[Translation]

The Constitutional Court of Korea

DECISION

Case No.	2020HunMa389	Constitutionality of Article 42(1)1 of the *Framework Act on Low Carbon, Green Growth*
	2021HunMa1264 (Consolidated)	Constitutionality of Article 8(1) of the *Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis*
	2022HunMa854 (Consolidated)	Constitutionality of Article 3(1) of the Enforcement Decree of the *Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis*
	2023HunMa846 (Consolidated)	Constitutionality of the *First National Framework Plan for Carbon Neutrality and Green Growth*
Complainants	As listed in [Appendix 1]	
Joint Intervenors	As listed in [Appendix 1]	
Date of Decision	August 29, 2024	

OPERATIVE PART

1. Article 8(1) of the *Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis* (as enacted by Act No. 18469 on September 24, 2021) does not conform to the Constitution. This provision shall remain in force until its amendment, with a deadline set for February 28, 2026.

2. The complaints regarding Article 3(1) of the Enforcement Decree of the *Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis* (as enacted by Presidential Decree No. 32557 on March 25, 2022), as well as "B. Sectoral Reduction Targets" and "C. Annual Reduction Targets" of "V. Mid- and Long-Term Reduction Targets" in the *First National Framework Plan for Carbon Neutrality and Green Growth* that the government established on April 11, 2023, are dismissed in their entirety.

3. Complainants' remaining complaints, as well as Joint Intervenors' applications for joint intervention in adjudication and auxiliary intervention are rejected in their entirety.

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[1] This is an unofficial translation of the decision prepared by Plan 1.5. (Contact : sejong@plan15.org)

[Translation]

REASONING

1. Case Overview

A. Case No. 2020HunMa389

(1) Complainants, born between February 15, 2001 and November 6, 2006, are members of the youth environmental organization '◯◯.'

(2) On March 13, 2020, Complainants filed this constitutional complaint, asserting that the following measures, taken in relation to setting greenhouse gas (GHG) reduction targets to address the climate crisis, infringed upon their rights to life, right to healthy environment, and the right to equality, among others: ① Article 42(1)1 of the former *Framework Act on Low Carbon, Green Growth* (hereinafter referred to as the "former *Green Growth Act"* unless otherwise specified by the relevant year), which mandates the government to establish GHG reduction targets; (2) the President's amendment of Article 25(1) of the Enforcement Decree of the former *Green Growth Act* on May 24, 2016, which amends the target for the total national GHG emissions reduction from 2020 to 2030; ③ Article 25(1) of the Enforcement Decree of the former *Green Growth Act*, as amended on December 31, 2019, which stipulates the 'target for greenhouse gas reduction' referred to in Article 42(1)1 of the former *Green Growth Act* as a 'reduction of total nationwide emissions of greenhouse gases of 2030 by 24.4 percent relative to the total greenhouse gas emissions in 2017.'

(3) Subsequently, Complainants submitted supplementary applications for the relief sought and grounds for relief, adding the following provisions to the subject matter of review: ④ on February 16, 2022, regarding Article 8(1) of the *Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis* (hereinafter referred to as the "*Carbon Neutrality Framework Act*" unless otherwise specified by the relevant year), which mandates the government to set 'a national medium- and long-term greenhouse gas emission reduction target' 'to reduce national greenhouse gas emissions by ratio prescribed by Presidential Decree to the extent of not less than 35 percent from the 2018 levels by 2030'; ⑤ on June 8, 2022, regarding Article 3(1) of the Enforcement Decree of the *Carbon Neutrality Framework Act,* which set the aforementioned provision's 'ratio prescribed by Presidential Decree' at 40 percent. Complainants asserted that each of these provisions violates the State's duty to protect fundamental rights, excessively infringes upon their fundamental rights as members of future generations, and subjects them to discriminatory treatment.

B. Case No. 2021HunMa1264

On October 12, 2021, Complainants filed this constitutional complaint, asserting that Article 8(1) of the *Carbon Neutrality Framework Act* sets a target insufficient to protect their life and safety from climate disasters, as required by internationally agreed standards, such as the Paris Agreement. They argue that the provision infringes upon their fundamental rights by failing to constitute an appropriate and effective minimum measure to protect their right to life, the right to pursue happiness, the right to general freedom of action, the right to live in a healthy and pleasant environment, the right to liberty, and the right to equality.

C. Case No. 2022HunMa854

(1) Complainants include an unborn fetus at the time of filing this constitutional complaint as well as individuals born between January 4, 2012, and March 25, 2022.

(2) On June 13, 2022, Complainants filed this constitutional complaint, asserting that Article 3(1) of the Enforcement Decree of the *Carbon Neutrality Framework Act* sets a target insufficient to protect their life and safety from climate disasters, as required by internationally agreed standards, such as the Paris Agreement. They argue that this provision infringes upon their fundamental rights by failing to constitute an appropriate and effective minimum measure to protect their right to life, the right to pursue happiness, the right to general freedom of action, the right to live in a healthy and pleasant environment, the right to equality, and the right to property.

(3) One of Complainants, who was a fetus at the time, was born on October 6, 2022, and this Complainant's name was corrected to Choi □□.

D. Case No. 2023HunMa846

(1) In accordance with Article 10 of the *Carbon Neutrality Framework Act*, the government established the *First National Framework Plan for Carbon Neutrality and Green Growth* (hereinafter referred to as the "Framework Plan"), which was finalized following reviews by the 2050 Presidential Commission on Carbon Neutrality and Green Growth on April 10, 2023, and the State Council Meeting on April 11, 2023.

(2) Under 'B. Sectoral Reduction Targets' of 'V. Mid- and Long-Term Reduction Targets' in the aforementioned framework plan, the national GHG emission volume after a 40 % reduction from 2018 levels by 2030, as set forth in Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act, is set at 436.6 million tons [tCO2-eq (tons of carbon dioxide equivalent), hereinafter the same]. This figure is based on net emissions, representing total emissions minus absorptions and removals. Additionally, sectoral emission and absorption targets for 2030 were established for emission sectors such as conversion, industry, buildings, transportation, agriculture/ livestock/fisheries, wastes, hydrogen, and fugitive emissions, as well as for absorption and removal sectors such as carbon sinks, CCUS (Carbon Capture, Utilization, and Storage), and international reductions.

(3) Under 'C. Annual Reduction Targets' of 'V. Mid- and Long-Term Reduction Targets' in the aforementioned framework plan, total net emissions and sectoral emissions for the base year of 2018 were established, along with total net emission targets and sectoral emissions and absorptions targets for each year from 2023 to 2030.

(4) Under '1. Fiscal Investment Plan' of 'VII. Fiscal Plan and Expected Benefits' in the aforementioned framework plan, a fiscal investment plan totaling at least KRW 89.9 trillion was established to support carbon neutrality and green growth from 2023 to 2027.

(5) Complainants filed this constitutional complaint on July 6, 2023, asserting that the targets set in the aforementioned framework plan are insufficient to protect their life and safety from climate disasters, as required by the standards agreed upon by the international community, such as the Paris Agreement. They argue that the plan fails to constitute appropriate and effective minimum measures required to protect their right to life, the right to pursue happiness, the right to general freedom of action, the right to equality, the right to property, and the right to live in a healthy and pleasant environment, thereby infringing upon their fundamental rights.

E. Application for Joint Intervention in Adjudication and Auxiliary Intervention

On February 15, 2024, the Constitutional Court consolidated the cases listed in sections B. through D. with Case No. 2020HunMa389, referenced in section A. Subsequently, on May 29, 2024, Applicant for Joint Intervention in Adjudication (hereinafter referred to as "Applicant") submitted an application, primarily seeking joint intervention in adjudication, and secondarily, auxiliary intervention, in the consolidated constitutional complaints in this case.

2. Subject Matters of Review

A. In Case No.2020HunMa389, Complainants identified the "President's act of abolishing the 2020 GHG reduction target" as one of the subject matters of review. Specifically, prior to its amendment on May 24, 2016, Article 25(1) of the Enforcement Decree of the former *Green Growth Act* stipulated that "the target for the reduction of greenhouse gases" under Article 42(1)1 of the former *Green Growth Act* was set to "reduce total nationwide emissions of greenhouse gases in 2020 to 30/100 of the estimated emissions of greenhouse gases in 2020." Complainants challenge the May 24, 2016 amendment, which revised this target to "reduce total nationwide emissions of greenhouse gases in 2030 by 37 percent below the estimated greenhouse gas emissions in 2030." Accordingly, the aforementioned provision of the Enforcement Decree, as amended on May 24, 2016, is specified as a subject matter of review in this case.

B. In Case No. 2023HunMa846, Complainants filed the constitutional complaint challenging the entirety of the *First National Framework Plan for Carbon Neutrality and Green Growth*, which was finalized and established by the government following deliberation and approval at the State Council Meeting on April 11, 2023. However, as the grounds for the alleged infringement of fundamental rights primarily pertain to the proportions of sector-specific reduction targets, the figures for annual reduction targets and reduction pathways, and the inadequacies of the fiscal plan, the subject matters of review are limited to those specific aspects of the aforementioned framework plan.

C. Therefore, the subject matters of review in this case are as follows: ① Article 42(1)1 of the former *Framework Act on Low Carbon, Green Growth* (enacted by Act No. 9931 on January 13, 2010, and before its repeal by Act No. 18469 on September 24, 2021); ② Article 25(1) of the Enforcement Decree of the former *Framework Act on Low Carbon, Green Growth* (amended by Presidential Decree No. 27180 on May 24, 2016, and before its amendment by Presidential Decree No. 30303 on December 31, 2019, hereinafter referred to as the "2016 Enforcement Decree of the former *Green Growth Act*"); ③ Article 25(1) of the Enforcement Decree of the former *Framework Act on Low Carbon, Green Growth* (amended by Presidential Decree No. 30303 on December 31, 2019, and before its repeal by Presidential Decree No. 32557 on March 25, 2022, hereinafter referred to as the "2019 Enforcement Decree of the former *Green Growth Act*"); ④ Article 8(1) of the Framework Act on *Carbon Neutrality and Green Growth for Coping with Climate Crisis* (enacted by Act No. 18469 on September 24, 2021); ⑤ Article 3(1) of the Enforcement Decree of the *Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis* (enacted by Presidential Decree No. 32557 on March 25, 2022); ⑥ the sections 'B. Sectoral Reduction Targets' (hereinafter referred to as the "Sectoral Reduction Targets") and 'C. Annual Reduction Targets' (hereinafter referred to as the "Annual Reduction Targets") under 'V. Mid- and Long-Term Reduction Targets' in the 'First National Framework Plan for Carbon Neutrality and Green Growth' (hereinafter referred to as the "Framework Plan"), established by the government on April 11, 2023, hereinafter collectively referred to as the "Sectoral and Annual Reduction Targets"); ⑦ the section '1. Fiscal Investment Plan' under 'VII. Fiscal Plan and Expected Benefits' of the Framework Plan (hereinafter referred to as the "Fiscal Plan," and together with ⑥, collectively referred to as the "Plan"). At issue is whether these provisions infringe upon Complainants' fundamental rights. The provisions subject to review, along with the relevant provisions, are listed below,

and the Plan is attached in [Appendix 2] Plans Subject to Review.

[Provisions Subject to Review]

The former *Framework Act on Low Carbon, Green Growth* (enacted by Act No. 9931 on January 13, 2010, and before its repeal by Act No. 18469 on September 24, 2021)

> Article 42 (Coping with Climate Change and Management of Targets for Energy) (1) The Government shall establish medium and long-term targets and the goals attached to each particular phase for the following matters and seek for measures necessary for accomplishing the targets in order to cope with the global reduction of greenhouse gases actively and to promote low carbon, green growth efficiently and systematically:
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> 1. Targets for greenhouse gas emission reduction

The Enforcement Decree of the former *Framework Act on Low Carbon, Green Growth* (amended by Presidential Decree No. 27180 on May 24, 2016, and before its amendment by Presidential Decree No. 30303 on December 31, 2019).

> Article 25 (Establishment and Management of National Target for Greenhouse Gas Emission Reduction) (1) A target for greenhouse gas emission reduction referred to in Article 42 (1) 1 of the Act shall be to reduce total nationwide emissions of greenhouse gases of 2030 by 37/100 below the estimated greenhouse gas emissions for 2030.

