

# Case Study on Korea's Green Growth Recovery

**WORLD BANK GROUP  
KOREA GREEN GROWTH TRUST FUND**



# Why Korea?

## Impact of War <sup>1</sup>

### CIVILIAN CASUALTIES

Around 1 million people

### DAMAGED INDUSTRIAL BUILDINGS

44%

of the total industrial buildings  
(as of August 1951)

### DAMAGED ELECTRICITY GENERATION CAPACITY

80% of the capacity

### DEVASTATED SCHOOLS

4,800 schools

### GROSS NATIONAL INCOME PER CAPITA (1953) <sup>2</sup>

US \$67

### GROSS DOMESTIC PRODUCT <sup>2</sup>

US \$1.35 billion



South Korea's remarkable recovery from war and poverty provides case studies with specific solutions for economic advancement, creation of employment opportunities, and sustainable infrastructure development that is highly relevant for any country planning to transform or rebuild its economy.



## Currently

### RANKING <sup>3</sup>

12th

largest economy  
in the world

### GROSS NATIONAL INCOME PER CAPITA (2018) <sup>2</sup>

US \$33,564

### GROSS DOMESTIC PRODUCT (2018) <sup>2</sup>

US \$1.7 trillion

Source: Global Knowledge Exchange and Development Center (GKEDC), 2019

### 1953-1960

Post-war Korea faced varieties of hardships and challenges — a weak industrial base, dearth of natural resources, increasing population, and political instability. Foreign aid began to dwindle while poverty remained widespread.

### 1961-1979

The government embarked on an ambitious industrialization program as embodied in a series of Five-Year Economic Development Plans. The program relied on exchange rate reform, export subsidies, investment in economic infrastructure, expansion of schooling and training, and selective choice of strategic industries in later years.

### 1980-1996

Inflation and overcapacity created by the state-led industrialization in the 1970s were gradually resolved with stabilization policies in the early 1980s. The government pursued conservative fiscal and monetary policies to stabilize prices and rationalize the overly expanded industries. Economic liberalization gained speed in the 1990s.

### 1997-PRESENT

An extensive restructuring in the wake of the Asian financial crisis enabled Korea to avoid sovereign default, overhaul institutions and practices in its economy, and grow into one of the world's richest countries. Various efforts are now being made to meet the new challenges in the 21st century.

# Seoul's Transformation Over The Last 50 Years (1970-2020) <sup>4</sup>

Rising through the destruction and turmoil left by the Korean War, the city of Seoul has transformed to a global megalopolis in only 50 years. Seoul underwent several phases to overcome significant urban challenges and become a model smart city full of urban development best practices.



Photo: Seoul Photo Archives

## 1960S-1980s

To accommodate increasing population and address inadequate social infrastructure, the Seoul Metropolitan Government formulated urban development plans and implemented projects tailored to address the city's urban challenges.

