



A Report on Korean-Sustainable Development Goals (K-SDGs)

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Greetings

Sustainable development fosters mutual symbiotic relationship between nature and people and fair and mutually beneficial human relationship.

I am delighted and grateful for the publication of a Report on the Korean Sustainable Development Goals. In 2015, the United Nations established sustainable development goals for 17 areas with the deadline of 2030. Following that, South Korea's Commission on Sustainable Development set up the Korean Sustainable Development Goals (K-SDGs) in 2018 by applying the international sustainable development goal system to domestic circumstances.

Sustainable development refers to developing a mutually symbiotic relationship between nature and human beings as well as transforming the relationship between people into a fair and mutually beneficial relationship. In other words, sustainable development pursues the value of inclusion. This can be called sustainability, which is an inclusive value that embraces both progressive and conservative values. Through good politics, we aim to consistently maintain the appropriate quality of life in the present and future, so that everyone can lead a happy life. The last three years that we worked to establish K-SDGs was never enough time to gather opinions and set targets for the extensive range of 17 goals.

This year, the Commission on Sustainable Development plans to collect more comprehensive opinions of Korea-Major Groups and other Stakeholders (K-MGoS) to reflect them in the Fourth Sustainable Development Goals as well as to improve insufficient indicators. Moreover, we will reinforce our efforts to recover the authority of the Sustainable Development Act, which has been weakened with the launch of the 2010 Green Growth Policy, and foster the Commission on Sustainable Development into cross-ministerial entity.

Sustainable development policy is not only a policy that enables us to address diverse and complex problems that we face today but also a policy that can mediate disputes and conflicts of interests, thereby strengthening our environmental, social, and economic constitutions.

I would like to ask generous support and attention from all of you—members of the public, stakeholders, inter-ministerial committees, politicians, and decision-makers. I express my sincere appreciation to the members and advisors of the sustainability committee as well as various stakeholder groups for their valuable participation in K-SDGs and all members of the Sustainable Strategy Team of the Policy Planning Bureau at the Ministry of Environment, who have spared no effort and support for the establishment of K-SDGs and the publication of this report.

Thank you.



Moon Tae-hoon,
Chairman on
Commission on
Sustainable Development

March 2019

Moon Tae-hoon,
Chairman on Sustainable Development

Chapter 1.

Background of the Establishment of K-SDGs

Adoption of Global Sustainable Development Goals

The international community led by the United Nations set up the Millennium Development Goals (MDGs) from 2000 to 2015 with the aim of solving social problems mainly in developing countries such as diseases and inequality. Afterward, the UN adopted Sustainable Development Goals (SDGs) in 2015 to address economic, social, and environmental issues in an integrated way. The new goals set the shared vision of humanity to be achieved by 2030 to raise the quality of life for the present and future generations within the frame of sustainable development. Major countries, such as Germany, Switzerland, and France, have adopted SDGs as a national agenda and used them for policy formulation and evaluation for the sustainable development of their countries. In line with this, Korea has also seen the need to establish SDGs based on interministerial consultation and public participation.

Necessity for National Sustainable Development

Contradictory to the significant economic growth in Korea, people's quality of life has not improved as much, with persisting problems such as income polarization, environmental degradation, including worsening fine dust, and lack of quality jobs. As part of efforts to address this, the South Korean government established the Basic Plan for Sustainable Development in three phases every five years since 2006. However, in 2017, Korea's OECD Better Life Index was ranked 29th among the 38 member states, even declining from the 25th place in 2014.

Also, the current policy goals, which were set with a focus on administrative affairs, have limited traction to drive the country's sustainability and improve people's quality of life substantially. Of a total of 151 implementation tasks of the Third Basic Plan for Sustainable Development, 80 were environment-related tasks, and therefore, social and economic sectors were not fully reflected. This has led to the need for the government to set goals through a balanced consideration of the economic, social, and environmental sectors, as well as based on governance by the people, from the early stage of forming policy goals.

In this regard, the government set the strengthening of sustainable development as the national agenda for the year 2018 and established the Korean Sustainability Development Goals (K-SDGs) that can complement the Third Basic Plan for Sustainable Development. K-SDGs will pave the way for Korea to make strides toward an inclusive country that can create "substantial changes in people's lives."

What is sustainable development?

Sustainable development refers to development activities that meet generations' present and future needs. In other words, it means a future-oriented development aimed at achieving not only social and economic development but also environmental protection.

Vulnerabilities in Korea's Sustainability

Social issues

Because of the continuing low birth rates and the aging population in Korea, the number of working-age population in 50 years is expected to plunge to 60% of that in 2017, weakening the base for social sustainability. Moreover, worsening income distribution has increased the relative poverty rate of the elderly and the income quintile ratio, which indicates that the income disparity of the working class also rose from 6.5 times in 2003 to 7.9 times in 2018. Also, the proportion of chronically ill adults in Korea hovers over 50%, while the gap in education spending by income bracket is also on the rise.

Economic issues

As Korea enters an era of jobless low growth, the potential growth rate, which stood at 3% as of 2018, is expected to fall to 2% in the 2020s and to 1% in the 2030s, further aggravating the base for economic sustainability. As of 2017, compared to the OECD average employment rate of 53.3%, Korea's youth employment rate was only 42.1%, which was lower than that of other developed countries. Also, Korea's domestic food self-sufficiency rate averaged 23.8% from 2013 to 2015, which was far lower than the world average (102.5%), as well as that of Australia (275.7%) and Canada (195%), indicating a significant threat to the country's food security.

Environmental issues

Environmental sustainability is threatened with climate change, waste, the extinction of plants and animals, among other issues, and this has become a shared problem for countries around the world. Because of climate change, droughts and heatwaves are becoming commonplace, while environmental hazards, such as plastics, are accelerating damage to ecosystems and human health as well as the extinction of plants and animals. All of these require urgent global action.

Geographical issues

Being the only divided country in the world, Korea's sustainability faces a serious threat.

As of 2013, the defense budget expenditure of South Korea accounted for 11% of the total government budget. A direct economic loss caused by the division is estimated to be around KRW 16 trillion, which is an enormous burden for the country. In particular, the fact that young males have to spend about 20 months in their prime for mandatory military service also needs to be considered when establishing national SDGs.

Institutional Foundation for the Establishment of K-SDG

According to Article 50 of the Framework Act on Low Carbon, Green Growth, the government has to not only renew sustainable development basic plans every five years to carry out international agreements on sustainable development and promote sustainable development in Korea but also establish sustainable development goals and indicators. In addition, according to Chapter 3 of the Sustainable Development Act, sustainability indicators should be developed and distributed, and sustainability assessment should be executed every two years to monitor the fulfillment of the indicators. These activities are carried out through the Commission on Sustainable Development under the minister of environment and have been operating for nine years since 2000. However, it is necessary to strengthen the status of related organizations and the legal framework so that the inter-ministerial functions, such as the enhancement of sustainability in the economic and social dimension, can be carried out along with the establishment of K-SDG.



Article 50 of the Framework Act on Low Carbon, Green Growth

- ① The Government shall perform international agreements related to sustainable development, such as Agenda 21 adopted at the United Nations Conference on Environment and Development held in Brazil in 1992 and the plan of implementation adopted at the World Summit on Sustainable Development held in the Republic of South Africa in 2002, in good faith and shall establish and implement a basic plan every five years for sustainable development for a planning period of 20 years to facilitate the State's sustainable development..[omit]...
- ③ The basic plan for sustainable development shall include the following matters:
 1. Matters concerning the current status of sustainable development, changes in circumstances, and prospects thereof;
 2. Matters concerning the vision and goals of sustainable development, the strategy and principles for promotion, the direction of the basic policy, and major indexes for sustainable development; and
 3. Matters concerning the performance of international agreements related to sustainable development.

Chapter 3. Evaluation of the Sustainability of the Sustainable Development Act

Article 13 (Sustainable Development Index and Evaluation of Sustainability)

- (1) The State shall prepare and disseminate a sustainable development index.
- (2) The Commission on Sustainable Development under Article 15 shall evaluate national sustainability every two years with the sustainable development index stipulated in paragraph (1).

Article 14 (Report on Sustainability)

- (1) The National Commission shall prepare a report on sustainability every two years, which consolidates the results of the evaluation of sustainability referred to in Article 13 (2), and publish it after reporting to the president.

Roles of the Commission on Sustainable Development (CSD)

Established in 2000, PCSD is responsible for setting up and modifying basic strategies and implementation plans for national sustainable development, discussing and coordinating implementation plans, reviewing and notifying laws and administrative plans, developing the national sustainable development indicators and evaluating national sustainability, disseminating, educating, and publicizing knowledge and information on sustainable development, domestic and international cooperation on sustainable development, and providing advice for major policies and social conflicts settlement regarding sustainable development.

Status of CSD

- 2000–2006 (1st–3rd phases): Establishment and operation of the Commission on Sustainable Development under the immediate control of the President
- 2006–2008 (4th phase): Announcement of the basic Sustainable Development Act and the first Sustainable Development Plan (2006–2010)
- 2008–2010 (5th phase): Change of the legal basis of the commission of the Basic Sustainable Development Act (which is changed to the Sustainable Development) and enactment of the Framework Act on Low Carbon, Green Growth
- 2010–2015 (6th–7th phases): The second Sustainable Development Plan (2011–2015)
- 2016–2017 (8th phase): The third Sustainable Development Plan (2016–2020)
- 2018 - (9th phase): Establishment of Korea Sustainable Development Goals (K-SDGs)

Overview of the UN SDGs: Establishment and Implementation

Since countries agreed to establish SDGs for global sustainable development in the 2012 Rio+ 20, 193 UN member countries unanimously adopted SDGs at the UN Summit Meeting in September 2015. The SDGs pursue inclusive growth, representing “No one will be left behind,” and propose a vision for global prosperity that the international community will jointly pursue. The main principles of the indicator establishment are based on the 5Ps: people, planet, prosperity, peace, and partnership, and the goal achievement activities will be promoted for 15 years from 2016. The SDGs consist of 17 objectives, 169 targets, and 232 indicators in the environmental, social, and economic sectors, and their achievement will be monitored by the High-Level Political Forum (HLPF) of the UN Economic and Social Council (ECOSOC). HLPF meetings will be held annually at the ministerial level and every four years at the summit level. The year 2019 is the summit meeting year.

17 SDGs

The 17 SDGs are based on 3 axes: social development, economic growth, and environmental conservation. Goals 1 to 6 aim to address social development issues such as addressing poverty and inequality and restoring human dignity. Goals 8 to 11 aim to build inclusive economic environments and sustainable growth engines to enable an adequate level of livelihood through quality jobs. Goals 7, 12, 13, 14, and 15 include goals of protecting the ecosystem, including responses to climate change and natural disasters and environmental protection, as well as making the earth sustainable.

- Society 1. No Poverty
- Society 2. Zero Hunger
- Society 3. Good Health and Well-Being
- Society 4. Quality Education
- Society 5. Gender Equality
- Society 6. Clean Water and Sanitation
- Environment 7. Affordable and Clean Energy
- Economy 8. Decent Work and Economic Growth
- Economy 9. Industry, Innovation, and Infrastructure
- Economy 10. Reducing Inequality
- Economy 11. Sustainable Cities and Communities
- Environment 12. Responsible Consumption and Production
- Environment 13. Climate Action
- Environment 14. Life below Water
- Environment 15. Life on Land
- Infra 16. Peace, Justice, and Strong Institutions
- Infra 17. Partnerships for the Goals

K-SDGs and Its Connection to International SDGs

Global Indicator Connection Structure

K-SDGs are closely connected to international SDGs, and the process of goal establishment should be promoted through the participation of the public. According to “The Road to Dignity by 2030,” national SDGs should be monitored through the participation of various stakeholders based on existing local mechanisms and processes. National indicators should be in balance with global indicators. However, as each country can determine the number and attributes of the indicators in the best direction for sustainable development although they are not internationally comparable, Korea should establish the indicators in consideration of its distinct characteristics.

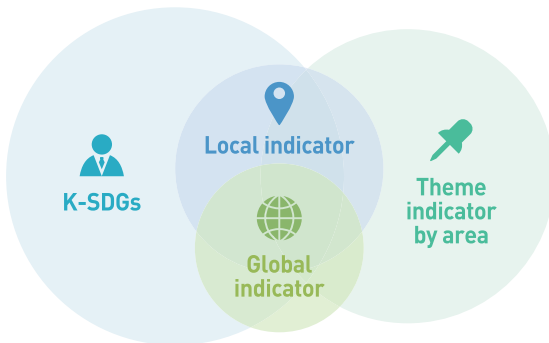
System of Reporting on the Implementation

When issuing guidelines for “mainstreaming the 2030 agenda for sustainable development,” the UN proposed that each government build a sustainable development indicator system to monitor the implementation of the SDGs. Furthermore, it recommended the development of a monitoring and reporting system for the implementation of the SDGs according to this indicator system. The sustainable development indicator is a comprehensive diagnosis of the fulfillment of the SDGs and targets to ultimately make a comprehensive diagnosis of the sustainability of society and the quality of life in an environment. It is different from the performance indicators pointing to the achievement of the implementation plan. Therefore, the indicators of sustainable development should be able to faithfully diagnose the quality of life of Korean people and further lead the switch of policies and promotion of sustainability based on the diagnosis. In this respect, K-SDGs should build a system that can assess the implementation status of sustainable development and the quality of life of the public in economic, social, and environmental aspects.

SDG promotion system and structure



Relationship of K-SDGs and international SDGs



Global Participation in SDGs

The Korean government incorporated the SDGs into national policies such as the Third Basic Plan for Sustainable Development and the National Sustainability Report. It also established K-SDGs and their implementation system to put the framework for the declaration, SDGs, implementation, and follow-up actions in place according to the UN guideline.

Internationally, the connection between the Official Development Assistance (ODA) project and the SDGs has been strengthened, and the contribution to the achievement of the SDGs has been specified in the basic plan for the Second International Development Cooperation as an ODA Vision. In addition, the 10 ODA sectors and the SDGs and performance indicators were connected, and the ODA agencies were obliged to report relevant individual SDGs when submitting project plans since 2016. The average annual growth rate of ODA from Korea is 10.2% from 2010 to 2015, which is the highest among the OECD DAC member countries. In addition, as of 2015, Korea's ODA amounted to USD 19.2 billion, making it the 14th active participant in global sustainable development activities.

Since Korea took the position of the chair country of ECOSOC in 2015, it presided the HLPF meeting held in July 2016 and led to its participation in the Voluntary National Reviews (VNR), which was held for the first time since the adoption of SDGs. In the HLPF held in the New York headquarters of the UN in 2018, targets of the six SDGs, including clean water and sanitation, affordable and clean energy, sustainable cities and communities, responsible consumption and production, life on land, and global partnerships for the goals, were reviewed under the theme "Transformation toward sustainable and resilient societies."

Speech of the Permanent Representative of ROK at HLPF

(July 17, 2018)

Since taking office in May last year, the Moon Jae In administration has been receiving much attention from the international community with its role in bringing peace on the Korean peninsula and in Northeast Asia. Meanwhile, domestically, the Moon administration has been taking various drastic measures to improve economic, social and environmental sustainability like; 16% increase in minimum wage, 16 hours cut in maximum weekly working hours, substantial increase in benefits for the elderly, disabled and children, etc. These all are well in line with the moral principle of SDGs; "leave no one behind".

Now, I would like to introduce some of the Korean government's key measures to improve sustainability, especially relevant to this year's focus.

First, SDG 6. Clean Water and Sanitation. Integration of water quality and quantity management has been finalized this June, enabling integrated sustainable water management paradigm.

Next SDG 7. Affordable and Clean Energy. According to the new road map, Korea plans to shut down 6 nuclear power plants out of 24 by 2030 and become nuclear-free by 2022. Korea also closed 3 of the aged coal power plants and is planning to close additional 7 plants by 2022.

Next, SDG 12. Responsible Consumption and Production. The government put heads together with manufactures, suppliers as well as consumers and came up with long term comprehensive plan for recycling. According to this plan, Korea will reduce plastic waste generation by 50% and increase recycling rate from 34% to 70% by 2030.

Now last but not least, SDG 17. Partnership for the Goals. [omit]

Korea is currently working to newly establish Korean SDGs that reflect on Korea-specific issues upon the framework of UN SDGs. 14 working groups are working that are composed of about 420 experts from national institutes, civil society, and academia, as well as relevant ministries.

Korea also has officially adopted UN's Major Groups and other Stakeholders mechanism, namely K-MGoS, in order to promote participation from all levels of society. K-MGoS will also play a key role in implementing the K-SDGs.



Chapter 2.

Vision and Implementation of K-SDGs

Vision of K-SDGs: A Sustainable Nation that Embraces All

An inclusive state is the current government's national vision for social policy that refers to a society that pursues quality growth instead of quantitative growth, coexistence and shared prosperity rather than exclusion and monopoly, as well as future-oriented innovation. Under the vision of an "innovative, inclusive nation in which all people prosper together," the government unveiled its three visions and nine strategies. Among them, reform of the income security system for easing income disparities, a strategy for equal distribution of opportunities and rights for a fair society, establishment of an active social system in preparation for society with low birth rates and an aging population, enhancement of fairness and reliability in social services and job creation under the vision of social cohesion, as well as strengthening of gender-sensitive human capacity, innovation toward a human-centered workplace, and establishment of an employment safety net for a virtuous cycle of the economy, and job creation under the vision of social innovation are all highly relevant to the vision of the Korean-Sustainable Development Goals (K-SDGs).

To achieve its vision of "A Sustainable Nation that Embraces All," K-SDGs set out 17 goals under 5 strategies: a society where everyone can live like a human being, preservation of the clean environment that can be enjoyed by all generations, economic growth that improves the quality of life, protection of human rights and inter-Korean peace, and strengthened global cooperation.

"Such structural problems as low growth, jobless growth, the polarization of wealth and income inequality, a low birthrate and an aging population, as well as changes in the industrial structure, are daunting tasks to be resolved in a short period. We cannot afford to turn back to the old methods that aggravate economic inequality. When the state takes responsibility for people's welfare throughout their different life stages, when businesses fulfill their social responsibilities, and when individuals find happiness in their jobs, we can prosper together.

To that end, our nation should become a place where people feel at ease within a social safety net and welfare system. It should become a country that guarantees fair opportunities and just results. It should become a country in which not a single citizen is discriminated. An inclusive state in which all people prosper together—this is the path we should take and the calling of this time entrusted to my administration. The World Bank, IMF, OECD, and many other international organizations and countries have already begun to talk of inclusiveness. They advocate welfare, a fair economy, and inclusive growth in which the resulting gains are distributed equally to everyone and income increases among mid- to low-income earners.

From inclusive society and inclusive growth to inclusive prosperity and inclusive democracy, when an "inclusiveness free of exclusions" becomes our society's value and philosophy, we will be able to thrive together."