The Enforcement Decree of the former *Framework Act on Low Carbon, Green Growth* (amended by Presidential Decree No. 30303 on December 31, 2019, and before its repeal by Presidential Decree No. 32557 on March 25, 2022)

> Article 25 (Establishment and Management of National Target for Greenhouse Gas Emission Reduction) (1) A target for greenhouse gas reduction referred to in Article 42(1)1 of the Act shall be to reduce total nationwide emissions of greenhouse gases of 2030 by 24.4 percent relative to the total greenhouse gas emissions in 2017.

The *Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis* (enacted by Act No. 18469 on September 24, 2021)

> Article 8 (National Mid- and Long-Term Greenhouse Gas Reduction Targets) ① The Government shall set a national medium- and long-term greenhouse gas emission reduction target (hereinafter referred to as "mid-to long-term reduction target") to reduce national greenhouse gas emissions by a ratio prescribed by Presidential Decree to the extent of not less than 35 percent from the 2018 levels by 2030.

The Enforcement Decree of the *Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis* (enacted by Presidential Decree No. 32557 on March 25, 2022)

> Article 3 (National Mid- and Long-Term Greenhouse Gas Reduction Targets) ① "Ratio prescribed by Presidential Decree" in Article 8(1) of the Act means 40 percent.

[Relevant Provisions]

The former *Framework Act on Low Carbon, Green Growth* (enacted by Act No. 9931 on January 13,

2010, and before its repeal by Act No. 18469 on September 24, 2021)

Article 42 (Coping with Climate Change and Management of Targets for Energy) (1) The Government shall establish medium and long-term targets and the goals attached to each particular phase for the following matters and seek for measures necessary for accomplishing the targets in order to cope with the global reduction of greenhouse gases actively and to promote low carbon, green growth efficiently and systematically:

2. Targets for energy saving and targets for efficiency in the use of energy;

3. Targets for self-sufficiency in energy;

4. Targets for the supply of new and renewable energy.

The Enforcement Decree of the former *Framework Act on Low Carbon, Green Growth* (enacted by Presidential Decree No. 22124 on April 13, 2010, and before its amendment by Presidential Decree No. 27180 on May 24, 2016)

Article 25 (Establishment and Management of National Targets for Reduction of Greenhouse Gases) (1) The target for the reduction of greenhouse gases under Article 42 (1) 1 of the Act shall be to reduce total nationwide emissions of greenhouse gases in 2020 to 30/100 of the estimated emissions of greenhouse gases in 2020.

The Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis (enacted by Act No. 18469 on September 24, 2021)

Article 7 (National Vision and Strategy) ① The Government shall establish a national vision for transition to a carbon neutral society and promotion of harmonious development of economy and environment, with the aim of achieving carbon neutrality by 2050.

Article 8 (National Mid- and Long-Term Greenhouse Gas Reduction Targets) (2) The Government shall set a greenhouse reduction target for each sector, including industries, buildings, transportation, power generation, and waste (hereinafter referred to as "sectoral reduction target"), to achieve the mid- to long-term reduction targets.

(3) The Government shall set annual greenhouse gas emission reduction targets for the entire nation and each sector (hereinafter referred to as "annual reduction target") to achieve the mid- to long-term reduction targets and the sectoral reduction targets.

(4) The Government shall re-examine mid- to long-term reduction targets, sectoral reduction targets, and annual reduction targets (hereinafter referred to as "mid- to long-term reduction target, etc.") every five years in consideration of domestic and international conditions, such as the Paris Agreement (hereinafter referred to as the "Agreement"), and shall modify or reset such targets in accordance with the principle of progression under Article 4 of the Agreement, if necessary: Provided, That if it is necessary due to changes, etc. in social and technical conditions, the targets may be modified or reset before five years elapse.

Article 10 (Formulation and Implementation of National Framework Plan for Carbon Neutrality and Green Growth) (1) The Government shall formulate and implement a 20-year national framework plan for carbon neutrality and green growth (hereinafter referred to as "national framework plan") every five years to achieve the national vision and the mid- to long-term reduction targets, etc. in line with the basic principles under Article 3.

(2) A national framework plan shall include the following matters:

1. Matters regarding the national vision and greenhouse gas emission reduction targets;

4. Sectoral and annual measures to attain the mid- to long-term reduction targets, etc.;

10. The scale of and procurement methods of financial resources required for the transition to a carbon neutral society and promotion of green growth;

The Enforcement Decree of the *Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis* (enacted by Presidential Decree No. 32557 on March 25, 2022)

Article 3 (National Mid- and Long-Term Greenhouse Gas Reduction Targets) (2) The Minister of Environment shall exercise general supervision over and coordinate the affairs regarding the setting and modification of the national mid- to long-term greenhouse gas reduction targets, sectoral greenhouse gas reduction targets, and annual greenhouse gas reduction targets under Article 8 (1) through (3) of the Act (hereinafter referred to as "mid- to long-term greenhouse gas reduction targets, etc.").

(4) Where the Government sets, modifies, or resets the mid- to long-term greenhouse gas reduction targets, etc. pursuant to Article 8 (1) through (4) of the Act, it may take into account the greenhouse gas reduction performance achieved by utilizing carbon sinks, etc. under Article 33 (1) of the Act and the international mitigation outcomes, etc. under the main clause of Article 35 (3) of the Act.

3. Claims of Complainants and Opinions of Interested Institutions

As outlined in [Appendix 3] Complainant's Claims and Opinions of Interested Institutions.

4. Lawfulness of the Intervention Application

A. Application for Joint Intervention in Adjudication

In constitutional complaints challenging laws and regulations, where the decision must be uniformly finalized for both the complainant and a third party, the third party may intervene as a joint complainant in the case, pursuant to Article 83(1) of the Civil Procedure Act, as applied mutatis mutandis by Article 40(1) of the Constitutional Court Act. However, since a joint intervenor in adjudication participates in an ongoing case as a joint complainant rather than filing a separate constitutional complaint, the intervention application must be submitted within the filing period for the constitutional complaint (*see* Constitutional Court Decision 2021HunMa1379 rendered on September 26, 2023; Constitutional Court Decision 2023HunMa105 rendered on April 25, 2024, et al.).

Applicant's claim raises an issue related to correctional treatment in the context of climate change adaptation. However, it is difficult to regard Applicant as having a legal status that would require the outcome of this constitutional complaint, concerning GHG reduction as a climate change mitigation measure, to be uniformly finalized for them.

Furthermore, among the provisions subject to review, Article 42(1)1 of the former *Green Growth Act was* enforced on April 14, 2010; Article 25(1) of the 2016 Enforcement Decree of the former *Green Growth Act* was enforced on June 1, 2016; Article 25(1) of the 2019 Enforcement Decree of the former *Green Growth Act* was enforced on December 31, 2019; Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act were enforced on March 25, 2022, respectively [Article 1 (main clause) of the Addenda to the former *Framework Act on Low Carbon, Green Growth* (Act No. 9931, January 13, 2010), Article 1 of the Addenda to the Enforcement Decree of the same Act (Presidential Decree No. 27180, May 24, 2016), the Addenda to the Enforcement Decree of the same Act (Presidential Decree No. 30303, December 31, 2019), Article 1 (main clause) of the Addenda to the *Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis* (Act No. 18469, September 24, 2021), Article 1 (main clause) of the Addenda to the Enforcement Decree of the same Act (Presidential Decree No. 32557, March 25, 2022)], and; the

Plans Subject to Review were established and enforced on April 11, 2023. However, Applicant submitted the application for joint intervention in adjudication on May 29, 2024, more than one year after the respective filing periods for the foregoing had elapsed.

Therefore, Applicant's application for joint intervention in adjudication is unlawful.

B. Application for Auxiliary Intervention

Applicant has also, secondarily, submitted an application for auxiliary intervention. A third party with an interest in the outcome of a constitutional complaint may intervene in ongoing constitutional complaint proceedings to assist one of the parties (*see* Article 40(1) of the Constitutional Court Act, Article 71 (main clause) of the Civil Procedure Act, Constitutional Court Decision 2023HunMa105 rendered on April 25, 2024, et al.).

However, as previously noted with respect to the above application for joint intervention in adjudication, Applicant's claim pertains to correctional treatment, and it is difficult to regard Applicant as having a legal interest in the outcome of this constitutional complaint.

Therefore, Applicant's application for auxiliary intervention is also unlawful.

5. Judgment on Article 42(1)1 of the former *Green Growth Act*, and Article 25(1) of the 2016 and 2019 Enforcement Decrees of the former *Green Growth Act*

A. Interest in the Protection of Rights

If a provision of a law or regulation that is the subject of a constitutional complaint is amended after the filing of the complaint, rendering it no longer applicable to the complainant, then, in the absence of special circumstances, the complainant's subjective interest in the protection of rights by securing a ruling on the unconstitutionality of the former provision—once subject to review—ceases to exist. Consequently, such a constitutional complaint becomes unlawful (*see* Constitutional Court Decision 2007HunMa103 rendered on April 30, 2009, et al.).

Nevertheless, interest in filing a constitutional complaint may exceptionally be recognized if there is a risk of repeated infringements of fundamental rights, or if resolving the dispute is essential for maintaining and safeguarding the constitutional order, and thus, the constitutional clarification becomes significantly important (*see* Constitutional Court Decision 91HunMa44 rendered on May 25, 1995, et al.). In this case, since no constitutional clarification has been provided regarding the unconstitutionality of the former provision under review, and the amended provision contains similar content, the risk of repeated infringements of fundamental rights remains. Furthermore, if the unconstitutionality of the former provision could affect the likelihood of further amendments to the new provision, then constitutional clarification on the former provision holds significant importance, and interest in the protection of rights may thus be recognized (*see* Constitutional Court Decision 2001HunMa565 rendered on May 15, 2003, et al.).

B. Judgment

Provisions governing the establishment of GHG reduction targets pertain to national goals and plans based on future timeframes. If these reduction targets are revised and reset before those timeframes are reached, the targets that have already been abolished can no longer affect the rights of citizens, including Complainants, nor the actions of state institutions.

The 'target for greenhouse gas reduction' stipulated in Article 42(1)1 of the former *Green Growth Act*, and Article 25(1) of the 2016 and 2019 Enforcement Decrees of the former *Green Growth Act* were repealed following the enforcement of Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act, effective on March 25, 2022, respectively [Article 1

(main clause) and Article 2 of the Addenda to the *Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis* (Act No. 18469, September 24, 2021), and Article 1 (main clause) and Article 2 (2) of the Addenda to the Enforcement Decree of the same Act (Presidential Decree No. 32557, March 25, 2022)]. In accordance with Article 8(1) of the *Carbon Neutrality Framework Act*, and Article 3(1) of the Enforcement Decree of the same Act, the national mid-and long-term GHG reduction target was revised to a '40% reduction in national GHG emissions by 2030 from the 2018 levels.' As a result, there is no longer any possibility of the former provisions, now repealed, being applied to citizens, including Complainants.

Complainants argue that the GHG reduction targets stipulated in the provisions under review are inadequate. However, the GHG reduction targets set under Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act—which replaced Article 42(1)1 of the former *Green Growth Act* and Article 25(1) of the 2016 and 2019 Enforcement Decrees of the former *Green Growth Act* after their repeal—set stricter reduction target, revising the post-reduction emissions target for 2030 from 536.0 million tons to 436.6 million tons. Moreover, the method for determining these targets has evolved: instead of being established solely by Presidential Decree, they are now anchored in statute, with the law setting a minimum threshold and further specifying the target through Presidential Decree. Moreover, the legal significance of the 2030 GHG reduction target has also changed. Under the former *Green Growth Act*, it served as one of several measures intended to promote efficient and systematic low-carbon green growth (*see* Article 42 of the former *Green Growth Act*, et al.). In contrast, under the *Carbon Neutrality Framework Act*, it is positioned as an intermediate goal toward achieving the national vision of carbon neutrality by 2050 (*see* Article 7 of the *Carbon Neutrality Framework Act*, et al.). The related provisions have also undergone substantial structural changes. Therefore, even if Article 42(1)1 of the former *Green Growth Act* and Article 25(1) of the 2016 and 2019 Enforcement Decrees of the former *Green Growth Act* were found to have violated the duty to protect fundamental rights, as asserted by Complainants, the likelihood of the same grounds for unconstitutionality recurring, or of such unconstitutionality impacting future amendments to Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act, which newly set the GHG reduction target, is low. As such, it is difficult to conclude that constitutional clarification on this matter holds significant meaning.