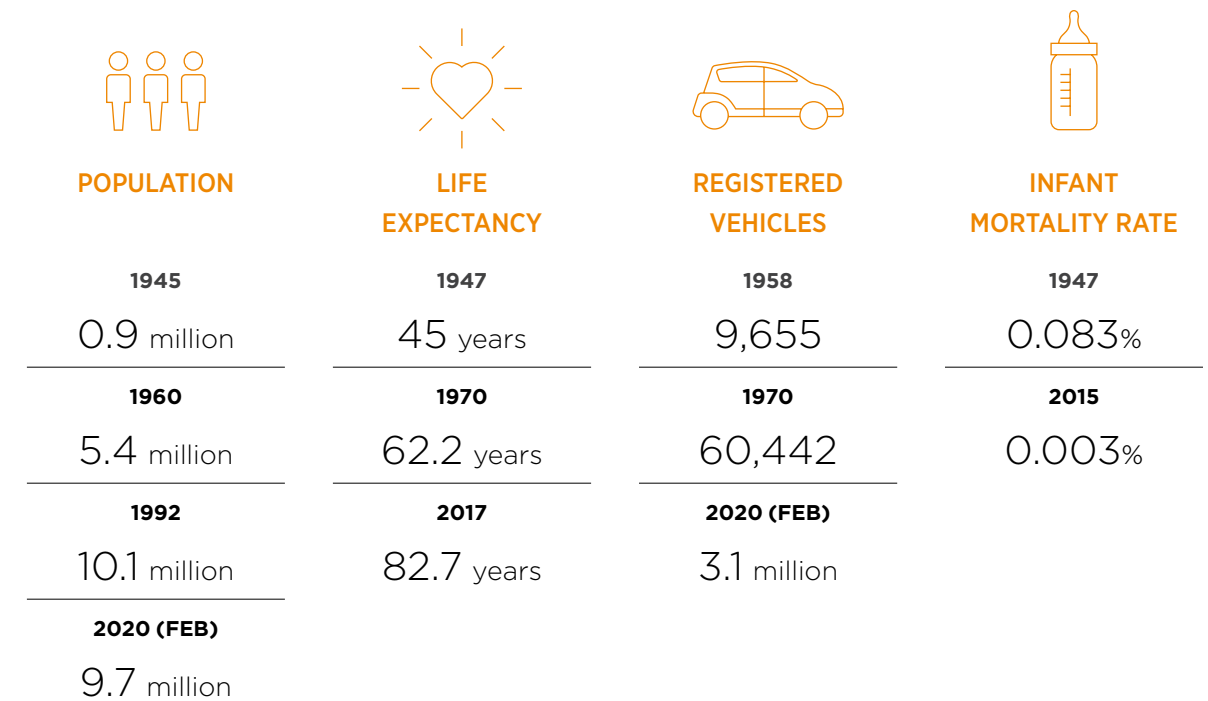
## 1980S-2000s

Extensive urban development planning continued, and policies were put in place to beautify the city. Subsequently, Seoul's infrastructure network flourished with quality transport, water and sewage systems.

## 2000-PRESENT

Seoul adapted a software-centered approach to its urban management policy. The use of advanced information technology helped Seoul facilitate a sustainable city and improve the well-being of its residents and visitors.

The implementation of extensive development projects spurred demographic change across the city of Seoul, providing a quality living environment for its nearly 10 million residents.



# Cheonggye-cheon Restoration Project (CRP)

Cheonggye-stream was once a symbol of the culture of the people of Seoul, a place where traditional celebrations were held, where women did their washing and where children played. Over time the poor built settlements and shanty

towns and pollution became an issue and serious problem. In 1958 the decision was taken to cover the stream for public safety and from 1968 to 1978 an expressway was constructed over the covered stream.

The area became the most overcrowded part of the city with 60,000 businesses, 200,000 shopkeepers and over 1 million people per day passing through causing severe congestion and crime. The business district underneath the expressway became synonymous with Seoul's deterioration. For 40 years the covering of the Cheonggye-stream to ensure public safety led to additional problems. The Cheonggye-stream

Restoration was a visionary approach to remake downtown Seoul. After city leaders held over 1500 meetings with local stakeholders the expressway was removed and the river restored. Now the river and pedestrian paths are a popular greenspace providing residents with a peaceful reprieve from city life. The project represents a new model for cities and city dwellers and the start of new evolution.



Photo (Left and Center): Seoul Museum of History; University of Seoul

**MAJOR OUTCOMES**

- Environment—average daytime temperature in the area dropped
- Economic vitalization
- Traffic—discouraged driving cars in the center, eased traffic flow, \$1 public transport system

**PROJECT SPANNED**

5.8 km



**IMPLEMENTED OVER**

1 year

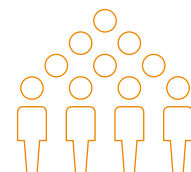
for planning and preparations

2 years & 3 months

for construction

**TOTAL LABOR FORCE OF**

700,000



**TOTAL COST**

\$305 USD million

Fully funded by Seoul Metropolitan Government (already owned most of the land used by the elevated highway redirected and earmarked funds for maintenance of deteriorated elevated highways).

**DESIGN**

\$1.7 USD million

**CONSTRUCTION**

\$294 USD million

**LAND ACQUISITION**

\$2.3 USD million

**PROJECT MANAGEMENT**

\$6.1 USD million

**ADMINISTRATION**

\$0.5 USD million

# Overview of Korea's Green Growth Approach



Initiated by the necessity to adopt sustainable practices, Korea underwent a development paradigm shift from quantity to quality-oriented growth, and from fossil fuel-dependent to energy independent growth and sustainability. Korea's green growth was propelled by the establishment of key institutional arrangements that created an enabling environment and laid the foundation for advancement through legislative, institutional and strategic frameworks. In 2008, Low Carbon, Green Growth was declared as a new vision and Green New Deal for the nation for the next 60 years, and the green growth action plan was promoted thereafter.

Countries around the world are finding the Green Growth model highly relevant.

