbon; using fewer resources and generating fewer emissions; resource efficient; cleaner climatic and environmental sustainability; energy and resource efficiency; minimizes pollution and environmental impacts; resilient to hazards; harmony between the economy and the environment; environmental protection; reduce GHGs

37 *A Guidebook to the Green Economy*, *supra* note 20, at 60.
38 *Id.*

Table 1 shows that the various definitions of green growth and green economy are consistent, both having sustainable development as basic foundations and both reconciling the economic pillar with the environmental pillar without sacrificing the social pillar.[39] Although the International Chamber of Commerce proposed that the key difference between green growth and green economy is that "green growth" is a "bottom-up" approach of greening products, processes, services, technologies, and supply chains, whereas "green economy" is a "top-down" approach that involves strategic, macro-economic policies addressing systemic challenges,[40] the focus of this Note, South Korea's green growth model, will further demonstrate that a distinction between the terms is of little relevance. Moreover, the distinction will probably be of little significance in the future.[41] Both green economy and green growth are covering different shades of green, but green nonetheless.[42]

III. SOUTH KOREA: A PARADIGM SHIFT FROM QUANTITATIVE GROWTH TO QUALITATIVE GROWTH

A. The Old Quantitative Growth Model

In 1953, after the split of the Korean peninsula along a demilitarized zone at the 38th parallel, South Korea achieved rapid economic growth under the leadership of Park Chung-hee.[43] From 1962 until the mid-1990s, the government implemented regular five-year economic development plans based on theories of a quantitative growth paradigm.[44] The quantitative growth paradigm provided that labor and capital were the key factors of production, and thus, extensive growth in labor and capital made extensive economic growth possible.[45] South Korea is where it is today most likely as a result of this paradigm shift.[46] In 2012 figures, South Korea's GDP was U.S. $1.130 trillion, population was 50.00 million people,

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[39] Stephanie Hallegatte et al., *From Growth to Green Growth: A Framework* 2-3 (World Bank Sustainable Dev. Network, Working Paper No. 5872, 2011), *available at* http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2011/12/07/000158349_20111207171314/Rendered/PDF/WPS5872.pdf.

[40] Int'l Chamber of Commerce [ICC], *Ten Conditions for a Transition Towards a Green Economy*, at 3, ICC Doc. No. 213-18/7 (Dec. 8, 2011), *available at* http://www.iccwbo.org/Advocacy-Codes-and-Rules/Document-centre/2012/ICC-Ten-conditions-for-a-transition-towards-a-Green-Economy-(2012)/.

[41] *See A Guidebook to the Green Economy*, *supra* note 20, at 60.

[42] *See id.*

[43] *World Factbook*, *Korea, South*, CENT. INTELLIGENCE AGENCY, https://www.cia.gov/library/publications/the-world-factbook/geos/ks.html (last visited Feb. 29, 2014).

[44] *Overview of the National Strategy for Green Growth*, *supra* note 26, at 14.

[45] *Id.*

[46] *See generally id.*

and GNI per capita was U.S. $22,670.[47] Moreover, World Development Indicators boasted life expectancy at birth of eighty-one years, school enrollment in primary school at 104 percent,[48] and an improved water source in rural areas of 88 percent.[49] Not surprisingly, South Korea is one of the world's top twenty economies—ranking 15th in 2008 and remaining at 15th in 2012 in total GDP[50]—and a member of the Organization for Economic Co-operation and Development (OECD).[51]

South Korea's rapid economic progress, however, created numerous environmental challenges and constraints that required the nation to shift its quantitative growth paradigm into something more environmentally friendly. In 2010, the most recent year where this data is available, its CO2 emission is 11.5 metric tons per capita.[52] In Korean culture, the 60th anniversary marks a point in life for reflection, introspection, and an opportunity to make new pledges for the sixty years ahead.[53] The year 2008 marked the 60th anniversary of South Korea as an independent nation.[54] It was a period to celebrate its previous successes, but the anniversary also required the nation to plan for the upcoming sixty years with a new vision.[55]

B. A New Growth Engine Announced: Low Carbon, Green Growth

It was obvious to the South Korean government that it would not be able to continue its quantitative growth paradigm for the next sixty years.[56] The

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[47] *Korea, Republic Country Data*, WORLD BANK [hereinafter *Korea Country Data*], http://data.worldbank.org/country/korea-republic#cp_wdi (last visited Jan. 29, 2014).

[48] *Id*. The gross enrollment ratio for primary school enrollment can exceed 100 percent because of the inclusion of over-aged and under-aged students, resulting from early or late school entrance and grade repetition. *Id.*

[49] *Id.* The life expectancy and water source data is for 2012, whereas the primary school enrollment data is for 2011. *Id.*

[50] *GDP (Current US$)*, WORLD BANK, http://data.worldbank.org/indicator/NY.GDP.MKTP.CD/countries/1W?display=default (last visited Jan. 29, 2014).

[51] *List of OCED Member countries-Ratification of the Convention on the OECD,* OECD, http://www.oecd.org/general/listofoecdmembercountries-ratificationoftheconventionontheoecd.htm (last visited Jan. 29, 2014).

[52] *CO2 Emissions (Metric Tons Per Capita)*, WORLD BANK, http://data.worldbank.org/indicator/EN.ATM.CO2E.PC/countries/KR--XS?order=wbapi_data_value_2010%20wbapi_data_value%20wbapi_data_value-last&sort=desc&display=default (last visited Jan. 29, 2014).

[53] PRESIDENTIAL COMM. ON GREEN GROWTH OF REPUBLIC OF KOREA, GREEN GROWTH IN MOTION: SHARING KOREA'S EXPERIENCE 11 (2011) [hereinafter GREEN GROWTH IN MOTION], *available at* http://www.gggi.org/sites/www.gggi.org/files/research/GreenGrowthInMotion.pdf.

[54] *Id.*

[55] *Id.*

[56] *Id.* at 12.

Presidential Committee on Green Growth (PCGG0 offered three primary reasons.[57] First, the rapid economic growth due to the quantitative growth paradigm actually ended about a decade ago.[58] This is attributable to the government's failure to provide new engines for growth and new development models.[59] Second, South Korea is more vulnerable in terms of energy security now than compared to the past.[60] In 2010, South Korea was the 5th largest net importer of both crude oil at 119 million tons[61] and natural gas at 47 billion cubic meters.[62] In 2011, it was the 3rd largest net importer of coal at 129 million tons.[63] Overall, South Korea imported 97 percent of its total energy requirements in 2010,[64] creating dependency on and vulnerability to fluctuations in world energy prices and supplies. Moreover, South Korea's energy security is further threatened by the increasing energy demand of emerging economies, specifically led by China and India.[65] Finally, South Korea must address the threat of climate change and global warming.[66] Emissions of greenhouse gases in South Korea doubled in the past fifteen years.[67] Temperature increase double that of the world average resulted in entire habitat changes for the nation's seasons.[68] Thus, in the midst of the financial and economic crises of 2008, President Lee Myung-bak announced a "low-carbon, green growth" strategy as the new long-term development vision.[69]

At a national address on the 60th Anniversary of the founding of South Korea, President Lee announced that "Low Carbon, Green Growth" would be "a new national development paradigm that creates new growth engines and jobs with green technology and clean energy."[70] As defined in that address, green growth is "sustainable growth which helps reduce greenhouse gas emission and environmental pollution."[71] Emphasizing green technology that will create numerous jobs, future energy security, a promise to formulate new welfare models,

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[57] *Id.* at 13.

[58] GREEN GROWTH IN MOTION, *supra* note 53, at 13.

[59] *Id.*

[60] *Id.*

[61] Int'l Energy Agency, *Key World Statistics*, at 11 (2012), *available at* http://www.iea.org/publications/freepublications/publication/kwes.pdf.

[62] *Id.* at 13.

[63] *Id.* at 15.

[64] *Overview of the National Strategy for Green Growth*, *supra* note 26, at 14.

[65] Int'l Energy Agency, *World Energy Outlook*, at 46-47 (2010), *available at* http://www.iea.org/publications/freepublications/publication/name,27324,en.html.

[66] GREEN GROWTH IN MOTION, *supra* note 53, at 13.

[67] *Id.* at 14.

[68] *Id.* at 13.

[69] Lee Myung-bak, President, 63rd Anniversary of National Liberation and the 60th Anniversary of the Founding of the Republic of Korea (Aug. 15, 2008) [hereinafter President's Speech on August 15], *available at* http://news.mofat.go.kr/enews paper/articleview.php?master=&aid=1333&ssid=23&mvid=576t.