Therefore, the portion of this constitutional complaint concerning Article 42(1)1 of the former *Green Growth Act*, and Article 25(1) of the 2016 and 2019 Enforcement Decrees of the former *Green Growth Act* is deemed unlawful due to the cessation of the subjective interest in the protection of rights, and the lack of necessity for further constitutional clarification.

6. Judgment on the Fiscal Plan

A. Whether a Budget is Recognized as an Exercise of Public Authority

A budget, while a type of legal norm established through passage by the National Assembly like a law, binds only state institutions and does not directly bind the general public. Even if a budget impacts the fundamental rights of citizens through the government's fiscal actions, such effects arise from the government's specific execution of those actions based on related laws, not from the budget itself or the resolution concerning the budget bill. Therefore, the National Assembly's approval of the budget or the resolution of the budget bill does not constitute an 'exercise of public authority' as stipulated in Article 68(1) of the Constitutional Court Act and thus cannot be the subject of a constitutional complaint (*see* Constitutional Court Decision 2006HunMa409 rendered on April 25, 2006).

B. Judgment

The Fiscal Plan forms part of 'Scale of Financial Resources and Financing Plans for Transitioning to Carbon-Neutral Society and Promoting Green Growth'—a required component of the National

Framework Plan for Carbon Neutrality and Green Growth, as stipulated under Article 10(2)10 of the *Carbon Neutrality Framework Act.* Essentially, it outlines the State's mid- to long-term investment plan, stating, "specific investment plans may be subject to changes based on fiscal conditions, project feasibility, and other factors," with implementation being based on the government's annual budget, which is subject to approval by the National Assembly.

Therefore, the Fiscal Plan, which merely sets a mid- to long-term plan for the budget, which is a legal norm established by the government and approved by the National Assembly, cannot be regarded as an exercise of public authority directly affecting the fundamental rights of citizens. Accordingly, it cannot be the subject of a constitutional complaint.

As such, the portion of the constitutional complaint of this case concerning the Fiscal Plan is deemed unlawful.

7. Judgment on Article 8(1) of the *Carbon Neutrality Framework Act*, Article 3(1) of the Enforcement Decree of the same Act, and the Sectoral and Annual Reduction Targets

A. Issues in This Case

(1) Fundamental Rights Alleged to be Infringed

(A) Article 8(1) of the *Carbon Neutrality Framework Act*, and Article 3(1) of the Enforcement Decree of the same Act are the provisions that establish the 'national medium- and long-term greenhouse gas emission reduction target' (hereinafter referred to as the 'Mid- to Long-Term Reduction Target"), which aims to 'reduce national greenhouse gas emissions by 40 percent from the 2018 levels by 2030.' Additionally, the Sectoral and Annual Reduction Targets are administrative plans established by the government pursuant to Article 8(2) and Article 8(3) of the *Carbon Neutrality Framework Act*, setting specific targets for nationwide total GHG emissions and absorptions by sector and year to achieve the Mid-to Long-Term Reduction Target.

In particular, the Sectoral and Annual Reduction Targets, as administrative plans, represent the 'State's actions in setting GHG reduction targets, which are measures aimed at addressing the risk situation posed by the climate crisis,' as will be discussed below. From the perspective of the State's duty to protect fundamental rights, these targets directly impact citizens' fundamental rights, including their right to healthy environment. Moreover, supported by the *Carbon Neutrality Framework Act* and relevant laws, these targets are expected to be implemented through specific and individualized GHG reduction measures. Therefore, they qualify as an exercise of public authority, which can be subject to review in a constitutional complaint (*see* Constitutional Court Decision 92HunMa68 rendered on October 1, 1992; Constitutional Court Decision 2021HunMa271 rendered on December 22, 2022). Meanwhile, it is difficult for citizens to rely on other procedures, such as administrative litigation, to challenge related plans or individual policies on the grounds of inadequacy in the GHG reduction targets established by laws or administrative plans (*see* Seoul Administrative Court Decision 2023GuHap59001 rendered on January 25, 2024).

The risks of the climate crisis that the State seeks to address by setting GHG reduction targets through laws and administrative plans encompass the harm resulting from phenomena caused by climate change including extreme weather events, water scarcity, food shortages, ocean acidification, sea level rise, and ecosystem collapse (*see* Article 2, subparagraph 2 of the *Carbon Neutrality Framework Act*). These risks threaten not only the life, physical safety, and health of citizens but also the natural and living environments, either in whole or in part. Therefore, the fundamental right most closely related to these provisions and plans, and the right citizens must be protected from such risks, is the right to healthy environment. In this case, the key issue is whether the GHG reduction targets set by the aforementioned provisions and plans infringe upon Complainants' right to healthy environment.

Complainants argue that the GHG reduction targets set by the aforementioned provisions and plans

excessively shift the burden of reduction, which should be borne by the current generation, onto future generations, thereby infringing upon the freedoms of the future generations in violation of the principle of proportionality, as well as their right to equality. As will be discussed later, this argument is based on the premise of the risk situation of the climate crisis and the characteristics of protective measures taken in response thereto, which eventually asserts to the effect that the State has violated its duty to endeavor to 'protect the environment" as stipulated in Article 35(1) of the Constitution. Therefore, this matter will be reviewed within the scope of determining whether there has been an infringement of right to healthy environment.

(B) Complainants assert that the aforementioned provisions and plans infringe not only on their 'right to live in a healthy and pleasant environment' but also on their 'right to life, right to pursue happiness, right to resist extinction, as well as broad rights to freedom, including freedom of the body, freedom to choose a residence and move, freedom to choose an occupation, and freedom of housing, along with their right to lead a dignified life as human being.

However, the risks of environmental degradation caused by the climate crisis include threats to life and physical safety. Given that the right to pursue happiness serves as a supplementary right to other fundamental rights, Complainants' assertion that various freedoms and rights are being infringed upon essentially means that the climate change-induced degradation of the environment, which serves as the foundation of life, ultimately threatens to infringe upon these various freedoms and rights. Therefore, as the Court reviews whether the right to healthy environment—most closely related to the provisions and plans under review—are infringed upon, no separate judgement will be made regarding the alleged infringements of the right to life, the right to pursue happiness, and other rights claimed by Complainants.

(2) Review Criteria Regarding Infringement of Right to healthy environment

(A) Constitutional Guarantee of the Right to Live in a Healthy and Pleasant Environment

The Constitution states, "All citizens shall have the right to a healthy and pleasant environment. The State and all citizens shall endeavor to protect the environment" (Article 35(1)). This provision not only guarantees citizens' right to healthy environment but also imposes on the State the obligation to strive to maintain a favorable environment in which citizens can live healthily and pleasantly. Right to healthy environment serve as a fundamental basis for protecting the rights to life and physical safety, with the ultimate aim of ensuring a "quality of life."

When exercising the right to healthy environment, citizens can invoke the right to be free from State interference in their enjoyment of healthy and pleasant environment. In certain circumstances, they may also assert the right to demand that the State ensure that they can live in a healthy and pleasant environment. As such, right to healthy environment possess a comprehensive character as a fundamental right in their own right.

Though the substance and exercise of right to healthy environment are to be determined by law (Article 35(2) of the Constitution), the intent of this constitutional provision is for the Legislature to give concrete content to the right to healthy environment explicitly stipulated in the Constitution through laws that align with its purpose. It does not imply that absence of legislation is permitted even in situations where right to healthy environment could become completely meaningless, nor does it suggest that simply enacting any legislation, regardless of its substance, would suffice. Therefore, when certain requirements are met, and the absence or significant insufficiency of legislation protecting right to healthy environment results in an infringement of citizens' right to healthy environment, it is appropriate to seek relief from the Constitutional Court (*see* Constitutional Court Decision 2018HunMa730 rendered on December 27, 2019; Constitutional Court Decision 2017HunMa1281 rendered on March 26, 2020).

(B) State's Duty to Guarantee the Right to Live in a Healthy and Pleasant Environment

According to Article 10 of the Constitution, it is the duty of the State to affirm and guarantee the

fundamental and inviolable human rights of individuals. Given that fundamental rights are part of the objective order of values within the community, the State is also obligated to actively protect these rights, particularly when, at least, critical legal interests concerning fundamental rights, such as the protection of life and physical safety, are infringed upon. This duty applies even when the infringement is caused by private individuals rather than the State.

If that is the case, the State's duty to actively guarantee the fundamental rights of its citizens is recognized. Article 35(1) of the Constitution imposes a duty on the State and citizens to endeavor to protect the environment. Environmental infringements, often caused by private individuals, necessitate legislative measures to define acceptable boundaries. Moreover, environmental damage can lead to infringement of key legal interests related to fundamental rights, such as the protection of life and physical safety. In light of the foregoing, the State, in certain cases, bears a duty to actively take measures to protect fundamental rights, even when citizens' right to healthy environment are infringed by private individuals (*see* Constitutional Court Decision 2018HunMa730 rendered on December 27, 2019; Constitutional Court Decision 2017HunMa1281 rendered on March 26, 2020).

The 'right to live in a healthy and pleasant environment,' as guaranteed under the right to healthy environment, encompasses not only the protection of the natural environment but also of the living environment, including artificial surroundings (*see* Constitutional Court Decision 2018HunMa730 rendered on December 27, 2019; Constitutional Court Decision 2017HunMa1281 rendered on March 26, 2020).

Furthermore, the duty of the State and citizens to strive for the 'environmental conservation' includes the obligation to protect both the natural and living environments from pollution and damage, to restore any polluted or damaged environment, and to maintain and create more pleasant environmental conditions, among other responsibilities (Article 3, subparagraph 6 of the *Framework Act on Environmental Policy*).

This duty also encompasses the State's obligation to address the nation's climate crisis by either mitigating climate change by reducing its causes, or adapting to its consequences, in relation to the risks posed by climate change which degrades the various environments that serve as the foundation of life and threaten life and physical safety, among other critical concerns.

(C) Principle of Prohibition Against Insufficient Protection

1) Although the State has the obligation to protect citizens' right to live in a healthy and pleasant environment, the manner in which this obligation to protect fundamental rights is fulfilled by the Legislature, or the Executive delegated by the Legislature, falls under the responsibility of the Legislature or the Executive. This is because they derive direct democratic legitimacy from citizens and bear political responsibility for their decisions, in line with the principle of separation of powers and democracy. The Constitutional Court can only review the fulfillment of this protective duty by the Legislature or the Executive in a limited capacity.

Therefore, when the Constitutional Court reviews whether the State has failed to fulfill its duty to protect the right to live in a healthy and pleasant environment, it must assess whether the State has at least taken minimum protective measures that are appropriate and effective, in accordance with the "principle of prohibition against insufficient protection" (*See* Constitutional Court Decision 2008HunMa419 rendered on December 26, 2008, Constitutional Court Decision 2012HunMa89 rendered on October 21, 2015, Constitutional Court Decision 2012HunMa121 rendered on October 27, 2016, Constitutional Court Decision 2018HunMa730 rendered on December 27, 2019, Constitutional Court Decision 2017HunMa1281 rendered on March 26, 2020, et al.).

It is not possible to define, in general and uniform terms, the cases that fall short of meeting the principle of prohibition against insufficient protection. Such determinations must be made based on the specific case, by comparing and weighing factors such as the type of the legal interest involved, its standing

within the constitutional order, the nature and extent of the infringement or risk to that legal interest, and the significance of competing legal interests (*See* Constitutional Court Decision 2018HunMa730 rendered on December 27, 2019).

