



Press Release

다시, 대한민국!
새로운 국민의 나라

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The Yoon administration's blueprint for achieving carbon neutrality and green growth revealed

- Sectoral and annual GHG emissions reduction targets by 2030 and implementation plans are presented -
- The public hearing for the government's draft of the national plan for carbon neutrality and green growth took place –

[Overview of the National Plan for Carbon Neutrality and Green Growth]

- The legally-binding plan at the highest level (2023-2042) regarding carbon neutrality and green growth was first established.

National strategy and 2030 greenhouse gas reduction targets were set to realize the national vision for achieving carbon neutrality by 2050. GHG reduction and its implementation policies were presented to reach the specific reduction target.

[Feasible and Reasonable 2030 Greenhouse Gas Reduction Targets]

- To achieve the 2030 national GHG emissions target (an increase of 40% compared to 2018), ▲ sectoral reduction targets, including transition and industry, were reasonably adjusted, and ▲ annual reduction targets were set for the first time

【Adjusted Greenhouse Gas Emissions Reduction Targets】

(Unit: 1 million tons of CO₂e, parentheses show a decrease compared to 2018)

Classification	Sector	2030 Targets	
		Previous NDC (October 2021)	New NDC (March 2023)
Emissions	Total Emission	436.6(40.0%)	436.6(40.0%)
	Transition	149.9(44.4%)	145.9(45.9%)
	Industry	222.6(14.5%)	230.7(11.4%)
	Building	35.0(32.8%)	35.0(32.8%)
	Transportation	61.0(37.8%)	61.0(37.8%)
	Agriculture, Livestock, Fisheries	18.0(27.1%)	18.0(27.1%)
	Waste	9.1(46.8%)	9.1(46.8%)
	Hydrogen	7.6	8.4
	Carbon Leakage, etc.	3.9	3.9
	Carbon Sinks	-26.7	-26.7
Absorption · Elimination	CCUS (Carbon capture, utilization, and storage)	-10.3	-11.2
	Overseas Carbon Offset Programs	-33.5	-37.5

[Mid- to Long-term Sectoral Greenhouse Gas Reduction Policies]

□ 37 policy tasks for mid-to-long-term greenhouse gas reduction across ten sectors were designated to achieve carbon neutrality by 2050 and greenhouse gas reduction by 2030

- ① **(Transition)** ▲ Switching energy sources for decarbonization (Coal ↓, Nuclear, and renewable energies↑), ▲ Building infrastructure for renewable energy (Power grid, storage system), ▲ Increasing demand efficiency (Using ICT)
- ② **(Industry)** ▲ Securing reduction technology (Technology innovation fund, increasing subsidies and loans), ▲ Improving emissions trading scheme (benchmark↑, auctioning↑)
- ③ **(Building)** ▲ Enhancing building performance (Zero-energy buildings, green remodeling), ▲ Improve efficiency (Manage evaluations, disclose performance data)
- ④ **(Transportation)** ▲ Increasing zero-emission vehicles (Electric vehicles and hydrogen cars↑, Charging stations↑), ▲ Managing demand for zero-emission vehicles (Strengthening standards for internal combustion engine vehicles, promoting public transportation)
- ⑤ **(Agriculture, livestock, and fisheries)** ▲ Transition to a low-carbon agricultural structure (Smart farm, low-methane feed), ▲ Low-carbon fisheries and fishing vessels (LPG and hybrid fishing vessels)
- ⑥ **(Waste)** ▲ Reducing waste (rating system for resource efficiency, reduce disposable products), ▲ Circular use (high-value-added recycling)
- ⑦ **(Carbon Sinks)** ▲ Maximizing carbon sequestration and storage (Forest management), ▲ New carbon sinks (Coastal wetlands, urban forests)
- ⑧ **(Hydrogen)** ▲ Developing key technologies (Green hydrogen based on water electrolysis), ▲ Building and expanding regional hydrogen ecosystems (Hydrogen cluster, hydrogen cities)
- ⑨ **(CCUS)** ▲ Establishing an institutional foundation (Enact the CCUS law), ▲ R&D for key technologies (Secure technology and commercialize)
- ⑩ **(Overseas Carbon Offset Projects)** ▲ Establishing a foundation for implementation (Revise guidelines for businesses and sign agreements), ▲ Discover projects for reduction (Investment and purchase)

[Foundations for implementation toward a transition to a carbon-neutral society]

□ 45 policy tasks across six sectors were designated to ensure a harmonious transition to carbon neutrality across all economic and social sectors and all walks of life