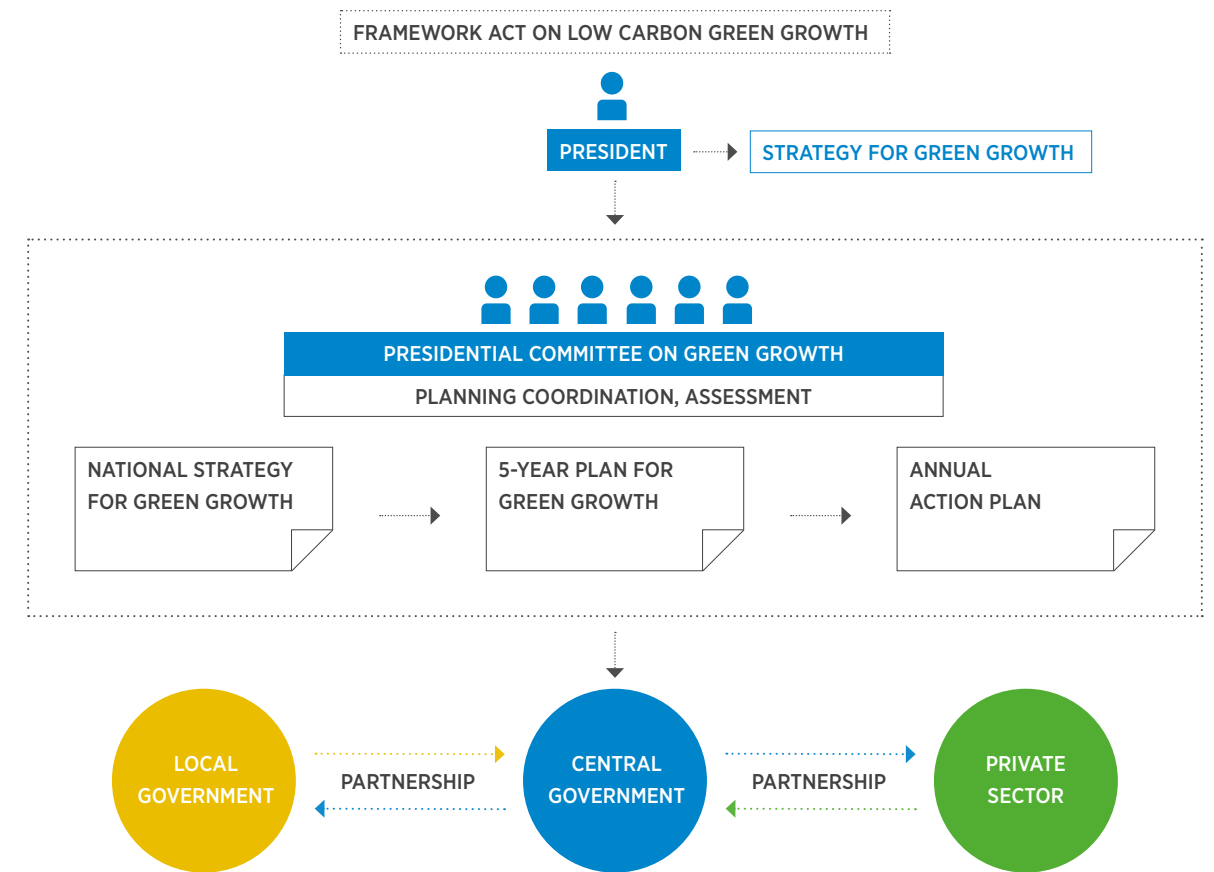
## INSTITUTIONAL FRAMEWORK

The Presidential Committee on Green Growth (PCCG) was established in 2009 to spearhead Korea's Green Growth Transformation. Specifically, the PCCG developed and mandated the legal framework, strategic planning, and budget allocation for the National Strategy.

The Committee on Green Growth was instituted several years later in 2013 with the main function of deliberating matters concerning Green Growth. The Committee was comprised of 38 people: 21 Private Experts and 17 ministers, Co-chairs: Prime Minister and one Private Expert and 4 Sub-Committees focused on:

- Green Growth Strategy
- Climate Response
- Green Technology and Industry
- Energy

Figure 2 Institutional Framework for Green Growth



## LEGISLATIVE FRAMEWORK

The Framework Act on Low Carbon Green Growth was enacted in 2010. It provided the legal basis for implementing measures to effectively address climate change and energy issues, promote sustainable development, build the implementation system for green growth (such as the establishment of the Committee on Green Growth), and revise a variety of institutional systems to promote low-carbon green growth in the region.

The major provisions in the Framework Act include:

- The realization of the green economic system, green technology and green industries.
- Policies on energy, sustainable development; the green life, the green homeland and the low-carbon traffic system.
- International negotiations and cooperation in relation to low carbon, green growth, including climate change.
- Procurement of financial resources, taxation, financing, training of human resources, education, and public relations activities necessary for low carbon, green growth.