Whether the principle of prohibition against insufficient protection is violated in a specific case is determined by whether the substance of the 'protective measure' responding to the 'risk situation' calling for protection due to foreseeable infringement of fundamental rights has the required minimum characteristics as a protective measure that appropriately correspond to the characteristics of the risk situation at issue. When such determination falls within a technical field of expertise or has an international aspect, the characteristics of the risk situation, etc., shall be objectively examined based on 'scientific facts' and 'international standards' (*See* Constitutional Court Decision 2008HunMa419 rendered on December 26, 2008, Constitutional Court Decision 2012HunMa38 rendered on April 30, 2015, and Constitutional Court Decision 2012HunMa89 rendered on October 21, 2015, et al.).

2) Paragraph 8(1) of the *Carbon Neutrality Framework Act*, Article 3(1) of the Enforcement Decree of the same Act, and the Sectoral and Annual Reduction Targets, which establish the national GHG reduction targets, are part of the State's efforts to reduce GHG emissions that contribute to the climate change. These measures constitute protective measures in response to the specific risk situations posed by climate change, which threaten the life and physical safety of citizens, including Complainants, while also degrading the environment, the essential foundation of human life.

Climate change, driven by GHG emissions resulting from human activities and their accumulation in the atmosphere, triggers irreversible changes in the natural climate system. Therefore, addressing this issue requires responses grounded in specialized and scientific forecasts and analyses. Given that the climate crisis is a global challenge facing all of humanity, international cooperation is essential for implementing effective measures to combat it.

The Intergovernmental Panel on Climate Change (IPCC), established in November 1988, is an international organization created under the joint auspices of the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) under the UN. The IPCC's mission is to address global environmental challenges related to climate change. It is a governmental body composed of more than 3,000 experts, including meteorologists, oceanographers, glaciologists, and economists, from 195 member countries, including Korea. The IPCC produces comprehensive assessment reports every 5 to 7 years, analyzing climate change trends, identifying the causes, assessing the ecological and socioeconomic impacts, and evaluating response strategies. These reports serve as foundational materials for climate-related research, policymaking and international negotiations.

Meanwhile, multilateral treaties to which Korea has also signed, ratified, and therefore taken effect—such as the United Nations Framework Convention on Climate Change (Treaty No. 1213, effective March 21, 1994; hereinafter the "UNFCCC"), the Kyoto Protocol to the United Nations Framework Convention on Climate Change (Treaty No. 1706, effective February 16, 2005; hereinafter the "Kyoto Protocol"), and the Paris Agreement (Treaty No. 2315, effective December 3, 2016; hereinafter the "Paris Agreement"), etc.—set forth the detailed international efforts to combat climate change.

3) At issue in this case is whether Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act, which establish the Mid- to Long-Term Reduction Target, along with the Sectoral and Annual Reduction Targets, which set sectoral and annual emissions and absorption targets aimed at the achievement thereof, violate the principle of prohibition against insufficient protection in relation to the duty to protect fundamental rights, including right to healthy environment. To assess this, it is crucial to objectively examine the nature of the risk situations referred to as the climate crisis, as well as the required characteristics of protective measures setting national GHG reduction targets in response thereto, based on scientific analyses and forecasts outlined in IPCC reports and international standards for climate actions, as established by the Paris Agreement, among others.

(D) Principle of Statutory Reservation

1) The Constitution establishes the rule of law as one of its fundamental principles, with the principle of statutory reservation at its core. This principle requires that administrative actions be grounded in formal laws enacted by the National Assembly. Moreover, the contemporary understanding of the principle of statutory reservation extends beyond merely requiring a legal basis for administrative actions. In matters of fundamental significance to the national community and its members—particularly those concerning the realization of citizens' fundamental rights—such decisions should not be left to the discretion of the Executive, but instead, they must be determined by the Legislature, as the representative of the people, which is responsible for deciding on essential matters, namely, the principle of parliamentary reservation. The determination of which matters the legislature must regulate through formal laws cannot be uniformly defined; rather, it must be made on a case-by-case basis, taking into account the significance of the interests or values at stake, as well as the degree and manner of regulation or infringements, among others. However, when restricting, the freedoms or rights of citizens guaranteed by the Constitution, at least, insofar as the matter concerns the essential aspects of such restrictions, the legislature must directly regulate them through law (*see* Constitutional Court Decision 98HunBa70 rendered on May 27, 1999, et al.).

Meanwhile, the legislative process in the National Assembly involves making critical decisions for the community through open discussions within a diverse body representing the people. This process allows for the recognition and mediation of various public opinions and interests. By enabling criticism and participation from the general public and opposing parties, the legislative process is deemed more democratic and better suited for discovering the public interest and fairly balancing competing interests compared to administrative rulemaking carried out solely by professional bureaucrats. Furthermore, the legislative process is more democratic. From this perspective, the greater the fundamental importance of the subject being regulated, and the more necessary public debate or the compromise among competing interests becomes, the stronger the need for direct regulation by the National Assembly through legislation. Additionally, the level of regulatory detail required should also be heightened (*see* Constitutional Court Decisions 2001HunMa882 rendered on March 25, 2004, and 2007HunBa63 rendered on October 29, 2009, et al.).

2) Article 37(2) of the Constitution stipulates the general principle of statutory reservation concerning the restriction of fundamental rights, while Article 35(2) of the Constitution provides that "the substance and exercise of the environmental right shall be determined by law." In this light, the extent to which the specific content and level of protection measures related to right to healthy environment must be regulated by law could raise questions regarding statutory or parliamentary reservation. Therefore, when reviewing whether Complainants' right to healthy environment have been infringed, the issue of whether there has been a violation of the principle of statutory reservation, including the question of parliamentary reservation, must also be considered within the scope of the State's duty to protect fundamental rights.

3) Complainants argue that Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act also violate the principle of prohibition against blanket delegation. Specifically, they assert that essential matters, such as setting reduction pathway to achieve GHG reduction targets, are not directly regulated by law but are delegated to subordinate regulations. However, this argument is essentially not different from their claim regarding the violation of the principle of parliamentary reservation.

Article 8(1) of the *Carbon Neutrality Framework Act* delegates only the determination of the 2030 emission reduction target to the Presidential Decree, which is limited to a specific percentage of not less than 35% from the 2018 levels of national GHG emissions. It does not delegate the regulation of reduction pathways, among other matters, for the periods 2018–2030 and 2031–2049, to the Presidential Decree. When limited to the portions delegated to the Presidential Decree, Complainants argue that setting 35% as the minimum reduction threshold relative to the 2018 levels is excessively low. This issue, however, falls under the question of principle of prohibition against insufficient protection. Therefore, the question of whether the provisions violate the principle of prohibition against blanket delegation is not separately assessed in this case.

Similarly, the claim regarding the violation of the principle of statutory reservation or the principle of prohibition against blanket delegation concerning Article 3(1) of the Enforcement Decree of the *Carbon Neutrality Framework Act*, which sets the reduction rate at 40%, as delegated under Article 8(1) of the same Act, is substantively the same as the claim regarding the violation of the principle of prohibition against insufficient protection. Therefore, no separate judgment will be made on this issue.

(3) Nature of Risk Situations, Protective Measures, and Standard of Review

(A) Climate Crisis as Risk Situation

1) It is a well-established scientific fact that GHG emissions from human activities are a primary cause of global warming, a point consistently highlighted in the IPCC's reports and other sources.

GHGs emitted through human activities, such as the use of fossil fuels, are not fully absorbed by the natural climate system, leaving a portion to continuously accumulate in the atmosphere. This accumulation increases the total concentration of atmospheric GHGs, which in turn raises the Earth's temperature due to the greenhouse effect. According to the IPCC's Sixth Assessment Report, including the summary of the synthesis report approved on March 19, 2023, the global surface temperature during the period from 2011 to 2020 was approximately 1.09°C higher than the pre-industrial level of 1850 to 1900. Additionally, it is estimated that human activities contribute approximately 0.45°C of warming for every 1,000 $GtCO_2$ of GHGs emitted.

This global warming has triggered irreversible shifts in the climate system, moving beyond the scope of natural climate variability and deviating from the average state. Climate change results in extreme weather events, including heatwaves, droughts, floods, as well as water scarcity, food shortages, ocean acidification, rising sea levels, and the collapse of ecosystems worldwide. As global warming intensifies, the negative impacts of climate change, such as threats to human life and health and the degradation of both natural and human environments, are becoming increasingly severe and widespread.

In particular, it is not unlikely that as global temperature rises reach critical thresholds, the consequences of climate change could manifest abruptly and irreversibly. For instance, large-scale melting of ice sheets could cause sea levels to rise by several meters abruptly, or changes in ocean currents could drastically alter the climate in affected regions.

To address the negative effects of climate change, both 'mitigation'—focused on reducing GHG emissions, the primary driver of global warming—and 'adaptation,' aimed at mitigating or preventing damage based on the premise of changed climate, are necessary. However, as global warming intensifies, adaptation efforts become increasingly challenging and costly. Therefore, it is crucial to reduce human-induced GHG emissions to slow the pace of global warming, the primary cause of the climate crisis.

2) The effects of GHG emissions on the climate system, the resulting risks of climate change, and the impact of GHG reductions are inherently global in nature. Therefore, efforts to reduce GHG emissions are guided by international agreements, such as treaties, which serve as frameworks for coordinated actions.

Korea, like many other nations, is experiencing the effects of climate change, marked by rising average temperatures, sea temperatures, and sea levels. There is also a noticeable trend of longer summers, shorter winters, and more frequent extreme weather events, including typhoons, heat waves, and heavy snowfalls. According to reports like the "2021 GHG Reduction Implementation Assessment" by the Greenhouse Gas Information Center (published in December 2022), Korea saw an increase in GHG emissions until 2018, with its per capita emissions reaching approximately 13.1 tons in 2021. This indicates that Korea is not an exception in terms of responsibility for climate change due to its GHG emissions.

Meanwhile, multilateral treaties forming the so-called UN climate regime, to which Korea has also singed, ratified, and has taken effect—such as the UNFCCC, the Kyoto Protocol, and the Paris Agreement—are international legal frameworks regarding climate change.

3) Given the scientific fact that the levels of atmospheric accumulation of GHGs emitted from human activities determine the rise in the global average temperature, the effects of climate change caused by GHG missions are inherently 'irreversible,' meaning they cannot be undone once GHGs are released. Therefore, the longer efforts to reduce GHG emissions are delayed, the greater the risks posed by climate change and the higher the burden of adaptation measures needed to address its consequences. As a result, an 'urgent necessity' is recognized for reducing GHG emissions. To limit the rise in global temperatures to a specific level, GHG emissions must be reduced to the point where emissions and absorption are balanced, preventing further accumulation in the atmosphere.

The State's establishment of GHG reduction targets and their implementation serves as protective measures to protect the environment in the face of the risk situations referred to as the climate crisis. However, it also entails restrictions on citizens' freedoms, including the freedom of occupation, the exercise of property rights, as they involve restricting or requiring changes to economic activities and lifestyles that produce GHG emissions, such as the use of fossil fuels. Furthermore, this could lead to structural changes across industries and everyday life of its citizens, with the imposition of broad and diverse restrictions on land use, development, and conservation. Since global temperature rise is proportional to the cumulative amount of GHGs in the atmosphere, rather than the level of GHG emissions at any given moment, delayed efforts to reduce emissions could lead to greater burdens of restricting economic activities and lifestyles that emit GHGs, which are also linked to the conservation of the living environment.

(B) Establishment of GHG Reduction Targets as a Protective Measure

To prevent the severe consequences of climate crisis, both GHG reduction to mitigate or delay the climate change, and adaptation measures to minimize the consequences and effects from the climate change, are necessary (*see* Articles 1 and Article 2, subparagraphs 7 and 11 of the *Carbon Neutrality Framework Act*). As global warming intensifies, the difficulties of adaptation measures increase, and an increasing number of areas reach the limits of adaptation. Therefore, the internationally agreed temperature targets aimed at limiting global temperature rise hold significant importance in setting GHG reduction targets as protective measures against the climate crisis.

Article 2(1)(a) of the Paris Agreement sets global temperature goal to stop the global warming by stipulating, "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change."

Furthermore, Article 4(1) of the Paris Agreement specifies that, "in order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty."