National Assembly Address by
President Moon Jae-in on November 1, 2018



A Sustainable Nation that Embraces All



Humans

A society where everyone can live like a human being

- Poverty reduction and strengthened social protection systems
- Food security and sustainable agriculture
- Healthy and happy lives
- Promotion of education
- Inclusive, safe, and resilient cities and settlements



Global Environment

Clean environment that can be enjoyed by all generations

- Sound and safe water management
- Eco-friendly production and consumption of energy
- Response to climate change
- Conservation of marine ecosystems
- Conservation of terrestrial ecosystems



Prosperity

Economic growth that improves the quality of life

- Expansion of quality jobs and economic growth
- Establishment of infrastructure, R&D expansion, and economic development
- Sustainable consumption and production



Peace

Protection of human rights and inter-Korean peace

- Gender equality
- Reduction of inequality
- Human rights, justice, and equality



Partnership

Strengthened global cooperation

- Enhanced global partnerships

Implementation System of K-SDGs

Unlike the existing top-down approach, the establishment of K-SDGs was performed in a bottom-up manner with the participation of relevant ministries, private working groups, stakeholders, and the general public. According to the implementation plan for the establishment of K-SDGs, which was discussed in a social ministerial meeting in February 2018, the government formed joint working groups of the private, public, and academic sectors, as well as consultative bodies and task forces from related ministries, such as the Ministry of Environment, the Ministry of Land, Infrastructure

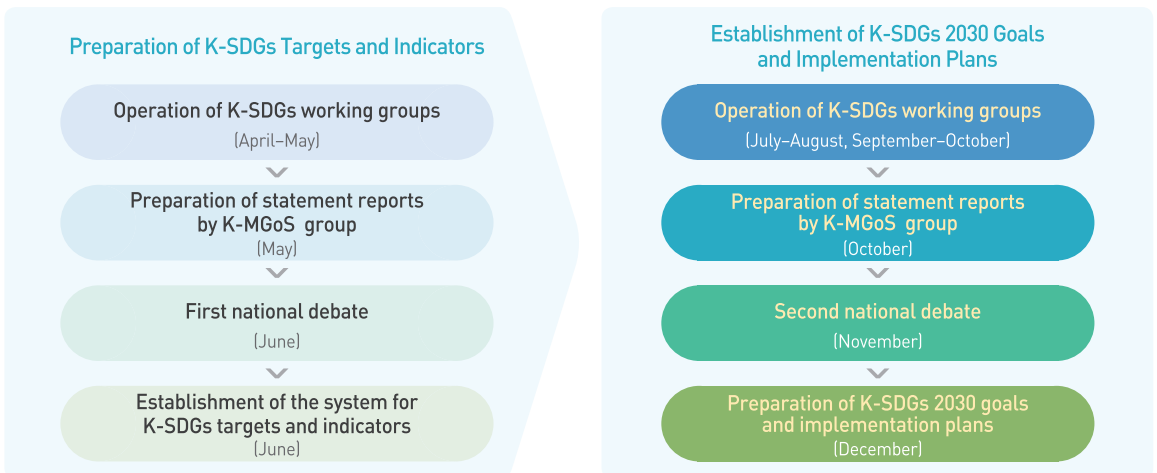
and Transport, and the Ministry of Education, as part of efforts to establish K-SDGs. The government played a role as an assistant, which opens opportunities for social dialogue while the actual task of setting up specific targets for each goal was led by the joint working groups of the private, public, and academic sectors. In particular, K-SDGs were prepared by reflecting social opinions gathered through the National SDGs Forum and public surveys, with the final approval from a cabinet meeting.



Establishment Process of K-SDGs

In January 2018, the Commission on Sustainable Development under the Ministry of Environment reported its implementation plan for K-SDGs at a social ministerial meeting. Following that, the commission formed the K-SDGs interministerial

committee, working groups, and Korea-Major Groups and other Stakeholders (K-MGoS) as part of the establishment process. In December 2018, K-SDGs was officially launched through deliberation at a cabinet meeting.



Joint Working Groups of Private, Public, and Academic Sectors

Formation

Each ministry received the first recommendation to participate in the working group until March 2018 as well as additional applications for further participation through the Sustainable Development Portal. Centering on 14 joint working groups of the private, government, and academic sectors, 192 experts gathered from state research institutes, industries, universities, and civic communities as well as officials from related ministries. Including ministry officials, a total of 429 people participated in the establishment of K-SDGs. Personnel allocation was done according to the following principle: around 10 experts were assigned to each of the 17 goals, but some highly related goals were integrated into 1 working group. The six goals that were integrated into three working groups are SDGs 1 (poverty) and 10 (inequality), SDGs 8 (economic growth and jobs) and 9 (infrastructure), and SDGs 7 (energy) and 13 (climate change).

Operation

Joint working groups began operations in April 2018 based on the principle that every member has an equal opportunity to participate. For efficiency, each group selected its leader to coordinate meeting schedules and agendas. Group leaders performed the role of an assistant including preparation of discussion drafts, convening meetings, and summing up the meeting results. In principle, they were picked from experts with a doctorate or equivalent degree at state research institutes but were replaceable as agreed among group members. When working groups created drafts, each of the private, public, and academic sectors held working group forums to collect opinions. A total of 45 forums were held from May to November. The working groups prepared report drafts on specific targets, indicators, and implementation plans, and produced final results after collecting public opinions online.



K-SDGs Forums by Private, Public, and Academic Working Groups (May 15 – Nov. 30)



K-SDGs National Debate (Jun. 21) / Working Group Workshop (Oct. 31)

Formation of Joint Working Groups of Private, Public, and Academic Sectors for K-SDGs Targets

Targets	Total	Private	Public	Academic
1&10. Poverty Reduction	8	4	3	1
2. Agricultural Development	10	4	3	3
3. Health Promotion	10	6	3	1
4. Quality Education	18	8	7	3
5. Gender Equality	10	3	6	1
6. Clean Water and Sanitation	11	5	4	2
7&13. Climate Change Response	28	14	10	4
8&9 Economic Development	18	8	5	5
11. Sustainable City Development	11	7	2	2
12. Sustainable Consumption and Production	21	10	10	1
14. Life Below Water	11	3	6	2
15. Life on Land	12	5	5	2
16. Peace & Justice	11	5	2	4
17. Global Partnership	13	5	6	2
Total	192	87	72	33

Address by South Korea's Chief Delegate at the 6th HLPF (Jul. 17)

At the UN High-Level Political Forum on Sustainable Development (HLPF) held on July 17, 2018, the chief delegate of South Korea introduced the government's major policies to improve sustainability and resilience as well as the establishment process of K-SDGs through joint working groups of the private, public, and academic sectors and K-MGoS.



Korea-Major Groups and Other takeholders (K-MGoS)

Formation

Since nationwide public participation was crucial for the implementation of K-SDGs, Korea's Major Groups and other Stakeholders (K-MGoS) were formed and operated to build a participatory platform for the establishment of K-SDGs. To ensure a transparent selection, a public application process was open for those interested for about a month, after which 14 groups were formed. The finally selected stakeholders were divided into the following categories: women, teenagers, farmers, workers, industries, NGO, science and technology, local governments, education and academia, persons with disabilities, local communities, migrants, animal welfare, and youth groups. A total of 132 stakeholders, including representatives of 90 organizations and 42 civic representatives, took part in the process. K-MGoS took a similar approach as UN-MGoS, but it was meaningful that youth and animal welfare groups were added in consideration of Korea's high interest in youth jobs and animal welfare.

Operation

After the formation of working groups was complete, K-MGoS began its operation in May 2018. The K-SDGs draft report prepared by working groups went through the process of gathering public opinion and was modified by reflecting the statement report by K-MGoS. In a bid to strengthen the democratic establishment process and review the relevance between goals, which are the characteristics of SDGs, a discussion within respective stakeholder groups was added.



K-MGoS Kickoff (May 11)



K-MGoS Meeting (Nov. 20)

Regional K-SDGs Debates



Southeastern Region (Jun. 7)



Southwestern Region (Jun. 8)



Seoul Metropolitan Area (Jun. 12)

Composition of K-MGoS

Total 132



Women



Teenager



Farmers



Workers



Industry



NGO



Science & Technology



Local Government



Education & Academia



Persons with Disabilities



Local Community



Migrants



Animal Welfare



Youth

K-SDGs with Public Participation

Regional Debates and First National Debate

From June 7 to 12, 2018, the environment ministry held regional debates in which it explained the meaning and establishment process of K-SDGs in attendance with experts and local citizens. The debates from the southeastern and southwestern regions to the Seoul Metropolitan Area were held under the different themes of “sustainable consumption, production, and ecosystems,” “sustainable water, climate, and energy,” and “sustainable rights to equality, health, and human,” respectively, which allowed participants to discuss focusing on specific topics.

After some 1,000 people participated in the regional debates, the 1st National Debate for Establishing Korea’s SDGs was held on June 21, 2018. With around 600 people in attendance, presentations were given by 14 K-MGoS including persons with disabilities, NGO, labor, farmers, industries, animal ecosystems, women, local communities, youth, and migrant groups. It was followed by a free debate among all participants as well as a panel discussion led by K-SDGs group leaders. The debate topics included specifics of each K-SDG, the establishment process, and how to reflect the opinions of stakeholders.



Second National Debate and Sideline Event

Following the first national debate, the second national debate was held in October 2018. With 400 people participating, the debate was intended to listen to a wide range of public opinions during the process of establishing the specific targets and indicators of K-SDGs as well as the implementation plans of related ministries. The debate was held in the style of a town hall meeting, where the joint working groups of experts from the private, public, and academic sectors and members of the general public present their opinions on the specific targets and implementation plans suggested by related ministries.

In a sideline event, on-site voting was held for the four slogans and two symbols chosen through the K-SDGs competition, as well as an appointment ceremony, was held for K-SDGs PR ambassadors who were selected through public voting. The appointed ambassadors will participate in activities to promote K-SDGs including promotional videos and events. To raise awareness of K-SDGs, public voting was held among stakeholder groups including youth, science and technology, and animal protection. About 400,000 people participated in the voting to choose 14 PR ambassadors. This appointment ceremony was joined by actor Hong Kyung-in, KBS announcer Kim Jae-won, animal expert Kang Hyung-wook, Shin Eui-hyun, a gold medalist at the PyeongChang Winter Paralympics, and actor Ha Seok-jin.



Area	PR Ambassador	Area	PR Ambassador
Women	Suzy	Industries	Yoon Song-yeo
Teenagers	GOT7	Science & Technology	Ha Seok-jin
Youth	Ok Taec-yeon	Education & Academia	Rhyu Si-min
Persons with Disabilities	Shin Eui-hyun	Animal Protection	Kang Hyung-wook
Migrants	Jeon Cheol-wu	NGO	Jung Woo-sung
Farmers	Choi Bool-am	Local Communities	Kim Jae-won
Workers	Hong Kyung-in	Local Governments	Park Won-suk

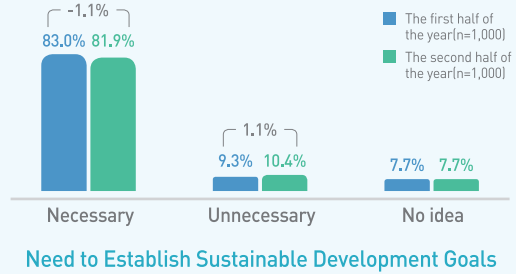
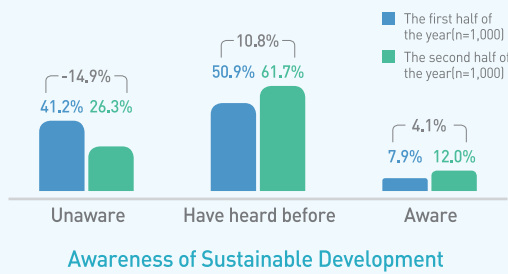
The establishment of K-SDGs was implemented as a national project with the participation of 429 members in working groups, 132 in stakeholder groups, around 1,000 people in the national debates in the first and second half of the year, and 2,000 people in the public survey. During the two rounds of the national debate, “collecting public opinions through sticky notes” was held to reflect the voices of the people as much as possible.



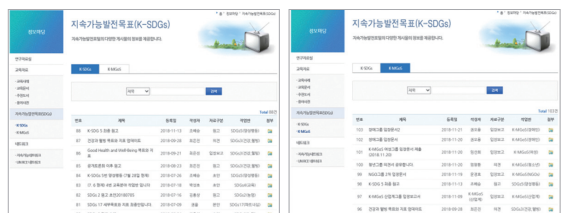
Survey on Public Awareness of K-SDGs

Two rounds of the “survey on general public awareness of SDGs” were conducted in the first and second half of 2018 among 1,000 men and women from the 10s to 70s nationwide to lay the groundwork for establishing goals with a shared vision. According to the survey on “awareness of sustainable

development,” the awareness level in the second half of the year increased by 14.9% compared to the first half, and 81.9% of the respondents said that the establishment of sustainable development goals is necessary.



On the Sustainable Development Portal—the information network for information on sustainable development—an online platform was established to collect opinions from the public, where drafts of K-SDGs working groups and statement reports from stakeholder groups are disclosed. When working groups and stakeholder groups upload their reports, any members of the public can view the reports and post their opinions freely.



Sharing of Working Group Reports Sharing of Stakeholders' Opinions

Chapter 3.

Contents of K-SDGs

Establishment and Significance of K-SDGs

K-SDGs consists of 122 specific targets and 214 indicators across 17 sectors, containing the universal values and goals of the international community set to be achieved by 2030. Of the total indicators, 122 new indicators that were not included in the UN-SDGs account for 57%, thus indicating a balance between the global and national-specific indicators. In the past, related indicators were limited to the environmental sector, but K-SDGs have been complemented with social and economic indicators, thereby constituting a balanced, sustainable development goal system. In particular, it is highly meaningful that detailed targets were set for 143 indicators.

What's also notable is that the establishment of these goals was led by working groups consisting of private experts, not by the government, according to Korea's vision, "The nation is owned by its people." Also, the representation of stakeholders was strengthened by adding North Korean defectors to the migrant group.

K-SDGs' target and indicator framework incorporated contents that are relevant to Korea's circumstances. Unlike UN-SDGs consisting of 17 goals, some experts and public members have suggested setting a new target separately under K-SDGs' Goal 16 (Human Rights and Peace), "Establishing Peace on the Korean Peninsula," as Goal 18 of Inter-Korean Peace, and this will be discussed on a national level accordingly. As such, the establishment of K-SDGs has a significant meaning in that it laid the groundwork for the public to participate and sympathize in the process of building Korea's sustainable development goals.

Modified Indicators Compared to UN-SDGs

Excluded indicators

Among UN-SDGs, the specific targets and indicators that are not relevant to Korea's circumstances were excluded. Extreme poverty, which is measured as people living on less than USD 1.25 a day, was found to be irrelevant to Korea as the domestic index stood at a mere 0.49%, and reducing malnutrition was also excluded in the final stage because Korea is classified as a country with high calorie consumption. Also, other indicators, including female genital mutilation, open defecation, transboundary cooperation on water resources, eradication of child labor, and ensuring access to vaccines, which were deemed inappropriate for Korea's circumstances, were excluded after gathering opinions from stakeholders and the general public.

Additional indicators

On the other hand, indicators that need to be desperately addressed in the context of Korea were added including the preparation for chronic diseases, overcoming low birthrates, integrated water management, development of plastic substitutes, and the establishment of permanent peace on the Korean Peninsula. Other added indicators include the preparation for an aging population, expansion of public health services, provision of sewer service, reduction of air pollution from transportation, promotion of technology sophistication and commercialization, expansion of education on sustainable development, limiting climate change to less than 1.5°C, and restoration of ecological axes.

Operation Plans of K-SDGs

To promote the implementation of K-SDGs, various communication and feedback channels will be established including relay public forums, vision sharing and promotion, and active collaboration with local governments.

Main Indicators of K-SDGs

Area	Main Indicators	2030 Targets Compared to 2017
Society	• Income gap between the upper and lower classes	36.8%* → 31.0%
	• Elderly poverty rate	65.9% → 85.5%
	• Suicide rate per 100,000 people	46.5% → 31.0%
	• Occupational fatality rate per 10,000 people	24.3 → 11.9
	• Utilization rate of public kindergartens	0.52 → 0.22
	• Ratio of households below minimum housing standards	24.0% → 44.0%
Environment	• Restoration rate of major endangered species	5.9% → 4.6%
	• Area of restored tidal flats (km ²)	74.3% → 90.0%
	• Ratio of certified organic farming areas	0.2 → 6.0
Economy	• R&D expenditure relative to GDP	4.9% → 10%
	• Rate of successfully commercialized R&D projects	4.23%** → 4.29%
	• Recycling rate of industrial waste	51.6% → 52.9%
	• Number of eco-friendly cars	75.8%** → 95.4%
		97,000 → 8.8 million

* Compared to 2015, ** Compared to 2016

Composition of K-SDGs Targets and Indicators

Sustainable Development Goals	Total	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Targets	122 (14)	4 (-)	5 (-)	9 (3)	10 (-)	7 (0)	7 (3)	4 (1)	7 (-)	5 (1)	5 (-)	8 (-)	11 (3)	4 (1)	8 (-)	8 (1)	14 (1)	7 (-)
Indicators (New)	218* (122)	8 (5)	11 (7)	18 (9)	27 (6)	9 (1)	14 (12)	7 (5)	11 (4)	8 (4)	10 (7)	19 (9)	20 (12)	6 (6)	14 (8)	13 (4)	14 (14)	9 (9)

* Four duplicated indicators included



Goal 1. Reducing Poverty and Enhancing the Social Safety Net

1. Reduce poverty

Since 2006, the market income poverty rate based on nationwide data has been steadily increasing. Expanded measures have been taken through taxation and social security, but as their scale is not large enough, the poverty reduction effect is weak. As a result, the disposable income poverty rate has not been significantly decreasing. It is necessary to pay attention to the problems such as the high-level elderly poverty rate because of the lack of old age income security and the working poor because of the arising of the widespread unstable working class among the issues from each population category. In addition, the poverty rate of persons with disability is three times higher than that of persons without disability. Therefore, the government aimed to reduce the relative poverty rate—the proportion of the population below 50% of the median disposable income—from 13.8% in 2016 to 12.5% in 2030, which is the average of the OECD. We can reduce those suffering from poverty by expanding the recipients of the benefits of our basic living security system for living, medical care, and housing to guarantee the minimum quality of life. Efforts should be made to realize income and property standards to decide eligibility and expand the number of recipients among the poor by easing the standard for the person who is under obligation to support as well as to set specific targets.

1-2. Achieve substantial security for the poor and vulnerable by minimizing social security blind spots

Social security system, such as the National Pension, the Health Insurance, and the Employment Insurance, have completed a formal framework. However, there is still a group that is excluded from the system's protection and support, and the level of support from it is insufficient compared to the actual needs. The social security system should expand its inclusion and appropriateness to achieve substantial poverty reduction. Expanding the coverage rate of the health insurance and reducing the co-payment of patients can reduce the direct burden on households owing to medical bills and consequently the financial burden on the poor and the vulnerable in the use of medical services. It is necessary to set specific targets to reduce the direct household burden rate of 33.3% in 2016 by setting goals by an indicator such as the health insurance coverage rate. The unemployment benefit, which aims to stabilize the income of the unemployed, has a low wage replacement rate and short payment period. Thus, its net replacement rate during the five unemployment years is 10.3%, which is only one-third of the average of OECD. Specific targets should be set, boosting efforts such as the extension of unemployment benefit payment period and increasing the benefit amount. The National Pension, which was introduced in 1988 and has been gradually expanded its scope of application, should reduce its blind spots to secure

a certain level of benefits in the future. It is now planned to expand the scope of subscribers and the institutional support system that can help the public actually pay contributions. Therefore, we plan to increase the contribution payment rate, which is 82.5% of the population in 2017, and it is necessary to set specific targets.

1-3. Strengthen social services for the poor and the vulnerable

Providing specific services for the poor and the vulnerable is effective in helping them cope with the constraints in satisfying their needs, which are derived from poverty, and keeping hopes for the future. Therefore, it is necessary to expand various social services that target them. Rather than setting policy goals for each social service, it is better to aim to expand the roles of various public support systems. To this end, it is necessary to enlarge the proportion of public social expenditure to GDP, which is 10.1% in 2015. In particular, specific expenditure targets for each category should be in place—age, the family of the deceased, disability, health, family, active labor market policy, unemployment, housing, and other forms of public assistance. In this regard, the ratio of households below the minimum housing standard, which is 5.9% in 2017, will be increased to 4.6% by 2030.

1-4. Help the poor and the vulnerable strengthen the resilience to economic, social, and environmental impacts

Poverty gnaws away the hope of the people, weakening social dynamics. Sustainable social development requires a response system to urgent socioeconomic crises and maintain the hope of the working people. The basic living security system is not functioning well in support for working-age households. Therefore, the government has been gradually expanding the Earned Income Tax Credit (EITC) and the Child Tax Credit (EITC), which are cash support schemes for the working poor. Also, the government is going to set specific targets of the expenditure amount of financial support projects for the working poor comparing to the future government budget to help strengthen economic resilience by raising the incentives of the low-income household members to work and increasing the actual income.