- ① **(Climate Change Adaptation)** ▲ Responding to extreme weather events (Reduce the time needed to issue flood warnings), ▲ Supporting vulnerable groups (Build a healthcare and welfare safety net)
- ② **(Green Growth)** ▲ Fostering green technologies (100 key Korean technologies to achieve carbon neutrality), ▲ Growing green industries (Support the growth of new low-carbon industries)
- ③ **(Just Transition)** ▲ Supporting at-risk regions (special zones for just transition), ▲ Supporting affected groups (Job transition training for workers)
- ④ **(Local Government-led projects)** ▲ Laying regional foundations (Expand support centers for a transition toward carbon neutrality), ▲ Strengthening the capability of local governments (Build carbon neutral cities)
- ⑤ **(Human resources training and Raising Awareness)** ▲ Training talented individuals for new technology based on demand (Expand specialized graduate schools), ▲ Expanding voluntary campaigns (Provide incentives for participating campaigns)
- ⑥ **(International Cooperation)** ▲ Strengthening global leadership (Active bilateral and multilateral cooperation), ▲ Contributing to global reduction efforts (Expand green ODA)

Sejong, March 30 – On March 21, 2023, the Korean government announced the draft of the first National Plan for Carbon Neutrality and Green Growth ('23~'42) (hereinafter the National Plan) and the implementation plan to achieve the 2030 Nationally Determined Contribution (reduction of national carbon emissions by 40% of 2018 levels). The draft of the national plan has yet to be finalized and will be supplemented after collecting opinions and feedback through public hearings. The primary purpose of the national plan is to prepare reasonable implementation measures, such as sectoral and annual reduction targets and strategies, considering economic and social conditions and feasibility comprehensively to faithfully comply with the greenhouse gas reduction targets committed to the international community.

On March 22, 2023, the Presidential Commission on Carbon Neutrality and Green Growth and the

Ministry of Environment jointly held a public hearing on the first National Plan for Carbon Neutrality and Green Growth draft. The national plan is the legally-binding plan at the highest level (2023-2042) established under the enactment of the Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis (implemented in March of 2022). The national plan is the Yoon administration's blueprint containing the willingness and policy direction to implement a transition to carbon neutrality and push ahead for green growth.

Since August 2022, the national plan draft has been prepared through a total of 80 meetings with a technical workgroup composed of experts from national research institutes. Based on research and analysis, the plan went through consultation with twenty concerned authorities, such as the Ministry of Environment, the Ministry of Trade, Industry, and Energy, the Ministry of Land, Infrastructure, and Transport, and the Ministry of Science and ICT. Since November 2022, opinions from stakeholders, including officials from major industries emitting most GHG, academia, cooperatives, organizations, and local governments, have also been collected over twenty times.

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Highlights of the draft of the National Plan for Carbon Neutrality and Green Growth

<1-1 Overview of the national plan>

To realize a national vision for 'transition to a carbon neutral society and promotion of harmonious development of economy and environment' (Article 7 of the Framework Act on Carbon Neutrality and Green Growth), the national plan sets four national strategies: △ Detailed, efficient, and responsible transition to carbon neutrality, △ private-led effort for a transition to carbon neutrality and green growth, △ Transition to carbon neutrality with cooperation and sympathy, and △ proactively strive to achieve carbon neutrality, so the country can lead climate change adaptation in the international community.

The detailed measures for implementation include 82 policy tasks, including △ policies to achieve 2030 Nationally Determined Contribution, △ sectoral and annual GHG reduction targets, △ GHG reduction policies, △ climate change adaptation, △ green growth, △ just transition, △ local government-led projects, △ human resources training and raising awareness, and △ international cooperation.

<1-2 2030 Nationally Determined Contribution (2030 NDC)>

To achieve the Nationally Determined Contribution, which is to reduce national carbon emissions by 40% of 2018 levels by 2030, as stipulated in the Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis and its enforcement decree, the government has decided to switch energy sources more reasonably and established sectoral goals and implementation measures.

For energy transition, the reduction target has been raised through a more balanced mix of nuclear and renewable energy sources and by accelerating the transition to clean energy such as solar and hydrogen. For industry, the reduction goal has been eased, considering domestic conditions, such as raw material supply and technological outlooks. For CCUS, the point that increasing domestic carbon storage can increase greenhouse gas absorption was reflected. In addition, for hydrogen, it is expected that emissions can partially increase due to the increase in blue hydrogen. The reduction targets of five sectors, building, transportation, agriculture and fisheries, waste, and carbon sink, remain the same as mentioned in the submitted NDC. As an auxiliary means of domestic reduction, international offset projects, including project development and expansion of public-private partnership investments, will be flexibly utilized. Based on this, Korean companies with excellent reduction technologies will be expected to participate in offset projects.