Article 3, subparagraph 8 of the *Carbon Neutrality Framework Act* provides, "it shall aggressively participate in the efforts of the international community to hold the rise in the global average temperature to below 1.5 degrees Celsius above pre-industrial levels, based on the recognition that the climate crisis is a common challenge for humanity," thereby stipulating it as a basic principle in this regard. Article 2, paragraph 3 of the *Carbon Neutrality Framework Act* defines 'carbon neutrality' as 'a state where greenhouse gas emitted, released, or leaked out into the atmosphere are offset by greenhouse gas absorption and the net emission becomes zero.' Article 3, paragraph 4 of the same Act defines the term 'carbon neutral society' means a 'society in which people lower or eliminate dependence on fossil fuels and lay the foundation for finance, technology, system, etc. for adaptation to climate crisis and just transition to smoothly achieve carbon neutrality and prevent and minimize damage and adverse effects that may arise in the process.' Based on these, Article 7(1) of the *Carbon Neutrality Framework Act* prescribes that "The Government shall establish a national vision for transition to a carbon neutral

society and promotion of harmonious development of economy and environment, with the aim of achieving carbon neutrality by 2050."

Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act are based on the principle of contributing to the international community's efforts to limit the global average temperature rise to a maximum of 1.5°C above pre-industrial levels, as stipulated in the Paris Agreement. They are further grounded on the objective of achieving 'carbon neutrality by 2050,' as set forth in Article 7(1) of the *Carbon Neutrality Framework Act*, which aims to strike a balance between anthropogenic emissions from sources and removals by carbon sinks of GHG by the second half of this century. Accordingly, based on the premise of continuously reducing GHG emissions from the peak level reached in 2018 until the target year of 2050 for carbon neutrality, the mid- to long-term reduction target for 2030 has been established.

2) Climate change is a global issue in both its causes and impacts. As no nation can claim to bear absolutely no responsibility for contributing to the climate crisis, no nation can avoid its own share of responsibility merely by pointing out other countries' GHG emissions.

At the same time, climate change involves elements of disparity depending on factors such as nation, region, class, age, and gender. When limited to issues among nations, developed countries bear greater responsibility for GHG emissions, while the damages caused by climate change disproportionately affect developing countries, which have weaker adaptation capabilities. Furthermore, the scale and nature of these impacts vary according to each nation's geographical conditions. In terms of technological, economic, and industrial capacity to reduce GHG emissions, developing countries are more vulnerable compared to developed nations, and their geographic conditions related to reduction capabilities also vary across countries.

The Paris Agreement establishes a framework in which both developed and developing countries alike participate in efforts to reduce GHG emissions. Article 2(2) of the Paris Agreement sets forth the principle that 'this Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.' To this end, Article 3 and Article 4 of the Paris Agreement require all Parties to prepare, communicate, maintain, and implement their own Nationally Determined Contributions (NDCs).

Specifically, Article 4 of the Paris Agreement stipulates that "Each Party shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions (Paragraph 2)," "Each Party's successive nationally determined contribution will represent a progression beyond the Party's then current nationally determined contribution and reflect its highest possible ambition, reflecting its common but differentiated responsibilities and respective capabilities, in the light of different national circumstances (Paragraph 3)," "Each Party shall communicate a nationally determined contribution every five years in accordance with decision 1/CP.21 and any relevant decisions of the Conference of the Parties serving as the meeting of the Parties to this Agreement and be informed by the outcomes of the global stocktake referred to in Article 14. (Paragraph 9)." Additionally, Article 14 of the Paris Agreement stipulates that the Conference of the Parties serving as the meeting of the Parties to this Agreement shall periodically take stock of the implementation of this Agreement to assess the collective progress towards achieving the purpose of this Agreement and its long-term goals, referred to as the "Global Stocktake".

The target of 40% reduction in national GHG emissions relative to 2018 levels by 2030, stipulated as the Mid- to Long-Term Reduction Target in Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act, constitutes a core element of Korea's 'Nationally Determined Contributions (NDC),' which was submitted to and registered with the UNFCCC Secretariat in December 2021, in accordance with the criteria outlined in the Paris Agreement.

The Sectoral Reduction Targets were established by the government under Article 8(2) of the *Carbon Neutrality Framework Act* to achieve the Mid- to Long-Term Reduction Target by 2030, as described

above, covering sectors such as industry, buildings, transportation, power generation, and waste (hereinafter referred to as the "Sectoral Reduction Targets"). Similarly, the Annual Reduction Targets were set by the government under Article 8(3) of the *Carbon Neutrality Framework Act* to achieve the Mid- to Long-Term Reduction Target and the Sectoral Reduction Targets, as described above, specifying the "annual greenhouse gas reduction targets" (hereinafter referred to as the "Annual Reduction Targets") for the country as a whole and for each sector. Therefore, the Sectoral and Annual Reduction Targets constitute “domestic mitigation measures” pursued to achieve the objectives of Korea’s NDC, as outlined in Article 4(2) of the Paris Agreement.

Article 8(4) of the *Carbon Neutrality Framework Act* provides that, “the Government shall re-examine mid- to long-term reduction targets, sectoral reduction targets, and annual reduction targets (hereinafter referred to as "Mid- to Long-Term Reduction Target, etc.") every five years in light of domestic and international conditions, such as the Paris Agreement (hereinafter referred to as the "Agreement"), and shall modify or reset such targets in accordance with the principle of progression under Article 4 of the Agreement, if necessary: Provided, That if it is necessary due to changes, etc. in social and technical conditions, the targets may be modified or reset before five years elapse.” This codifies a structure that continuously strengthens efforts to reduce GHG emissions in accordance with the principle stipulated in Article 4(3) of the Paris Agreement, which states that each Party’s ‘successive nationally determined contribution will represent a progression beyond the Party’s then current nationally determined contribution’ (hereinafter the “Principle of Progression”), while also adhering to the procedures of the ‘global stocktake’ under Article 4(9) and Article 14 of the Paris Agreement.

(C) Review Standards in this Case

1) Article 35(1) of the Constitution stipulates that “All citizens shall have the right to a healthy and pleasant environment. The State and all citizens shall endeavor to protect the environment.” Additionally, Article 34(6) provides that “The State shall endeavor to prevent disasters and to protect citizens from harm therefrom.” The damage caused to citizens' lives, health, and property due to extreme weather events, water scarcity, food shortages, ocean acidification, sea level rise, and ecosystem collapse—triggered by climate change—also carries the characteristics of a disaster or calamity. The State’s efforts to set and implement goals and plans for reducing GHG emissions in response to the climate crisis are not only efforts to protect the environment under Article 35(1) of the Constitution, but also efforts to prevent disasters under Article 34(6) thereof. These efforts constitute a constitutional duty of the State.

However, the right to healthy environment is often referred to as third-generation human rights, which require guarantees through international solidarity. The risk situation posed by the climate crisis is a prime example of such area calling for global solidarity in response. If a country neglects its GHG reduction efforts, claiming the difficulty of addressing the global climate crisis solely through its own measures, or pointing to the insufficient efforts of other nations, this would result in inadequate GHG reduction efforts across all countries, ultimately leading to the failure of global emission reduction efforts, making it impossible to effectively safeguard right to healthy environment. Conversely, if each country makes its best efforts to reduce GHG emissions, fostering mutual reduction efforts rather than avoidance, the global response to the climate crisis would effectively safeguard the right to healthy environment.

Therefore, in interpreting the right to healthy environment under the Constitution, international standards can be taken into account. In this context, when the State sets GHG reduction targets in response to the climate crisis, it is essential to ensure that the nation’s contribution to global GHG reduction efforts corresponds to its share.

2) Article 35(1) of the Constitution stipulates that not only the State but also the people shall endeavor to “protect the environment." Additionally, Article 122 of the Constitution provides that “The State may impose, under the conditions prescribed by Act, restrictions or obligations necessary for the efficient and balanced utilization, development, and preservation of the land of the nation, which is the basis for the productive activities and daily lives of all citizens.” The concept of ‘protecting’ the

environment under Article 35(1) of the Constitution includes maintaining environmental conditions that serve as the foundation for production and daily life, without causing harm, even in the future.

In particular, the scientific fact that the rise in global average temperatures—a major driver of climate change—is closely proportional to the accumulation of GHG in the atmosphere means that insufficient efforts to reduce GHG emissions today will proportionately exacerbate the burden in the future, both in terms of heightened exposure to the negative consequences of climate change and the stricter restrictions on economic activities and lifestyles required to mitigate GHG emissions. This is a crucial characteristic of the risk situation posed by the climate crisis.

The preamble of the Constitution expresses the commitment "to ensure security, liberty, and happiness for ourselves and our posterity forever." In this regard, when the State takes protective measures in response to the risk situation posed by the climate crisis, it is essential to prevent excessive burdens from being shifted to the future. This is not only necessary to protect the liberty of future citizens but also to guarantee equal protection of fundamental rights between current and future generations. Accordingly, Article 3, subparagraph 1 of the *Carbon Neutrality Framework Act* also stipulates that one of the basic principles for achieving carbon neutrality and promoting green growth is that "It shall be based on the principle of intergenerational equality, whereby the current generation is responsible for ensuring the survival of future generations, and the principle of sustainable development."

Therefore, when the State sets and implements GHG reduction targets in response to the climate crisis, it is constitutionally required to consider its responsibility for environmental conditions of the future. Given that GHG reduction must continue until emissions and absorptions are balanced, it is essential, when setting the national goals and plans for reducing GHG emissions, to ensure that no excessive burdens are shifted to the future in terms of the effects of climate change and the restrictions on GHG emissions.

3) As a mitigation measure against the climate crisis, the State's establishment of GHG reduction targets aims to reduce the amount of GHGs emitted and accumulated in the atmosphere by ensuring that the State and citizens make efforts across all sectors of production and daily life to achieve these targets. Therefore, the system for setting reduction targets must be institutionalized in a way that can effectively reduce GHG emissions.

In this regard, issues may arise concerning the mid- to long-term timeline for quantitative reduction targets, the regulations governing cases where post-reduction emission targets are not met, and the effectiveness of the legal frameworks regulating mitigation measures against the climate crisis.

4) Whether the Mid- and Long-Term Reduction Target set by Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act, as well as the Sectoral and Annual Reduction Targets, violate the principle of prohibition against insufficient protection depends on whether they possess the minimum characteristics required as protective measures that correspond to the characteristics of the risk situation posed by the climate crisis.

In this context, as discussed earlier, it should be assessed whether the specific reduction targets align with Korea's share of contribution it ought to bear in light of the global reduction efforts; whether the framework for setting these reduction targets is designed to prevent excessive burdens from being shifted to the future in terms of the effects of climate change and the restrictions on GHG emissions; and whether the system is institutionalized in a way that can effectively guarantee GHG reductions, considering scientific facts and international standards.

Furthermore, whether Article 8(1) of the *Carbon Neutrality Framework Act* violates the principle of statutory reservation, including the principle of parliamentary reservation, must also be assessed by considering whether the method used to set GHG reduction targets meets the characteristics required as protective measures in response to the climate crisis.

B. Judgment Regarding Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act

(a) Summary of the Issues

Article 8(1) of the *Carbon Neutrality Framework Act* establishes that the Mid- to Long-Term Reduction Target is to reduce national GHG emissions by a ratio, prescribed by Presidential Decree, to the extent of not less than 35% from the 2018 levels by 2030. Article 3(1) of the Enforcement Decree of the same Act specifies this ratio as 40%.

The key issues regarding whether this violates the principle of prohibition against insufficient protection are whether this reduction target by 2030, set as described above, reflects the share Korea ought to bear in light of the global GHG reduction efforts and whether it shifts excessive burdens to the future in terms of the effects of climate change and the restrictions on GHG emissions.

Meanwhile, Article 8(1) of the *Carbon Neutrality Framework Act* only defines the reduction percentage through 2030 relative to the 2018 levels, without specifying quantitative reduction targets for the years from 2031 to 2049, before 2050, the target year for carbon neutrality. Instead, Article 8(4) mandates that new reduction targets be set every five years based on the principle of progression. A further issue is whether this regulation shifts excessive burdens to the future beyond 2031.

Complainants argue that Article 8 of the *Carbon Neutrality Framework Act* lacks effective mechanisms to guarantee the implementation of the GHG reduction targets. They contend that the framework for setting GHG reduction targets has no regulation or provides insufficient regulation to ensure that any unfulfilled amount is compensated by subsequent reduction targets in cases where a quantitative reduction target is not met. In this regard, a key question is whether the method of setting GHG reduction targets under Article 8(1) of the *Carbon Neutrality Framework Act* is designed in a manner that effectively ensures the achievement of the intended GHG reductions.