Note. Eradication of the destitute poor

As of 2015, the % age of those with the monthly disposable income per person below the UN poverty line is about 0.64%, which is not meaningful in Korea.



Goal 2. Food Security and Strengthening Sustainable Agriculture

2-1. Ensure the vulnerable group's access to food

According to the 2008 famine survey, one in five people (19%) of the world's population said that they had skipped a meal for the past one year for economic reasons. However, 98% of Korea does not fall into this category; thus, it is possible to say that Korea does not have serious famine issues. Therefore, we include the rate of food safety of low-income households as a new indicator and aim to increase it from 95.8% as of 2016.

2-2. Diversify farm household income sources and expand the management safety net

Currently, the potential for the increase in agricultural income has already reached its limit. Hence, the actual farm income is expected to decrease considering the inflation. However, in Korea, the income gap between the urban and rural areas and the actual decrease in farm income and the absolute income level of the farm may pose a threat to sustainable agriculture and food security. Based on the laws and policies supporting rural households to raise income, it is necessary to pursue various measures, such as the improvement of agricultural productivity, the overhaul of the agricultural income compensation policies, the fostering of agriculture-related industries, the diversification of farm income sources, and job creation, in the rural area. As a new indicator, the nonfarm income of farming households will be raised from the KRW 16.3 in 2015 to KRW 18.5 by 2030. Also, the rate of crop cultivation insurance subscription will be raised from 30.1% to 45% in 2015.

2-3. Establish a sustainable food production system

In 1977, Korea achieved its self-sufficiency target in its staple grain, and its food consumption volume and structure reached the level as that of advanced countries. However, because of the increase in food imports due to the opening of the market, the food self-sufficiency rate is 50%, which left the country vulnerable to global food instability. The use of pesticides and chemical fertilizers undermines the quality of the soil, and the sustainability of agriculture is also threatened by the switch of agricultural land to other uses and the increase of idle farmland.

Consequently, the government enacted the Framework Act on Agriculture, the Rural Community and Food Industry in 1995 as a basic principle of the stable supply of safe agricultural

products, established self-sufficiency targets, and promoted the improvement of domestic production. Accordingly, it has set targets in agricultural land area and pursued policies for achieving them.

In addition, the government expanded the project that promotes the wide use of agricultural land for double cropping in winter and have been pursuing eco-friendly farming for sustainable agriculture. Accordingly, it is going to set agricultural land conservation targets and sophisticate agricultural land to replace the demand for imported grains using spare rice and coarse fodder. In addition, it has been promoting food consumption and the establishment of a sustainable agricultural system by reinforcing dietary education, expanding the agricultural product origin indication system, and establishing support centers for school meal supply. To reflect this, it has set the goal of increasing the proportion of certified agricultural land area from 4.9% in 2017 to 10% by 2030 and the organic content in the soil of agricultural land from 2.3% to 2.4%, improving the soil acidity from 6.3 pH to 6.4 pH, or preventing exacerbation. The new indicator of environment protection programs and the number of developed varieties against climate change should accompany targets.

2-4. Maintain genetic diversity

Korea seems to share the benefits of using the traditional knowledge of genetic resources through various international cooperation projects. The conservation of genetic resources is the starting point of sustainable agriculture and is recognized as a very important task to enhance food security by preventing food monopoly by global enterprises. As a result, the Ministry of Environment in 2017 promulgated the act on the access to and the utilization of genetic resources and benefit-sharing. In addition, it integrated the information of the genetic resources of agriculture, forest, and fisheries and provided them through portal services, on which users can search for information and receive resources. It also built the integrated information system of genetic resources for easy use by a private breeder. K-SDGs aim to increase the number of plant genetic resources for food production secured in medium- and long-term conservation facilities from about 290,000 in 2017 to 325,000 by 2030. However, the target value of indigenous seeds included as a new indicator needs to be set.

2-5. Stabilize the food market

The Korea government reserves rice as public stockholding that is purchased at a market price according to the recommendation of the Food and Agriculture Organization (FAO) and as market isolated rice for controlling the supply and demand of the market for stockpiling emergency food especially including rice, the staple grain of Korea. It is going to stabilize the market by minimizing its market intervention by cutting annual average reserves from 1.86 million tons to 800,000 tons as of 2017.

Note. The end of malnutrition

Korea does not have serious malnutrition problems. It had lowered the recommended daily calorie intake from 2,036 kcal to 1,992 kcal per person in 2015. Although there are some nutritional deficiencies in the elderly population, there are few child nutritional deficiencies indicated in the SDGs. Therefore, they are excluded from the target indicators.



Goal 3. Guarantee Healthy and Happy life

3-1. Control the risk of chronic disease and expand health insurance coverage

In addition to the observation of the Framework Convention on Tobacco Control of WHO, the government set a goal of reducing the adult males' smoking rate from 40.7% in 2017 to 29% by 2030 and improving the diabetes control rate from 32.9% in 2016 to 36% by 2030. In particular, it aims to increase the health checkup rate of a person with disability from 55.6% in 2017 to 64% and reduce the chronic disease rate of a person with disability from 81% to 68% to guarantee the right to health of persons with disability. The target values for the improvement of the mortality rate from cardiovascular disease, cancer, and chronic respiratory disease need to be set in the future.

3-2. Promote mental health and prevent drug abuse and misuse

The suicide rate of Korea reached a peak of 31.7 out of 100,000 population in 2011 but declined slightly to 24.3 in 2017. However, it is still the highest among OECD member countries. The government set a goal of reducing this number to 11.9 by 2030 through preventive measures, such as the Comprehensive National Health Promotion Plan and the Suicide Prevention Plan, which will be renewed every five years.

In addition, the annual consumption of alcohol per person in Korea is high at 8.7 liters as of 2017, and the government plans to find a way to reduce it to 7.2 liters by 2030. Also, to decrease the smartphone addiction, which is becoming a social problem in recent years, the government reflected the ratio of high dependency on smartphones as a new indicator and is going to develop statistical calculation method.

3-3. Reduce traffic accident

Reducing traffic accidents seemed to be a challenging goal for Korea. Nevertheless, the death toll of the road traffic accidents decreased by 16.1% over the past five years from 5,505 in 2010 to 4,621 in 2015 through the seventh National Traffic Safety Basic Plan. If the current trend continues, it is expected to decrease by about 32% by 2020. K-SDGs set a higher goal of reducing the death toll of traffic accidents out of 1,000 people from 0.08 in 2017 to 0.03 by 2030.

3-4. Prevent and manage infectious diseases

Infectious diseases in Korea are controlled by the Infectious Disease Control and Prevention Act. In the 1990s, many diseases have been eliminated, and the disease control of Korea reached the level as that of advanced countries. Nonetheless, the number of tuberculosis and its mortality are the highest among OECD member countries. Therefore, the government planned to reduce the number of tuberculosis patients out of 100,000 people from 70 in 2017 to 18 by 2030 and the rate of malaria patients out of 1,000 people from 0.17% to 0.02% according to the international standard indicators.

3-5. Protect and promote maternal health

The maternal mortality rate in Korea is 8.7 (per 100,000 births)

as of 2015, which is higher than the OECD average of 6.0. The mortality rate is expected to increase further as the birth rate of elderly mothers increases. More than 99% of delivery in the Western European countries are operated by skilled medical personnel, which is a very high rate. Therefore, the government planned to lower the maternal mortality rate out of 10,000 births from 0.84% in 2016 by carrying out the implementation plan including the improvement of medical personnel's proficiency.

3-6. Protect and promote children's health

Korea's neonatal death rate was 2.7 out of 1,000 births in 2014, which is lower than the OECD average of 4.0. In 2016, the rate is 1.6%, and the Ministry of Health and Welfare internally reviewed the status and set a goal of reducing it to 1.4% by 2030. In addition, the government incorporated a new indicator of youth and child obesity rate as it has increasingly higher social significance and planned to prevent the rate of 13.3% in 2016 from rising in the future.

3-7. Reduce the damage caused by environmental pollution

The additional deaths from air pollution have already exceeded 3 million a year in the world, and Korea is no exception. In 2013, the International Agency for Research on Cancer (IARC) designated air pollutants, such as fine dust as Group 1 carcinogens, provoking concerns over air pollution. The Korean Peninsula, which is located on the east side of the continent where the westerly blows, is heavily affected by the atmospheric pollutants. It is suffering from triple distresses with its own pollution from automobiles and industrial facilities and air congestion because of climate change. The number of premature deaths because of fine dust increased 21% from 15,100 in 1990 to 18,200 in 2015. The number of deaths out of 100,000 people because of fine dust was 27 as of 2015, which is higher than the average of 22 of the OECD member countries. Therefore, the government is going to set a new goal of controlling the ultra fine dust, but the target value will be decided later.

3-8. Cope with low birth rate and prepare for population aging

This goal consists of three new indicators reflecting Korea's situation and aims to raise Korea's Better Life Index, which ranked 29th among the OECD countries in 2017. In addition, the new indicators, such as the establishment of the Local Dementia Centers and the elderly job index, require the setting of targets.

3-9. Achieve universal health care

In Korea, the health insurance and the disease prevention programs and essential medical care policies according to the Health Plan 2020 have been expanding the coverage of medical care. Thus, universal health care, including essential medicine and medical services, is relatively better secured. Recently, the number of public hospital beds has been included as a new indicator to reflect the needs for stable medical service, and it requires specific targets.



Goal 4. Promotion of education

4-1. Ensure quality education in elementary and secondary schools

As of 2016, the ratio of students in the third grade of middle school who failed to meet the standard is low —2.6% in Korean and 4.9% in mathematics. However, efforts should be made to lower the ratio by providing support for the improvement of basic academic achievement. In addition, the government set a goal of increasing the percentage of students who achieved the basic level (Level 2) in reading, mathematics, and science by 0.1 percentage points, reflecting the result of OECD Programme for International Student Assessment (PISA) 2015 to be on par with the international level. It also aims to raise the ratio of students who are above the basic level in mathematics and science by 0.1 percentage points in elementary and middle schools, respectively, compared to the result of IEA TIMSS 2015. In addition, the quality balanced monitoring system of educational performance should be put in place by calculating the academic achievement and defining characteristic results by the continuous conducting of the national-level evaluation of the academic achievement of secondary schools.

4-2. Ensure quality education for infants

The government enforces the “Nuri Curriculum” for 3–5 years of infants according to the Enforcement Decrees of the Early Childhood Education Act and the Child Care Act. Accordingly, it had provided free education and childcare services for preschoolers and expanded relevant public investment, which reached 1% of GDP as of 2014 according to the recommendation of the OECD. However, despite the universal infant education service and the provision of childcare, the quality gaps between locals, kindergarten and daycare, and public institution and private care are wide. Also, because of the prevalence of preschool tutoring, children do not have enough time to play or be with their parents. Therefore, it is necessary to provide support for infants’ healthy growth and well-being as well as help strengthen the emotional bond with parents.

As new indicators of K-SDG, the rate of 0–5 years old infants’ use of education and childcare service is planned to be increased from 58% in 2017 to 75% by 2030, and the rate of the use of national and public kindergartens and daycare centers from 24% to 44%. However, in terms of the indicators, such as the ratio of infants who are experiencing positive home learning and parenting environment and the ratio of infants aged five or less who are in normal development level from the perspective of sociopsychological well-being, it is necessary to develop measurement tools and statistical calculation methods.

4-3, 4-4. Ensure higher education and skill training

Korea has promulgated the Lifelong Education Act in 1999 and the Enforcement Rule of the Act in 2000 to lay the institutional framework for lifelong education at the national level. Therefore, the rate of participation in lifelong education is close to the OECD average. Given the rates of school enrollment and enrollment in the school of higher grades, the participation rate of young people in education and training is high, but that of adults is lower than 50%. In particular, the rate of vocation-related learning participation is relatively low that is 16.0% in 2011, which is lower than the OECD average of 28.3%. In other words, Korea has a weak educational system in terms of “ensuring opportunities for high-quality skill, vocational, and higher education.” In addition, there are criticisms that the government fails to supply high-quality and trained workforce in line with changes in the industries or economic structure. In fact, according to the evaluation of national competitiveness by the International Institute for Management Development (IMD), it seems difficult for businesses or the labor market to obtain talented people with proficient technical skills in Korea. The inconsistency between the supply and demand of human resource is also serious, and it is expected that some fields, such as science and technology, will suffer serious human resource shortages, which needs policy attention. It is necessary to build a system that can respond quickly to market and industry demands by reforming existing vocational skill development training programs.

According to the government goal, the rate of higher education completion, the new indicator of K-SDGs, is going to remain at the level of 48% in 2017. In terms of the rate of participation in the nondegree education courses of higher education institutions and the ratio of private expenditure on public schools, statistics calculation methods will be developed. The rate of participation in lifelong learning is meant to be increased from 35.8% in 2017 to 38.4% by 2030, and the rate of experience of vocational education is from 16.1% to 18% to improve the quality and the vocational relevance of the education system.

4-5. Solve the inequality in education

In Korea’s education system, the most vulnerable groups are students from multicultural families, single-parent or grandparent families, North Korean refugees, persons with disability, and those with socioeconomic problems. To support the education of the vulnerable groups, Korea is carrying out various education support programs, such as North Korean student education support project and the multicultural education support project according to the Act on the Promotion of Education in Island and Remote Areas and the Enforcement Decree of the Act on Special Education for Persons with Disabilities, Etc. However, the vulnerable

groups are still alienated from education. Efforts to resolve the education discrimination of the vulnerable groups are essential to enhance the equity of education and realize inclusive society. Therefore, K-SDGs will introduce separate statistics by gender, disability, and type of vulnerable group on all indicators and monitor the enrollment and dropout rates of the vulnerable as indicators. However, since there is not enough domestic data to measure the education equity indicators, it is necessary to develop statistical calculation methods. As specific implementation targets, it is planned to reduce the rate of multicultural family students who stop education from 1.32% in 2017 to 1% by 2030 and that of the North Korean refugee students from 2% to 1.5%.

4-6 Strengthen literacy and numeracy skills

In PISA, which targets students who are 15 years old, Korea ranks high in reading and mathematics. However, the government applied the Program for the International Assessment of Adult Competencies (PIAAC) index for adults between 16 and 65, setting the goals of ensuring them to meet the minimum level. The rate of adult literacy and numeracy can be identified with the percentage of population below Level 1 in the language and mathematical abilities of PIAAC. The government set a goal of reducing the percentage gradually by 2030. The targets were set at 2.0% from 2.2% in 2017, and at 4.0% from 4.2% in 2017. Meanwhile, according to the results of PIAAC of Korea, it is necessary to carry out measures to reduce wide gaps between the different groups in age, educational background, and gender.

4-7 Strengthen sustainable development and global citizenship

Since the mid-2000s, Korea has been promoting education on sustainable development, which is led by the UNESCO Schools. The 2015 national education curriculum amendment adopted sustainable development as a subject for cross-curricular learning, and since then, it has been integrated into the education curriculum. In recent years, strategies to actively introduce "Global Citizenship Education" into schools have been developed by the Ministry of Education and UNESCO Asia-Pacific Centre of Education for International Understanding (APCEIU). However, the percentage in education curriculum is still not large enough.

Therefore, plans to expand education programs in connection with the basic capability of compulsory public education should be prepared. Also, it is necessary to establish a system and infrastructure that can grow the education of sustainable development into a curriculum that encompasses all curriculum. This requires the cooperation of various entities such as the government, academia, education communities, local communities, businesses, and civic groups.

However, there is no accurate statistical survey data to

understand the current achievement of Korea. Therefore, measurement tools should be developed, and surveys to obtain statistical data should be conducted regularly. Above all, it is necessary to strengthen the capacity of teachers to lead education. Therefore, the government will increase the cumulative number of teachers who participate in the teaching capacity enhancement training for the education of global citizenship from 1,374 in 2017 to 8,000 by 2030. In addition, the government will review the results of the qualitative evaluation on the implementation of national education policies related to sustainable development and global citizen and the inclusion of them in the education curriculum.

4-8. Educational facilities and inclusive learning environment

As disaster response has been recently drawing public attention, the government included a seismic retrofit indicator, setting a goal of raising it to 25% in 2022 and 100% in 2030 to build safe education infrastructure. In addition, it will increase the rate of Wee Class installation from 57.5% in 2017 to 100%. Wee Class represents the combination of "We Education + We Emotion," which provides counseling for students' satisfaction with school life. It is necessary to set a target for the rate of special class arrangement in regular schools.

4-9, 4-10. Obtain finance resources and teachers to provide quality education

In terms of financial indicators regarding Goals 4-9, the ratio of government expenditures to higher education to GDP is going to be increased from 1% in 2017 to the OECD average to secure education finances. As a qualitative indicator of education regarding the Goals 4-10, the number of students with special needs per special education teacher is going to be continuously reduced from 5.95 in 2017, the proportion of permanently hired teachers in public kindergarten will be raised from 66.9% to 100%, and the rate of counselors in primary and secondary schools is going to be increased from 61.7% to 100%. The proportion of the day care teachers with a bachelor's degree or higher will be continuously managed with a specific target for the improvement of education quality.



Goal 5. Promote Gender Equality

5-1, 5-7. Eradicate discrimination against women

Since the 1990s, Korea has persistently made efforts to eradicate gender discrimination according to the Act on the Equal Employment for Both Sexes. According to the National Gender Equality Index released annually by the Ministry of Gender Equality and Family, the national gender equality index has steadily increased from 67.4 points in 2011 to 70.1 points in 2015. Nonetheless, according to the 2016 Global Gender Gap Report, Korea ranked 116th place among the 144 countries in terms of the gender gap index in 2016. In particular, Korea ranks 123rd in the sector of “economic participation and opportunity,” showing the severe gap between the two genders. This is evident from the fact that the gender salary gap in Korea is the highest among OECD countries. Correspondingly, the government set a goal of raising the rate of policy improvement adoption in the business gender impact assessment from 60% in 2018 to 75% by 2030. In addition, it plans to expand its role in terms of institutions and budget by raising the rate of achieving performance targets with regard to the improvement of gender equality from 67.3% to 83%.

5-2. Eradicate violence on women

The government has reinforced its efforts to eradicate violence on women by enforcing the Sexual Violence Prevention and Victims Protection Act, the Act on the Prevention of Domestic Violence and Protection, Etc. of Victims, and the Act on the Prevention of Commercial Sex Acts and Protection, Etc. of Victims. However, 61.6% of respondents of a survey on the dating violence in 2016 answered they experienced violence in dating. According to the Supreme Prosecutors’ Office, there were 26,820 cases of sexual assaults in 2017, with 51.2 cases per 100,000 population. This is a slight decrease from the peak in 2014 after the series of increase from 23.7 cases in 2005, with a growth rate of 120% in the past decade. It is serious given that violent crimes, murder, robbery, and arson have declined over the past decade while sexual violence has increased by about 2.2 times. As a result, the safety sector points of the National Gender Equality Index also dropped by 8.8 points from 2011. Therefore, the government set a goal that is achievable on the maximum level based on past trends. It will increase the rate of responding to reported domestic violence from 33.2% in 2017 to 50% by 2030 and reduce the percentage without an arrest of the sexual crimes from 3.8% to 3.3%.

5-3. Respect and value housework

Korea is making efforts to improve the quality of family life according to the Framework Act on Healthy Families and the 3rd Basic Plan for the Healthy Family (2016-2020). But still, wives spend a lot more time on house chores and family care. Especially, women spend 16 minutes per day on house chores between the age 10 – 24, but the time sours to 4 hours a day between the age 25 – 39. Therefore, it is necessary to increase the time availability at home through improvement of working

culture and educate equal gender roles throughout the whole life of a person. To reflect the, an indicator showing the ratio of time spent on unpaid housework and care work at home is established, and methods for calculating statistics by sex, age, and region will be developed.