[70] *Id.*

[71] *Id.*

and a commitment to "upgrade the value of . . . [South] Korea's national brand"[72] in the international community, President Lee ambitiously proposed that "[g]reen growth will enable a Miracle on the Korean Peninsula to succeed the Miracle on the Han River."[73]

C. Paving the Way: The Global Green New Deal

In March of 2009, the United Nations Environmental Programme released a Policy Brief for a Global Green New Deal (GGND), encouraging governments to use the financial and economic crisis before them to direct public spending and private investment in green sectors.[74] UNEP argued that an investment of 1 percent of global GDP over two years could provide "the critical mass of green infrastructure needed to seed a significant greening of the global economy."[75] The broad objectives of the GGND were threefold:

> (1) To make a major contribution to reviving the world economy, saving and creating jobs, and protecting vulnerable groups;
> (2) To reduce carbon dependency and ecosystem degradation, putting economies on a path to clean and stable development; and
> (3) To further sustainable and inclusive growth, achieving the MDGs and ending extreme poverty by 2015.[76]

To achieve these objectives, UNEP proposed that governments include and implement three categories of reforms: (1) sectorally target fiscal stimulus to be carved out of the U.S. $3.0 trillion stimulus package already promised by governments around the world to re-inflate demand; (2) domestic policy reforms for green investments within domestic economies; and (3) reforms to international policy architecture and international coordination to enable and support national initiatives.[77]

With UNEP's guidelines, the South Korean government launched its Green New Deal stimulus package in January of 2009, comprised of a mix of financial, fiscal, and taxation policies.[78] The stimulus amounted to a total of U.S. $38.1 billion to be implemented from 2009 to 2012.[79] Eighty percent of the total amount—U.S. $30.7 billion—was allocated to environmental efforts, including

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72 *Id.*
73 *Id.*
74 U.N. ENV'T PROGRAMME, *Global Green New Deal: Policy Brief* (2009) [hereinafter *Global Green New Deal: Policy Brief*], *available at* http://www.unep.ch/etb/publications/Green%20Economy/UNEP%20Policy%20Brief%20Eng.pdf.
75 *Id.* at 1.
76 *Id.* at 5.
77 *Id.* at 5-6.
78 *Id.* at 15.
79 *Overview of the National Strategy for Green Growth*, *supra* note 26, at 15.

U.S. $1.80 billion for renewable energies, U.S. $6.19 billion for energy efficient building, and U.S. $1.80 billion to low carbon vehicles.[80] More specifically, South Korea announced that U.S. $11.7 billion would be invested in restoring four major rivers, expecting to create 200,000 jobs, and another 16,000 jobs from developing other water infrastructure such as small dams.[81] Another U.S. $7 billion was announced for mass transit and railways, expecting to create 138,000 jobs.[82] South Korea's Green New Deal was a policy initiative for creating jobs and revitalizing the economy, in the short-term, and boosting green growth, in the medium- and long-term.[83]

D. The Framework Act, National Strategy, and Five-Year Plan

In June of 2009, the government introduced the 2009-2013 Five-Year Plan.[84] The Five-Year Plan serves as the medium-term plan for implementing the green growth National Strategy and absorbing the Green New Deal by encompassing a number of previously announced projects.[85] It had a total funding of U.S. $83.6 billion, representing 2 percent of the country's GDP.[86] It was intended as a means to turn the National Strategy into a concrete and operational policy initiative for long-term green growth.[87]

The Framework Act on Low Carbon, Green Growth (Framework Act) is the base law for all national strategies and the 2009-2013 Five-Year Plan, even though it was enacted after the adoption of the National Strategy and Five-Year Plan.[88] It was drafted at the end of 2008 with efforts led by the Taskforce on the Establishment of Green Growth Committee.[89] The Framework Act aimed to comprehensively link existing policies and laws on low carbon, green growth. The bill passed with bipartisan agreement on December 29, 2009, and after presidential approval, it was officially announced on January 13, 2010.[90] The Framework Act took effect on April 14, 2010.[91]

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[80] *Id.*

[81] *Global Green New Deal: Policy Brief*, *supra* note 74, at 9 (internal citation omitted).

[82] *Id.* at 7 (citing Press Release, U.N. Env't Programme, Realizing a "Green New Deal" (Feb. 16, 2009), *available at* http://www.grinda.no/news/press/3469.aspx).

[83] *Overview of the National Strategy for Green Growth*, *supra* note 26, at 16.

[84] *Id.*

[85] *Id.*

[86] *Id.* at 6; *see also* Randal S. Jones & Byungseo Yoo, *Korea's Green Growth Strategy: Mitigating Climate Change & Developing New Growth Engines* 17 (Org. for Econ. & Co-operation & Dev., Working Paper No. 798, 2011), *available at* http://dx.doi.org/10.1787/5kmbhk4gh1ns-en.

[87] *Overview of the National Strategy for Green Growth*, *supra* note 26, at 6.

[88] GREEN GROWTH IN MOTION, *supra* note 53, at 26-27.

[89] *Id.* at 26.

[90] *Id.* at 27.

[91] *Id.*

E. The Uniqueness of South Korea's "Green Growth" Model

South Korea adopted the green growth concept and expanded it to be a national framework that touches every aspect of individual lifestyles, business operations, and government actions. Moreover, the scope of the South Korean model is crossing national boundaries as a benchmark for Asia and the Pacific.[92]

South Korea provides the following as its green growth definition:

> Green growth is aimed at creating a new development paradigm in which the conflicting goals of economic growth and protection of the environment are no longer seen as such. It engenders a complementary relationship between the two ideals. Broadly defined, green growth seeks to advance the transition from quantitative growth to qualitative growth and the shift from the traditional, fossil-fuel dependent socioeconomic structure into a low carbon one.[93]

This definition represents South Korea's pursuit of continuing economic and financial growth in the midst of declining GDP growth, increasing environmental degradation, and growing public discourse in the years leading up to and after the financial and economic crisis of 2008.[94] It blends existing concepts of green economy and green growth.[95] South Korea's green growth model focuses on climate change mitigation measures and reduction of fossil fuel dependency for a secure energy future.[96] It penetrates most (or maybe even all) aspects of South Korean society, including both public and private industrial sectors, the transportation and building sectors, and the lifestyle and consumption of individuals.[97] As an all-encompassing paradigm, the green growth model necessitates active participation from the government, the private sector, and the general public.[98] As provided in an official report, in pursuing this path, South Korea not only ensures a promising future for its citizens in all aspects of their lives, but it also enhances the nation's status in the international community as it "seeks to contribute to the international community based on its principle of working together in addressing the common challenges of [the] world."[99]

Table 2 provides the timeline for South Korea's green growth development, from the announcement of the national vision to the enactment of the legal foundation to achieve that vision.

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92 *See A Guidebook to the Green Economy*, *supra* note 20, at 33-35.
93 GREEN GROWTH IN MOTION, *supra* note 53, at 15.
94 *Overview of the National Strategy for Green Growth*, *supra* note 26, at 14-15.
95 *See Ten Conditions*, *supra* note 40, at 3.
96 GREEN GROWTH IN MOTION, *supra* note 53, at 15.
97 *Id.*
98 *Id.*
99 *Id.*

Table 2
Timeline of the Development of South Korea's Green Growth Strategy[100]

	Action	Date
Vision	President Lee Myung-bak proclaimed Low Carbon, Green Growth as South Korea's vision to guide development for the next fifty years.	September, 2008
	Announced the National Strategy for Green Growth, up to 2050.	July, 2009
Institutional Framework	Established the Presidential Committee on Green Growth.	January, 2009
	Created local green growth committees in cities and provinces.	November, 2009
	Started monthly evaluation meetings, chaired by the Prime Minister.	September, 2011
Short-term Plan	Launched the Green New Deal.	January, 2009
Mid-term Plan	Launched the Five-Year Plan for Green Growth (2009-2013).	July, 2009
Emission Target	Announced targets to reduce GHG emissions by 30 percent relative to business as usual baseline by 2020.	November, 2010
	Setting reduction targets by sector and industry.	July, 2011
	Launched design team for 2015 emission trading scheme.	February, 2013
Legal Foundation	Enacted the Framework Act on Low Carbon, Green Growth.	January, 2010
	Submitted a bill to the National Assembly to create an Emission Trading Scheme.	April, 2011

[100] Adopted from Randall S. Jones & Byungseo Yoo, *Achieving the "Low Carbon, Green Growth" Vision in Korea* 5 (Org. for Econ. & Co-operation & Dev., Working Paper No. 964, 2012), *available at* http://dx.doi.org/10.1787/5k97gkdc52jl-en.

IV. LOW CARBON, GREEN GROWTH NATIONAL POLICIES AND LEGISLATION

A. The National Strategy and Five-Year Plan

To implement the national vision of green growth, the National Strategy for Green Growth was adopted in 2009 along with the 2009-2013 Five-Year Plan for Green Growth.[101] The National Strategy and the Five-Year Plan are mid- to long-term (2009-2050) national agendas.[102] Both were implemented with collaborative efforts among government, industries, and civil society.[103] The National Strategy contains three primary strategies and ten policy directions.[104] In alignment with the National Strategy objectives, the Five-Year Plan identifies fifty core tasks after considering investment potential, significance of project, and relevance to the National Strategy.[105] Along with the core tasks, the Five-Year Plan names the ministries in charge, the yearly investment plan, and the expected benefits, and thus, the plan allows for systematic mechanisms of policy implementation.[106] Moreover, the Five-Year Plan specifies policy targets for each category.[107] Table 3 provides the targets alongside their policy directions.