(b) The issue of whether Article 8(1) of the *Carbon Neutrality Framework Act* violates the principle of statutory reservation centers around the fact that it only establishes a minimum reduction threshold by 2030, relative to 2018 levels, regarding the reduction targets until 2030, while delegating the precise percentage to be determined by Presidential Decree. Additionally, the Act leaves the determination of the reduction pathway to the Sectoral and Annual Reduction Targets, which are to be set by the Government pursuant to Article 8(2) and Article 8(3) of the *Carbon Neutrality Framework Act*.

Furthermore, another issue arises from the fact that quantitative reduction targets for the years from 2031 to 2049 are not determined by law, but instead the government is mandated to update the reduction targets every five years under Article 8(4) of the *Carbon Neutrality Framework Act*.

(2) Whether the principle of prohibition against insufficient protection is violated

(A) Reduction Target by 2030

1) Based on the scientific fact that global average temperature rises in proportion to the concentration of GHGs accumulated in the atmosphere, the total amount of remaining carbon emission allowance on a global level after a specific year to limit global temperature increases within a specified target—*i.e.*, the carbon budget—can be estimated. According to the IPCC's Sixth Assessment Report, the best estimate of the global remaining carbon emissions allowance from 2020 onward is 500 $GtCO_2$ to limit the global average temperature rise to 1.5°C with a 50% probability, and 1,150 $GtCO_2$ to limit the rise to 2°C with a 67% probability.

Meanwhile, based on the scientific facts reported by the IPCC and other relevant bodies, a global consensus on the direction of global actions or standards for addressing the climate crisis can be shaped through multilateral treaties such as the UNFCCC and the Paris Agreement, as well as their specific implementation mechanisms like the Conferences of the Parties (COP). For instance, paragraph 27 of Decision 1/CMA.5 from the 28th Conference of the Parties to the UNFCCC in 2023, concerning the 'Global Stocktake,' acknowledges that "limiting global warming to 1.5°C without or with limited

overshoot requires deep, rapid, and sustained reductions in global GHG emissions, reducing emissions by 43% by 2030 relative to 2019 levels, 60% by 2035, and achieving net-zero CO_2 emissions by 2050."

As described above, based on a common understanding of global GHG reduction pathways formed through international consensus—grounded in scientifically estimated global carbon budgets and scientific research findings—individual countries must set their own GHG reduction targets, thereby determining their fair share of contributing to global reduction targets, and develop and implement policies to achieve these targets.

In this context Complainants argue that Korea's 2030 'national Mid- and Long-term GHG Reduction Target,' which aims for a 40% reduction from 2018 levels, significantly falls short of the share Korea ought to bear in contributing to global GHG reduction efforts, as determined by the principles of "equity and common but differentiated responsibilities and respective capabilities (CBDR/RC)" established under the Paris Agreement.

Complainants assert that Korea's carbon budget can be fairly and reasonably calculated based on its share of the global population. When comparing this carbon budget to the 2030 reduction target set by Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act, along with the annual emission reduction targets set by the Plans Subject to Review, they claim that Korea's carbon budget would be fully exhausted by around 2025 under the 1.5°C target and by around 2028 under the 1.7°C target.

Furthermore, even when calculating the carbon budget allocated based on Korea's share of global emissions, Complainants argue that the carbon budget for the 1.5°C target would be exhausted by around 2032 and for the 1.7°C target, by around 2042.

Additionally, regarding the classification of developed country or developing country—an indicator related to the 'capability' to address the climate crisis—Complainants assert that Korea is classified as a developed country according to all criteria outlined by the IPCC. In terms 'responsibility' for climate change, measured by indicators such as current emissions, per capita emissions, and cumulative emissions, Korea ranks among the highest globally. Complainants argue that, despite these factors—which should compel Korea to make a more substantial contribution to global GHG reduction efforts—Korea's 2030 reduction target falls short of the internationally recognized goal of a 43% reduction relative to 2019 levels.

Complainants argue that Korea's 2030 GHG reduction target, whether based on 2010—the year Korea began setting its reduction targets—or on 2018, the year of peak emissions, falls short of the GHG reduction rates of major countries when compared using net emission reduction rates, which account for total emissions minus absorptions and removals.

Moreover, the United Nations Environment Programme (UNEP) annually publishes the Emissions Gap Report, which analyzes the gap between the GHG reductions pledged by each country and the reductions required to meet the goals of the Paris Agreement, along with the status of global GHG reduction efforts. The 2023 Emissions Gap Report indicates that even if all NDCs are fully implemented, the global average temperature rise would still reach 2.9°C above pre-industrial levels. Complainants assert that, to close this emissions gap, Korea's 2030 NDC reduction target must also be raised.

However, while countries differ in population, GDP, existing GHG emission levels, technological and economic capability for GHG reduction, and industrial structure. Although various studies are being conducted on which factors should be considered and how to ensure an equitable share of contributions to global GHG reduction efforts, there is no indisputable international consensus on the criteria for determining the specific contributions of individual countries that is applicable to Korea.

When setting the 'specific figure' of an individual country's GHG reduction rate for a 'specific year,' various additional factors must be considered. Beyond comprehensive indicators like the allocation method of the carbon budget and the status as a developed or developing country, other factors such as a country's industrial structure, geographical conditions, and energy supply circumstances may also

come into play. In the present case, the government cites challenges in achieving rapid reductions due to its manufacturing-based industrial structure, the late peak in emissions compared to other developed countries, and the need to ensure a stable energy supply.

Meanwhile, the formulation and submission of NDCs, along with the submission of related information under the Paris Agreement, fall within the government's diplomatic authority. In exercising this diplomatic authority, the Government may also take into account factors such as the nation's capacity to respond to energy crises and other energy security concerns, as well as the principle that each NDC must represent progress from the previous one and cannot regress.

Given the absence of clear criteria for equitable allocation of GHG reduction efforts across countries, it is also unclear whether the global emissions gap at any given point can be directly translated into the individual emissions gap of each country.

Article 4(1) of the Paris Agreement obligates Parties to 'undertake rapid reductions thereafter in accordance with best available science.' Regarding each Party's NDCs, Article 4(3) stipulates that they should 'reflect its highest possible ambition.'

Korea too, in principle, must determine its NDCs from this perspective and fulfill its commitments accordingly. However, the authority and responsibility for determining which factors should be considered, how they should be weighed, and setting specific reduction percentages, ultimately rest with the Legislature and the Executive to whom the authority has been delegated.

When deriving the numerical value of the GHG reduction target percentage through various statistical evaluation methods, formulas, and estimative methodologies that inherently include significant uncertainty in each stage of assessment, there is no indisputable international consensus on the derivation method, nor is there a published calculation procedure conducted by a domestic institution that is widely accepted enough to be cited by judicial authorities. Moreover, determining the specific numerical value of a GHG reduction target percentage inevitably falls within the realm of socioeconomic, or even diplomatic, policy considerations.

Therefore, with respect to the 'specific numerical value' of the reduction target percentage for a 'specific year,' which has been comprehensively determined by the Legislature or their delegated Executives after considering various factors, it is difficult for the Constitutional Court to apply the principle of prohibition against insufficient protection—which is premised on the authority and responsibility of the Legislature and their delegated Executives—to conclude that the figure fails to align with the share of contribution Korea ought to bear in light of the global GHG reduction efforts simply because it does not conform to the result derived from specifically chosen set of estimative method or set of assessment factors.

2) The Mid- to Long-Term Reduction Target of reducing national GHG emissions by 40% by 2030 from the 2018 levels is based on the premise of continuous emissions reductions from the 2018 peak until the carbon neutrality target year of 2050. The 2030 reduction target represents a mid-point in this trajectory.

If a linear reduction pathway is followed from the 2018 national GHG emissions to the 2050 net-zero emissions, emissions in 2030 would be approximately 37.5% from the 2018 levels. However, when setting specific GHG reduction targets, various factors—such as the impact on various industries and daily life of its citizens, the pace of technological advancements in renewable energy, and the feasibility of sector-specific reduction measures—must be considered. Accordingly, Article 8(1) of the *Carbon Neutrality Framework Act* sets a minimum threshold for the reduction target at 35%, allowing for a higher reduction rate to be set by Presidential Decree. In response, Article 3(1) of the Enforcement Decree of the same Act sets the reduction target at 40%, which is stronger than the linear reduction pathway.

Complainants argue that this reduction target will exhaust Korea's carbon budget too quickly and that a linear reduction pathway holds no legal significance. They further claim that such a pathway, which

reduces emissions by an 'equal amount' rather than an 'equal percentage,' would increase the actual burden of reduction in the latter half of the period, thereby shifting excessive burden to the future.

However, there is no derivation method for allocating Korea's carbon budget that is objective enough to be internationally agreed upon or nationally recognized. The shape of the reduction pathway is influenced by various factors, including the characteristics of individual reduction measures and their combinations. The 2030 reduction target simply means that it is set provisionally stronger than the linear reduction pathway as a mid-point on the path to carbon neutrality by 2050, and it is difficult to regard it as determining the overall shape of the reduction pathway.

Furthermore, according to materials submitted in the present case, such as the "Proposal to Enhance the 2030 National GHG Reduction Target (NDC)," established by the Government on October 18, 2021, the target of 'reducing emissions by 40% from the 2018 levels by 2030,' as set forth in Article 3(1) of the Enforcement Decree of the *Carbon Neutrality Framework Act* and delegated under Article 8(1) of the same Act, was determined after considering various sectoral reduction measures and targets, as well as gathering diverse opinions. Therefore, it is difficult to view this reduction target as being solely based on a linear reduction pathway.

It is clear that the reduction target for 2030 is an intermediate goal, based on the premise of gradual and sustained reductions from 2018 (the peak year of emissions) to 2050 (the target year for carbon neutrality). Considering that various considerations and variables—such as the characteristics and combinations of individual reduction measures— impact the specific numerical value of this target, it is difficult to conclude that it shifts excessive burden to the future based solely on its numerical value.

3) Therefore, based solely on the specific percentage of GHG reduction target for 2030, as set forth in Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act, the Court cannot be concluded that the target lacks the minimum characteristics required as protective measures corresponding to the risk situation posed by the climate crisis.

(b) Reduction targets for the years from 2031 to 2049

1) The Court's conclusion that the GHG reduction target by 2030 – 'a 40% reduction from 2018 levels' – is not, by itself, sufficient to conclude that it lacks the minimum characteristics required as protective measures that correspond to the risk situation posed by the climate crisis, merely means that it is difficult to declare the quantitative target for a specific year unconstitutional based on a specific methodology which may be subject to disagreement. Such conclusion does not mean that the target represents the best efforts as an intermediate goal towards achieving carbon neutrality by 2050.

The GHG reduction target rate by 2030 is predicated upon 2018 as the peak emission year. However, it is undeniable that, despite Korea has set GHG reduction targets and implementing relevant legislation since 2009, emissions continued to rise until 2018. In this regard, while the 2030 reduction target rate, based on 2018 emissions, may not represent the best scientific or policy decision, it can be regarded as reflecting the increased burden of improving a high-emissions industrial structure, given that GHG emissions continued to grow until 2018.

In light of this, unless all necessary and possible measures are exhaustively implemented in advance to achieve the already established 2030 reduction target, and to strengthen the reduction targets for the period after 2030, the burden of reductions from 2031 onwards will inevitably increase. This will result in greater difficulties in setting and implementing scientifically and politically adequate reduction targets, thereby raising the risk of failing to achieve the 2050 carbon neutrality goal.

Therefore, the framework for setting mid- to long-term national GHG reduction targets must be designed to ensure actual and gradual reductions up to 2050, the target year for carbon neutrality, in a way that prevents excessive burden from being shifted to the future. The standard of review on the effectiveness of this institutional framework should be stricter because the late peak in emissions makes the need for rapid reductions even more urgent.