5-4. Ensure women’s participation in social activities and equal opportunities

As a result of the amendment of the act on equal employment for both sexes in December 2005, active equal employment policies were implemented to expand female employment and eradicate discrimination against women. However, women’s participation and leadership in the political, economic, and public sectors are still very poor. Korea’s “Glass Ceiling Index” is 25.6 as of 2015, the lowest among OECD countries. The percentage of female managers is 0.4%, which is the lowest among OECD countries, and the country ranks 92nd in women’s political competency indicators. To reflect this in K-SDGs, the government aims to continuously increase the proportion of women in parliament and local councils and maintain the rate of the target achievement of the plan for female representativeness in the public sector at 100% as it was in 2017.

5-5. Ensure universal childbirth-related access to health and rights

The maternal mortality rate has been rising because of the deteriorating conditions of local ob-gyns. In addition, because of the negative perception of childbirth out of marriage, unwed mothers are not guaranteed of their right to reproductive health care and reproduction itself in social norms. However, it is considered that the large proportion of people who are making decisions about sex, the use of contraception, pregnancy, and health care are on their own. Therefore, a system ensuring to provide information and education regarding pregnancy and childbirth is established, with its statistics calculation methods to be developed in the future.

5-6. Expand access to core technologies to strengthen women’s empowerment

To advocate women’s rights, access to core technologies, such as ICT, should be strengthened. Therefore, the ratio of female engineering students was added as a new indicator, but the target has not yet been determined.

Note. Eradicate child marriage and female circumcision

Child marriage, early marriage, and forced marriage practices have already disappeared in Korea, and there are no customs such as female circumcision. Therefore, they are excluded from indicators.



Goal 6. Keep Water Safe and Clean

6-1. Supply safe drinking water

According to the UN-JMP, Korea has relatively high accessibility to safe drinking water of 97.64% as of 2012. K-SDGs included the rate of nationwide water supply rate and the rate of rural water supply as new indicators and aimed to increase the rates from 96.4% and 72.8% as of 2017, respectively. Rural areas have a relatively low water supply rate, which should be raised.

6-2. Evenly distribute sewerage system

Korea has an almost 100% distribution rate of flush toilets. However, the sewerage system distribution rate is high at 92.5% as of the end of 2014, but rural counties have just 65.9%, which requires improvement. Therefore, the sewerage distribution rate in rural areas is included as a new indicator and will be increased from 68.2% in 2017 to 85% by 2030.

6-3. Improve water quality and hydro-ecological healthiness

This target involves improving water quality by reducing water pollution, eliminating toxic chemical discharge, and minimizing discharges to reduce untreated sewage and increase recycling and safe reuse. Korea has been treating almost 100% of sewage and wastewater and securing safety by setting and managing effluent water quality and allowance standards. All relevant indicators in K-SDGs are newly added. The targets are as follows: the utilization rate of sewage treated water will be increased from 8.0% in 2018 to 9.0% by 2030, the rate of fulfilling water quality grade by biological oxygen demand (BOD) will be increased from 80.9% to 85.9% in 2017, and the new pollutants to be controlled will be from 55 to 100 types. For calculating another indicator, the ratio of the municipal governments that reuse rainwater and the calculation methods will be developed first.

6-4. Establish a stable water supply and the efficient use of water resource

According to the water footprint database, 800 m³ of water is used to produce 1 ton of rice in Korea. The water intake rate is 33% as of 2015, which is higher than the average in terms of water stress. To achieve this target, the water leakage rate will be increased from 10.6% in 2016 to 9.2% by 2030, and the water supply safety rate from 67.6% in 2017 to 98%. The volume of water use per capita is expected to continue to be decreased from 287 L/day/person in 2016, and all indicators are newly added.

6-5. Integrate water quality management

In Korea, on May 28, 2018, the bills of the Government Organization Act, the Act on the Water Management, and

the Water Management Technology Development and Water Industry Promotion Act passed in the National Assembly, and the execution of water management policies, which had been divided into the Ministry of Land, Infrastructure and Transport and the Ministry of Environment were integrated by the Ministry of Environment.

The Ministry of Environment announced that it would establish a water management system that does not allow the waste of water and set priorities for water use to be reflected in the water supply basic plan for the sustainable water management. Based on the evaluation report on the implementation of the total amount of water pollution management plan, K-SDGs newly added an indicator of water quality achievement rate (ratio of target water quality achievement) and will increase the rate from 10% in 2022 to 100% by 2030.

6-6. Protect and restore hydro-ecosystem

The Ministry of Environment has been promoting ecological waterway restoration projects since 1987. Recently, it has been making efforts to restore damaged rivers through the mid- and long-term plans of the Ecological Waterway Restoration Project. As a result of the comprehensive evaluation of hydro-ecosystem health in 2014, 15.4% of the 960 river sections were the best, 51.6% were good, 29.8% were in the average, and 3.2% were bad. Korea's water management has a problem that the longitudinal and lateral connectivity of the river ecosystem is severely damaged because of the management of the ecosystem focused on water use and intake. As of 2014, 34,012 irrigation reservoirs of the 3,582 rivers nationwide had 5,081 or only 14.9% of fishing vessels. Also, 49% of the estuaries in the country have been constructed as estuary banks, and ecological connections of the brackish water zones are severed. As a result, waterside aquatic creatures, including birds, mammals, and amphibians, are losing their habitats, raising concerns over biodiversity. Therefore, measures to cope with changing water environment conditions, such as the decrease of the river flow rate and changes in dominant species, should be in place. K-SDGs will continue to increase the ecological river restoration rate index from 70.8% in 2017, and the ratio of the "good" grade water quality as a new indicator from 80.9% in 2017 to 85% by 2030 according to the mid- and long-term plan of Ecological Waterway Restoration Project (2016-2020).

6-7. Support and strengthen local community participation

The participation of local communities is critical to achieve the targets of safe and clean water management. Therefore, the ratio of the private sector participation to the total participation should be included in the target, which will be maintained at 100% as it was in 2017.



Goal 7. Eco-Friendly Production and Consumption of Energy

7-1. Ensure stability and access to energy service

Korea's electricity accessibility is already high at 100%. Developing or underdeveloped countries make it important to supply power to rural areas, but Korea has already supplied power to almost all areas including rural communities and islands. In addition, most of the domestic households (95% or more) use clean fuel, such as natural gas for cooking and heating, proving that the country has well equipped its energy supply system. As a new indicator, the number of households as the recipient of the energy voucher, which is the heating support project for the energy-alienated people, will be increased from 546,000 in 2017 to 1 million households.

7-2. Increase clean energy generation

Greenhouse gas emissions are the main culprit of global climate change and are mainly attributable to the use of fossil fuels. It is essential to enlarge the share of clean energy to change the economic structure that depends on fossil fuels. As of 2014, the share of renewable energy in Korea is 1.06%, which is much lower than the OECD average of 9.17%. New and renewable energy generation increased to 37.93% from 26,882 GWh in 2014 to 37,079 GWh in 2015 with the introduction of Renewable Portfolio Standard (RPS), the new and renewable energy quota program, in 2012. However, as the total power generation, including fossil fuels, continues to rise, the proportion of new and renewable energy generation has not increased significantly by only 1.69% from 4.92% in 2014 to 6.61% in 2015.

As of 2015, the share of renewable energy sources among all primary energy sources is decreasing: hydroelectric from 5.0% in 2014 to 3.5% and bioenergy from 24.5% to 20.8%. On the other hand, solar power generation has sharply increased from 4.7% to 6.4%, while the proportion of waste energy generation increased slightly from 59.8% to 63.5% and the geothermal heat from 0.9% to 1.0%. Among new and renewable energy sources, the share of solar power generation has increased by a great deal because of the increase in new installation (1,134 MW), while that of hydroelectric power decreased from 10.2% in 2014 to 5.8% in 2015. Future renewable energy development goals have already been reflected in existing policy objectives, so the targets have been established in connection with the existing policies.

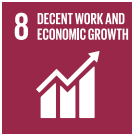
According to the Renewable Energy 3020 Plan announced in 2017, it aims to increase the share of renewable energy generation from 7.6% in 2017 to 20% by 2030. In addition, according to the revision of the fourth Renewable Energy Plan established in 2018, the ratio of renewable energy in the primary energy sources will be increased from 5.0% in 2017 to 13.6% by 2030 to achieve the goal of the plan to raise the share of clean energy generation.

7-3. Save energy and enhance energy efficiency

The introduction of renewable energy requires much time and expenses. However, energy efficiency improvement projects mostly can be applied relatively quickly. Korea's energy intensity in 2014 is 0.22 toe/thousand dollars, which is higher than the OECD average of 0.11 toe/thousand dollars. Investment in the new industry sector has been expanding from KRW 5.6 trillion in 2015 (KRW 4.8 trillion in public and KRW 0.8 trillion in private sector) to KRW 7.8 trillion in 2016 (KRW 6.2 trillion in the public sector and KRW 1.6 trillion in the private sector). In particular, the government has been fostering the electric power demand management, the energy management integrated service, and the stand-alone microgrid by designating them the Energy Storage System (ESS) supply business and demand management business. K-SDGs include national energy efficiency indicators (toe/KRW million) and building energy efficiency indicators (toe/m²/year) separately, reflecting the building energy management policy. However, targets are not yet determined.

7-4. Minimize energy consumption in transportation sector

This target is new and not included in UN-SDGs. It aims to minimize air pollution caused by energy consumption in the transportation sector. A newly added indicator, the number of eco-friendly vehicles, will increase from 97,000 in 2017 to 8.8 million by 2030. In this regard, the number of eco-friendly buses is included as a new indicator, but it needs a target setting.



Goal 8. Grow Quality Jobs and Boost Economic Growth

8-1. Economic growth that makes everyone happy

As of 2017, the growth rate of real GDP per capita in Korea is 3.1%, which is higher than that of major advanced countries. However, this growth rate is declining, facing the limitations of economic growth such as slow growth in domestic demand, sluggish exports, and slow growth in private consumption and facility investment. Therefore, K-SDGs seek to boost economic growth by setting an annual real GDP growth rate per capita as an indicator. In the future, it will be necessary to establish a flexible policy system so that the factor-driven growth can be transformed to total factor productivity-driven growth, and market functions and intensified competition will be priorities. Forms of support to business are focused on creating a foundation for innovation and creativity. The government will seek ways to help companies reallocate management resources in line with the rapid environmental changes as part of consumer-oriented business policies.

8-2, 8-4. Create quality jobs and equal pay for the work of equal value

The female employment rate in Korea is 50.8% and one of the mid- or lower-rank countries in the OECD. In particular, it is considerably lower than in Nordic countries, which have more than 70% female employment rate. In addition, the gap between male and female employment rates is the highest among OECD countries, reaching 37.2% in 2015 that is double the OECD average. In the service sector, the employment rates of female and the elderly are increasing, but the job quality is not good enough, showing remaining limitations. Therefore, it is necessary to set the targets of employment rate by gender, age, and disability. In this regard, to measure the equal wage payment for the same value work, the government set a target of increasing the female employment rate of 56.9% in 2017 to 63.9% by 2030 and raise the ratio of female wage to male wage from 65.9% to 85.5%, reflecting UN indicators.

8-3. Prevent environmental damage through the efficient use of resources

The Ministry of Environment enacted the Framework Act on Resources Circulation in 2016 to establish the fundamental for a society that recycles resources. The Ministry of Trade, Industry and Energy is promoting policies to expand energy welfare and minimize blind spots to improve the quality of life in terms of energy. The material footprint represents the primary resource required to meet the final consumption, which can be interpreted as indicating the quality of life associated with the resources or the level of capitalization of the economy. The total material footprint of Korea is 1,125 MT in 2010, which is lower than that of major countries, but its

material footprint per capita and per GDP is similar. Through it is proper to include the material footprint as an indicator, it is necessary to develop statistical calculation methods because the material footprint varies depending on the category.

Domestic Material Consumption (DMC) is the total amount of resources used for the consumption of the whole national economy for one year. In Korea, DMC is calculated by adding net imports to the total amount of collected (produced) resources in the country. Korea's DMC is 749 MT in 2010, which is lower than that of the United States, Japan, and Germany. However, similar to material footprint, DMCs per capita and per GDP are 15.45 MT and 0.68 kg, respectively, which are similar to or higher than those of major countries. K-SDGs aim to curb domestic resource consumption from 663 million tons in 2016 to 684 million tons by 2030, in consideration of the increasing total amount of consumption.

8-5. Increase youth employment rate

The youth employment rate of Korea is a serious social problem when considering the number of young people preparing for civil service examination or looking for a job. The employment of those aged 15 to 29 has marked an increase in the early 2000s and declined since the latter half of the decade. As of February 2019, the youth employment rate has dropped to 42.9% and is expected to remain stagnant. There are also voices demanding an essential solution to the structure in which good job opportunities are not provided to young people. K-SDGs included the increase rate in the number of Employment Insurance of insured employees of SMEs to connect youth employment with SME competitiveness. It aims to achieve 2.3% by 2021 and maintain it in the future. In the public sector, the ratio of the public agency's fulfillment of compulsory youth employment quota is included as a new indicator, but a specific target should be set.

However, the fulfillment of currently set indicators cannot be a fundamental solution. It is necessary to improve the situation where the individuals have to assume a heavy burden for the preparation of employment and go through excessive competition. There should be measures to

Note. Eradicate child labor

The problem of child labor in Korea is relatively less serious than that of developing countries. It might be attributable to the development of compulsory education system and early penetration of social awareness of children's rights. However, increasingly more youths are hired in poor employment condition, and their right to labor is not fully protected. It is now emerging as a social problem even though it is not included in K-SDGs. Therefore, the rate of youth employment in vulnerable condition should be considered as a new indicator.

eradicate the mismatch that the efforts for finding jobs do not lead to employment. It is necessary to establish systematic routes, such as job training, career guide, and job placement service, as a social infrastructure. Also, because young people who have succeeded in getting a job fail to work for long-term, it is necessary to expand jobs that provide proper treatment.

8-6. Protect workers' rights and create a safe working environment

Korea's current labor market is poorly structured and unstable. Also, the increase of the unstable working class is emerging as a social issue because of abundant temporary employment and outsourcing. In particular, the unequal labor structure causes frequent industrial accidents to temporary workers or subcontractors. Migrant workers are well managed within the framework of the Employment Insurance, but their rights remain seriously infringed. In addition, overall, the freedom of association and collective bargaining are not sufficiently enjoyed in Korea. Korea has not ratified the free treaty of the International Labor Organization (ILO), and its rate of labor union is very low at 10%. However, as the direction of the solutions to such labor issues has not yet gained social consensus, K-SDGs have included only the fatality rate of industrial accident as a new index with a focus on creating a safe working environment. As a result, the target is to lower the rate from 0.52‰ in 2017 to 0.22‰ by 2030. However, in the future, it is necessary to consider setting new indicators related to the protection of workers' rights.

8-7. Promote sustainable tourism

Korea is participating in the 10 Years Framework of Programs (10YFP) with the sustainable consumption and production paradigm, which is pursued by the United Nations World Tourism Organization (UNWTO) and the United Nations Environment Programme (UNEP). It is also a co-vice chairman of the program with France and Morocco. In the process of K-SDGs establishment, the targets were set up, reflecting the internal reviews of the ministries and the analysis of UNWTO member countries. Korea aims to raise the contribution of tourism in GDP to 3% in 2022 and further to 5% by 2030 and increase the share of jobs in the sustainable tourism to 65% in 2022 and 69% by 2030.

Note. Compulsory youth employment quota

The compulsory youth employment quota is to ensure that public agencies fill 3% of their total fixed employees with young people under the age of 34. It was introduced in 2014 and extended for two years in 2016. With the five-year extension of the "Special Act on the Promotion of Youth Employment" in December 2018, the quota will be maintained by 2021 as it is extended for three years. However, as of 2017, one out of five public institutions is unable to meet the employment obligation quota, which requires the government's intervention.

Note. Death rate in industrial accidents per 10,000 employees

The death rate in industrial accidents per 10,000 employees is the value of 10,000 multiples of the number of deaths divided by the total number of workers (‰), which indicates the share of workers who died from industrial accidents. In the past, the converted accident rate, including the injury caused by industrial accidents, was mainly used, but for enhancing the safety management, the death rate in industrial accidents per ten thousand employees began to be used to prevent death and injury in the industrial field. The domestic death rate in industrial accidents is more than three times higher than those of Germany and Japan at 0.53 ‰, which requires improvement.



Goal 9. Quality jobs expansion and economic growth

9-1. Accessibility to Sustainable Infrastructure

This target involves the construction of basic infrastructure, including roads, so it is a suitable indicator mostly for developing countries. Korea, which already has fully built basic infrastructure, has met the minimum standard. Therefore, considering the domestic status, the road distribution rate is included in terms of the accessibility to the traffic infrastructure. The rate will be increased from 2.13 km/thousand people in 2017 to 2.16 km/thousand people by 2030. In addition, by broadly interpreting the meaning of social infrastructure, the ratio of access to digital information of the socially vulnerable group is added newly, and the current 91% as of 2017 will be increased to 97.4% by 2030. In addition, the proportion of traffic consumption per household is included as an indicator, but it is necessary to develop a statistical calculation method in the future.

9-2. Improve access to financial services for small businesses

Korea has made significant progress in industrialization, and the proportion of manufacturing is large. Therefore, the indicator is made by reflecting the weak financial stability of domestic SMEs. The issue of SMEs' accessibility to financial services is important in enhancing economic vitality. In this regard, the ratio of small-scale industries that have liabilities or use credit is included as an indicator, but it is necessary to develop a statistical calculation method.

9-3. Establish technological capability and promote the commercialization of advanced technology

The establishment of technological capability and the promotion of the commercialization of advanced technology, which are important to domestic economic growth, are newly added indicators, although they are not included in the UN-SDGs. The target aims to increase the commercialization rate of R&D tasks from 51.6% in 2017 to 52.9% by 2030.

9-4. Increase national researcher and capital

The ratio of R&D expenditure to GDP of Korea is one of the highest in the world. The number of full-time equivalent (FTE) researchers considering the R&D participation rate is 361,292 as of 2016, and the number of FTE researchers per ten thousand population is 7.1, which is the highest among the major countries. The ratio of R&D expenditure to GDP in 2016 was 4.23%, the second highest in the world, following Israel with 4.25%. K-SDGs set the target of increasing the ratio by 0.01% every three years to 4.29% by 2030.

9-5. Eco-friendly industrial activities and technological innovation

Industrial activities are accompanied by resource use, pollutant emissions, and greenhouse gas emissions. Except pollutants included in other targets, greenhouse gas emissions, which is the most important indicator for climate change, and indicators related to resources being depleted were included in this target. Korea's CO₂ emission per value added is 0.25 CO₂/GDP in 2010, which is lower than the world average of 0.34 CO₂/GDP. However, the related statistical calculation method should be supplemented, and the future standards will be developed. The resource indicators are largely divided into two categories: domestic resource productivity is expected to increase from 2.27 GDP/DMC in 2016 to 3.03 GDP/DMC by 2030 and the resource intensity is from 0.33 DMC/GDP to 0.44 DMC/GDP.

Note. DMC (Domestic Material Consumption)

DMC refers to the total amount of resources used for consumption and is calculated by adding the net import volume (import – amount volume) to the total amount of resources collected (produced) in the country.



Goal 10. Resolve inequality

10-1. Increase income of low-income class

Since the global financial crisis, inequalities are intensified due to the differences in the income growth rates between low- and high-income classes. In Korea, the inequality is combined with the population aging, and as a result, the annual income growth per household in the lower 40% income group is 0.7%, which is much lower than 1.8% in the total household income growth rate. This means that various measures must be taken to increase the incomes of low-income classes. The subsidy system for low-income classes is made up of the social insurance system such as the National Pension and the Unemployment Benefit and the public assistance system such as the Basic Pension Act, the National Basic Living Security Act, and the Act on Pensions for Persons with Disabilities, and the Earned Income Tax Credit (EITC). It is necessary to set targets for the income growth rate for the low-income groups by aggregating the targets for each policy instrument. In addition, the income gap ratio, which means the low-income group's lack of income against the poverty line, is added as a new indicator with the aim of reducing the income gap ratio of 36.8% in 2017 by 31% by 2030 considering the OECD average. All of the above indicators need to be produced and managed considering gender, age, disability, and immigrant status.