(Unit: 1 million tons of CO₂e, parentheses show a decrease compared to 2018)

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※ Yellow areas: Changes compared to the previous NDC

<1-3. Mid- to Long-term Sectoral Greenhouse Gas Reduction Policies>

Thirty-seven policy tasks for mid-to-long-term greenhouse gas reduction across ten sectors were designated to achieve carbon neutrality by 2050 and greenhouse gas reduction by 2030. The details are as follows.

- ① **(Transition)** The government will comprehensively manage energy supply and demand by harmonizing nuclear and renewable energy.

The government will accelerate the shift to clean energy by reducing coal-fired power generation and expanding nuclear and renewable energy. It will enhance demand-side efficiency by establishing energy infrastructure, such as power grids and storage systems, and a reasonable energy pricing system based on market principles.

Future Change	[Current] Energy production based on fossil fuels → [Expected] Energy production based on new low-carbon technologies	
	Performance Indicators	▲ Nuclear energy share: (2021) 27.4% → (2030) 32.4% ▲ Renewable energy share: (2021) 7.5% → (2030) 21.6%+α

- ② **(Industry)** The government will transform toward a low-carbon economy and secure GHG reduction technologies through private-public cooperation.

In order to support the commercialization of companies' reduction technologies, the government will start technology innovation funds and expand subsidies and loans. The government will provide incentives to companies, such as increasing the benchmark-based allocation in emission trading schemes, to induce voluntary reduction activities.

Future Change	[Current] Carbon-intensive economy → [Expected] Low-carbon economy	
	Performance Indicators	▲ Benchmark-based allocation in the emissions trading scheme*: (2021) 65% → (2030) 75% * The "benchmarking" approach provides free allowance allocation to companies that perform below a set level of emissions.

- ③ **(Buildings)** The government will improve building energy efficiency by enhancing building performance and strengthening related standards.

The government will make zero-energy construction mandatory for new public buildings and support green remodeling for old private buildings. In addition, it will improve building efficiency by disclosing information on building performance.

Future Change	[Current] Buildings that consume a high volume of energy → [Expected] Enhance energy efficiency with performance enhancement	
	Performance Indicators	▲ Green remodeling (Total): (2022) 73,000 cases → (2030) 1.6 million cases ▲ Zero-energy buildings (Total): (2022) 2,950 → (2030) 47,000

④ **(Transportation)** The government will promote the green transition in all areas of mobility, on land, sea, and air.

The government will pursue a transition to low-carbon transportation by distributing electric and hydrogen vehicles, converting all diesel trains to electric trains, and securing key technologies for zero-carbon (e.g., e-methanol) ships. It will strengthen greenhouse gas and fuel efficiency standards for internal combustion engine vehicles and expand demand-responsive transportation (DRT).

Future Change	[Current] Carbon-intensive economy → [Expected] Low-carbon economy	
	Performance Indicators	▲ Benchmark-based allocation in the emissions trading scheme*: (2021) 65% → (2030) 75% * The "benchmarking" approach provides free allowance allocation to companies that perform below a set level of emissions

⑤ **(Agriculture, Livestock, and Fisheries)** The government will realize a sustainable agriculture, livestock, and fisheries industry by transitioning to a low-carbon industry.

The government will expand smart farms and develop low-carbon production technologies, agricultural machinery, and facilities for the agriculture sector. For livestock farming, the government will focus on developing low-methane feed and expanding the utilization of

livestock manure. The government will develop LPG and hybrid fishing vessels for fisheries and transform aquaculture and fish processing industries into low-carbon and smart ones.

Future Change	[Current] Greenhouse gas emissions from crop production, livestock farming, and fisheries activities → [Expected] Develop low-carbon agricultural and fisheries technologies	
	Performance Indicators	▲ Smart greenhouses/sheds: (2022) 7,076ha/6,002 → (2027) 10,000ha/11,000 ▲ Share of low-methane feed: (2022) 0% → (2030) 30%

⑥ **(Waste)** The government will complete the cycle for resource circulation in all economic and social sectors.

The government will reduce waste during the entire process from production to consumption by introducing a rating system for resource efficiency and reducing disposable products. The government will introduce a public responsibility collection system where the local government collects recyclable waste from apartments and housing complexes. It will increase high-value-added recycling, such as recycling solar panels and electric vehicle batteries.

Future Change	[Current] Increased amount of waste due to single-use products, packaging, and containers → [Expected] Reduce waste as a whole and increase the recycling rate by promoting resource recycling	
	Performance Indicators	▲ The recycling rate of waste from everyday life and companies: (2021) 56.7%/84.4% → (2030) 64%/92.5%

⑦ **(Hydrogen)** By establishing a hydrogen economy ecosystem, the government will leap forward as a leading country in clean hydrogen.

