



CASE STUDY

A paradigm shift for economic growth

Republic of Korea's National Strategy for Green Growth and Five-Year Plan

Key point

- **More than a vision, green growth is pursued as a top-down long-term strategy, complete with a legal framework, a coordinating institution and five-year mid-term plans.**

Background

A strong focus on quantitative growth brought economic development to the Republic of Korea, but it also left numerous challenges for the economy and the environment. A high dependence on energy imports, such as petroleum and liquefied natural gas, increased the country's vulnerability to fluctuations of energy prices and supplies. In addition, rapid industrialization and urbanization imposed a significant burden on the environment and natural resources, such as water and biodiversity. From 1990 to 2005, carbon emissions in the country doubled, making it one of the world's major carbon emitters.¹

What was done?

During a national address on the sixtieth anniversary of the establishment of the Republic of Korea in August 2008, President Lee Myung-bak announced low carbon green growth as a new vision to guide the nation's long-term development. As a means to tackle the global financial and economic crisis occurring at that time, the Korean Government launched a Green New Deal aiming to stimulate job creation and economic recovery over the period 2009–2012. Composed of a mix of financial, fiscal and taxation policies, the green stimulus package mainly covers renewable energy, energy-efficient buildings, low-carbon vehicles, railways and water and waste management, with a budget allocation of US\$30.7 billion (80 per cent of the total stimulus package). The Presidential Committee on Green Growth was established as an inter-ministerial body to follow up the vision with a multi sector approach to economic and environmental planning.

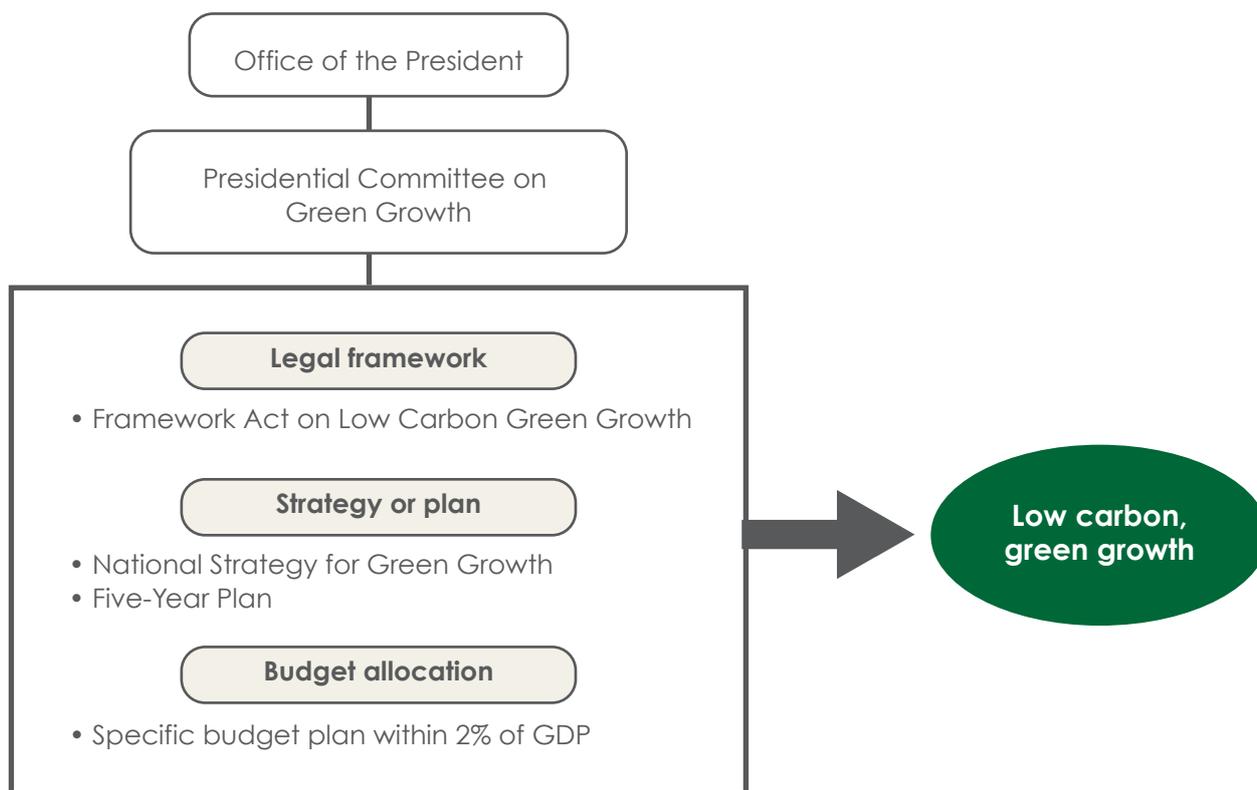
As a long-term perspective to implement the nation's new low carbon green growth vision, the National Strategy for Green Growth was announced in July 2009, together with the Five-Year Plan, which sets out mid-term policy goals (2009–2013). The Green New Deal expands overall government investment and the number of projects. To provide the legal and institutional basis for the country's green growth strategy, the Framework Act on Low Carbon, Green Growth as well as its enforcement decree was enacted in January 2010. In July 2011, the Korean Government announced a specific sector-based target aiming to reduce 30 per cent of greenhouse gases from the "business-as-usual" level by 2020.