10-2. Expand social, economic, and political inclusiveness for all

Korea's income quintile share ratio has decreased by 2015, but again increased in 2016. This is slightly better than the OECD average, but aggressive measures have to be taken to improve it. The area where the social inequality outstands most is income. The government plans to strengthen subsidy programs for low-income households so that the income quintile share ratio at 5.1 times in 2017 does not further deteriorate and remain at the same level by 2030. The number of households living below the relative poverty line decreased from 15.2% in 2011 to 13.8% in 2015. However, women are more economically vulnerable than men, and the elderly and the disabled are also more vulnerable than other groups. Poverty reduction plan for each population group should be in place. First of all, the government established a plan to reduce the poverty rate of the elderly, which is 46.5% in 2017, to 2/3 or 31% through efforts such as raising basic pension, stable operation of national pension, and reinforcing basic living security. In addition, it is necessary to set specific targets for various population groups. Reducing the inequality of assets is necessary as much as reducing income inequality for the realization of a sustainable society. The ratio of the net assets of lower income households (first quintile) to the total net household asset is only 7.5% in 2017, so it is necessary to set specific targets to reduce the gap.

10-3. Eliminate discriminatory treatment and provide equitable opportunities

In order to solve economic inequalities, various population groups should have sufficient access to economic resources. Because employment has great influence on the income level and is an important social participation, it is necessary to improve the employment rate of each group and control and manage the gap of employment rates between groups. The government aims to increase the employment rate of the elderly by reducing age discrimination in employment. To achieve this goal, it set a goal of increasing the employment rate of 55 or older, which is 49.4% in 2018, to 55% by 2030. The female employment rate has recently showed slight increase but is still low at 50.8% in 2017, so it is necessary to set specific targets. Despite the enforcement of the Act on The Prohibition of Discrimination Against Persons with Disabilities, Remedy against Infringement of Their Rights, Etc., according to the 2014 survey on the disabled, people with disabilities have experienced widespread discrimination in their overall social activities (school, work, community life, etc.). Especially, it was said that the constraints are serious in terms of employment, mobility, and educational opportunities. Therefore, it is necessary to set specific targets to raise the employment rate of the disabled, which is only 36.5% in 2017. The employment and income level of foreigners and immigrants living in Korea are relatively lower than those of Koreans. A 2015 survey indicates that their employment rate is quite good in terms of quantity, but not in terms of quality. For immigrants, specific methods to measure the quality of jobs as well as employment rates should be developed.

Korea has enforced various laws against discrimination: Article 11-1 of The Constitution of the Republic of Korea, Article 2-3 of the National Human Rights Commission of Korea Act, Article 10 of the Framework Act on the Treatment of Foreigners Residing in the Republic of Korea, and the Act on the Prohibition Of Discrimination against Persons with Disabilities, Remedy against Infringement of their Rights, Etc." However, the vulnerable groups are still experiencing various discrimination. Korea has to correct the discriminatory perceptions about the disabled so that it can enable full social participation and equality of the disabled and ensure them enjoy equal rights with the people without disability. In order to reflect this, the government set a target of improving discriminatory perceptions about the disabled, from 3.29 points in 2017 to 3.6 by 2030.

10-4. Reinforce finance, wage, and social protection policies

The concept of ratio of compensation of employees to national income means the share of labor income among the total income. The household income ratio to GDP can be used as an indicator of household income, in terms of finance, wage, and social protection policies for better equality. The ratio, which was 69.6% in 1995, dropped to 64.2% in 2007 and 64.3% in 2013 due to the decline in the share of labor income. Although the household income ratio to GDP including the ratio of compensation of employees to national income, second income distribution, and government's social transfers in kind is included as single new indicator. But it is necessary to establish specific measures and targets.

10-5. Carry out stable immigration policy

Pursuant to the Framework Act on Treatment of Foreigners Residing in the Republic of Korea, the government has established and implemented the Five-year Plans for Foreigners to support immigrants. Currently, the third-phase plan, which is to be implemented from 2018, has been established and the relevant ministry has been trying to share the affairs for its implementation. But it is necessary to comprehensively promote social integration of the immigrants. Since it is difficult to obtain appropriate statistics for the present, new measurements including the degree of compliance with international standards on the guarantee of immigrants' rights and the supports for healthcare of the immigrants will be developed.

Note. Income quintile share ratio

The income quintile share ratio is measured as the ratio of income of the 9th to 10th deciles to the lowest 1st and 2nd deciles (among the 10 quintiles). The ratio of Korea is slightly better than the OECD average, but is likely to worsen along with the population aging and intensifying labor market instability.

The ratio of household income to GDP

Household income is divided into primary income such as labor income and capital income, and secondary income such as tax according to the government redistribution policies, social contribution, and social benefit. The distribution rate of labor income in Korea is 52.7% in 1995, 50.6% in 2007, and 50.7% in 2013, which has been decreasing faster than the average of OECD countries. Many countries are to maintain household income by increasing government spending and lowering tax burdens to increase the secondary income. The rate of secondary income expenditure to GDP increased by 1.02% p in 2013 from 1995, but it does not reach the average of OECD countries.



Goal 11. Create inclusive, safe, and resilient cities and habitation

11-1. Ensure access to housings and basic services

Korea is considered to have solved the problem of quantitative shortages in housing and has achieved significant improvement of the old housing area. The Ministry of Land, Transport and Maritime Affairs has established and carried out ten-year comprehensive housing plans according to the Framework Act on Residence. As a result, the share of households under the minimum housing standard has been decreasing from 16.6% in 2006 by 2 - 3% every year. As of 2014, the households under the minimum housing standard accounts for 5.4% of the total households, with the largest share in the capital area. Indicators of this target are all new. According to the 2018 - 2022 Roadmap for Housing Welfare, the government aims to secure 650,000 units of public rental housing, give housing benefits to 1.358 million people, and raise KRW 1.9 trillion as housing benefit fund by 2022, and will continue to increase these figures.

11-2. Build affordable Transportation system and expand public transportation

Regarding public transportation support, basic plans are established based on the Act on the Support and Promotion of Utilization of Mass Transit System. And the Act on Promotion of the Transportation Convenience of Mobility Disadvantaged Persons stipulates plans for promoting mobility of the disadvantaged and the standards for mobility facility installation, etc. The share of public transportation in the capital area rose by 1.1% p from 47.3% in 2001 to 48.4% in 2014. On the other hand, the share in the local metropolitan area declined by 10.9% p from 38.9% in 2001 to 28% in 2014, which shows the gap between the capital and local areas. For comprehensive improvement of public transportation, the indicator of public transport share is set to increase from 31.3% in 2017. The low-floor bus distribution rate, which is included as a new indicator, will be raised from 22.4% in 2017 to 50% by 2030 according to the 3rd Plan for Promoting the Convenience of the Mobility Disadvantaged People. The share of bicycle, which is included as a new indicator for revitalize green traffic, is set to be raised from 1.43% in 2017 to 1.52% by 2030, and the bicycle lane will be extended from 0.41m / person to 0.55m / person.

11-3. Enhance cities' inclusiveness and sustainability

The population of Korea is 5.1 million as of 2015, increasing by 6.93% from 2006. The urbanization rate, which is the proportion of the population living in urban area, is 91.79% increased slightly from 90.29% in 2006. The size of urban area increased from 17,043 km² in 2006 to 17,614 km². As the urban population increases, deteriorated quality of living

space, environmental pollution, and gaps between inhabitants become problems, which get in the way of inclusiveness and sustainability of urban development. Accordingly, indicators such as citizen participation and resource saving land use, which are closely related to urban inclusion and sustainability, are newly suggested. The 2017 study of Urban Sustainability and Living Infrastructure suggested the proportion of the land in the urbanization zone as 41.8% and the citizen participation in urban planning projects as 1.74%, which are planned to be raised to 49.3% and 1.87% by 2030 respectively.

11-4. Reinforce efforts to protect global cultural and natural heritage

Cultural and natural heritages serve an important part in enhancing tourism attractiveness; therefore, the protection and management of culture and nature can be considered as critical to the development of sustainable tourism. Because Korea has been making focused supports for the conservation and management of natural and ecological resources, it is reasonable to evaluate its policy efforts to protect cultural and natural heritage based on the size of the relevant budget. Therefore, the number of inscriptions on the list of World Cultural Heritage sites, the preservation of world cultural heritage, and the amount of heritage protection budget will be included as indicators, with targets to be decided later.

11-5. Alleviate disaster damage and manage crisis

The rapid progress of climate change causes the rising trend in natural disasters, whose uncertainties are so great that the prediction is becoming increasingly difficult. Especially, natural disaster damage is increasing in urban areas where population and buildings are concentrated. Natural disaster damage increased by 8.6 times in the 2000s compared to the 1970s, and though the casualties were reduced by 78% in the 2000s compared to 1970s, still a lot of properties and human lives are damaged in the case of catastrophic disaster. The damages and restoration costs on public facilities such as roads, rivers, and erosion protections account for 87% of the total damage (KRW 172 billion as of 2013) and 59% of total restoration costs (KRW 15.1 as of 2004-2013). In addition, 25 - 28% of major coastal facilities of the government are expected to be vulnerable to flooding, so strengthening their safety standards and special management are necessary. The proportion of domestic industries affected by weather condition is 52% of GDP, which is higher than 42% of the US. Therefore, the Ministry of Land, Transport and Maritime Affairs revised the National Land Planning and Utilization Act in 2015 to make it mandatory to reflect the disaster vulnerability analysis when establishing urban plans. In response to large-scale and complex disasters, it is necessary to establish systematic monitoring and improvement systems

based on the results of disaster vulnerability analysis and disaster prevention-type urban plan. Reflecting the current situation in comprehensive manner, the government aims to reduce the number of deaths owing to social disasters per 100,000 people from 0.2 in 2017. In addition, added as a new indicator is the rate of the local municipalities that have established disaster prevention-type urban plans based on the analysis of urban vulnerability to disaster, in order to lead them to reflect the analysis in the early stage of local urban planning by raising the rate from 8% in 2017 to 100% by 2030. The ratio of recovery costs to natural disaster damage amount will be included, but specific objective will be set in consultation with relevant government ministries

11-6. Reduce environmental impact on cities

Since the introduction of the environmental standard in 1995, the fine dust concentration in Seoul has been gradually improved for the past 10 years. But since 2013, its improvement trend has stayed stagnant. In particular, the concentration of ultrafine dust is 26 $\mu\text{g}/\text{m}^3$ nationwide and 23 $\mu\text{g}/\text{m}^3$ in Seoul, which is higher than the WHO recommendation (10 $\mu\text{g}/\text{m}^3$) and major foreign cities in developed countries (16 $\mu\text{g}/\text{m}^3$ in Tokyo and 15 $\mu\text{g}/\text{m}^3$ in London). Korea has improved the fine dust concentration through concluding voluntary agreements with businesses with large-volume discharge, reducing pollutions from old diesel vehicles, and distributing eco-friendly cars. In June 2016, the government launched measures against fine dust, "Special Measures for Fine Dust for the Protection of Public Safety and Health. In addition, the total amount of waste, which is one of the major factors in urban environment, was 404,812 tons per day in 2015 and has increased by 4.2% in 2016. The amount of waste generated per GDP will be reduced by 25.9% from 95.5 tons/KRW 1 billion in 2016 to 70.8 tons/KRW 1 billion by 2030 in conjunction with the 1st Plan for Resource Circulation. The amount of wastes generated in the living spaces and businesses will be reduced from 95.5 tons/GDP KRW 1 billion in 2016 to 70.8 tons/GDP KRW 1 billion by 2030. The number of days with "bad" fine dust is included as indicators, but specific objective should be set.

11-7. Ensure easy access to safe public green spaces

For building public green areas, the Act on Urban Parks, Green Areas, Etc. laid the institutional base for building parks and green areas in city and province. The public green space is divided into square, park, green area, amusement park, and land for public use. The number and the size of the spaces are managed, which are gradually increasing except for the park. The number of parks increased from 17,616 units to 21,766, but its size decreased from and 1,111.6 km^2 in 2009 to 934.2 km^2 in 2015. In particular, it is important to secure parks

and green spaces in the area accessible on foot, and there should be measures to secure customized public space for customers. It is also necessary to secure customized public spaces according to the distribution of women, children, the elderly, and the disabled population. Reflecting such needs, the government plans to expand the area of city park per capita from 9.6 m^3 in 2017 to 11.6 m^3 by 2030. However, it will suggest objectives for the indicators such as the population accessible to parks, the ratio of sidewalk area, and the rate of the disabled-friendly public buildings after developing statistics calculation method.

11-8. Establish national land use and city planning to support linkage between cities and neighboring areas

Since the 1990s, the concept of sustainable development has emerged as a major topic in the policies of national land use and urban planning. Since then, the comprehensive national land plans, comprehensive provincial land plans, metropolitan urban plans, urban basic plans, and urban management plans have been established to pursue sustainable and eco-friendly plans in accordance with the Framework Act on the National Land and the National Land Planning and Utilization Act. With urbanization rate exceeding 90%, there are more needs to develop plans that can support the connection between the cities and its neighboring areas and enhance sustainable development. In the 2010s, the link between national land use plans and environmental plans has been promoted in order to provide sustainable national and environmental vision and suggest strategies and objectives in economic, social, and environmental aspects in consideration of mid- and long-term national land conditions and environmental changes. The amendments of the Framework Act on Environmental Policy in 2015 and the Framework Act on the National Land in 2016 laid the legal ground for creating linkage between the national land use plan and the environmental plan. And the Joint Directive on Integrated Management of Land-Environmental Plans were established by the Ministry of Land, Transport and Maritime Affairs and the Ministry of Environment in 2018. In order to integrate national land use plans and environmental plans, the cooperation of local municipalities must be in place. Therefore, the number of local governments that reflects city or county environment improvement plans in the basic city or county plans was presented as a new indicator, with the objective of increasing 100 municipalities by 2030.



Goal 12. Promote sustainable consumption and production

12-1. Establish and carry out policies for sustainable consumption and production

Korea has enacted the Framework Act on Low Carbon, Green Growth as the supreme law governing the issues regarding sustainability and laid strong legal groundwork through enacting the Act on the Allocation and Trading of Greenhouse-Gas Emission Permits, the Act on Promotion of Purchase of Green Products, and the Environmental Technology and Industry Support Act. In addition, other laws and regulations form the fundamental of sustainable development: The Framework Act on Resources Circulation, the Act on the Promotion of Saving and Recycling of Resources, the Energy Use Rationalization Act, the Act on the Support for Green Building. Korea has been renewing Green Growth Plan every five years, and the Ministry of Environment established the Third Basic Plan for Promoting Purchase of Green Products (2016 - 2020) to encourage the eco-friendly consumption practice and strengthen the market competitiveness of green products. In terms of K-SDGs indicator, the number of basic plans and the implementation schedules for resource circulation, which are highly related to sustainable consumption and production, are included as new indicators to boost circulation economy, with objective of increasing the number from one in 2017 to 18 cases in 2030. In addition, a qualitative evaluation indicator on whether the basic national sustainable production and consumption plans were established was also added as a new indicator to assess the government's plan implementation.

12-2. Sustainable management and efficient use of resources

In accordance with the Framework Act on Resources Circulation enforced in 2018, the First Basic Plan for Resource Circulation (2018-2027) was penned to provide the vision of "Realizing a sustainable cyclical economy with a virtuous circle of resources." The core strategy includes building a resource recycling system through the entire process of "production - consumption - management - recycling." Specific tasks are enhancing resource productivity by industry, promoting waste reduction at the production stage, designing products considering resource recycling, promoting consumption of resource-efficient eco-friendly products, and boosting high value-added recycling in the future. The plan ensures that a system for analyzing and managing resource efficiency indicators for the entire life cycle of resources is established and that the resource productivity of the country and industries is improved.

For this target, the amount of domestic resource consumption is an indicator, and its increase will be allowed only from 663 million tons in 2016 to 684 million tons by 2030 to restrain the increase. And the method of statistical calculation method of material footprint will be developed to improve sustainable resource management efficiency.

12-3. Reduce losses from the life cycle of food

According to the World Food Program, around 1.3 billion tons of food is being wasted or lost in the world every year, nearly a third of food production. The UN Summit of Sustainable Development in 2015 set the goal of reducing per capita food waste generation at retail and consumer by 50% by 2030. The daily generation of domestic food waste is increasing from 13,372 tons in 2006 to 14,220 tons in 2015. As a result, the government included the food waste index (kg/person/day) derived from the Fifth National Waste Statistics Survey as a new indicator and set a objective of reducing it from 0.37 in 2016 to 0.34 in 2030. It also developed a new statistical calculation method of food loss indicator to devise measures to minimize the food loss in production, distribution and disposal processes.

12-4. Environment-friendly manage chemicals and hazardous wastes

Since the international community adopted the Strategic Approach to International Chemicals Management (SAICM) as a voluntary regulation in 2006, discussions have been made to prepare the Post 2020 system. Korea is the one of the major chemical producer and consumer in the world: the third largest consumer of lead and the largest producer of cadmium. Thus, chemical management is very important in terms of sustainable development. In particular, the social demands for safety management of chemicals are soaring after the leakage of hydrofluoric acid in Gumi and the toxic humidifier disinfectant incident. In Korea, laws such as the Chemicals Control Act and Act on Registration, Evaluation, Etc. of Chemicals reflect such social issues in legal framework. And the government is now seeking to enact the Life Chemical and Biocide Safety Management Act, which is expected to be enforced in 2019, to lay the foundation for establishing safety standards of chemical products for general consumers and introducing an approval and licensing system for biocidal products. The K-SDGs aims to continuously reduce the amount of hazardous waste per capita from 0.098 kg/person/day in 2016, as a final performance indicator from the perspective of the total volume. In order to build a foundation for the purpose, the number of chemicals whose hazard information is secured and the number of those for which accident responses are prepared are added as new indicators, with the objective of increasing them from 960 and 97 to 2015 to 2,510 and 140 by 2030 respectively.

12-5. Reduce waste generation

Korea's domestic waste had a recycling rate of 59% as of 2014, exceeding the OECD average of 34%. In addition, when comparing the amount of domestic waste generated per capita with that of OECD countries, it was 0.95 kg/day/person, which is lower than 1.70 kg of Germany, 1.39 kg of France, and 1.34kg of the UK. The Framework Act on Resources Circulation enacted in 2018 is expected to further promote the achievement. According to the First Basic Plan for Resource Circulation, the recycling rate of domestic waste is expected to increase from 59.6% in 2016 to 83.8% by 2030. The plan also aims to raise the recycling rate of industrial waste, which is a new indicator, from 75.8% to 95.4%.

12-6. Manage businesses' sustainable management activities

There is no legal requirement to issue sustainability reports in Korea. But, businesses and public agencies have been voluntarily published sustainability reports. Since the end of 2016, businesses' information on sustainable management and social responsibility has been disclosed on the Korea Exchange's disclosure system and Korea Securities Depository's securities information portal. In Korea, sustainability reports have been published since 2003, with more than 100 publishing organizations in 2011, and recently more than 120 reports are published annually. K-SDGs include the increase in the number of companies that publish sustainability report as an indicator to promote sustainability management activities, but objective will be set in the future.

12-7. Certify and promote green products

Green Procurement is one of the most representative policies for sustainable public procurement. Korea is one of the 41 countries that have surveyed its sustainable public procurement policy. It has achieved excellent performance in all aspects including sustainable public procurement policy system and implementation and monitoring. Green Procurement initiated by the Ministry of Environment is promoted based on the Act on the Promotion of Purchase of Green Products enacted in 2005, and since then, the purchase of green products by the government and public agencies has been rapidly expanding. Also, the Third Basic Plan for Green Purchase Promotion (2016-2020) aims to boost the green consumption practice and enhance the competitiveness of the green products in the market. Based on this, the government aims to increase the green product purchase rate by the public sector (local governments) to 70% by 2030 from 35.2% in 2017, and in the middle of the process, it will achieve 60% by 2020. As a new indicator, it will include the number of green product certifications for household goods to encourage green purchase, with the objective of raising the case from 59 in 2017 to 73 in 2030.