The government will demonstrate key technologies, such as green hydrogen based on water electrolysis, and establish infrastructure, such as hydrogen liquefaction plants and hydrogen

pipelines. At the same time, the government will diversify hydrogen mobility, including vehicles, ships, trams, and drones, and expand the scope of hydrogen utilization by building hydrogen clusters and cities.

Future Change	[Current] Limited use of hydrogen; ecosystem focused on grey hydrogen → [Expected] Expand the use of hydrogen, and create an ecosystem focused on clean hydrogen	
	Performance Indicators	▲ Hydrogen cars: (2022) 29,733 → (2030) 300,000 ▲ Share of clean hydrogen: (2022) 0% → (2030) 2.1%

⑧ **(Carbon Sinks)** The government will rediscover the value of forests, oceans, and wetlands as carbon sinks.

The government will strengthen forests' absorption and storage capacity through programs including circulation-style forest management and managing ocean carbon sinks by restoring coastal wetlands and expanding maritime forests. In addition, the government will build new carbon sinks by creating urban forests and planting trees on unused land.

Future Change	[Current] Two-thirds of all forests are from the 1930s and 1940s; poor restoration of mud flats → [Expected] Expand carbon sinks with circulation management and protection of forests and restoration of more mud flats	
	Performance Indicators	▲ Forest area: (2021) 210,000ha → (2030) 320,000ha ▲ Restored mudflat area (Total): (2021) 1.5km² → (2030) 10km²

⑨ **(CCUS)** The government will create new industries for the future by building infrastructure and technological innovation for CCUS.

The government will enact a CCUS law containing the CCUS industry, safety, and certification

standards. The government will begin CCS (Carbon Capture and Storage) demonstration and secure additional storage using the East Sea gas field. In addition, it will provide one-stop support from CCU technology development, testing, and commercialization.

Future Change	[Current] Lack of investment → [Expected] New CCUS industries with technological innovation	
	Performance Indicators	▲ Forest area: (2021) 210,000ha → (2030) 320,000ha ▲ Restored mudflat area (Total): (2021) 1.5km ² → (2030) 10km ²

⑩ **(Overseas Carbon Offset Programs)** The government will contribute to global emissions reduction efforts through overseas carbon offset projects.

The government will establish a foundation for implementing overseas carbon offsets projects, such as approval, acquisition, and performance management. It will develop and implement sector-specific projects cooperating with priority partner countries (agreements already signed with Vietnam and Mongolia). At the same time, it will sign an agreement with more partner countries to broaden the reach of global efforts for emissions reduction.

<1-4. Policies to Strengthen the implementation foundation to transition to a carbon-neutral Society>

Along with GHG emissions reduction policies, 45 policy tasks across six sectors were designated to ensure a harmonious transition to carbon neutrality across all economic and social sectors and all walks of life. The details are as follows.

① **(Climate Change Adaptation)** In order to realize a sustainable society that overcomes changes and crises in health, agriculture, fisheries, and the natural environment caused by abnormal weather events, the government will expand adaptive infrastructure that can preemptively respond to such climate change.

The government will respond to extreme weather by strengthening three-dimensional

monitoring systems using ground observation networks and satellites and improving flood forecasting systems. The government will establish a health and welfare safety net by reducing the burden on vulnerable groups (insulation improvement projects, goods support, etc.)

Future Change	[Current] Lack of greenhouse gas surveillance information; damage due to abnormal weather events → [Expected] Better climate change prediction and building infrastructure to reduce damage from climate risks	
	Performance Indicators	▲ Greenhouse gas surveillance spots: (2022) 5 → (2025) 14 → (2042) 111 ▲ Flood alert timing: (2021) 3 hours in advance → (2025) 6 hours in advance

② **(Green Growth)** The government will develop key green technologies and discover and foster new green industries. It will achieve carbon neutrality and green growth that ensures the coexistence of the environment and growth through policy and private financial support.

Alongside developing 100 key Korean carbon-neutral technologies, the government will set up special zones for research and development as a carbon neutrality base. The government will also foster low-carbon materials, parts, equipment, and new energy industries, such as secondary batteries and semiconductors. Furthermore, it will boost green finance, such as sustainability-linked bonds.

Future Change	[Current] Limit exports and financial support for high carbon-emitting companies → [Expected] Take the lead in the global market and expand exports with technological innovation
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③ **(Just Transition)** The government will support regions facing industry and employment risks due to the transition to carbon neutrality and establish a proactive support system for crisis-hit companies and workers.