1. The Three Strategies and Ten Policy Agenda Items

a. First Strategy: Measures for Climate Change and Securing Energy Independence

The first strategy addresses effective response to climate change and energy independence.[108] The three policies include: (1) mitigating GHG emissions effectively; (2) reducing use of fossil fuel and improving energy independency; and (3) strengthening the capacity to adapt to climate change.[109] Moving beyond fossil fuels will help South Korea achieve energy independence and effectively mitigate GHG emissions.[110] Thus, this strategy calls for "actions

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[101] PRESIDENTIAL COMM. ON GREEN GROWTH OF REPUBLIC OF KOREA, ROAD TO OUR FUTURE: GREEN GROWTH 8 (2009) [hereinafter ROAD TO OUR FUTURE], *available at* http://www.greengrowth.go.kr/?p=42553.

[102] *Id.*

[103] *Id.*

[104] GREEN GROWTH IN MOTION, *supra* note 53, at 44; ROAD TO OUR FUTURE, *supra* note 100, at 9.

[105] GREEN GROWTH IN MOTION, *supra* note 53, at 42.

[106] *Id.*

[107] *Id.*

[108] *Id.* at 44; ROAD TO OUR FUTURE, *supra* note 100, at 9.

[109] GREEN GROWTH IN MOTION, *supra* note 53, at 44; ROAD TO OUR FUTURE, *supra* note 100, at 9.

[110] ROAD TO OUR FUTURE, *supra* note 100, at 9.

such as setting mid- to long-term mitigation goals, increasing the use of new and renewable energy sources, and managing energy demand efficiently."[111]

b. Second Strategy: Creation of New Growth Engines

The second strategy addresses creation of new growth engines.[112] The four policies include: (1) developing green technologies and growth engines; (2) greening industries and nurturing green industry; (3) advancing industrial structures; and (4) laying the foundation for a green economy.[113] This strategy emphasizes increasing strategic investments in research and development sectors; developing green small and medium enterprises, the cutting-edge convergence industry, and the high value-added service industry; creating a national carbon emissions trading market; laying the structure for green finance; and providing tax incentives for eco-friendly activities.[114]

c. Third Strategy: Improving Quality of Life and Strengthening the Status of the Country

The third strategy is improving the quality of life for the people and strengthening the nation's reputation in the international community through strong advocacy for green growth.[115] The three policies include: (1) constructing green land, water, and transportation systems; (2) creating a green lifestyle; and (3) becoming a role model for the international community as a green growth leader.[116] As a result of this strategy, green vehicles and bicycles will be more widely utilized.[117] Campaigns will be conducted to promote both public awareness and acceptance of green lifestyles.[118] Moreover, by redoubling its efforts for mitigating climate change and assisting developing countries to deal with the adverse impacts of climate change, South Korea strives to build its national image as a green growth role model.[119]

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[111] *Id.*

[112] GREEN GROWTH IN MOTION, *supra* note 53, at 44; ROAD TO OUR FUTURE, *supra* note 100, at 9.

[113] GREEN GROWTH IN MOTION, *supra* note 53, at 44; ROAD TO OUR FUTURE, *supra* note 100, at 9.

[114] ROAD TO OUR FUTURE, *supra* note 100, at 10.

[115] GREEN GROWTH IN MOTION, *supra* note 53, at 44; ROAD TO OUR FUTURE, *supra* note 100, at 9.

[116] GREEN GROWTH IN MOTION, *supra* note 53, at 44; ROAD TO OUR FUTURE, *supra* note 100, at 9.

[117] ROAD TO OUR FUTURE, *supra* note 100, at 10.

[118] *Id.*

[119] *Id.*

Table 3
The Five-Year Plan Strategies and Policy Directions[120]

Three Strategies	Ten Policy Agenda Items
Strategy 1, Effective response to climate change and energy independence	(1) Effective mitigation of GHGs
	(2) Reducing fossil fuel use and improving energy independency
	(3) Climate change adaptation
Strategy 2, Creation of new growth engines	(4) Developing green technologies and growth engines
	(5) Greening industries and nurturing green industry
	(6) Advancement of industrial structure
	(7) Laying the foundation for green economy
Strategy 3, Improvement of quality of life and strengthening the nation's reputation	(8) Construction of green land and transportation
	(9) Green lifestyle
	(10) Achieving green growth model national status

B. The Framework Act on Low Carbon, Green Growth

The Framework Act is composed of seven chapters and sixty-four articles.[121] The Enforcement Decree for the Framework Act accompanies it, which also took effect on April 14, 2010.[122] The Framework Act was enacted primarily "to implement measures to effectively address climate change and energy issues and promote sustainable development, which are partially implemented by various ministries and offices pursuant to respective Acts and subordinate statutes, by flexibly bringing them together or integrating them."[123] Two other reasons for its enactment include: (1) to build the implementation system necessary for green growth such that the creation of green technology and green industry will harmonize the economy and environment; and (2) to devise a variety of institutional systems to promote low carbon, green growth in the international region outside South Korea's boundaries.[124] Table 4 provides the chapters of the Framework Act alongside the corresponding Enforcement Decree provisions.

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120 GREEN GROWTH IN MOTION, *supra* note 53, at 44.

121 *See* MINISTRY OF GOV'T LEGISLATION, FRAMEWORK ACT ON LOW CARBON, GREEN GROWTH (2010) [hereinafter THE FRAMEWORK ACT], *available at* http://unpan1.un.org/intradoc/groups/public/documents/apcity/unpan050317.pdf. This English version of the Framework Act is superseded by the Korean version.

122 GREEN GROWTH IN MOTION, *supra* note 53, at 27.

123 THE FRAMEWORK ACT, *supra* note 120, at 24.

124 *Id.*

Table 4
Structure of the Framework Act and Enforcement Decree[125]

Classification	Act	Enforcement Decree
Chapter 1, General Provisions	Purpose; Definitions; Basic Principles; Responsibilities of Entities	Purpose; Greenhouse Gases
Chapter 2, National Strategy for Low Carbon, Green Growth	Establishment, implementation, monitoring, and evaluation of the National Strategy and Action Plan for Green Growth	Establishment of Five-Year Plan for National Strategy for Green Growth; Establishment, Amendment, Monitoring, and Evaluation of Central and Local Green Growth Plans
Chapter 3, Presidential Committee on Green Growth, Etc.	Composition, operation, and function of the Presidential Committee on Green Growth	Composition, operation, meetings, deliberation of Presidential Committee on Green Growth; Subcommittees; Secretariat; Local Committees on Green Growth; Distribution of Resources for Green Technology Development
Chapter 4, Promotion of Low Carbon, Green Growth	Fostering Green Economy and Green Industries; Resource Recycling; Green Technology; Green Finance; Eco-friendly Tax Reformation; Green Jobs	Establishment, operation, and support of Green Industry Investment Companies; Standardization and Certification Procedure of Green Technologies and Green Industries; Green Cluster Development
Chapter 5, Realization of Low Carbon Society	Establishment of Basic Plans for Climate and Energy Policies; Target Management; Reporting of Greenhouse Gas Emissions and Energy Consumptions; Cap and Trade System	Principles of Management of Greenhouse Gases; Public Institutions Subject to Control of Greenhouse Gases and Energy Targets; Designation of Controlled Entities; Green Gases and Energy Target Management by Controlled Entities, etc.
Chapter 6, Realization of Green Life and Sustainable Development	Green Land; Water; Green Transportation; Construction; Agriculture; Green Consumption and Life	Plan for Green Land; Greenhouses Gas Emissions Reduction System in the Traffic Sector; Standards and Expansion for Green Buildings
Chapter 7, Supplementary Provisions	Enhancement of International Cooperation; Preparation of National Reports; Fines for Negligence	Imposition of Fines for Negligence

[125] GREEN GROWTH IN MOTION, *supra* note 53, at 27.

1. Legal and Policy Implications

The Framework Act is a comprehensive law that includes short-term responses to climate change, energy, and the environment.[126] It "provides the legal and institutional groundwork for a systematic transition of society and economy to green growth."[127] The Framework Act is the "fundamental law with precedence over other relevant laws," including prior energy- or sustainable-development-related laws."[128] Future laws "must conform to the objectives and principles" of the Act, and "policies and measures taken under other laws must be in harmony" with the National Strategy.[129] The Framework Act is a results-based law, focusing on the "management, monitoring, and evaluation of specified targets and policy goals."[130]

Regarding policies, the Framework Act focuses on South Korea's future development by highlighting growth in a low-carbon society through development of new growth engines.[131] The Act considers practicality and flexibility by recognizing that GHG is not merely a regulatory scheme but a new growth engine.[132] It does this by providing safe measures for industries that are particularly vulnerable to international competition, and by mandating sustainable water management to cope with possible water scarcity problems.[133] Moreover, by introducing eco-friendly tax reform, disclosing green management performances, requiring fuel efficiency standards, and enhancing green labeling policies, the Framework Act signals to businesses and consumers that productivity and consumption patterns must become efficient and resource conservative.[134]

2. Key Aspects of the Framework Act

The Framework Act has several major provisions besides those directly relating to the low carbon, green growth strategy. Regarding the overall plan, Article 9 mandates "[t]he government shall establish and enforce the national strategy for low carbon, green growth . . . , which shall include the targets of the State's policies for low carbon, green growth, the strategy for promotion, and main tasks of promotion."[135] This mandate includes setting five-year action plans

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126 *Id.* at 30.