12-8. Expand environmental education to raise awareness of sustainable development

The Ten-year Implementation Plan for Sustainable Development Education was announced under the sponsorship of PCSD and the Ministry of Environment. Since

the promulgation of the Sustainable Development Act in 2007, the Environmental Education Promotion Act was enacted in 2008, and the Comprehensive Plan for Environmental Education was drawn up in 2010 to lay the foundations for sustainable development and environmental education. Local governments of Jeju, Seoul, Gyeongsangnam-do, etc. have enacted the Environmental Education Promotion Ordinance. KOICA ODA Education Center also provides education on global citizenship and sustainable development for the elementary, middle and high school students, and teachers and graduate students. For this target, a new indicator of the proportion of the population who has received environmental education to the total population is included, with the objective of expanding the figure from 5.98% in 2017 to 10%. Another new indicator of environmental consciousness index is also included, with the objective of raising 65.5 points in 2013 to 75.

12-9. Build a system for plastic virtuous cycle

This target is not included in the UN SDGs and was added recently as concerns over plastic use have increased in Korea. The government set this target to increase the use of recycled plastics to build a virtuous cycle and prevent leakage of plastic to the environment through the development of eco-friendly materials. The new indicator is the consumption of plastic per capita and the ratio of the consumption of recycled plastic to the total plastic consumption. If relevant statistical calculation method is developed, a objective will be established.

12-10. Develop sustainable tourism index

The specific estimation method for identifying the performance of sustainable tourism policies has not yet been established. The United Nations World Tourism Organization (UNWTO) and the United Nations Environment Program (UNEP) include policy evaluation indicators in the 10 YFP Sustainable Consumption and Production Detailed Project in the tourism sector. Also, Korea included carbon footprint and ecological footprint as new indicators and will develop statistical calculation methods.

12-11. Gradual elimination of fossil fuel subsidies

Subsidies for domestic fossil fuels are estimated at over KRW 6 trillion. If the subsidy is reduced gradually, it can contribute to environmental protection as well as increasing incomes. Among the fossil fuels consumed domestically, anthracite (briquettes) is the most representative fossil fuel that is provided subsidies. The briquette prices are being hiked gradually. The grants for coal production stabilization have been suspended since 2011, and the grants for briquette manufacturing will be abolished by 2020 with considering the economic situation. Reflecting this trend, the proportion of fossil fuel subsidies per GDP is included as an indicator, but the objective will be decided in the future.



Goal 13. Response to climate change

13-1. Reduce climate change risks and strengthen adaptive capacity

The Framework Act on Low Carbon, Green Growth was enforced in 2010, providing legal grounds for the country's climate change response plans. To execute the country's National and Local Disaster Risk Strategy, Korea has established the First National Climate Change Adaptation Initiative (2011-2015) and ensured the local governments of 17 metropolitan areas and 226 local districts to establish detailed implementation plans. In addition, local municipalities drew up comprehensive plans to reduce damages from storm and flood. The annual report on disasters and accidents published by the Ministry of the Interior and Safety, discloses the national official statistics on death tolls, damages, and restoration expenses by region and cause. The rate of improvement of the representative indicators that integrate the indicators of adaptation capacity for climate change was 16.2% in 2017, and the objective is reaching 68% by 2030.

13-2. Efforts to reflect climate change action plans in policy

It is considered that the efforts to integrate climate change measures into national policies have been made in earnest with the enactment of the Framework Act on Low Carbon, Green Growth. It is noteworthy that the Act reflected all relative divided policies in integrative manner, such as climate change response and energy target management, promotion of early action to reduce greenhouse gas emissions, greenhouse gas management of in the transportation sector, low carbon transportation system, and adaptation measures. In 2016, the system to make the ministries responsible for climate change responses is established to strengthen the roles of the Prime Minister and the Deputy Prime Minister for Economic affairs to oversee and coordinate climate change responses and ensure the responsible ministry to execute implement the emission reduction policies. And in the process of preparing the ratification of the Paris Agreement, the relevant ministries jointly established the 2030 Basic Roadmap for Reducing Greenhouse Gas Emissions and the Basic Plan for Climate Change Response.

K-SDGs includes the three most important policies for dealing with climate change as new indicators. First, it plans to increase the proportion of renewable energy generation from 7.6% in 2017 to 20% by 2030 according to the Renewable Energy 3020 Plan. Second, the number of adaptation measures and support cases of industries and local governments will be increased from 25 cases to 300 cases. Third, the policy supports will be expanded to increase the number of eco-friendly vehicles from 97000 to 8.8 million.

13-3. Strengthen climate change education

Climate change-related school education is operated along with environmental education, but it is not vital as much as general social education. Since 1995, the subject of the "Environment" has been adopted in middle school as one of the independent curricula, which can be chosen at the discretion of the principal. However, only 221 middles schools or 6.8% selected the Environment as a learning subject among the total 3,227 middle schools nationwide. In the high school, the "Environmental Science" was adopted and could be chosen at the discretion of the principal as an independent curriculum since 1996. But the school selected the curriculum was only 300 among 2,342 high schools as of 2015, which is 12.8%. Even worse, schools that select environment course are gradually decreasing.

Local communities are operating the Green Leader Program that is leading and disseminating the low-carbon life practices. By the end of 2015, it has trained 320,000 leaders. In addition, various activities such as greenhouse gas diagnosis, consultancy service (370,000 households), and climate change education (1.77 million people) are being carried out. But the need to raise awareness of the climate change still remains. In particular, the awareness of climate change adaptation is lower than that of climate change mitigation. The target includes awareness of climate change adaptation as new indicator with the aim of raising the indicator from 63.2% in 2018 to 85% by 2030.

13-4. Reduce national GHG emissions

The Paris Agreement, which was concluded through an international discussion in 2015, agreed to keep a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Based on the international agreement, the national greenhouse gas emission is included as a new indicator, with an aim of reducing emissions of 694 MtCO₂ in 2016 to 574 - 608 MtCO₂ by 2030.



Goal 14. Conserve marine ecosystem

14-1. Establish marine pollution management system

Although the ocean disposal of land wastes was banned entirely in 2016, there are growing concerns over the increase of pollution load and pollution area resulted from the land because of continuous coastal development pressure, requiring systematic management. The Third Basic Plan for Sustainable Development (2016-2035) requires controlling of coastal pollution and the increase and decrease of foreshore. The coastal pollution level is overall on a slight rise while both increasing and decreasing trends arise in all east, west, and south coast. For this target, the rate of marine water quality standard fulfillment of coast area based on the water quality index (WQI) and the collection of marine litter were included as new indicators. The figures of 8.18% and 82,000 tons in 2017 will be raised to 100% and 100,000 tons by 2030.

14-2. Manage ecological environment and fishery resources' habitat

Korea is executing a coastal environment management system to protect and improve the marine environment through the Marine Environment Management Act. Based on the Act, the coastal management system that applies differentiated programs depending on the conservation value and environmental properties of each coastal area. A total of 1,882 km² of environmental conservation coastal area is designated at four coasts. As of 2017, the sea forest area is 15,252ha and will be expanded to 54,000ha to include the area where sea forest can be formed by 2030, which is a new indicator. In addition, based on the five-year restoration objectives of the mid-term plan (2019-2023) for restoration of tidal-flat ecosystem, the tidal-flat restoration area is included as a new indicator and will be expanded from 0.2km² in 2017 to 6km² by 2030.

14-3. Minimize marine acidification

Marine acidification is affected by global factors such as the increase in the concentration of carbon dioxide in the atmosphere and the rising water temperature. However, regional factors such as formation of oxygen deficient water masses and the influx of river water also affect it. Therefore, the degree of change in acidification and its impact on marine ecosystems are very difficult to quantify. According to the Marine Environment Management Act, the optimal hydrogen ion concentration is pH 6.5 - 8.5, and the figure at Seogwipo and its vicinity, which has little impact from the land, is maintained at pH 8.2. The target includes the average pH in coastal areas as an indicator rather than including complex causes and aims to maintain pH 8.1 in 2017 by 2030 according to the marine environment standard.

14-4, 14-6, 14-8. Sustainable fishery resources and its use

The variability in the type and size of fishery resources has increased due to climate change and water temperature change. And it became more difficult to manage fishery resources due to illegal fishing and overfishing by foreign fishing vessels. Korea establishes a comprehensive plan for the development of the distant water fishery industry every five years according to the Distant Water Fisheries Development Act and has implemented a total allowable catch (TAC) system since 2009. The TAC is a fishery resource management system with cap on annual fish catches for certain species and allows within the limit. It has set standard for 11 fish species as of 2017. In order to manage domestic fisheries and marine resources, TAC target species will be increased to 20 by 2030, and the cap of allowable catch will be increased from 25% to 75% by 2030.

In addition, the target includes a new indicator of the number of vessels subject to buybacks to set standards for the size for fishing fleet that is proper for fishery resources. The government will expand the number of buyback vessels from 291 in 2017 to 1200 by 2030 according to the Basic Plan for Improving Fishery Structure. Also, as new indicators for supporting the fishery, it includes fishery household income and the ratio of fishery household income to urban worker household income, with the aim of raising KRW 49 million and 82.3% in 2017 to KRW 80 million and 87.5%, to help the fishery households to secure economic benefit. In addition, to support small-scale fisheries, the government takes the challenges of the area of low fishery productivity and poor settlement condition into account. So, it will raise the rate of recipients of direct payments for the fisheries in disadvantaged area to 20% by 2030. And to reflect the plan for expansion of income safety net for farmers and fishermen, the direct payment amount will be increased from KRW 550,000 to KRW 1.2 million.

14-5. Designate coastal and marine protection areas

The protection area designated in the domestic waters is only 6.3% based on the territorial waters area and 1.2% based on the jurisdictional sea area. According to Conservation and Management of Marine Ecosystems Act, Sinduri dune coast was designated as marine protection area, followed by 28 other areas. The target is to increase the marine protection areas to 39 sites by 2030.

14-7. Expand R&D efforts on marine science

In order to enhance the capacity of marine science research and expand relative technology transfer, the proportion of marine and fishery R&D investment to the total government R&D budget is reflected as a new indicator. The target aims to raise the proportion to 3.1% in 2018 according to the Basic Plan for Marine and Fishery Science and Technology Development (2018). To reach the level of developed countries, it will achieve 6.0% by 2030.



Goal 15. Conserve land ecosystem

15-1, 15-4. Active preservation and restoration of land ecosystem

Korea has continued to reinforced its land ecosystem preservation activities through the laws such as the Natural Parks Act, the Natural Environment Conservation Act, the Wildlife Protection and Management Act, the Forest Protection Act, and the Act on Urban Parks, Green Areas, Etc. The K-SDG No. 15-1 target aims to expand the protection area continuously to achieve 17% in the ratio of land protection area according to the Fourth National Biodiversity Strategy (2019-2023). In addition, it will increase the forest area among the total land area from the current 63.05%. The new indicator for Mountain Green Cover will have a objective later.

15-4 Regarding the indicators for the prevention of the loss of plant diversity, the target is to expand the rate continuously from 74.3% in 2017 based on the Comprehensive Plan for Conservation of Endangered Wildlife (2018 - 2027), with specific objective to be set later.

15-2. Stop forest destruction and restore devastated forest

Since the adoption of "sustainable forest management" as the principle of forest management in the early 1990s, forest management plans establishment have been compulsory for all forests including privately owned ones. In addition, although the legal basis was laid through the laws such as the Framework Act on Forestry, the Forest Protection Act, and the Creation and Management of Forest Resources Act, but the imbalance in the age class of the forest woods makes the growth rate staggering, absorption efficiency of carbon dioxide decreasing, and causes disruption in sustainable production. Reflecting the National Forest Management Index, this target aims to expand the target indicators from 36 in 2017 to 54 by 2030, to promote sustainable forest management.

15-3 Prevent desertification and land degradation

Although the frequency of landslides and forestfires is increasing in Korea, the restoration speed is fast and the damaged area is not considerably large since the country sits in the temperate climate zone. However, land degradation should be dealt with in terms of overall land use such as urban development, agriculture and forestry. The laws enacted for the prevention of soil degradation include the "Soil Environment Conservation Act," which governs the implementation of soil conservation measures at the local level. When it comes to soil contamination levels, 65 out of 2,460 sites nationwide were identified to have exceeded the soil pollution standard in 2014. In addition, more than 10,000 tons of uncollected waste vinyl pollute farmland soil. Given the size of domestic waste landfills, the problems can lead to soil and groundwater contamination.

Reflecting the status, K-SDGs include the ratio of degraded land to the total land area as an indicator, with new statistics calculation method, and connect it to the plans for land degradation prevention.

15-5. Share the benefit from the use of genetic resources

In accordance with the enforcement of the Nagoya Protocol in Korea in 2018, the Act on Access to and Utilization of Genetic Resources and Benefit-Sharing was enforced. The Nagoya Protocol is supplementary agreement to the 1992 Convention on Biological Diversity, ensuring the user should get an approval when accessing to foreign genetic resources and the sharing of benefits arising out of the utilization of them between the resource provider and the user. This target includes the inclusion the number of registration and update of the country information on ABSCH (Access and Benefit-Sharing Clearing-House) as indicator, with the aim of increasing the figure from 10 cases in 2022 to 30 by 2030.

15-6. Crack down on poaching or smuggling protected animals and plants

Laws and systems related to the prevention of poaching and smuggling are the Rules for Prevention of Poaching Exploiting the Permit for Harmful Wildlife Capture, the Act on the Punishment of Attempted Poachers of Savage Dogs, and the Act on Punishment for Proper Use of Hunted Animals. Recently, the number of uncovered poaching or smuggling has decreased by more than 90%. But those who exploit the permit for harmful wildlife capture are significantly increasing, and poaching of savage dogs are still pervasive. Accordingly, the activities in curbing poaching and smuggling of wildlife are included as an indicator, with focus on winter. The indicator, which marks 168 cases in 2017, will be decreased continuously.

15-7. Prevention and control of the inflow of harmful alien species

The management of harmful alien species is based on the Five-year National Plan for Controlling Alien Species according to the Act on Conservation and Use of Biological Diversity. The advanced countries prepare for the inflow of alien species through systematic analysis of the potential damage that could be caused by the inflow into the country and monitoring their flows. However, as of 2014, the level of related technology in Korea was identified 56% of that of the countries with the highest technology. The target designates 1,000 species as those requiring special attention to build preventive system and aims to reduce the annual forest area that is damaged by alien species from 26,230 ha to 25,000.

15-8. Restore ecological layer and maintain ecological network

Baekdudaegan mountain range is Korea's largest mountain range extending from Baekdusan Mountain to Jirisan Mountain and is a representative ecological treasure including many domestic ecosystem conservation areas. K-SDGs, referring to the Third Basic Plan for Forest Biodiversity (2018 ~ 2022) of the Korea Forest Service and include the area of restored forest such as Baekdudaegan as a new indicator, with the aim of expanding the area of 315ha in 2017 to 700ha by 2030. In addition, the area of restored urban and residential zone is included as a new indicator reflecting the Plan for Restoration of Urban and Residential zone, with the aim of expanding the area of 150ha to 500 ha.



Goal 16. Human rights, justice, and peace

16-1. Reduce violence and violence mortality

As of 2015, the number of victims of murder was 365, and 600 out of every 100,000 population fell victim to violent crimes. The National Police Agency has expanded the investigation team dedicated to women and youth nationwide in order to eradicate the four major crimes including sexual violence. In addition, the Agency has strengthened its policy-implementation functions by upgrading the existing sexual violence unit to sexual violence department. For the present, as the arrest rate for the five major crimes is estimated to be close to the threshold, the target is to continuously increase the arrest rate from 78.8% in 2017.

16-2. Put an end to violence against children

The government has established various laws and plans regarding child exploitation and violence, including child abuse and sexual violence. The government is making various efforts through the Child Welfare Act, the Act on Special Cases Concerning the Punishment, Etc. of Child Abuse Crimes, the Act on the Protection of Children and Youth against Sex Offenses, the Sexual Violence Prevention and Victims Protection Act, and the Comprehensive Measures to Prevent Child Abuse and Early Detection and Protection of Victims. However, child abuse and sexual exploitation have not been eradicated and still remained as serious social issues. Since the detection rate of domestic child abuse is lower than advanced countries, it will be included in K-SDGs and will be increased from 2.51% in 2017.

16-3, 16-6. Promote the rule of law, ensure justice, and build responsible system

The systematic arrangements for the realization of basic rule of law are well established, but still need improvement in actual operation.

As of 2015, the proportion of victims of violence who reported to appropriate authorities or other official dispute resolution mechanisms was 0.07%. In addition, the percentage of prisoners who are not convicted is 34.7% at the end of 2014. As a representative indicator of this target, the ratio of the number of the judgement of acquittal to the total number of judgments of the courts has been included, and future objective should be set. In addition, regarding the establishment and implementation of government policies and systems, the survey results of the public support and satisfaction level will be reflected.

16-4. Reduce illegal funds, arms trade, and combat organized crime

In order to prevent grave crimes such as organized crime, the economic factors that encourage such crimes should be rooted out by tracking and cutting off the circulation of funds and weapons distributed behind the crimes. This target includes the number of illegal weapon possession and punishment as an indicator considering the domestic situation, with specific objectives to be set later.

16-5. Reduce corruption and bribery

In the survey of National Integrity by the Transparency International, Korea gained 5.5 out of 10 points as of 2014, which is 43rd place among the total of 175 countries. In 1953, a provision regarding bribery was added to the Criminal Act to increase transparency of the country, but it was not easy to impose actual punishment on such crime. However, the Improper Solicitation and Graft Act enforced in 2016 is practically prohibiting the solicitation for abuse of favoritism, status, and authority related to the areas of frequent corruption. The K-SDGs includes the National Integrity Index as an indicator, and the development of the statistical calculation method will be completed by 2020 as recommended by the Anti-Corruption & Civil Rights Commission

16-7, 16-9. Ensure public access to information

The number of public information disclosure requests related to the information accessibility indicator has been continuously increasing. In 2015, 691,963 requests for information disclosure were received, increasing 12.9% from the previous year. This is a 25-fold increase from 1998 when the Official Information Disclosure Act went into effect. Since 2012, the information disclosure rate has remained above 95%, which seems positive trend. The K-SDGs include the number of requests for information disclosure and response rate, as well as the results of independent international evaluation of the right to know and disclosure of information in Korea as indicators, with plans to set future objectives.

16-8. Grant legal status at birth

In order to grant legal status to all people, including by registration of birth, this target aims at establishing a legal identity acquisition system for immigrant children and conducting qualitative evaluation in the future.

16-10. Strengthen international cooperation in combating crimes in developing countries

The government plans to strengthen international cooperation for helping the public institutions of developing countries build capacity to fight violence, terrorism, and crime. To this end, the number of programs to strengthen the capacity of developing countries' public institutions to combat violence, terrorism, and crime is included as an indicator, with future objectives to be set.

16-11. Establish and implement anti-discrimination laws and policies

Korea has established and operated the National Human Rights Commission to correct discriminatory acts, and the Committee on Gender Equality Promotion and the Committee for Equal Opportunity for Employment are responsible for dispute settlement caused by gender discrimination. Policies promotes prohibition on discriminatory treatment, support for employment promotion, fairness and public interest protection in broadcasting, and equal education opportunities based on the legal basis for each sector such as employment, women, the disabled, foreigners, the welfare, the media, and education. This target includes indicators proving the existence and implementation of separate and comprehensive anti-discrimination laws. Also, it will make qualitative assessment as to whether the country is practicing the recommendations of the international human right conventions related to discrimination.