At-risk regions will be designated as special zones for just transition and eligible for support, including consulting for business transition and human resource training. The government will develop measures to minimize losses for companies and employees affected by the industrial shift towards carbon neutrality, including minimizing company loss and worker job transition training.

Future Change	[Current] Concerns regarding the competitiveness and employment risks for existing industries due to low carbon transition policies → [Expected] Boost regions' economy and ensure stable employment with support for just transition
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④ **(Local Government-led projects)** The government will establish a bottom-up system for achieving carbon neutrality and green growth led by local governments, moving away from being led by the central government.

The following measures will strengthen the capability and foothold of local governments for a transition to carbon neutrality: local governments establishing basic plans, increasing the number of support centers for a transition toward carbon neutrality, building carbon-neutral cities, and improving the accuracy of regional greenhouse gas emission statistics. Also, the government will establish communication and cooperation channels between the central and local governments to share and expand achievements.

Future Change	[Current] Carbon neutrality and green growth policies designed and implemented by the central government → [Expected] Local governments lead the development and implementation of carbon neutrality and green growth plans	
	<table> <tr> <td data-bbox="443 1686 638 1836">Performance Indicators</td><td data-bbox="638 1686 1388 1836">▲ Metropolitan/local governments with climate change response plans: (2022) 17/20 → (2025) All</td></tr> </table>	Performance Indicators
Performance Indicators	▲ Metropolitan/local governments with climate change response plans: (2022) 17/20 → (2025) All	

⑤ **(Training Human Resources and Raising Awareness)** To prepare for the demand for

specialized workforces due to the transition in industrial structure, the government will train talented individuals and enhance public awareness to encourage voluntary participation.

The government will operate academic departments and graduate schools specializing in carbon neutrality and support the training of specialized talented individuals for future technology based on industrial demand. In addition, the government will expand nationwide campaigns, including collaboration among the public, private entities, and civil society, and encourage participation in the "carbon neutrality action point" system.

Future Change	[Current] Limited incentives for carbon reduction activities → [Expected] Expand the scope of incentives to decarbonize all daily life factors for citizens	
	Performance Indicators	▲ Number of participants in the "carbon neutrality action point" system: (2022) 260,000 → (2030) 800,000 → (2042) 1 million

⑥ **(International Cooperation)** The government will play a role as a global leader in transitioning to carbon neutrality and green growth through bilateral and multilateral cooperation, considering Korea's international standing and national interests.

The government will actively participate in international organizations such as the UNFCCC and the G20 to proactively respond to the new global order and expand green ODA for the emissions reduction efforts of developing countries.

Future Change	[Current] Lack of green investment in developing countries → [Expected] Contribute to the reduction of global greenhouse gases by expanding green investment in sectors, including infrastructure	
	Performance Indicators	▲ Share of Green ODA: (2015-2019) 19.6% → (2025) At least OECD average* * OECD average share of green ODA: (2019) 28.1%

<1-5. Financial plans>

The government plans to allocate a budget of approximately KRW 89.9 trillion over the next five years (2023-2027) to ensure the effective implementation and achievement of the national plan's policy tasks. The budget for greenhouse gas reduction projects, such as developing key technologies to achieve carbon-neutrality (industry sector), zero-energy and green remodeling (construction sector), and the subsidy for electric and hydrogen vehicles (transportation sector) is expected to be KRW 54.6 trillion over the next five years. In addition, KRW 19.4 trillion will be allocated to climate change adaptation and KRW 6.5 trillion to green industry growth over the next five years, ensuring that carbon neutrality and green growth are seamlessly pursued throughout the country's economy and society. The government will provide as much support as possible.

2

Public Hearing and Future Plans

On March 22, 2023, a public hearing was held and participated by officials from concerned ministries, including Kim Sang-hyup, the head of the Presidential Committee on Carbon Neutrality and Green Growth. The hearing was held to collect the opinions of the public. A question-and-answer session with the audience was held, along with in-depth panel discussions on the national plans by experts from industry, academia, and research institutes related to carbon neutrality and green growth. After the public hearing, the Committee made plans to conduct on-site discussions with various social groups, including young people (March 24) and civic groups (March 27), to gather enough opinions from the public. As follow-up measures, the Committee will supplement the draft of the national plan based on the opinions gathered during the discussions. After the Committee and the State Council deliberations, the final version will be confirmed and announced in April 2023.

In addition, as the basic plan is a proposal of mid- to long-term policy directions, the government plans to swiftly establish and implement detailed measures for each sector to increase the national plan's effectiveness and create tangible results.