127 *Id.*

128 *Id.* at 31.

129 *Id.*

130 GREEN GROWTH IN MOTION, *supra* note 53, at 31. For example, the Framework Act crafted policies regarding mandatory GHG reporting, creation of a GHG inventory, and a cap-and-trade for emissions (with consideration of international standards). *Id.*

131 *Id.* at 30.

132 *Id.* at 31.

133 *Id.*

134 *Id.*

135 THE FRAMEWORK ACT, *supra* note 120, at 40.

for green growth that have policy objectives, strategies for attaining targets, policies for prioritized items, and an estimated budget.[136] In this scheme, central administrative agencies are responsible for preparing central enforcement plans in their respective sectors (Article 10), while local governments are to prepare local plans (Article 11).[137] Moreover, Article 14 establishes institutions to foster low carbon, green growth, specifically forming the Presidential Committee on Green Growth to create major policies and plans related to low carbon, green growth and to matters concerning the performance of such policies and plans.[138] Municipality or provincial governments are required to create local committees on green growth (Article 20).[139]

The Framework Act also has an international provision. Article 61(1) mandates "the [g]overnment shall prepare various measures for promoting international cooperation and expansion in overseas markets through information exchange on low carbon, green growth with foreign and international organizations and through participation in technical cooperation, standardization, and joint surveys and research."[140] It also mandates that the government provide developing nations with financial support to strengthen environmental diplomacy and to tackle climate change (Article 61(2)).[141]

a. Green Economy, Green Technology, and Green Industries

Article 22(1) provides "[t]he [g]overnment shall strengthen the national economy and materialize the economy pursuing sustainable development (hereafter referred to as "green economy") by reducing the use of fossil fuels step-by-step and fostering green technology and green industries."[142] To foster and support a green economy, Article 23 provides measures and matters for the government to address, including matters that concern domestic and overseas economic conditions and the prospects thereof (Article 23(2)(1)); matters concerning the conversion of existing national infrastructure—including electric, information and telecommunications, and traffic systems—into an environmentally friendly structure (Article 23(2)(5)); and matters concerning the training of human resources for green industries and the creation of job opportunities (Article 23(2)(7)).[143]

The Framework Act promotes green technology and green industries as new engines for growth and green jobs. Article 25 provides support for a transition to eco-friendly production system and promotes corporate green

136 GREEN GROWTH IN MOTION, *supra* note 53, at 28.
137 THE FRAMEWORK ACT, *supra* note 120, at 41.
138 *Id.* at 43.
139 *Id.* at 47.
140 *Id.* at 82.
141 *Id.*
142 THE FRAMEWORK ACT, *supra* note 120, at 48.
143 *Id.* at 49.

management.[144] Article 26 enables the government to establish and enforce measures to facilitate research, development, and commercialization of green technology.[145] The State, or any local government, under Article 31, may provide financial support for green technology and green industries, such as payment of subsidies with the use of the Korea Credit Guarantee Fund Act, or it may even abate or exempt enterprises from income tax, corporate tax, acquisition tax, property tax, registration tax, or other taxes.[146] Another means to reduce the burden on enterprises as they transit to green technology or green industry is Article 32. It requires that the government remodel the domestic regulatory system and provide measures to address compliance with the international regulations.[147]

b. Finance

The Framework Act mandates that the government stimulate green investment through green finance. Article 28 enables the government to establish and enforce financial measures to facilitate low carbon, green growth.[148] These measures include, but are not limited to, raising the financial resources and financial support for supporting green economy and green industry, and establishing a carbon market—"a market in which the rights to emit greenhouse gases or results of performance of reducing or absorbing greenhouse gases are traded"—and stimulation of the market's transactions.[149] Green certification systems and screening of green businesses allow the government to select promising green technologies, companies, and industries to direct investment.[150] Moreover, the Act promotes the creation of a green fund (Article 29),[151] which is where public agencies invest in green research and development and redistribute the investment to their investors.[152] An eco-friendly tax system is also promoted to minimize the nation's inefficient resource distribution (Article 30).[153]

c. Energy and Greenhouse Gas Emissions

Articles relating to energy and GHG emissions permeate the entire act. They mandate that the government substantially increase energy independence

144 *Id.* at 50-51.
145 *Id.* at 51.
146 *Id.* at 55.
147 THE FRAMEWORK ACT, *supra* note 120, at 56.
148 *Id.* at 53.
149 *Id.*
150 GREEN GROWTH IN MOTION, *supra* note 53, at 29.
151 THE FRAMEWORK ACT, *supra* note 120, at 53.
152 GREEN GROWTH IN MOTION, *supra* note 53, at 29.
153 THE FRAMEWORK ACT, *supra* note 120, at 55.

and gradually reduce GHG emissions. Primarily, Article 42 requires that the government prepare medium- and long-term goals and monitor the progress towards major objectives, including reduction of greenhouse gases; energy conservation and energy efficiency; self-sufficiency in energy; and targets for the supply of new and renewable energy.[154] These basic plans—those for coping with climate change and those for energy—are to be established and implemented every five years for a planning period of twenty years (Articles 40 and 41).[155]

d. Lifestyle

Article 49 mandates that the government establish and promote measures for realizing green life, green lands, and sustainable development.[156] The Framework Act focuses on reducing GHGs in the transportation sector with the expansion of green transport such as trains, busses, light-rail transits, and bicycles (Article 53).[157] It also introduces a grading system for green buildings, so as to expand these buildings with high efficiency energy usage, high ratio of new and renewable energy, and minimum emission of GHGs (Article 54).[158] In addition, the Framework Act also promotes eco-friendly and organic agricultural products and fisheries to serve as carbon sinks (Article 55),[159] green life campaigns (Article 58),[160] and active collaboration among local governments, businesses, and the public to foster a green lifestyle in every sector via education and public relations activities (Article 59).[161]

V. GREEN GROWTH, GREEN ECONOMY, AND THE UNITED NATIONS MILLENNIUM DEVELOPMENT GOALS

The Millennium Development Goals were adopted in September of 2000 during the United Nations Millennium Summit.[162] Participating nations—including South Korea—adopted the United Nations Millennium Declaration and thus committed their nations to a global partnership to reduce extreme poverty.[163] The Millennium Declaration created a series of time-bound targets with a deadline

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154 *Id.* at 64.
155 *Id.* at 62-63.
156 *Id.* at 72.
157 *Id.* at 75-76.
158 THE FRAMEWORK ACT, *supra* note 120, at 76-77.
159 *Id.* at 78.
160 *Id.* at 80.
161 *Id.*
162 *Background*, U.N. WE CAN END POVERTY, http://www.un.org/millenniumgoals/bkgd.shtml (last visited Apr. 4, 2014).
163 *Id.*

of 2015.[164] These targets became the MDGs and include: eradicate extreme poverty and hunger; achieve universal primary education; promote gender equality and empower women; reduce child mortality rates; improve maternal health; combat HIV/AIDS, malaria, and other diseases; ensure environmental sustainability; and develop a global partnership for development.[165] The top priorities of the MDGs are eradicating poverty and hunger.[166] Given that a green economy must address the concerns of sustainable development with intergenerational equity and poverty eradication, the MDGs became a basis for the social equity pillar of UNEP's green economy model.[167]

Based on the 1989 book, *Blueprint for a Green Economy*,[168] UNEP developed a green economy model for the twenty-first century.[169] From 2008 to 2011, green economy moved from a specialized field of environmental economics into the mainstream of policy discourse.[170] In several reports, including "Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication," UNEP provides guidance to policy makers on necessary reforms to unlock the productive and employment potential of a green economy.[171] As defined by UNEP, a green economy is one that results in "improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities."[172] In other words, a green economy is one that is "low-carbon, resource efficient, and socially inclusive."[173]

In such an economy, public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services also drive income and employment growth.[174] Target public expenditures, policy reforms, and regulation changes are needed to catalyze and support these investments.[175] In addition, natural capital

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164 *Id.*

165 *Id.*

166 U.N. ENV'T PROGRAMME, TOWARDS A GREEN ECON.: PATHWAYS TO SUSTAINABLE DEV. & POVERTY ERADICATION 20 (2011) [hereinafter TOWARDS A GREEN ECONOMY], *available at* http://www.unep.org/greeneconomy/Portals/88/documents/ger/ger_final_dec_2011/Green%20EconomyReport_Final_Dec2011.pdf.

167 *Id.* at 19.

168 *See* DAVID PEARCE, ANIL MARKANDYA & EDWARD B. BARBIER, BLUEPRINT FOR A GREEN ECONOMY (1989). The authors argued that sustainable development is unachievable because today's economies are based towards depleting natural capital to secure growth. *See* TOWARDS A GREEN ECONOMY, *supra* note 166, at 17. Thus, a green economy that values environmental assets, adjusts the economy's measure of GDP for environmental losses, and employs pricing policies and regulatory changes to translate these values into market incentives is necessary to ensure the wellbeing of current and future generations. *Id.*

169 *See id.* at 14.

170 *Id.* at 14.