16-12. Strengthen digital rights protection

In 2013, the UN passed the resolution on Rights to Privacy in Digital Age, which stated that it will respect and protect the privacy of digital communications. Accordingly, Korea should compare domestic laws with international human rights law, take measures to prevent infringement of rights, and review the related procedures, practices, and laws. The target will assess the implementation of the Comprehensive Measures to Prevent Sexual Crime established in 2017 in qualitative manner, and the target will include the number of cyber violence crimes, which are now arising as social ills, as an indicator.

16-13. Promote inter-Korean cooperation

The Republic of Korea is in a complex political and diplomatic situation where it is confronted with North Korea but has to pursue cooperation. This target will include a new indicator of promoting inter-Korean cooperation for peace and prosperity, but specific indicators and objectives will be set in the future.



Goal 17. Reinforce global cooperation

17-1. Expand aid to developing countries

As the international community recognizes the implementation of SDGs of developing countries as an important agenda, the size of official development assistance (ODA) should be continuously expanded. Korea enacted the Framework Act on International Development Cooperation in 2010 to ensure legal stability, consistency, and aid effectiveness of ODA policies. This target aims to raise the ratio of ODA to Gross National Income (GNI) from 0.14% of 2017 to 0.3%, the average of the DAC member countries according to the Second Basic Plan for the International Development Cooperation.

17-2. Support trade and investment in developing countries

As the trend of global protectionism expands, each country should actively support the promotion of the fair multilateral trading system for global free trade. In order to help the least developed countries and developing countries strengthen their export base and increase investment attraction, Korea also has to expand its waiving of custom to more least developed countries and ease developing countries' access to the markets. K-SDGs focus on promoting the multilateral trading system and supporting the increase in the trade and investment of developing countries. In this regard, the trade volume with and the investment in the developing countries are included as indicators, but specific objectives to be decided in the future.

17-3. Support developing countries to strengthen system for science and technology innovation

Science and Technology Innovation (STI) is important for the implementation of SDGs. In developing countries, it is especially important to strengthen science and technology capacity to expand the growth base and cope with various environmental problems. In order to solve the global issues such as climate change, it is necessary to provide more support to the scientific and technological innovation systems in developing countries as well as developed countries. Therefore, indicators should be set up under the consultation with the Committee for International Development Cooperation, and other stakeholders in order to strengthen science and technology capacity of developing countries and technology transfer.

17-4. Support developing countries to build capacity of national planning

In order for the developing countries to achieve SDGs, it is necessary to expand capacity building projects to support the countries' national planning and implementation and to build an effective support system with the international community. Korea has been enlarging its projects for sharing development experience and building policy capacity so that the developing countries can establish and promote consistent and sustainable national development strategies. In the future, discussions

with the Committee for International Development Cooperation or other stakeholders should be in place to provide practical support for developing countries to strengthen their capacity for the implementation of SDGs through knowledge sharing, technology cooperation, and policy consultation.

17-5. Strengthen policy consistency for sustainable development

K-SDGs should enhance policy consistency from policy planning to enforcement and reflux to establish an efficient and effective implementation system, since the goals have strong inclusiveness and mutual linkages. In particular, securing consistency is necessary for existing country level sustainable development strategies and support for developing countries. The 2008 OECD/DAC special evaluation and the 2012 peer evaluation have consecutively recommended Korea to pursue policy consistency, and it ranks at the bottom of the Commitment to Development Index (CDI). Accordingly, the evaluation results of the K-SDGS establishment and its implementation as well as the number of policy coordination of the Sustainable Development Committee will be reflected as indicators.

17-6. Strengthen various global partnership

As the realm of cooperation and subjects of the international community for the implementation of the SDGs are diversified and sub-divided, the government has increasingly more needs to mobilize and share the expertise, experience, skills, and resources by utilizing global partnerships. And as the development cooperation area has been sub-divided, and as the number of participants has been increasing, and effective global partnership for implementing SDGs has been expanded. K-SDGs will include the indicators showing SDGs implantation with specific objectives after the discussions with the Committee for International Development Cooperation.

17-7. Promote effective public-private partnerships

For the effective implementation of K-SDGs, effective partnerships with civic groups, business and industry, and local autonomous institutions should be built to draw up social consensus and improve public awareness. The government should build partnerships with civic groups and local entities to lead public participation and draw public attention. In support of developing countries, the public-private cooperation projects can initiate various activities such as national duties, operation of international development cooperation committee, evaluation of international development cooperation, support for private international development cooperation groups, advertisement for public participation, and reinforcement of international exchanges and cooperation. The key indicators include the number of public-private participating agencies and regular meetings for the implementation of K-SDGs, with objectives to be set in the future.

Chapter 4. K-SDGs Operation Plan

Build Governance for Implementation of K-SDGs

PCSD has to serve the roles of deliberation of the national basic plans for sustainable development, evaluating national sustainability and making recommendations, and reviewing major mid- and long-term administrative plans by strengthening its status. And the Presidential Committee on Green Growth should establish a role sharing system by devising plans for operating SDGs specialized for climate change, energy, and green industries.

Plan for laying legal ground (draft)

Plans to change the Third Basic Plan for Sustainable Development (2016-2035)

- (Article 50 of the Framework Act on Low Carbon, Green Growth) The Government ... shall establish and implement a basic plan every five years for sustainable development for a planning period of 20 years to facilitate the State's sustainable development.

Operation of sustainable development indicators according to the Sustainable Development Act

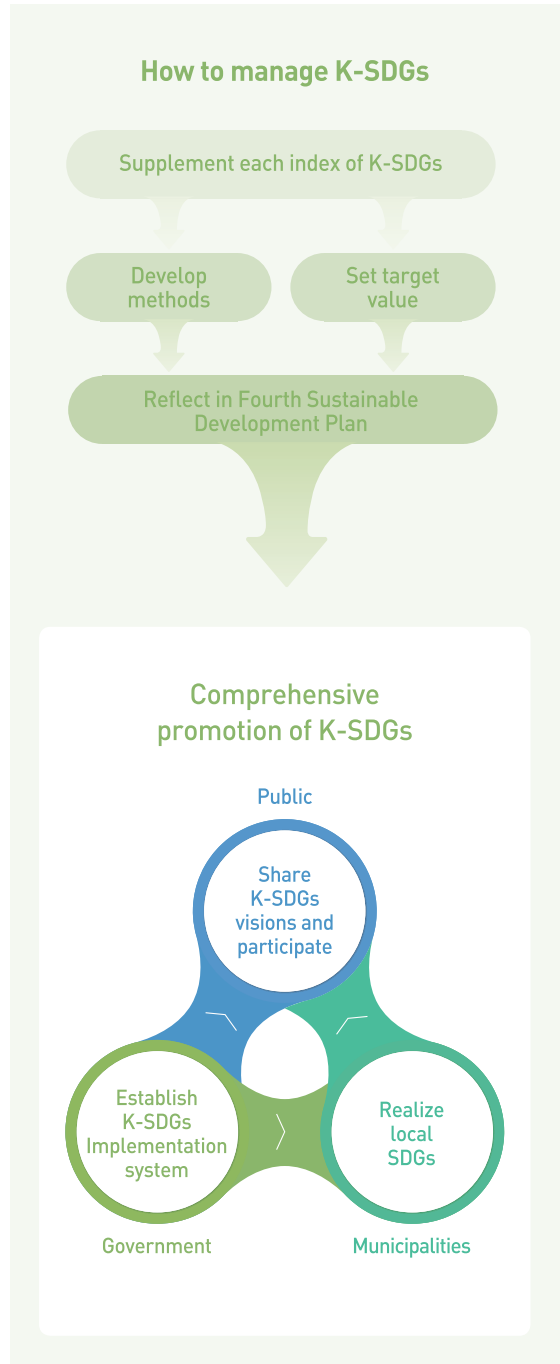
- (Article 13 of the Sustainable Development Act) (1) The State shall prepare and disseminate a sustainable development index. (2) The Commission on Sustainable Development under Article 15 shall evaluate national sustainability every two years with the sustainable development index stipulated in paragraph (1).

Supplement each index of K-SDGs

Out of the total 214 indicators established so far, 26 new indicators will have their own statistical calculation methods by 2019, and then have specific target values. Such new indicators include the percentage of public social expenditure to GDP, the rate of high dependency on smartphone, the healthcare support for the immigrants, the school enrollment rate for the disabled, the rate of hours spent on household labor, the material footprint, plastic usage per person, and the ratio of sidewalk.

In addition, specific target values for 45 indicators will be set through social discussion and should be met by 2030. The indicators include the rate of those who are paying national pension contribution, the net replacement rate of unemployment benefit, real GDP growth per capita, national energy efficiency index, household income, establishment of the Local Dementia Centers, and the ratio of ODA to GNI.

The finalized K-SDGs indicators and specific target values will be reflected when drawing up the 2020 Fourth Sustainable Development Plan (2021 - 2040).



Establish K-SDGs monitoring and evaluation methodology

K-SDGs will replace the Third Basic Plan for Sustainable Development and the relevant goals and be used as a standard for continuously monitoring and diagnosing national sustainability according to Article 13 of the Sustainable Development Act. In 2019, among the indicators that do not have sufficient statistics calculation methods, those that can use the existing statistics will be quantified and disposed on the Korean Statistical Information System. For the case of other indicators, the PCSD and the Statistics Korea have been discussing how to calculate them under the consultation with the relevant ministries. When the methodology is established, K-SDGs will be evaluated in 2020.

Article 50 of the Framework Act on Low Carbon, Green Growth stipulates that the Government shall establish and implement a basic plan every five years for sustainable development and continuously monitor the goal achievement. When needs to supplement the goals arises according to the changes in the domestic or overseas sustainable development environment and corresponding changes in policy directions of each government department, they will be reflected in the indicators and implementation plans. Korea Environment Institute has conducted the Analysis of the International Implementation System of Sustainable Development Goals (SDGs) from December 2018 to June 2019, with the aim of strengthen the SDG implementation evaluation system by reviewing the cases of the international organizations such as UN SDSN and OECD as well as advanced countries such as Germany.

Share and advertise SDG visions through public opinion

K-SDGs can be achieved not only by the government ministries and municipalities but also by the public participation. To this end, K-SDGs should be advertised in all aspects, with maximum participation of the public in the implementation of the goals. For example, efforts to achieve the goals and share the visions will be widely made: Designing of K-SDGs logo and slogans,

publication of contributions of notable social figures such as the Minister of Environment or the Chairman of PCSD, distribution of promotional materials, appointment of public relations ambassadors, creating PR videos, and hosting international events.

Activate the connection between K-SDGs and local municipalities

The government will establish a linkage frame for connecting SDGs with local municipalities by 2021 and support localization of SDGs based on local community participation. As of 2019, the SDG localization rate is 30%, which will be raised to 60% in 2020 and 100% in 2021.

For realization of regional SDGs in the future, public - private joint venture projects should be activated, but the status and plans of local SDGs will be investigated to ensure the establishment of phased goals. The Agenda 21 and SDGs will be carried out by organic public-private bodies, and a national SDG convention will be held to share best practices of local SDG implementation. In order to disseminate the vision of SDGs, local educational sustainable development opportunities will be expanded, and educational programs for local residents will be opened.

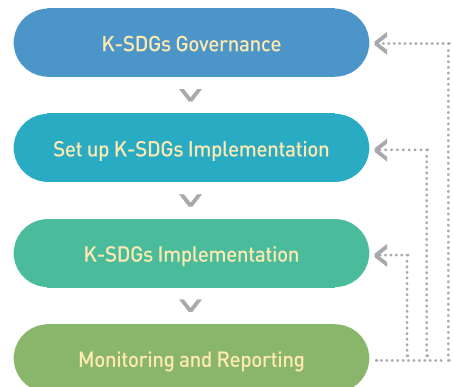
Host K-SDGs relay forum

The government will lay the basis for the continuous K-SDGs discussions by grouping the 17 goals into 3 - 4 themes and hosting relay forum.

For example, the first round about environment, the K-SDG 6, 7, 11, 12, 13, 14 and 15 are discussed, and the second round for inclusive society discusses K-SDG 1, 2, 3, 4, 5, 10, 16, and 17. The last third round for innovative economy deals with K-SDG 7, 8, 9, 11 and 12. And for topics that needs in-depth discussion, more rounds of relay forum will be held. And a collaborative system with research institutes such as KEI, KDI, and the Korea Institute for Health and Social Affairs, which are highly relevant to each forum topic, will be built. The K-SDGs relay forum will be held in conjunction with the Forum for the Management of the K-SDGs, which is a commissioned to other entity by the government.

The Reflux system for implementation of K-SDGs

The successful implementation of K-SDGs requires strong implementation methods and along with the mainstream policies. For example, it is possible to intensify the effectiveness of SDGs by introducing a system to review the sustainable development plans for law enactment or mid- and long-term administrative plans in advance. The policies associated with K-SDGs are based on the principles of consistency (inclusiveness, consistency, weighting, reporting, and resources) to enable contribution to the goal achievement. To this end, the achievement of the target against the objective data will be monitored and disclosed every two years. As well, the national sustainability evaluation report will be prepared to promote the achievement of the goal through the reflux system. In particular, the committees related to sustainable development will be incorporated on a government level, and foundations such as Sustainable Development Act will be created to build a structure to carry out SDG plans.



Chapter 5.

K-SDGs Indicators and 2030 Targets

* New Indicator

Goals	No.	Targets	Indicators	2030 Targets
Reducing Poverty and Enhancing the Social Safety Net	1-1	Reduce the proportion of all people whether men, women, or persons with disabilities to below the OECD average.	Relative poverty rate (%; by gender, age group, disability, and immigrant status) based on 50% of median disposable income	13.8 → 12.5
	1-2	Minimize the blind spot of the social welfare system and achieve substantial coverage of the poor and vulnerable.	Number of recipients of basic livelihood security, healthcare, and housing benefits	
			* Household out-of-pocket expenditure rate	
			* Net replacement rate of unemployment benefits	
1-3	Strengthen the provision of social services to the poor and the vulnerable.	* National pension payment rate (%; by type of subscription and gender)	82.5(2017) → gradual increase	
		* Social public expenditure as GDPpercentage (%; by expenditure item)		
1-4	Reduce the exposure and vulnerability of the poor and those in vulnerable situations toeconomic, social, and environmental shocks and disasters, and build their resilience as well.	Ratio of households below minimum housing standards(%)	5.9 → 4.6	
		* Expenditure of the financial programs (EITC and CTC) for the working poor relative to government budgets		
Food Security and Strengthening Sustainable Agriculture	2-1	Ensure thatpeople in vulnerable situationshave reliable access to food	* Lower-income households with food security (%)	95.8 → gradual increase
	2-2	Increase the income of farmers by diversifying their income sources and broadening management protection systems.	* Rural farm income	16,269('15) → 18,516
			* Subscription rate of agricultural disaster insurance (%)	30.1('15) → 45
	2-3	Build sustainable food production systems.	Ratio of certified organic farming areas(%)	4.9('17) → 10
			Soil organic matter content in agricultural land (%)	2.3('17) → 2.4
			Soil acidity (pH) infields	6.3('17) → Increase the level to 6.4 or prevent it from decreasing
			* Expansion of environmental protection programs	
			* Number of crop varieties developed against climate change	
			* The average government-stockpiled rice(10,000 tons)	186('17) → 80
	2-4	Maintain the genetic diversity of seeds, crops, as well as farmed and domesticated animals, and their related native and wild species.	Score of plant genetic resources for food and agriculture secured in medium- or long-term conservation facilities (1,000 cases)	288('17) → 325
* Number of secured native species				
3-1	* Manage risk factors of chronic diseases and expand health coverage.	Ensure the stability of food commodity markets by reducing food price volatility.		
		* Mortality rate attributable to cardiovascular diseases, cancers, or chronic respiratory diseases (population aged 15–64)		
Guarantee Healthy and Happy Life	3-1	* Manage risk factors of chronic diseases and expand health coverage.	* Diabetes control rate(%)	32.9('16) → 36.0
			Rate of adult male smokers(%; implementation of the WHO Framework Convention on Tobacco Control)	40.7('17) → 29
			* Guarantee of the right to health for persons with disabilities	
			Rate of health checks for persons with disabilities (%)	55.6('17) → 64
			Prevalence of chronic diseases in persons with disabilities(%)	81('17) → 68

Goals	No.	Targets	Indicators	2030 Targets
Guarantee Healthy and Happy Life	3-2	Improve mental health and prevent drug abuse.	Suicide rate per 100,000 people(%)	24.3('17) → 11.9
			Per capita alcohol consumption(ℓ) among the population aged 15 years and older.	8.7('17) → 7.2
			* Smartphone dependency rate(%)	
	3-3	Prevent death and injuries from accidents including traffic accidents.	Number of deaths because of traffic accidents (per 100,000 people)	0.08('17) → 0.03
			3-4	Work to prevent and manage infectious diseases.
	3-4		Annual malaria incidence per 1,000 people (%)	0.17('17) → 0.02
			3-5	Protect and promote mothers' health.
	3-6	Protect and promote children's health.	Infant mortality rate(%)	1.6('16) → 1.4
			* Prevalence of obesity among children and adolescents(%)	13.3('16) → 13.3
	3-7	Reduce death and illnesses from hazardous chemicals as well as air, water, and soil pollution and contamination.	* Environmental standards for ultrafine dust	
3-8	* Tackle low birth rates and prepare for the aging population in South Korea.	* Opening of dementia care centers		
		* OECD Better Life Index	29thplace(2017) → gradual increase	
		* Jobs for the elderly		
3-9	* Achieve universal health coverage by expanding public health services.	* Number of beds in publicly owned hospitals		
Promotion of education	4-1	Ensure that all children irrespective of gender and disability complete free and quality primary and secondary education leading to appropriate and effective learning outcomes.	International assessment of educational achievement(score)	
			PISA: 85.5(2017) 85.6(average in three subjects)	
			TIMSS: 98.7(2017) 99.0(two school grades, average in four subjects)	
			Creation of education performance indicators at the national level	
	4-2	Ensure that all children have access to quality early childhood care and education services so that they are prepared for primary education.	* Rates of girls and boys under five years old who show normal levels of development in terms of physical health, learning, and psychosocial well-being.	
			* Utilization rate of systematic early childhood education and care services before primary education (%)	58('17) → 75
			* Utilization rate of public kindergartens and daycare centers (%)	24('17) → 44
			Rate of infants who experience positive home education and upbringing environments	
	4-3	Ensure that all learners have equal access to affordable and quality technical, vocational, and tertiary education, including university, regardless of gender and disability.	* Adult learners' participation rate in the nonacademic curriculum in higher education institutions	
			* Higher education completion rates(%)	44('17) → 48
* Direct costs of higher education per student				
4-4	Substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, necessary for employment, decent jobs, and entrepreneurship.	Rate of participating in lifelong learning (%)	35.8('17) → 38.4	
		Rate of experiencing vocational education or training (%)	16.1('17) → 18	