In light of Article 4(1) of the Paris Agreement, which addresses the entire trajectory of emissions, from increase to reduction, and ultimately achieving carbon neutrality, Korea is now at the stage of aiming for rapid reductions based on the best available science, following its peak emissions. Therefore, the review of the effectiveness as described above also aligns with international standards for climate action.

2) Article 8(1) of the *Carbon Neutrality Framework Act* stipulates only the percentage of the Mid- to Long-term Reduction Target by 2030, without providing any quantitative criteria for reduction targets between 2031 and 2049, prior to the 2050 carbon neutrality goal.

Although Article 7(1) of the *Carbon Neutrality Framework Act* establishes the goal of carbon neutrality by 2050, and Article 8(4) of the same Act mandates the government to periodically revise or reset GHG reduction targets every five years according to the principle of progression, it is difficult to regard this as an effective mechanism that can prevent excessive burden from being shifted to the future, for the following reasons:

a) Article 8(4) of the *Carbon Neutrality Framework Act*, which requires, in principle, the re-examination and adjustment of GHG reduction targets every five years, follows the same cycle as the submission of NDCs under Article 4(9) of the Paris Agreement. Additionally, the requirement that the target timeframe of NDCs submitted every five years must be set for '10 years after submission' is not explicitly stipulated in either the *Carbon Neutrality Framework Act* or the Paris Agreement itself. Instead, this requirement is based on Decision 6/CMA.3 of the 26th Conference of the Parties to the UNFCCC in 2021, regarding 'Common Time Frames for Nationally Determined Contributions' under Article 4(10) of the Paris Agreement. Paragraph 1 of this decision 'reaffirms' the nationally determined nature of NDCs, and paragraph 2 'encourages' the submission of targets for 10 years beyond the 5-year cycle, meaning its effects on Parties are relatively flexible. Paragraph 170 of Decision 1/CMA.5 from the 28th Conference of the Parties to the UNFCCC in 2023, regarding the 'Global Stocktake', also maintained a relaxed stance by 'encouraging' Parties to submit their national reduction targets up to 2035 by 2025, in line with Decision 6/CMA.3 from the 26th Conference of the Parties as described above.

Certain GHG reduction measures, particularly those involving technological advancements and commercial adoption, may require considerable time to materialize. Likewise, national policies may take time to yield tangible results, as private entities, such as corporations, may need time to respond to government initiatives in a way that leads to an actual reduction in GHG emissions. Therefore, specific reduction targets must be established well in advance of the target timeframe. Additionally, for businesses and other sectors that need to develop business plans, including facility investments to reduce emissions, the consistency of GHG reduction policies is a critical factor in determining the likelihood of actually achieving the emission reduction targets.

However, the requirement that the target timeframe of NDCs submitted every five years be set for '10 years after submission' is not a legal mandate, but rather falls within the government's discretionary judgment, which may change depending on circumstances. This makes it difficult to ensure consistent preparation and implementation of policies for the post-2031 GHG reduction pathway.

b) Even if Article 8(4) of the *Carbon Neutrality Framework Act*, Article 4(9) and Article 4(10) of the Paris Agreement, and the aforementioned decision from the 26th Conference of the Parties to the UNFCCC are followed and the 'principle of progression' is applied, the 'pace of progression' could slow down due to various practical factors.

Given Korea's manufacturing-driven industrial structure, which includes many high-emission sectors, the government may be incentivized to consider socioeconomic policies when setting GHG reduction targets, potentially easing the short-term reduction burden. However, if this fails to accelerate the reduction rate, the pace of industrial restructuring may also slow down, leading to a vicious cycle that exacerbates future reduction burdens.

If the pace of progression in raising GHG reduction targets slows down excessively as described above, the shape of the overall reduction pathway could become more convex, resulting in higher cumulative GHG emissions and making the achievement of the 2050 carbon neutrality goal more difficult.

Moreover, the framework outlined in Article 8 of *the Carbon Neutrality Framework Act*, which stipulates that the targets be newly set every five years solely at the discretion of the government without specifying even rough quantitative criteria for reduction targets after 2031, makes it difficult to identify any legal regulation intended to ensure that the 'pace of progress' remains adequate.

Article 8(5) of the *Carbon Neutrality Framework Act* lists nine factors, from subparagraphs 1 through 9, that the government must consider when setting or adjusting the Mid- to Long-Term Reduction Target. Among these, the factor most likely to accelerate GHG reduction efforts is the relatively long-term goal of 'carbon neutrality by 2050' as 'national visions and strategies' under subparagraph 2. In contrast, the factor that could slow down the pace of GHG reduction is the relatively short-term and concrete elements under subparagraph 6, which take into account the 'impacts on the domestic industries, especially on the industry type and region highly dependent on fossil fuels.' The remaining factors are neutral in nature and may vary depending on the circumstances.

In particular, the 'trends of the international community in coping with climate crisis' in Article 8(5)9 of the *Carbon Neutrality Framework Act* may not be sufficient as a substantial factor to accelerate national GHG reduction efforts, given the voluntary nature of NDCs under the Paris Agreement and the relaxed timeframe for submitting 10-year target after the 5-year cycle.

When Article 25(1) of the 2016 Enforcement Decree of the former *Green Growth Act* was amended, shifting the GHG reduction target timeframe from 2020 to 2030 without strengthening the target, and with actual emissions still increasing, the trend of international discussions on the UN climate regime had some influence. Similarly, the 2023 UNEP Emissions Gap Report indicated that even if all NDCs are implemented, global average temperatures are still expected to rise by 2.9°C from pre-industrial levels, highlighting the inadequacy of global reduction efforts. In light of these considerations, it can be concluded that even taking into account the existence of the UN climate change framework, merely re-examining GHG reduction targets every five years, without legally establishing the Mid-to Long-Term Reduction Target, is insufficient to ensure that national GHG reduction targets will be strengthened at an adequate pace.

c) Article 8(4) of the *Carbon Neutrality Framework Act* mandates the government to re-examine and adjust or newly set GHG reduction targets every five years in principle, and this includes not only the Mid- to Long-Term Reduction Target but also the Sectoral and Annual Reduction Targets needed to achieve them.

However, Article 8(2) of the *Carbon Neutrality Framework Act* governs sectoral reduction targets as a means to achieve the Mid- to Long-Term Reduction Target, while Article 8(3) governs annual reduction targets as a means to achieve both the mid- to long-term and sectoral reduction targets. This means that all targets at various stages ultimately aim toward a single year target of the Mid- to Long-Term Reduction Target, established every five years. There is no consideration of emissions for the entire period leading up to the target timeframe. The numerical value for the Mid- to-Long-Term Reduction Target is determined based on the prevailing circumstances and conditions of the time the Government sets them every five years. However, there is no established procedure for calculating Korea's carbon budget, which could serve as a reference for considering cumulative emissions.

Under this framework, if no quantitative criteria for specific reduction targets after 2031 are established, even roughly, the pace of raising reduction targets every five years is likely to depend solely on the short-term circumstances and conditions identified by the government at the time when the specific target values are determined.

3) The specific and individual measures to achieve the Mid- to Long-Term Reduction Target, as well as the Sectoral and Annual Reduction Targets outlined in Article 8 of the *Carbon Neutrality Framework Act*, are implemented based on their independent legal grounds respectively, and the characteristics of each reduction measures vary widely. It is very difficult to integrate sector-specific reduction targets, with their diverse characteristics, along with management framework for implementing these measures, into a single, comprehensive legal structure, and current laws are not

designed in this manner. The coordination and integration of these diverse reduction measures fall fundamentally within the authority and responsibility of the Government, which must establish framework plans, including the Sectoral and Annual Reduction Targets, and their implementation measures, while continually monitoring their execution.

However, if the long-term national reduction targets leading up to the 2050 carbon neutrality goal are entirely dependent on the government's comprehensive consideration of the characteristics of individual reduction measures and the circumstances at each point in time, the reduction targets for specific years and the reduction pathway over certain periods may vary significantly depending on which sectors or characteristics the government prioritizes in its policy efforts. This could also make it difficult to ensure consistency in GHG reduction policies.

On the other hand, if reduction targets are based on figures that are quantified to a certain degree for each timeframe of a specified period leading up to the 2050 carbon neutrality goal, the government can comprehensively consider the characteristics of individual reduction measures and circumstances within that range. It can then set specific reduction targets through coordination and integration of sector-specific measures. This approach would respect the government's discretion in setting reduction policies while also ensuring a certain level of consistency in GHG reduction policies.

Even when setting intermediate reduction targets for the period between 2031 and 2049 in advance, the intervals between these targets and specific figures fall within the realm of legislative decision-making. A certain degree of flexibility can be maintained by setting a minimum reduction rate, as with the 2030 reduction target, while delegating the determination of the final figure to a Presidential Decree or similar authority.

Additionally, various frameworks could be devised to account for cumulative emissions while ensuring progress in emission reductions, which also falls within the realm of legislative decision-making. For example, in addition to having "single-year targets" for specific points leading up to 2050, a "multi-year target" system could also be considered where cumulative emissions is controlled to a certain degree by setting total or average reduction rates for each timeframe of a specified period.

4) Therefore, while Article 8(1) of the *Carbon Neutrality Framework Act* establishes reduction target rates only until 2030, it does not provide any quantitative criteria with regards to reduction targets for the 19 years between 2031 and 2049. Even considering the structure of related legal provisions, such as the periodic resetting of reduction targets under Article 8(4) of the same Act, there is no mechanism in place to effectively ensure gradual and sustained reductions leading up to the 2050 carbon neutrality goal. This results in a regulatory approach that shifts excessive burden to the future and fails to meet the minimum characteristics required as protective measures corresponding to the risk situation posed by the climate crisis.

(c) Regulation in Case of Failure to Meet Reduction Targets

Under the Paris Agreement regime, a global stocktake is conducted every five years, starting in 2023, with the results communicated to Parties (see Article 4(9) and Article 14 of the Paris Agreement). Additionally, each Party submits a Biennial Transparency Report every two years, which includes the National Inventory Report—a statistical report on anthropogenic GHG emissions and removals through carbon sinks—as well as other information necessary to track progress in implementing each Party's NDCs. These reports are then reviewed by technical experts (*see* Article 13(4), Article 13(7), and Article 13(11) of the Paris Agreement).

In accordance with Article 8(4) of the *Carbon Neutrality Framework Act*, the government must re-examine, modify, or newly set GHG reduction targets every five years, 'in consideration of domestic and international conditions, such as the Paris Agreement.' Additionally, the 'principle of progression' under Article 4 of the Paris Agreement must be observed. Therefore, the findings from continuous review process under the Paris Agreement regime can be reflected when setting the Mid- to Long-Term Reduction Target, the Sectoral and Annual Reduction Targets, as well as in measures to ensure their implementation.

2) According to the *Carbon Neutrality Framework Act*, the implementation status of the ‘annual targets’ and the National Framework Plan, which includes these targets, is qualitatively and quantitatively assessed and publicly disclosed each year under the leadership of the Presidential Commission on Carbon Neutrality and Green Growth (hereinafter the “Carbon Neutrality Green Growth Commission”). The results of the assessment of the National Framework Plan's implementation status are reported annually to the National Assembly. If GHG emissions do not align with the annual reduction targets, the head of the relevant administrative agency must prepare a reduction plan and submit it to the Carbon Neutrality Green Growth Commission. Any shortcomings or areas for improvement identified in the implementation status report must be reflected in the policies, among others, of the relevant administrative agencies (*see* Article 9, Article 13, and Article 78 of the *Carbon Neutrality Framework Act*). These procedures for monitoring the implementation status of annual reduction targets and the progress of the National Framework Plan serve as effective mechanisms to ensure the fulfillment of the Sectoral and Annual Reduction Targets.

3) According to Article 25 of the *Carbon Neutrality Framework Act*, and *the Act on the Allocation and Trading of Greenhouse-Gas Emission Allowances* (hereinafter the "Emissions Trading Act"), the ‘emissions trading system’ is designed to leverage market mechanisms to effectively achieve the nation's GHG reduction targets. Under this system, considering the Mid- to Long-Term Reduction Target established under Article 8 of the *Carbon Neutrality Framework Act*, the government permits individual GMG-emitting businesses to trade ‘emission allowances,’ which represent emission allocated to the business within the scope of the ‘total amount of GHG emission allowances’ set for each five-year commitment period (*see* Article 1, Article 2, subparagraph 3, and Article 5(1)1 of the *Emissions Trading Act*).