171 *Id.* at 15.

172 *Id.* at 16.

173 TOWARDS A GREEN ECONOMY, *supra* note 166, at 16.

174 *Id.*

175 *Id.*

must be maintained, enhanced, or rebuilt to become a critical economic asset and a source of public benefit.[176] This idea is especially important for poor people whose livelihoods and security depend on the natural environment.[177] Therefore, the key aim for a green economy is to enable economic growth and investment while increasing environmental quality and social inclusiveness.[178]

Instead of investments in renewable energy, public transportation, sustainable agriculture, ecosystem and biodiversity protection, and land and water conservation, UNEP posits that today's capital is allocated to property, fossil fuels, and structured financial assets.[179] This misallocation led to many world crises, including climate, fuel, food, water, and financial.[180] In turn, these crises—and their compounding social problems of job losses, socio-economic insecurity, disease, and social instability—are hindering the possibilities of sustaining worldwide prosperity and achieving the MDGs for reducing extreme poverty.[181] Consequently, a green economy must be consistent with that objective, and nations must pursue a transition to a green economy.[182] Moreover, a green economy must ensure that policies and investments directed towards reducing environmental risks and scarcities are compatible with ameliorating global poverty and social inequity.[183]

As another shade of green, green growth was not advocated for by the United Nations. Instead, its primary proponent is South Korea. It was at the Fifth MCED in 2005 that green growth was first adopted as a new paradigm for development.[184] UNEP accredits the initiation of the "green growth" term to South Korea, who co-hosted the Fifth MCED with UNESCAP.[185] Specifically, however, green growth was used as a shorthand term for "environmentally sustainable economic growth."[186] The "Seoul Initiative on Environmentally Sustainable Economic Growth (Green Growth)" was an outcome document aimed at addressing major policy issues highlighted in the "Ministerial Declaration of the Fifth Ministerial Conference" and the "Regional Implementation Plan for Sustainable Development in Asia and the Pacific, 2006-2010."[187]

The Seoul Initiative was aimed at promoting regional cooperation in the following areas: improving environmental sustainability; enhancing environmental performance; and promoting environment as a driver and

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176 *Id.* at 19.
177 *Id.*
178 TOWARDS A GREEN ECONOMY, *supra* note 166, at 19.
179 *Id.* at 14.
180 *Id.*
181 *Id.*
182 *Id.* at 20.
183 TOWARDS A GREEN ECONOMY, *supra* note 166, at 20.
184 *Overview of the National Strategy for Green Growth*, *supra* note 26, at 51 n.2.
185 *Id.*
186 *See Seoul Initiative*, *supra* note 33; *A Guidebook to the Green Economy*, *supra* note 20.
187 *Seoul Initiative*, *supra* note 33, at 1.

opportunity for economic growth and development.[188] The justification for green growth was that it was "*required* to continue the economic growth acutely needed to attain the Millennium Development Goal of poverty reduction while meeting another Goal, that of achieving environmental sustainability."[189] The Seoul Initiative continued on to state that the success of green growth would depend on environmental performance regarding pollution control and environmental sustainability in improving ecological efficiency in resource utilization.[190] In order to achieve a new paradigm of green growth—thus, shifting away from the conventional "grow first and clean up later" paradigm—the Seoul Initiative provided that it was crucial to initiate policy concepts and system changes towards:

> (a) [P]resenting the environment as an opportunity for economic growth, investment, marketing, industry, employment, and technological research and development; and
>
> (b) [C]reating win-win synergies between the environment and the economy to replace the prevailing perception of environment and economy as a zero-sum outcome.[191]

Moreover, the Seoul Initiative identified three targets and related policy areas to support the above policy concepts and system changes.[192] The targets included: (1) improving the environmental sustainability of economic growth; (2) enhancing environmental performance in pollution control and ecosystem management; and (3) promoting the environment as a driver of economic growth and development.[193] Consequently, given these targets, the objectives of the Seoul Initiative were to provide a regional cooperation framework for green growth and for achieving the MDGs on poverty reduction and environmental sustainability in the Asia-Pacific region.[194] South Korea not only hosted the Fifth MCED, but the successes and failures of its rapid economic growth during the last forty years (accounting back from 2005) were used as baselines for the Seoul Initiative.[195]

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188 *Id.*
189 *Id.* (emphasis added).
190 *Id.*
191 *Id.* at 2.
192 *Seoul Initiative*, *supra* note 33, at 3.
193 *Id.*
194 *Id.*
195 *Id.* at 2.

VI. SOCIAL EQUITY, THE WEAKEST PILLAR IN SOUTH KOREA'S GREEN GROWTH EFFORTS

Both the green economy concept advocated by UNEP and the green growth concept derived from the Seoul Initiative had overwhelming references to poverty eradication and the MDGs. In fact, both can be viewed as means to achieve the MDGs or, at least, to aid the achievement of the goals. As established in Part II above, the line between green economy and green growth has blurred, and a distinction between the two concepts will probably be of little significance in the future.[196] A comparison of the various definitions of both demonstrates significant overlap.[197] Even though the concepts are different shades of green, both green economy and green growth exist under the sustainable development umbrella.[198] Thus, policies and legislations designed under one are comparable to those designed under the other.

Although South Korea took no part in UNEP's conceptualization of the green economy concept, it did, in 2009, adopt a Green New Deal based on UNEP's Global Green New Deal guidelines.[199] Recall that the objectives of the GGND were (1) to make a major contribution to reviving the world economy, saving and creating jobs, and protecting vulnerable groups; (2) to reduce carbon dependency and ecosystem degradation, putting economies on a path to clean and stable development; and (3) to further sustainable and inclusive growth, achieving the MDGs and ending extreme poverty by 2015.[200] South Korea's Green New Deal was a policy initiative for creating jobs, revitalizing the economy, and boosting green growth.[201] It was a stimulus package comprised of a mix of financial, fiscal, and taxation policies.[202] Although 80 percent of the U.S. $38.1 billion budget was allocated to environmental efforts, including energy efficient buildings, low-carbon vehicles, and restoration of the four major rivers, no funding was allocated directly to social efforts.[203] In fact, there was no mention of poverty eradication or the MDGs in the Green New Deal.[204]

Ultimately, the National Strategy and the 2009-2013 Five-Year Plan absorbed the Green New Deal.[205] Like the Green New Deal, both the National Strategy and 2009-2013 Five-Year Plan are devoid of any explicit mention of poverty eradication or the MDGs.[206] The foundations for the National Strategy

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196 *See* discussion *supra* Part II.B.

197 *See supra* note 35 and accompanying text.

198 *See A Guidebook to the Green Economy*, *supra* note 20, at 60.

199 *See Global Green New Deal: Policy Brief*, *supra* note 74, at 5-6.

200 *Id.* at 5.

201 *Overview of the National Strategy for Green Growth*, *supra* note 26, at 14-15.

202 *Id.* at 15.

203 *Id.*

204 *See generally id.*

205 *Id.* at 15-16.

206 *See* GREEN GROWTH IN MOTION, *supra* note 53, at 38-46.

and Five-Year Plan are the three strategies and ten policy agenda items.[207] Even though these foundations are not associated directly with the MDGs, they could, in theory, contribute to improvements in sectors important for the poor. Sectors with green economic potential, such as agriculture, forestry, fishery, and water management, can aid in reducing poverty.[208] Investments in these sectors are likely to benefit the poor in terms of creating jobs and securing livelihoods that are predominantly based on ecosystem services.[209]

Specifically, an examination of each strategy reveals that each do not directly address poverty eradication. The first strategy focuses on climate change measures and securing energy independence.[210] Energy independence is not a part of the MDGs, whereas the closest climate change comes is under Goal 7, "ensure environmental sustainability," Target 7.A, "integrating the principles of sustainable development into country policies and programs and reverse the loss of environmental resources."[211] A description of Target 7.A provides, the "unparalleled success of the Montreal Protocol shows that action on climate change is within our grasp."[212] This connection, however, is derived from the MDGs' efforts to connect themselves to the first strategy. This should not be the case. The MDGs were developed as general goals for nations to adapt and form means specific to their nation's capabilities and to achieve according to their nation's particular development situation.[213] Thus, the first strategy, as part of a green growth effort, should consider and incorporate the MDGs. This it does not.

The second strategy addresses the creation of new growth engines.[214] This strategy emphasizes green technologies and green industries, as well as lays the foundation for a green economy—none of which are explicitly a part of the MDGs.[215] Even though the second strategy appears to "green" industries that are important to the poor, thereby creating jobs and securing livelihoods, this is not the case. The second strategy is focused on greening the nuclear and construction industries, thereby nurturing those industries.[216] Moreover, the second strategy calls for green technological innovations in all industries, including the agriculture,

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[207] GREEN GROWTH IN MOTION, *supra* note 53, at 44; ROAD TO OUR FUTURE, *supra* note 100, at 9.

[208] *See* TOWARDS A GREEN ECONOMY, *supra* note 166, at 20.

[209] *Id.*

[210] GREEN GROWTH IN MOTION, *supra* note 53, at 44; ROAD TO OUR FUTURE, *supra* note 100, at 9.