Table 1: Green growth initiatives in the Republic of Korea

Time	Green growth initiatives
August 2008	President announces low carbon green growth as a national vision
January 2009	Launch of Green New Deal
February 2009	Establishment of Presidential Committee on Green Growth
July 2009	Development of the National Strategy for Green Growth and Five-Year Plan
January 2010	Enactment of Framework Act on Low Carbon, Green Growth
July 2011	Development of 2020 roadmaps for greenhouse gas emissions reduction

¹ United Nations Environment Programme, *Overview of the Republic of Korea's National Strategy for Green Growth* (Geneva, 2010). Available from www.unep.org/PDF/PressReleases/201004_unep_national_strategy.pdf (accessed 12 August 2011).

Figure 1: Diagram showing the relationship among green growth initiatives



The National Strategy for Green Growth (2009–2050)²

The National Strategy for Green Growth up to 2050 includes a fundamental paradigm shift from quantitative to qualitative growth and consists of three objectives and ten policy directions.

As a comprehensive policy framework, the National Strategy aims to 1) mitigate climate change and promote energy independence, 2) create new engines for economic growth and 3) improve the quality of life and the Republic of Korea's international standing.

To mitigate climate change and promote energy independence, the strategy calls first for setting medium- and long-term mitigation goals, increasing the use of new and renewable energy sources and strengthening the adaptation capacities to counter adverse impacts of climate change. Second, to create engines for growth, the strategy's emphasis lies in the development of green technology, the greening of industries, a transition to a more advanced industrial structure and laying the ground work for a green economy. Third, to raise the overall living quality and contribute to the international standing of the Republic of Korea, the strategy focuses on greening the infrastructure, expanding public awareness and actively engaging in international cooperation.

² Republic of Korea, *National Strategy for Green Growth and Five-Year Plan* (Seoul, Presidential Committee on Green Growth, 2009). Available from www.greengrowth.go.kr/?page_id=2450 (accessed 10 August 2011).

Table 2: Ten policy directions to achieve the three objectives

Objective			
	Mitigation of climate change and energy independence	Creating new engines for economic growth	Improve quality of life and international standing
Policy direction	1. Mitigate greenhouse gas emissions	4. Develop green technologies	8. Green the land and water and build green transportation infrastructure
	2. Reduce the use of fossil fuels and increase energy independence	5. Green existing industries and promote green industries	9. Bring green revolution into our daily lives
	3. Strengthen the capacity to adapt to climate change	6. Advance industrial structures	10. Become a role model for the international community as a green growth leader
		7. Engineer a structural basis for the green economy	

Source: Republic of Korea, National Strategy for Green Growth and Five-Year Plan (Seoul, Presidential Committee on Green Growth, 2009). Available from www.greengrowth.go.kr/?page_id=2450 (accessed 10 August 2011).

The Five-Year Plan for Green Growth (2009–2013)³

To follow through on the National Strategy for Green Growth, the Five-Year Plan for Green Growth was announced in July 2009. This mid-term strategy draws from the five-year plans of the early development era of the Korean economy, which the Government recognized as effective. In terms of green growth, the revival of five-year planning appeared prudent for building public consensus and allocating the national budget. The Green New Deal announced in early 2009 is incorporated in the Five-Year Plan and contains a budget and detailed tasks assigned to line ministries and local governments.

The annual spending of 2 per cent of GDP for the Five-Year Plan is largely financed from the central government budget. More than half of the total expenditure is allocated to two of the ten policy categories, which centre mostly on public construction: 1) green the land and water and build green transport infrastructure and 2) strengthen the capacity to adapt to climate change. Two main projects are the ongoing Railroad Construction Project and the Four Major Rivers Restoration Project. To boost the railway passengers from 18 per cent in 2009 to 26 per cent in 2020, express trains are being expanded (Korea Train Express, KTX). To secure water resources and prevent floods, a large portion of the budget (15.4 trillion won) has been allocated to the Four Major Rivers Restoration Project.

Of the plan's total budget, expenditure on R&D consumes 12 per cent, in contrast with the large portion of budget on construction-related projects. However, within the five-year framework, the R&D investment in 27 core green technologies gradually will expand from 2 trillion won in 2009 to 3.5 trillion won by 2013, which is equivalent to 13 trillion won cumulatively. Fiscal support for green R&D by small and medium-sized enterprises as well as investment in public R&D is also included in the plan.

³ Republic of Korea, *Road to Our Future: Green Growth* (Seoul, Presidential Committee on Green Growth, 2009). Available from www.google.co.kr/url?sa=t&rct=j&q=Road+to+Our+Future:+Green+Growth&source=web&cd=1&ved=0CEcQFjAA&url=http%2Fper%2Fcent2Fper%2Fcent2Feng.me.go.kr%2Ffile.do%2Fmethod%2FfileDownloader%2FattachSeq%2F2098&ei=i1ciT5LFE4vyrQeq7dWXCA&usq=AFQjCNF9xQxIBNo2A4yG8Tb6AvNXsa8iLw&cad=rjt (accessed 10 August 2011).

Further reading

Korea's Green Growth Strategy: Mitigating Climate Change and Developing New Growth Engines, by S. Jones and B. Yoo (Paris, OECD, 2011). Available from www.oecd-ilibrary.org/docserver/download/fulltext/5kmbhk4gh1ns.pdf?expires=1327649323&id=id&accname=guest&checksum=98298B5F649C09F4A12957D2A70A00A7