Goals	No.	Targets	Indicators	2030 Targets
Promotion of education	4-5	Eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable including persons with disabilities, migrants, and children in vulnerable situations.	Adopt disaggregated statistics by gender, disability, and vulnerable groups in all indicators	
			Enrollment rate(%)	
			School suspension rate (%)	1.32('17) → 1.00
	4-6	Ensure that all youth and a majority of adults achieve literacy and numeracy.	Rate of the population who achieved a certain level of language and mathematical proficiency(PIAAC)	
			Adolescent and adult literacy rates (%)	
			Adult literacy rate (below Level 1)	Language 2.2(2017) → 2.0 Math 4.2(2017) → 4.0
	4-7	Ensure that all learners acquire the knowledge and skills needed to promote sustainable development including, among others, through education for sustainable development, human rights, gender equality, promotion of a culture of peace and nonviolence, global citizenship, and appreciation of cultural diversity and culture's contribution to sustainable development.	Implement national policies related to education on sustainable development and global citizenship	
			Include content on sustainable development and global citizen in education curriculum	
			Cumulative number of teachers who received capacity building training for global citizen education (persons)	1,374('17) → 8,000
	4-8	Build and upgrade education facilities that are child-, disability-, and gender-sensitive and provide safe, nonviolent, inclusive and effective learning environments.	Rate of special classes in regular schools	
Rate of seismic retrofitting for schools(%)			25('22) → 100	
Rate of Wee Class (%)			57.5('17) → 100	
4-9	Secure sufficient financial resources to provide inclusive and quality education at all levels.	Government expenditure on tertiary education relative to GDP (%)	1.0('17) → OECD average	
4-10	Secure a sufficient number of teachers to provide quality education at all levels.	Rate of preschool teachers with bachelor's degrees or higher		
		Number of special education students per teacher	5.95('17) → gradual decrease	
		Placement rate of full-time teachers at public kindergartens (%)	66.9('17) → 100	
		Placement rate of professional counselors at primary and secondary schools(%)	61.7('17) → 100	
Promote Gender Equality	5-1	End all forms of discrimination against women.	Rate of accommodating policy improvement from Gender Impact Assessment(%)	60('18) → 75
	5-2	Eliminate all forms of violence against all women in public and private spheres including trafficking and sexual and other types of exploitation.	Number of domestic violence reports and responses (%)	33.2('17) → 50
			Sexual assault cases and rate of unsolved such cases (%)	3.8('17) → 3.3
	5-3	Recognize and value unpaid care and domestic work.	Ratio of time spent on unpaid housekeeping and care work at home	
	5-4	Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life.	Proportion of women in parliament and local councils	→ Gradual expansion
			Achievement rate of goals toward raising female representations in the public sector(%)	100('17) → 100
	5-5	Ensure universal access to reproductive health and rights for all.	Establish a system that ensures the provision of birth-related information and education	
	5-6	Enhance access to technology, particularly in information and communications technology, to promote women empowerment.	* Proportion of female students at coeducation schools	
5-7	Adopt and strengthen sound policies and legislation for gender equality promotion and women empowerment at all levels.	Success rate of achieving planned outcomes of gender-sensitive budgets (%)	67.3('18) → 83	

Goals	No.	Targets	Indicators	2030 Targets
Keep Water Safe and Clean	6-1	Provide safe and equitable drinking water for all.	* Rate of water supply nationwide(%)	96.4('17) → gradual increase
			* Rate of water supply to rural areas (%)	72.8('17) → gradual increase
	6-2	* Provide sufficient and equitable sewer service regardless of region including areas with the most vulnerable water supply.	* Rate of sewer supply in rural areas (%)	68.2('17) → 85
			* Utilization rate of water resources from treated wastewater(%)	8.0('18) → 9.0
			* Achievement rate of target water quality (%) ※ Based on BOD	80.9('17) → 85
			* New pollutants to be controlled (type)	55('17) → 100
	6-3	* Improve water quality and the health of water ecosystems by reducing water pollution and minimizing the release of toxic chemicals and hazardous substances.	* Ratio of local governments that utilize rainwater	
			* Water leakage rate (%)	10.6('16) → 9.2
			* Water system security rate (%)	67.6('17) → 98
	6-4	Ensure a reliable supply of water to address concerns over water scarcity and pursue the effective use of water resources by supplying tap water without leakage.	* Water consumption per capita (ℓ/day/person)	10('22) → 100
			* Achievement rate of target water quality (%)	10('22) → 100
	6-5	* Implement integrated water management through the Total Pollution Load Management System.		
	6-6	Protect and restore water-related ecosystems including wetlands, rivers, aquifers, and lakes.	Restoration rate of ecological streams(%)	70.8('17) → gradual increase
* Ratio of water quality at "good" levels (%)			80.9('17) → 85	
6-7	Support and strengthen the participation of local communities in sound and safe water management.	Participation rate of private groups among the total consultative bodies (%)	100('17) → 100	
Eco-Friendly Production and Consumption of Energy	7-1	Ensure reliable and adequate access to energy services.	* Number of households that receive energy vouchers(10,000 units)	54.6('17) → 100
	7-2	Increase the generation of clean energy among national energy resources.	Share of renewable energy generation(%)	7.6('17) → 20
			Share of renewable energy among primary energy resources (%)	5.0('17) → 13.6
	7-3	Save energy and increase energy efficiency	* National energy efficiency index(Toe/KRW 1 million)	
			* Building energy efficiency index(Toe/m ² /year)	
7-4	* Minimize air pollution from energy consumption in the transportation sector.	* Number of newly added eco-friendly cars (10,000 cars)	9.7('17) → 880	
		* Number of newly added eco-friendly buses		
Grow Quality Jobs and Boost Economic Growth	8-1	Achieve economic growth for the benefit of everyone.	Annual growth rate of real GDP per capita	
	8-2	Enhance policies to create decent jobs.	* Employment rates by population group (by gender, age, and disability)	
	8-3	Limit environmental damage caused by economic growth through the efficient use of resources.	Material footprint	
			Domestic resource consumption (million tons)	663('16) → 684
	8-4	Ensure that proper compensation is implemented.	Female employment rate(%)	56.9('17) → 63.9
			Gender wage gap(%; difference between male and female median wages)	65.9('17) → 85.5
8-5	Increase the youth employment rate.	* Implementation rate of public institutions' mandatory hiring of youths		
		* Increase rate of employees covered by employment insurance at SMEs (%) 2.3(2021) 2.3		

Goals	No.	Targets	Indicators	2030 Targets
Grow Quality Jobs and Boost Economic Growth	8-6	Protect labor rights and promote safe and healthy work environments for all workers.	* Occupational fatality rate per 10,000 people(%)	0.52('17) → 0.22
	8-7	Contribute to job creation through the development and implementation of sustainable tourism promotion policies.	Share of tourism's contribution to total GDP (%)	3('22) → 5
			Share of sustainable tourism jobs among the total jobs in the tourism industry (%)	65('22) → 69
Quality jobs expansion and economic growth	9-1	Strive to provide reliable welfare services and access to information for a majority of people.	Penetration rate of roads (km/1,000 persons)	2.13('17) → 2.16
			* Transportation expenditure to household consumption	
			* Digital information accessibility for vulnerable groups (%)	91('17) → 97.4
	9-2	Secure industrial competitiveness by pursuing diversity in industries and laying the groundwork for sustainable business activities.	Ratio of small-scale industries that have debt or use credit loans.	
	9-3	* Strengthen international competitiveness by building technical capacity and promoting technology commercialization.	* Rate of successfully commercialized R&D projects (%)	51.6('17) → 52.9
	9-4	Help boost the national economy by expanding the country's human and financial resources for research as well as planning and executing relevant research.	R&D expenditure relative to GDP	4.23('16) → 4.29
	9-5	Pursue industrialization with highly efficient use of resources through environmental friendly industrial activities and technological innovation.	CO2 emissions per unit value added	
			* Domestic resource productivity(GDP/DMC), material intensity(DMC/GDP)	Domestic resource productivity 2.27(2016) → 3.03 material intensity(2016) 0.44 → 0.33
Resolve inequality	10-1	Achieve and sustain disposable income growth of the bottom 40% of the population at a rate higher than the national average.	Rate of increase in the average per capita household income of the bottom 40% of the population	
			* Income gap ratio(%)	36.8('17) → 31
	10-2	Promote the social, economic, and political inclusion of everyone, irrespective of age, sex, disability, or social status.	* Income quintile share ratio	5.1('17) → 5.1
			Poverty rate by population (%; elderly poverty rate)	46.5('17) → 31
			* Share of the net assets of the first-income and second-income quintiles	
	10-3	Ensure equal opportunity by eliminating discriminatory treatment according to age, gender, and disability.	* Employment rate by population(%; employment rate for people aged 55 and above)	49.4('18) → 55
			Awareness of discrimination against persons with disabilities	3.29('17) → 3.6
	10-4	Achieve greater equality by enhancing fiscal, wage, and social protection policies.	* Household income to GDP	
10-5	Ensure the stable and orderly migration and mobility of migrants through the implementation of migration policies.	* Compliance with international standards on rights of migrants		
		* Development of an indicator to support the management of migrants' health		

Goals	No.	Targets	Indicators	2030 Targets
Create inclusive, safe, and resilient cities and habitation	11-1	Ensure access to adequate, safe, and affordable housing and basic services and improve old neighborhoods as well.	* Number of public rental housing supplies (10,000 units)	65('22) → increase
			* Recipients of housing benefits(10,000 units) and budget allocation	Recipients (10,000 households) 135.8(2022) → budgetincrease (KRW 1 trillion)
	11-2	Provide access to safe and affordable transport systems particularly byexpandingpublic transport, with special attention to the needs of the vulnerable including women, children, persons with disabilities, and the elderly.	Modal share of public transport(%)	31.3(2017) → increase
			* Assurance of the convenient use of transportation for the most vulnerable (%; including the utilization rate of buses and subways of persons with disability (PWD))	Penetration rate of low-floor buses 22.4(2017) → 50
			* Ratio of green transportation	Modal share of bicycles 1.43(2017) → 1.52 Extension of bike lanes per capita 0.41(2017) → 0.55
	11-3	Raise the inclusiveness and sustainability of cities and enhance the capacity for the participatory and integrated planning and management of residential areas.	* Land area used inurbanization-coordination zones(%)	41.8('17) → 49.3
			* The budget rate for promoting public participation (%)	1.74('17) → 1.87
	11-4	Strengthen efforts to protect and preserve the world's heritage.	Number of the listed World Heritage Sites The budget amount for the preservation and protection of the World's Heritage	
	11-5	Significantly reduce the number of deaths and economic losses from disasters as well as devise and implement integrated risk management solutions for urban disasters.	Death caused by social disasters per 100,000 population (persons)	0.12('17) → gradual decrease
			* State funds for restoration relative to the amount of damages caused by natural disasters	
			* Proportion of local governments that established urban planning aimed at preventing disasters based on respective urban disaster vulnerability analyses (%)	8('17) → 100('30)
	11-6	Reduce the adverse environmental impact of cities including air quality and waste management.	Number of days affected bybad levels of fine dust	
			Life and workplace waste generation (ton/ GDP KRW 1 billion)	95.6('16) → 70.8
	11-7	Ensure safe and easy access to public green spaces for all including women, children, seniors,and persons with disabilities.	Urban park area per capita(m3)	9.6('17) → 11.6
Population with easy access to park facilities				
Ratio of pavement area				
Ratio of PWD-friendly public buildings				
11-8	Strengthen national and regional development planning to support economic, social, and environmental links between urban, peri-urban, and rural areas.	* Number of local governments that incorporated respective environmental protection plans into the framework of their province, city, or county	8('17) → 100	
Promote sustainable consumption and production	12-1	* Establish and implement comprehensive national policies for sustainable consumption and production.	* Number of the established frameworks and implementation plans for resource circulation	1('17) → 18
			* Whether to establish the national framework for national sustainable production and consumption	
12-2	Achieve sustainable management and efficient use of natural resources.	Material footprint		
		Domestic resource consumption (million tons)	663('16) → 684	

Goals	No.	Targets	Indicators	2030 Targets
Promote sustainable consumption and production	12-3	Reduce food losses arising from production, distribution, and disposal.	Food loss index * Food waste index	0.37('16) → 0.34
	12-4	Protect human health and prevent environmental pollution through the environmentally sound management of chemicals and hazardous wastes.	* Number of confirmed hazardous substances	960('17) → 2,510
			* Number of chemicals that require preparation for accidents	97('17) → 140
			Hazardous waste generation per person(kg/person-day)	0.098('16) → gradual decrease
	12-5	Reduce waste generation through prevention, reduction, recycling, and reuse.	Recycling rate of household waste(%)	59.6('16) → 83.8
			* Recycling rate of industrial waste (%)	75.8('16) → 95.4
	12-6	Oversee companies' sustainable management activities and expand support as well.	Rate of increase in the number of companies that publish sustainable management reports	
	12-7	Promote sustainable green consumption through the expansion of green product certification and green consumption.	Purchasing rate (%) of green products in the public sector (local governments)	35.2('17) → 70
			* Number of green household products with green certification	59('17) → 73
	12-8	* Expand opportunities for participation in environmental education to raise public awareness of sustainable development.	* Proportion of beneficiaries who received environmental education relative to the population (%)	5.98('17) → 10
			* Environmental awareness level of the general public (%)	65.5('13) → 75
12-9	* Increase the recycling of plastics so that they can be consumed in a virtuous cycle and to prevent them from polluting the environment through the development of eco-friendly materials.	* Plastic consumption per capita * Usage of recycled plastics relative to total plastic usage		
12-10	Contribute to environmental conservation by developing measurement indicators for sustainable tourism.	* Carbon and ecological footprints		
12-11	Phase out fossil fuel subsidies.	Share of fossil fuel subsidies to GDP		
Response to climate change	13-1	Reduce the expected risk of climate change and strengthen resilience and adaptive capacity to natural disasters.	* Rate of improvement in key indicators of adaptive capacity to climate change (%)	16.2('17) → 68
	13-2	Work toward integrating climate change measures into national and regional policies.	* Share of renewable energy generation (%)	7.6('17) → 20
			* Number of established countermeasures and implemented support measures by industries and local governments	25('17) → 300
			* Number of newly added eco-friendly cars (10,000 cars)	9.7('17) → 880
	13-3	Improve education, awareness-raising, and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning.	* Awareness level of climate change adaptation (%)	63.2('18) → 85
13-4	* Strive to keep the global temperature increase to less than 2°C and further limit warming to 1.5°C.	* The country's greenhouse gas emissions (MtCO ₂)	694('16) → 608-574	
Conserve marine ecosystem	14-1	Establish a management system to protect the marine environment from land and sea pollutants.	* Achievement rate of seawater quality standards by ecology-based marine region using Water Quality Index (WQI; %)	81.8('17) → 100
			* Amount of ocean waste collected (ton)	82,175('17) → 101,917
	14-2	Actively manage the marine ecological environment and habitats of fishery resources.	* Accumulated area of formatted marine forests (ha)	15,252('17) → 54,000
			* Area of restored tidal flats (km ²)	0.2('17) → 6
	14-3	Minimize the impacts of ocean acidification through enhanced scientific cooperation.	Maintain the average pH concentration at appropriate levels (8.0-8.2).	8.1('17) → 8.1

Goals	No.	Targets	Indicators	2030 Targets
Conserve marine ecosystem	14-4	Sustainably manage fishery resources and avoid excessive fishing.	Amount of fish caught in the coastal waters relative to TAC(%) ※ TAC: Total Allowable Catch	25('17) → 75
			Number of fish species subject to TAC	11('17) → 20
			* Number of fishing vessel buybacks	291('17) → 1,200
	14-5	Expand the designation of marine protected areas for systematic conservation and wise use of marine ecosystems.	Number of marine protected areas	28('17) → 39
	14-6	Ensure economic benefits through the sustainable use of marine resources.	* Fishery Income(KRW 1 million)	49('17) → 80
			* Fishery income/urban workers' household income(%)	82.3('17) → 87.5
	14-7	Enhance ocean science research capacity and expand technology transfer of marine science.	* Share of investment in marine fisheries R&D relative to the government's R&D budgets (%)	3.1('18) → 6.0
	14-8	Support the stable fishing practices of small-scale fishermen.	Rate of benefit receipt from the direct payment program for fisheries(%)	△3('17) → 20
※ Districts with unfavorable conditions: Districts with low fisheries productivity and unfavorable settlement conditions			55('17) → 120	
Conserve land ecosystem	15-1	Actively implement conservation and restoration activities to diversify terrestrial and inland freshwater ecosystems.	Ratio of areas designated as protected areas for terrestrial and freshwater biodiversity(%)	11.6('17) → gradual increase
			Ratio of forest areas relative to the total land area (%)	63.05('17) → gradual increase
			* Mountain Green Cover Index	
	15-2	Strengthen sustainable forest management including the halting of deforestation and the restoration of degraded forests.	Expanded indicators of state forest management (case)	36('17) → 54
	15-3	Endeavor to restore degraded land affected by drought, floods, and commercial development.	Ratio of degraded land relative to total land area	
	15-4	Protect threatened species to prevent the loss of biodiversity.	Endangered species of animals and plants	
			* Restoration rate of major endangered species(%)	74.3('17) → gradual increase
	15-5	Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources, as internationally agreed.	Number of registered and renewed Korean genetic resources in Korea at ABSCH (case) ※ ABSCH: Genetic Resources Information Management Center	10('22) → 30
	15-6	Strive to end poaching and trafficking of protected species of flora and fauna.	Number of reporting cases on illegal trafficking	168('17) → gradual increase
	15-7	Take measures to prevent the introduction of invasive alien species and reduce their impact on land and water ecosystems.	Alien species to be controlled	148('17) → 500
			Area of annual forest damage caused by sporadic and invasive alien species (ha)	26,230('17) → 25,000
	15-8	* Exert efforts to restore the ecological axes that were destroyed by human activities, including commercial developments, and to maintain and manage ecological networks.	* Area of restored forests including Baekdudaegan Mountain Range(ha)	315('17) → 700
* Restoration of urban and living areas (ha)			150('17) → 500	
Human rights, justice, and peace	16-1	Significantly reduce all forms of violence and related death rates.	Arrest rate of five major crimes [%; murder, robbery, violence, rape, and theft]	78.8('17) → gradual increase
	16-2	End abuse, exploitation, trafficking, and all forms of violence and torture of children.	Detection rate of child abuse (%)	2.51('17) → gradual increase
	16-3	Promote the rule of law at the national and international levels and ensure equal access to justice for all.	Ratio of innocent verdicts relative to total court verdicts	

Goals	No.	Targets	Indicators	2030 Targets
Human rights, justice, and peace	16-4	Reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets, and combat all forms of organized crime.	Rates of crimes with illegal possession of weapons and their punishment	
	16-5	Reduce corruption and bribery practices.	Corruption Perceptions Index	
	16-6	Develop and implement effective and accountable government policies and systems.	Public approval rating for government organizations / Satisfaction survey results	
	16-7	Ensure responsive, inclusive, participatory, and representative decision-making at all levels and improve public access to information.	Number of public disclosure requests and response rate	
	16-8	Provide legal identity for all including birth registration.	Establish a system that allows the granting of legal identity to migrant children	
	16-9	Ensure public access to information and protect fundamental freedoms according to national legislation and international agreements.	Independent international assessment results on Korea's right to know and disclosure of information	
	16-10	Strengthen international cooperation for building public institutional capacity in developing countries to combat violence, terrorism, and crime.	Number of programs to enhance the public institutional capacity of developing countries to combat violence, terrorism, and crime	
	16-11	Establish and enforce nondiscriminatory laws and policies.	Existence of individual and comprehensive antidiscriminatory laws and their implementation	
			Follow the recommendations of international treaty-based committees on human rights	
	16-12	Strengthen the protection of everyone's digital rights.	Number of cyber crimes	
			Implementation of "Comprehensive Measures to Prevent Digital Sex Crimes"	
16-13	* Promote inter-Korean cooperation for peace and prosperity.			
Reinforce global cooperation	17-1	Expand the resources needed to support the implementation of SDGs in developing countries.	ODA to GNI	0.14('17) → 0.30
	17-2	Promote a multilateral trading system, and support trade and increased investment in developing countries.	Share of trade with developing countries	
			Size of investment in developing countries	
	17-3	Support the strengthening of science and technology innovation systems in developing countries.	Indicators will be finalized through consultation with ODA Korea or related agencies	
	17-4	Strengthen the national planning capacity to implement SDGs in developing countries, and provide enhanced international support.	Indicators will be finalized through a consultation with ODA Korea or related agencies	
	17-5	Increase policy coherence for sustainable development.	Number of coordinated policies of the commission on sustainable development (including domestic and foreign matters)	
			Establishment of K-SDGs and results of the performance evaluation	
17-6	Enhance various global partnerships for sustainable development in developing countries.	Indicators will be finalized through a consultation with ODA Korea or related agencies		
17-7	Encourage and promote effective public, public-private, and civil society partnerships.	Participating organizations in private and public consultative bodies for the implementation of SDGs and the number of regular meetings		



Ministry of Environment
Commission on Sustainable Development