[211] *Goal 7: Ensure Environmental Sustainability*, U.N. WE CAN END POVERTY, http://www.un.org/millenniumgoals/environ.shtml (last visited Apr. 4, 2014).

[212] *Id.*

[213] *See generally* U.N. MILLENNIUM DEV. GOALS, http://www.unmillenniumproject.org/ (last visited Apr. 4, 2014).

[214] GREEN GROWTH IN MOTION, *supra* note 53, at 44; ROAD TO OUR FUTURE, *supra* note 100, at 9-10.

[215] *Background*, U.N. WE CAN END POVERTY, *supra* note 162.

[216] *See generally* GREEN GROWTH IN MOTION, *supra* note 53, at 44; ROAD TO OUR FUTURE, *supra* note 100, at 9.

forestry, and fishery sectors,[217] which are important to the poor. The greening of these sectors, however, does not create more jobs for the poor;[218] let alone provide a secure livelihood for individuals with jobs in those sectors. Increasing the poor's freedom of choice and action to shape their own lives is critical to achieving development outcomes.[219] By tapping into their natural energy and incentive, freedom of choice and action require these people to build their individual assets (material and financial) as well as their capabilities (human, social, psychological, and political).[220]

Finally, the third strategy targets improving the quality of life for citizens and strengthening the status of South Korea in the international community as a green growth leader.[221] This strategy has the most potential to aid MDGs achievement since it directly deals with human wellbeing. An examination of the policies and annual government budgets from 2009 to 2013, however, reveals that the third strategy is oriented primarily towards infrastructure development.[222] It does not provide the foundation to build the constituency and concerns necessary for greening among the general public.[223]

Recall that the three policies for the third strategy include: (1) constructing green land, water, and transportation systems; (2) creating a green lifestyle; and (3) becoming a role model for the international community as a green growth leader.[224] As Table 5 below demonstrates, the total budget for the third strategy during 2009 to 2013 was 26.4 trillion won.[225] Twenty-four trillion, or 91 percent, was allocated to green land and water, and to build green infrastructure.[226] A mere 1.6 trillion won was allocated to creating a green

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[217] *See* GREEN GROWTH IN MOTION, *supra* note 53, at 44; ROAD TO OUR FUTURE, *supra* note 100, at 9.

[218] For example, the government announced that the Four Major Rivers project, which began under the Green New Deal and was absorbed by the Five-Year Plan, would create about 340,000 jobs, but critics argue that only 2,000 long-term jobs will be created. *See* Sun-jin Yun, Myung-rae Cho & David von Hippel, *The Current Status of Green Growth in Korea: Energy & Urban Security*, 44 ASIA-PACIFIC J.: JAPAN FOCUS, Oct. 31, 2011, www.japanf ocus.org/-sun_jin-y un/3628.

[219] Jason S. Calder, *Mobilizing Human Energy*, *in* 2008 STATE OF THE WORLD: INNOVATIONS FOR A SUSTAINABLE ECONOMY 166, 171 (Linda Starke ed., 2008).

[220] *Id.*

[221] GREEN GROWTH IN MOTION, *supra* note 53, at 44; ROAD TO OUR FUTURE, *supra* note 100, at 9-10.

[222] Jones & Yoo, *supra* note 161, at 7.

[223] *See* GREEN GROWTH IN MOTION, *supra* note 53, at 44; ROAD TO OUR FUTURE, *supra* note 100, at 9-10.

[224] GREEN GROWTH IN MOTION, *supra* note 53, at 44; ROAD TO OUR FUTURE, *supra* note 100, at 9.

[225] On January 6, 2013, the exchange rate was 1.00 U.S. dollar = 1,064.07 Korean won. Thus, 26.4 trillion won equaled approximately U.S. $24.8 million. XE CURRENCY CONVERTER, http://www.xe.com/ucc/convert/?Amount=1&From=USD&To=KRW (last visited Jan. 6, 2013).

[226] Jones & Yoo, *supra* note 161, at 7.

lifestyle, which included 1 trillion won to developing the infrastructure for green villages.[227] Consequently, the third strategy, as viewed by its budgetary expenditures, will do little to eradicate poverty in South Korea. The infrastructure development will do more to help those with the means to purchase and enjoy it than those with no means to survive. Instead of closing the divide between the haves and have-nots, the budgetary expenses for the third strategy most likely will do the opposite.

[227] *Id.*

Table 5
Five-Year Plan (2009-2013) Budget in trillion won[228]

	Total	2009	2010	2011	2012	2013
Strategy 3, Improving living standards and enhancing national status	**26.4**	**5**	**4.6**	**4.5**	**6.2**	**6.1**
(8) Greening land and water, and building green infrastructure	24	4.6	4.2	4	5.7	5.5
- Construction of railways	12.9	3	3	2.8	4	…
- Managing streams and rivers	3.2	0.9	0.7	0.7	0.9	…
(9) Bringing the green revolution to daily lives	1.6	0.3	0.3	0.3	0.3	0.4
- Developing green villages	1	0.3	0.3	0.2	0.2	…
- Promoting green campaigns	0.1	0	0	0	0	…
(10) Becoming an international role model for green growth	0.7	0.1	0.1	0.2	0.2	0.1
- Green official development assistance, etc.	0.6	0.1	0.1	0.2	0.2	…
- International cooperation on forests	0	0	0	0	0	…
For comparison, below are the budgets for strategies 1 and 2.						
Strategy 1, Adapting to climate change and enhancing energy independence	**60.0**	**8.5**	**15.6**	**16.8**	**11.4**	**7.7**
(1) Effective mitigation of GHG emissions	5.0	1.0	0.9	0.9	0.9	1.3
(2) Reduce fossil fuel use and enhance energy independence	16.7	2.8	3.8	3.7	3.6	2.8
(3) Strengthen the capacity to adapt to climate change	38.3	4.7	10.9	12.2	6.9	3.6
Strategy 2, Securing new growth engines	**22.3**	**3.7**	**4.3**	**4.4**	**4.3**	**5.6**
(4) Development of green technologies	7.3	1.4	1.5	1.4	1.4	1.6
(5) Greening of existing industries and promotion of green industries	4.5	0.7	0.9	1	0.9	1
(6) Advancement of industrial structure to increase services	9	1.4	1.7	1.7	1.7	2.5
(7) Engineering a structural basis for the green economy	1.5	0.2	0.2	0.3	0.3	0.5
Total	108.7	17.2	24.5	25.5	21.9	19.4

[228] *Id.* Actual budgets for 2009-2011 and plans for 2012-2013. The figures include 8.5 trillion won of investment by public enterprises.

On its face, the Framework Act also lacks a direct reference to poverty eradication or the MDGs.[229] As Table 6 demonstrates, the seven chapters of the Framework Act can be viewed as achieving one of the three strategies or an administrative matter. Chapter 5, the first strategy, focuses on climate change and fails to incorporate poverty eradication or the MDGs,[230] whereas Chapter 4, the second strategy, provides for green economy, green technology, and green industries.[231] Again, this infrastructure development will most likely create a wider gap between the rich and poor, rather than address poverty issues. Moreover, Chapter 4 mandates the government stimulate green finance to reach a green economy.[232] The green finance system is heavily designed to support the first strategy, combating climate change, and the second strategy, creating new growth engines, without any mention of the third strategy, improving the standard of living.[233] Specifically, Article 28 enables the government to establish financial measures to raise the financial resources and financial support for supporting green economy and green industry, and to establish a carbon market.[234] Although Article 28 notes that the measures are not limited to those stated, this residual clause is hardly comforting, considering the close attention to growth engines and climate change in all the articles addressing finances and investments.[235]

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229 *See generally* THE FRAMEWORK ACT, *supra* note 120.
230 *Id.* at 60-71.
231 *Id.* at 48-59.
232 *Id.* at 53-54.
233 *See id.*
234 THE FRAMEWORK ACT, *supra* note 120, at 53.
235 *See id.*

Table 6
The Divided Framework Act[236]

Classification	Description of Issues	Category
Chapter 1	Purpose; Definitions; Basic Principles; Responsibilities of Entities	Administrative
Chapter 2	Establishment, Implementation, Monitoring, and Evaluation of the National Strategy and Five-Year Action Plans for Green Growth	Administrative
Chapter 3	Composition, Operation, Function of the Presidential Committee on Green Growth	Administrative
Chapter 4	Fostering Green Economy and Green Industries; Resource Recycling; Green Technology; Green Finance; Eco-friendly Tax Reformation; Green Jobs	Strategy 2 (creation of new growth engines)
Chapter 5	Establishment of Basic Plans for Climate and Energy Policies; Target Management; Reporting of Greenhouse Gas Emissions and Energy Consumptions; Cap and Trade System	Strategy 1 (effective response to climate change and energy independence)
Chapter 6	Green Land; Water; Green Transportation; Construction; Agriculture; Green Consumption and Life	Strategy 3 (improvement of quality of life and strengthening nation's reputation)
Chapter 7	Enhancement of International Cooperation; Preparation of National Reports; Fines for Negligence	Administrative and Strategy 3 (improvement of quality of life and strengthening nation's reputation)

Chapter 6, which represents the third strategy, suffers from the same issue as the National Strategy and Five-Year Plan: its focuses on infrastructure development.[237] The green transportation provision (Article 53), the green building provision (Article 54), and the carbon sink provision (Article 55) all work to benefit future infrastructure development and to improve only some existing infrastructures.[238] Granted, the focus on Chapter 6's infrastructure development is more along the lines of improving living conditions for South Korea's citizens.[239] Whereas Chapter 4's infrastructure mainly benefits the

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236 Adopted from GREEN GROWTH IN MOTION, *supra* note 53, at 27.
237 *See* THE FRAMEWORK ACT, *supra* note 120, at 72-81.
238 *Id.* at 75-78.
239 *See id.* at 72-81.

construction and nuclear industries,[240] Chapter 6 addresses efforts such as greening the transportation sector, constructing green villages, and developing and advocating for green consumption patterns.[241]

The problem with these efforts is the underlying assumption that citizens will be able to take advantage of these improvements. For people to benefit from the greening of the transportation sector, from green villages, and from having a green consumption pattern presupposes that they are in economic situations that enable them to pursue such benefits. Thus, for South Korean citizens without adequate food or housing, without a stable job, without a primary or secondary school education, these infrastructure improvements will mean next to nothing. Maslow's hierarchy of needs dictates that physiological needs (food and water), and then safety needs, will be priorities of these people, not a green transportation sector or green villages.