## STRATEGIC FRAMEWORK

The National Strategy for Green Growth (2009-2050), provides a comprehensive policy framework towards green growth. Launched in 2009, the strategy aims to promote eco-friendly new growth engines, enhance people's quality of life, and contribute to international efforts to fight climate change. To achieve the goals set in the National Strategy, South Korea rolled out a series of five-year plans with the following objectives:

### Definition of Green Growth:

Growth that registers harmony between economy and environment that reduces climate change and environmental damage by saving and efficiently using energy and resources and creates jobs by exploiting new growth engines through R&D in clean energy and green technology.

\*Article 2, Section 2 of Low Carbon Green Growth Framework Act (hereafter the Framework Act)

The government set a budget target to allocate 2% of GDP for Phase 1 (2009-2013)  
Total: 107.4 trillion KRW (98.1 billion USD (1/1/2013))<sup>5</sup>

|   | Total | '09  | '10-'11 | '12-'13 | Growth |
|---|-------|------|---------|---------|--------|
| <b>Public Investment (trillion KRW)</b> | 107.4 | 17.5 | 48.3    | 41.5    | 10.2%  |
| <b>Adaptation to climate change</b>     | 56.9  | 8.6  | 29.2    | 19.1    | 14.0%  |
| <b>New growth engine</b>                | 28.6  | 4.8  | 10.8    | 13.1    | 9.4%   |
| <b>Better life quality</b>              | 27.9  | 5.2  | 10.5    | 12.2    | 3.6%   |

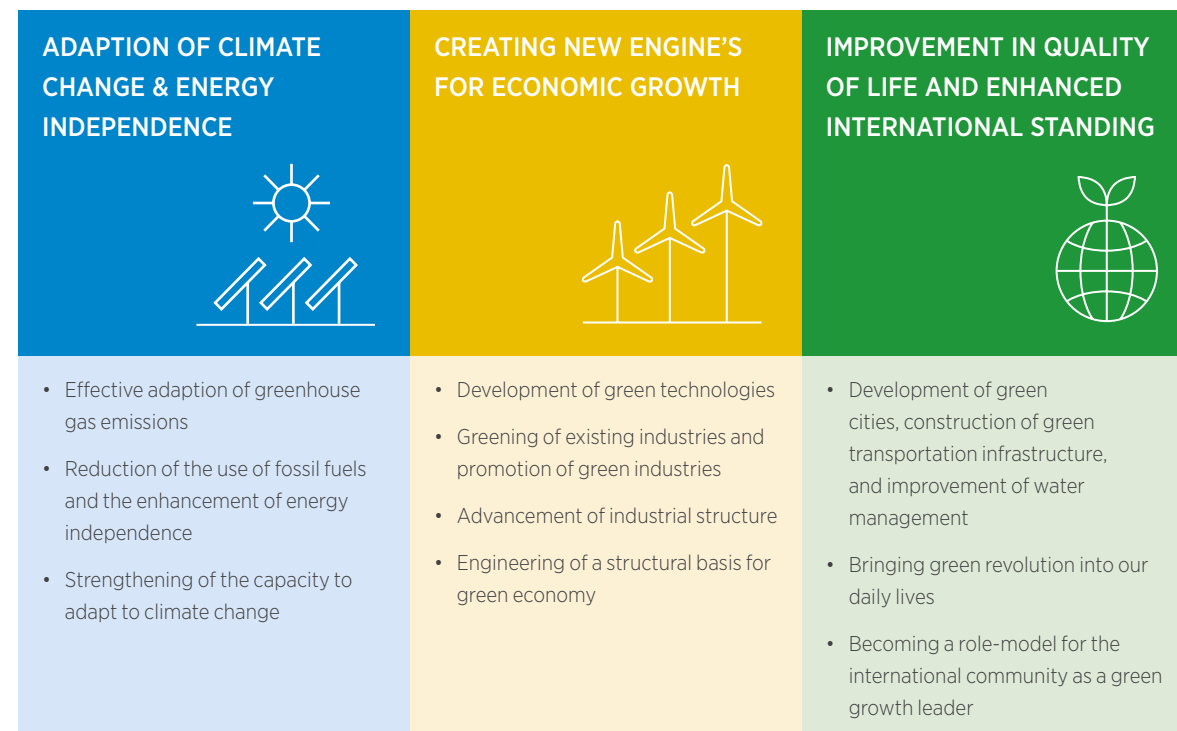
### The 1st Five-Year Green Growth Plan 2009-2013