Chapter 6, however, has two added dimensions that shed encouraging light on the situation: public education and public relations activities.[242] Article 59 calls for active collaboration among government, businesses, and the public to foster a green lifestyle.[243] This includes developing textbooks and other teaching materials and strengthening "education and public relations activities through mass media."[244] In addition, Article 58 enables the government to provide finance and administrative support to non-governmental organizations so as to include the private sector in nationwide green life campaigns.[245] Here, the focus on education and public engagement has a different effect than infrastructure development. Infrastructure development enables the government to create the space and foster the environment to enable social equity. Education and public engagement, on the other hand, are keys to developing social equity, thereby aiding in poverty and hunger eradication.

The benefit of education is not a debated issue. Generally, an educated individual has a better chance of obtaining employment and altering their career path when compared to the uneducated individual. Around the world, the prospects of wider opportunities and a higher standard of living lead families to save in advance and sacrifice current consumption opportunities in order to enable their children to pursue educational opportunities. Education provides basic literacy skills and numeracy skills, along with social benefits for the individual and society at large. When a school is built, not only are people given a chance to receive an education, but the resulting community is one composed of healthy, informed, connected, and resilient people. Consequently, these people create a better society for all. Education, combined with public engagement and opportunities for citizen participation, are important drivers to achieve social equity in South Korea.

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240 *See id.* at 48-59.
241 *See id.* at 72-81.
242 THE FRAMEWORK ACT, *supra* note 120, at 80-81.
243 *Id.*
244 *Id.*
245 *Id.* at 80.

VII. LOOKING TOWARDS THE FUTURE: CAN GREEN GROWTH BECOME MEANINGFUL GROWTH?

South Korea's green growth campaign has many positive aspects. It aggressively seeks to combat climate change, create new growth engines, change the lifestyle of its citizens, and make South Korea an international forerunner in green growth policies.[246] But the continual success of this campaign depends on solving the "growth" focus of the campaign,[247] building national consensus, and inciting public participation.[248] Although lacking in social equity, these other policies may lift social aspects, create social equity for South Koreans, and partially achieve the MDGs.

South Korea's green growth policy has two positive implications.[249] First, on an international scale, environmental problems pose a fundamental threat to the future of humanity,[250] and green growth attempts to solve this problem for South Korea. Second, on a domestic scale, with its slowing economic growth, South Korea needs a new development goal after its industrialization and democratization successes.[251] On the other hand, there are several aspects of the policy that need improvement.[252] First and foremost, growth focused on economic growth and job creation dominates the green growth discourse.[253] But science and technology-based thinking is also necessary to solve environment and energy problems.[254] In addition, the government is still reliant on a traditional top-down approach, creating a dependency on government leadership[255] and a lack of public participation. As a result, green growth should not merely be a new source for economic growth or represent technical progress for environmental protection, nor should it be used as merely a political slogan.[256] Instead, South Korea's green growth should be a form of cultural movement; one that relates to social integration and lifestyle changes.[257]

The green growth campaign has the potential to be a promising social discourse with the ability to heal the polarized social conflicts of South Korean society.[258] In the span of several decades, South Korea grew into an economic

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246 GREEN GROWTH IN MOTION, *supra* note 53, at 44-45.

247 *See* Sang-in Jun, *Green Growth & Its Sociocultural Implications*, *in* INSIGHT INTO KOREA SERIES VOL. 10: GREEN GROWTH (II) (Korea Herald ed., 2009).

248 *See* Han-gyu Cho, *Green Growth Requires Lifestyle Change*, *in* INSIGHT INTO KOREA SERIES VOL. 10: GREEN GROWTH (II), *supra* note 247.

249 Jun, *supra* note 247, at 32.

250 *Id.*

251 *Id.*

252 *Id.* at 33.

253 *Id.*

254 Jun, *supra* note 247, at 33.

255 *Id.*

256 *Id.*

257 *Id.*

258 *Id.* at 36.

powerhouse from a country mired in poverty.[259] The problem, however, is the large and increasing gap between the rich and the poor, along with a sense of deprivation and a feeling of relative inferiority pervading South Korean society.[260] Further, South Korea has experienced the formation of a "fundamentalistic" line of conflict, which separates conservatives against progressives and the left against the right.[261] Consequently, green growth has the potential to act as a psychological common denominator for social unity and integration.[262] As Ulrich Beck noted "poverty is hierarchical, while smog is democratic," and environmental crises do not distinguish conservatives from progressives.[263] While green growth will not be a cure-all solution, it can exist as a symbolic code facilitating mutual understanding and social communication to facilitate social integration in South Korea.[264] Although green growth can be viewed either as an open theory or an empty container, its strength lies in its flexible nature.[265] Depending on South Korea's efforts, green growth can be utilized for the greater good.[266]

As a result, if the South Korean government pursues green growth without national consensus and public participation, it has little chance of success.[267] Unless South Korean citizens are more environmentally conscious, "green growth will be nothing more than an empty government catchphrase."[268] In the past, the South Korean government attempted several campaigns, and their successes depended on the levels of national consensus and public participation. Former President Park Chung-hee pursued the Saemaeul (New Community) Movement, which was a success due, in part, to changes in the public's consciousness and behavior.[269] On the other hand, former President Kim Dae-jung's campaign for a "Second National Foundation . . . based on a new paradigm of 'knowledge economy'" failed partly due to a lack of public participation.[270] President Kim's campaign lost momentum after his term expired because it did not incorporate a reform in the attitude and lifestyle of South Korean citizens.[271]

Moreover, underlying South Korea's green growth paradigm is "the concept of harmony."[272] Green growth "pursues unity" between nature and humans, between the West and the East, and among past, present, and future

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259 Jun, *supra* note 247, at 35-36.
260 *Id.*
261 *Id.*
262 *Id.*
263 *Id.* at 36 (citing ULRICH BECK, ECOLOGICAL ENLIGHTENMENT 60 (1995)).
264 Jun, *supra* note 247, at 36.
265 *Id.* at 41.
266 *Id.*
267 Cho, *supra* note 248, at 290.
268 *Id.*
269 *Id.* at 290-91.
270 *Id.* at 291.
271 *Id.*
272 Cho, *supra* note 248, at 291.

generations.[273] The concept of harmony is embedded in the traditional Oriental thought that the root of both nature and humans is one and the same.[274] Thus, humans are obliged to "take care of nature, rather than to conquer it."[275] With this foundation, green growth becomes "not just about humans living together or ensuring mutual prosperity between the environment and the economy."[276] Instead, green growth creates a green world: a place where humans live with nature and a place where humans recognize their stewardship responsibilities.[277] A green world is therefore "a place where humans prosper by following a green lifestyle."[278]

While South Korea's green growth campaign does not explicitly mention or incorporate social equity principles, poverty eradication, or the MDGs in any of its legal or policy frameworks, the entire campaign can be viewed as implicitly improving social conditions. By concentrating on economic development, climate change, and new growth engines, the government is ensuring continual economic growth for the years to come. This economic growth for the entire nation will result in increased economic and ultimately social development for all of South Korea. The notion of "rising tide" can be used to illustrate what the government is attempting, that is, as the tide rises, it lifts all boats in the long run.[279] The rising tide refers to economic growth, in general, as an increase in income for the general economy (those with more monetary assets) will benefit all participants in that economy (those with relatively less monetary assets).[280] Thus, an increase in income for the rich alone is akin to a locomotive pulling the entire economy.[281]

In 2008, the South Korean government realized its rapid economic progress would slow if it continued to use a quantitative growth model.[282] Thus, the government pursued qualitative growth: growth concentrated on new growth engines and development models.[283] It formulated and aggressively promoted a green growth campaign to combat climate change and create new growth engines.[284] Between 2009 and 2012, the government injected U.S. $38.1 billion into the country's development, including environmental efforts, renewable energies, and low-carbon vehicles.[285] To ensure the continual growth, the

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273 *Id.* at 291-92.

274 *Id.* at 292.

275 *Id.*

276 *Id.*

277 Cho, *supra* note 248, at 292.

278 *Id.*

279 *See* John C. Weicher, *Private Production: Has the Rising Tide Lifted All Boats?*, *in* PERSPECTIVES ON PROP. LAW 393, 398 (Robert C. Ellickson, Carol M. Rose & Bruce A. Ackerman eds., 3d ed. 2002) (citing TED SORENSEN, COUNSEL: A LIFE AT THE EDGE OF HISTORY 140 (2008)).

280 *See id.* at 398.

281 *Id.*

282 GREEN GROWTH IN MOTION, *supra* note 53, at 12-13.

283 *See* President's Speech on August 15, *supra* note 69.

284 *Id.*

285 *Overview of the National Strategy for Green Growth*, *supra* note 26, at 15.

government created medium- and long-term development strategies.[286] The government even constructed a national vision to guide all necessary and vital parts of the green growth campaign.[287] There is no doubt that the green growth campaign is focused on, first, green and, second, growth, where growth refers to economic growth and green refers to environmental protection. In this scenario, growth always precedes green.[288]

Even with a heavy focus on growth, the government's efforts are commendable in that it will lead to social equity, poverty reduction, and lifestyle improvements. During South Korea's sixty years of development, it rose to become the world's 15th largest economy with GNI per capita at U.S. $22,670.[289] For World Development Indicators, South Korea's life expectancy at birth is eight-one years[290]; enrollment in primary school is at 104 percent,[291] with individuals returning to finish their primary education[292]; and improved water source in rural areas is at 88 percent.[293] Recognizing that its rapid economic development did not come free, the government took the environmental challenges head on.[294] In its effort to solve its slowing economic development and environmental deterioration, the government sacrificed social equity, perhaps hoping that the rising tide will lift all boats in the long run.

VIII. CONCLUSION

In 2002, the International Law Association developed the New Delhi Declaration of Principles of International Law Relating to Sustainable Development, which provided:

> States are under a duty to manage natural resources, including natural resources within their own territory or jurisdiction, in a rational, sustainable and safe way so as to contribute to the development of their people . . . and to the conservation and sustainable use of natural resources and the protection of the environment, including ecosystems. States must take into

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286 *Id.* at 16.
287 *See* President's Speech on August 15, *supra* note 69.
288 *See* GREEN GROWTH IN MOTION, *supra* note 53, at 15.
289 *Korea Country Data*, *supra* note 47.
290 *Id.*
291 *Id.*
292 *Id.*
293 *Id.*
294 *See* GREEN GROWTH IN MOTION, *supra* note 53, at 12-14.

> account the needs of future generations in determining the rate of use of natural resources.[295]

The three dimensions of sustainable development—economics, environment, and social equity—are clearly visible in this principle. States, with power invested by their citizens, have a duty to manage natural resources in such a manner to contribute to both economic and social development of their citizens. Moreover, the conservative use of natural resources is necessary for the wellbeing of future generations. The current generation's development must not ignore their duty to pursue growth with consideration of the generations to come.

Sustainable development, green economy, and green growth are all concepts that enable humans to live by the aforementioned international law principle. Specifically, South Korea is the first country to enact a law on green growth, intending to transform itself into a low-carbon society. The government engaged in systematic and bold investments in green infrastructures, green technologies, and green finance.[296] At the World Economic Forum in June 2010, South Korea was recognized as a "green tiger," a play on its title as one of the Four Asian Tigers that experienced rapid industrialization between the early 1960s and 1990s.[297] By labeling South Korea as such, the global community, specifically Asia, acknowledged South Korea's unique green growth model as a means of turning an economic crisis into a development opportunity.[298] South Korea's green growth model has been undeniably ambitious and impressive. Although lacking in the areas of social development, perhaps education and public relations activities will build the constituency and concerns necessary for greening among the general public. In turn, this will result in improved social conditions for the Korean people.[299]

While South Korea has accomplished a lot in terms of green growth, there is room for improvement. In December of 2012, South Koreans elected their first female president, Park Geun-hye.[300] Consequently, the government has been reorganized to fit the new Administration's structure.[301] During the reshuffle, the Blue House downscaled and demoted the PCGG to an office under the prime

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[295] *New Delhi Declaration of Principles of International Law Relating to Sustainable Development, Resolution 3/2002*, INT'L LAW ASS'N (2002), *available at* http://cisdl.org/public/docs/new_delhi_declaration.pdf.

[296] *See generally* GREEN GROWTH IN MOTION, *supra* note 53.

[297] Maan-ee Lee, *Korea Initiating "Green Wave" Worldwide*, KOREA TIMES (June 20, 2010), http://www.koreatimes.co.kr/www/news/biz/2010/07/291_68577.html.

[298] *Id.*

[299] *See* Calder, *supra* note 219.

[300] Sang-hun Choe, *Ex-Dictator's Daughter Elected President as South Korea Rejects Sharp Change*, N.Y. TIMES (Dec. 19, 2012), http://www.nytimes.com/2012/12/20/world/asia/south-koreans-vote-in-closely-fought-presidential-race.html?pagewanted=all.

[301] *Executive Branch*, KOREA.NET, http://www.korea.net/Government/Constitution-and-Government/Executive-Branch (last visited Apr. 4, 2014).

minister.[302] Although the PCGG once declared that all future laws must conform to the Framework Act,[303] it no longer has the power to enforce the provision. Based on accounts of previous presidential commissions, its reassignment likely stripped it of all enforcement power regarding green growth policies. The governmental reorganization, however, has not removed an environmentally conscious economic development from the government's agenda.

In October of 2013, South Korea's Prime Minister Chung Hong-won spoke at the third Global Green Growth Forum in Copenhagen, Denmark.[304] Mr. Chung described the new government's green growth paradigm as a "notch higher" than the previous administration's paradigm.[305] His speech indicated that President Park was embracing her predecessor's green growth policy under the label "Green Growth 2.0," whereas the previous efforts are now referred to as "Green Growth 1.0."[306] The strategy has been shifted back (or forward?) to sustainable development. The new focus, as stated by Mr. Chung, is "sustainable growth via the creative economy vision that creates new market and jobs through innovation and integration."[307] The administration has yet to unveil what this "creative economy" entails, but one thing is for certain: South Korea, regardless of the party in power, will implement a growth strategy that incorporates economic growth with environmental protection.

Thus, even with this change in politics, too many events have occurred to allow the green growth campaign (and the previous environmental movements

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[302] Shin Hyon-hee, *South Korea Ditching "Green Growth*," KOREA HERALD (Mar. 3, 2013), *posted at* http://www.asianewsnet.net/South-Korea-ditching-green-growth-44753.html. There was an account that the PCGG was closed by the Blue House, but subsequent accounts provide that it was "downgraded." *Compare* Shin Hyon-hee, *Korea Eyes Era of 'Green Growth 2.0'*, KOREA HERALD (Nov. 10, 2013), http://www.koreaherald.com/view.php?ud=20131110000342, *with Green Growth: Rebooted in South Korea, Booted Out in Australia*, THE CONVERSATION (Feb. 6, 2014), https://theconversation.com/green-growth-rebooted-in-south-korea-booted-out-in-australia-22243 [hereinafter *Green Growth: Rebooted in South Korea*].

[303] GREEN GROWTH IN MOTION, *supra* note 53, at 31.

[304] *S. Korea to Promote Green Growth via "Creative Economy" Vision: PM*, GLOBAL POST (Oct. 21, 2013), http://www.globalpost.com/dispatch/news/yonhap-news-agency/131021/s-korea-promote-green-growth-creative-economy-vision-pm. See also Shin, *South Korea Ditching "Green Growth"*, *supra* note 301, for more information regarding South Korea's green growth shift from green growth to sustainable development. This shift, however, is not unexpected. Yoon Seong-kyu is President Park's new environmental minister and an advocate of the sustainable development agenda. *Id.* During the President's presidential campaign the previous year, Mr. Yoon criticized the green growth initiative as focusing more on the "growth" aspect than the "green" aspect. *Id.* Due to the constantly rising emissions and despite the implementation of the green growth policies, President Park requested Mr. Yoon to develop a new plan for South Korea to reach the nation's GHG emissions target for 2020 and amend the existing cap-and-fine and upcoming cap-and-trade systems. *Id.*

[305] *Id.*

[306] *Green Growth: Rebooted in South Korea*, *supra* note 302.

[307] *Id.*

before it) to go away quietly. The Green New Deal injected 2 percent of South Korea's GDP into the economy as a stimulus package. Given its bold vision, the National Strategy permeated national, provincial, and local governments, in addition to citizen groups, businesses, and other public organizations. The Five-Year Plan, along with its three strategies and ten policy agenda items, has initiated local and provincial projects all over South Korea. The Framework Act, as the first green growth law in the world, provides a strong legal structure for South Korea's green growth campaign. Finally, and most importantly, the South Korean government, specifically officials who worked for and advocated for such a revolutionary campaign to reinvent the South Korean growth paradigm, are still pushing for further greening of South Korea.