- Adaptation to climate change and energy independence
- Creating new engines for economic growth
- Improvement in quality of life and enhanced international standing

### The 2nd Five-Year Green Growth Plan 2014-2018

- Establishing a low-carbon socio-economic infrastructure
- Achieving a creative economy through the convergence of green technology and ICT
- Building a pleasant living environment safe from the harms of climate change

Figure 1 Three Objectives and Ten Directions of Green Growth



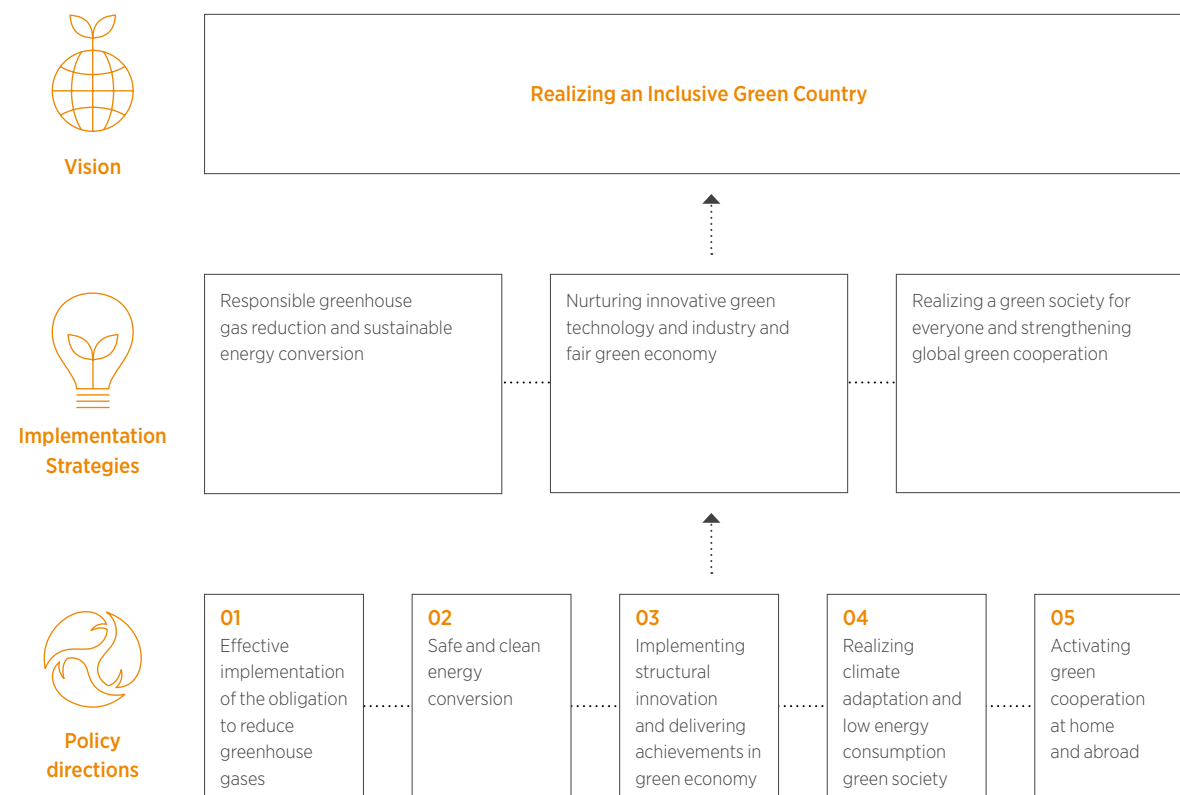
## MAJOR ACHIEVEMENTS 2009-2019<sup>6</sup>

10 years of Green Growth Policy implementation has:

- Facilitated the adoption of Green Growth as an agenda for national development and the institutionalization of Green Growth promotion.
- Aided in preparing the basis for preemptively setting the GHG reduction target and system.
- Established the foundation for future growth engines through the development of green technology.
- Led to an increase in the supply of green products and efforts for actualizing green lifestyle.
- Enhanced national standing by setting green growth as a global agenda by establishing and engaging related internal organizations.

**The 3rd 5-Year  
Green Growth Plan <sup>7</sup>**  
2019-2023

- Responsible greenhouse gas reductions and sustainable energy convergence
- Nurturing innovative green technology, industry and fair green economy
- Realizing a green society for everyone and strengthening global green growth cooperation



## Sources and Links

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KGTF is committed to sharing technical knowledge and first-hand experience of implementing integrated green growth solutions that contribute to sustainable development and shared economic prosperity.

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