The *Emissions Trading Act* requires the government to allocate emission allowances to GHG-emitting businesses in five-year intervals, referred to as ‘commitment periods’ and to manage compliance on a yearly basis within each period, referred to as the ‘compliance year’ (see Article 2, subparagraphs 4 and 5 of the *Emission Trading Act*). Under this system, holders of emission allowances may, with the approval of the competent authority, carry over their unused emission allowances to the subsequent compliance year within the same commitment period or to the first compliance year of the subsequent commitment period (see Article 28(1) of the *Emission Trading Act*: Carryover of Emission Allowances). If a business subject to emissions regulation holds fewer emission allowances than required at the end of a compliance year, making it difficult to fully meet its submission obligation, it may borrow allowances allocated for other compliance years within the same commitment period, subject to limits prescribed by Presidential Decree and approval by the competent authority (see Article 28(2), Article 28(3) of the *Emission Trading Act*, and Article 45 of the Enforcement Decree thereof: Borrowing of Emission Allowances). As described above, GHG emissions in sectors covered by the emissions trading system are strictly managed over both the five-year commitment period and each compliance year. Mechanisms such as the carryover and borrowing of emission allowances help ensure that unmet GHG reduction targets are accounted for in subsequent periods, allowing proactive control over planned GHG emission allowances.

In terms of the framework or timelines for implementing reduction targets, Korea’s NDC, submitted to and registered with the UNFCCC Secretariat on December 23, 2021, specifies that Korea has set its 2030 GHG reduction target as a ‘single-year target.’ To achieve this, the government established the ‘Third Framework Plan for the Emission Trading System’ (2021–2030), which allocates emission allowances in five-year intervals for 73.5% of total emissions, with the aim of reducing GHG emissions accordingly.

Additionally, the total GHG emission allowance, which serves as the basis for the plans to allocate national emission allowance—typically set in five-year intervals—is determined with consideration of the Mid-to Long-Term Reduction Target set under Article 8 of the *Carbon Neutrality Framework Act* (see Articles 2, subparagraph 3 and Article 5(1)1 of the *Emission Trading Act*). The formulation and amendment of the Master Plans for the Emission Trading System and the plans to allocate national emission allowances, except for minor matters prescribed by Presidential Decree, are finalized after

review by the Carbon Neutrality Green Growth Commission and the State Council Meeting (*see* Article 4(5) and Article 5(5) of the *Emission Trading Act*). As a result, the emission trading system is designed to align with the GHG reduction targets set forth in Article 8 of the *Carbon Neutrality Framework Act.*

4) Complainants argue to the effect that the total emissions over the entire period for which reduction targets are set, *i.e.*, cumulative emissions, must be managed. They assert that the law should include provisions requiring the enhancement of reduction targets in subsequent years if there are excess emissions in a given year.

If such an additional plan were to be established, various policy factors would need to be considered, such as whether to set the timeframe for one year or multiple years, and whether to regulate additional reduction plans by sector or solely by managing total annual emissions. This issue is also tied to how the structure of reduction targets is regulated—whether through a "single-year target" or a "multi-year target" system. It is also important to consider that if the failure to meet reduction targets is due not to the negligent execution of the competent authority but to structural issues related to production and consumption in the private sector, certain sectors may face challenges that are difficult to overcome within a short period.

Under the framework of the *Carbon Neutrality Framework Act*, the goal of achieving carbon neutrality by 2050 remains unchanged (see Article 7(1) of the *Carbon Neutrality Framework Act*). The government may revise or newly set GHG reduction targets as necessary, even before the five-year period has passed, in response to changes in social or technological conditions, and in such cases, the principle of progression still applies (see Article 8(4) of the *Carbon Neutrality Framework Act*). Therefore, how the shortfall in Sectoral and Annual Reduction Targets up to 2030 is reflected in future reduction targets falls within the government's policy discretion.

However, regarding the 2030 reduction target, where quantified sectoral and annual reduction targets as well as various relatively detailed policies and measures are already in place for the achievement thereof—premised on the possibility of revision and resetting based on the principle of progression—it is difficult to conclude that the means of implementation for the reduction target are ineffective simply because the law does not explicitly require the compensation of unmet targets in subsequent years, as described above, and leaves such matters to the discretion of the government's policy decisions instead.

Meanwhile, , it is also difficult to deny that the emissions trading system, which operates on the basis of a ‘five-year commitment period’ and includes mechanisms such as the ‘carryover and borrowing of emission allowances,’ functions as an effective means to manage total GHG emissions allowance within a set timeframe (cumulative emissions) to a certain degree. The emissions trading system serves as a "multi-year target" system that helps manage total emission allowances, also complementing the "single-year target" approach of the Mid- to Long-Term Reduction Target.

While the emissions trading system covers 73.5% of Korea's total GHG emission sources, there may be sectors where it is difficult to apply the system due to their characteristics. Therefore, it is not reasonable to conclude that the emission trading system lacks effectiveness as an institutional framework simply because it does not cover all areas of GHG emissions.

5) As examined above, the GHG reduction targets set and implemented under the framework of Article 8 of the *Carbon Neutrality Framework Act* are subject to continuous monitoring through the transparency system established by the Paris Agreement, including the Global Stocktake and the submission and review of Biennial Transparency Reports. Regarding the Annual Reduction Targets, the implementation status is inspected annually, led by the Carbon Neutrality Green Growth Commission, and any shortfalls are addressed by the competent administrative agencies, which prepare and implement additional reduction plans for the affected sectors. In particular, for sectors subject to the emissions trading system, the total emission allowances for each commitment period are actively managed under the national emission allowances allocation plan, which is set in consideration of the Mid- to Long-Term Reduction Target under Article 8 of the Carbon Neutrality Framework Act. This ensures the effective achievement of specific emission reduction targets.

When these measures to ensure the achievement of emission targets are considered alongside the system of periodic review and resetting of GHG reduction targets under Article 8(4) of the *Carbon Neutrality Framework Act,* it is difficult to conclude that the method of setting GHG reduction targets in Article 8(1) of the *Carbon Neutrality Framework Act* is not designed in a way that can effectively ensure GHG reductions simply because of the absence of explicit statement in the law requiring the addition of unmet reduction targets to subsequent targets. Therefore, it cannot be said that it lacks the minimum characteristics required to provide protective measures corresponding to the risk situation posed by the climate crisis.

6) However, the aforementioned mechanisms to ensure the achievement of emission targets cannot be considered sufficient to effectively guarantee gradual and continuous reductions during the period from 2031 to 2049, for which Article 8(1) of the *Carbon Neutrality Framework Act* does not prescribe quantitative reduction targets. If the issue of reflecting shortfalls in reduction targets in subsequent targets is left solely to the government's policy decisions at each point in time, there is a risk that, in the mid-to long term, the progression of reduction targets could be continuously delayed.

In particular, while the emissions trading system functions to manage total GHG emission allowances within a specified timeframe to a certain degree, this function is premised on the existence of already established quantitative Mid- to Long-Term Reduction Target, along with sectoral and annual reduction targets designed to achieve them, and it does not compensate for the absence of quantitatively defined reduction targets. This is evident from the fact that when Article 25(1) of the 2016 Enforcement Decree of the former *Green Growth Act* was amended, shifting the GHG reduction target year from 2020 to 2030, total emission allowances under the emissions trading system was actually increased. Specifically, as stated in the section, '2. Results and Limitations' of the Third Basic Plan for Emission Trading System (December 30, 2019), during the first commitment period (2015-2017), a total emission allowance of 1.673 billion tons was set, easing the reduction burden compared to the annual reduction rates set in the '2020 GHG Reduction Roadmap' to facilitate the stabilization of the system. In 2017, the third compliance year of the first commitment period, the total emission allowance was recalculated and increased by 17.63 million tons, taking into account the 2030 reduction targets and measures outlined in the '2030 GHG Reduction Roadmap' (December 2016).

(D) Sub-conclusion

Based solely on the target figure of a 40% reduction in national GHG emissions from 2018 levels by 2030, as established by Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act, it is difficult to conclude that the target significantly falls short of the share that Korea ought to bear in light of global GHG reduction efforts or as shifting excessive burden to the future in terms of the effects of climate change and restrictions of GHG emissions.

With respect to mechanisms for monitoring the implementation status of the Annual Reduction Targets or ensuring the achievement of emission targets, such as the emissions trading system, the absence of an explicit legal requirement to compensate for unmet reduction targets in the subsequent targets does not necessarily indicate that the GHG reduction target-setting framework under Article 8(1) of the *Carbon Neutrality Framework Act* is designed in a way that cannot ineffective guarantee GHG reductions.

However, the absence of any quantitative criteria for reduction targets from 2031 to 2049 under Article 8(1) of the *Carbon Neutrality Framework Act* makes it difficult to effectively guarantee gradual and continous reductions leading up to the 2050 carbon neutrality goal. As a result, it can be seen as regulating GHG reduction targets in a way that shifts excessive burden to the future.

Therefore, Article 8(1) of the *Carbon Neutrality Framework Act* lacks the minimum characteristics required as protective measures corresponding to the risk situation posed by the climate crisis, particularly in regulating reduction targets from 2031 to 2049. As a result, it violates the principle of prohibition against insufficient protection.

(3) Whether Article 8(1) of the *Carbon Neutrality Framework Act* Violates the Principle of Statutory Reservation

(a) Reduction Target by 2030

The Mid-to Long-Term Reduction Target regulated by Article 8(1) of *the Carbon Neutrality Framework Act* serves as a protective measure to address the climate crisis and safeguard Complainants. Setting the national GHG reduction targets and pathways falls within a technical field of expertise, grounded in scientific projections and analyses, which makes it challenging to define these matters in specific detail within the law. Moreover, the Mid-to Long-Term Reduction Target is a key component of NDC that must be submitted under the Paris Agreement, and the government's diplomatic authority must also be respected when determining their specific content.

Regarding Mid-to Long-Term Reduction Target by 2030, Article 8(1) of the *Carbon Neutrality Framework Act* establishes only a minimum threshold of the quantified reduction target by 2030, mandating that national GHG emissions be reduced by at least 35% from 2018 levels, with the specific percentage to be determined by Presidential Decree. Articles 8(2) and 8(3) further stipulate that the government must establish sectoral and annual reduction targets, comprehensively taking into account various factors, such as the characteristics of specific GHG reduction measures, based on the Mid- to Long-Term Reduction Target, thereby determining the specific reduction targets up to 2030.

This regulation takes into account that setting GHG reduction targets and pathways involves scientific and technical considerations, along with social, economic, and diplomatic circumstances. Therefore, the approach taken in Article 8(1) of the *Carbon Neutrality Framework Act* for regulating reduction targets by 2030 cannot be considered a violation of the principle of statutory reservation.

(B) Reduction Targets from 2031 to 2049

Setting GHG reduction targets and pathways in response to the climate crisis involves not only scientific and technical considerations but also the comprehensive incorporation of socioeconomic policies and diplomatic circumstances. This process is a matter of policy formation and, at the same time, an implementation of the State’s obligation under Article 35(1) of the Constitution to protect the environment, which entails broad and comprehensive restrictions on fundamental rights of the citizens, such as in terms of freedom of occupation or the exercise of property rights, among others.

The Mid-to Long-Term Reduction Target established under Article 8(1) of the *Carbon Neutrality Framework Act* serves as the basis for the sectoral and annual reduction targets, as well as specific means for reduction. Given their significant impact on the national economy and industries, the government must comprehensively consider related factors when setting or revising these targets. Additionally, the government is required to gather input from relevant experts and stakeholders through public hearings and reflect those opinions in the decision-making process (see Articles 8(5) and 8(6) of the *Carbon Neutrality Framework Act*).

However, Article 8(1) of the *Carbon Neutrality Framework Act* does not establish even rough quantitative level of reduction targets for the period from 2031 to 2049. As discussed earlier, this omission shifts excessive burden to the future, falling short of the minimum characteristics required as protective measures corresponding to the risk situation posed by the climate crisis. The primary reason is that relying solely on the government's potentially short-term perspective when setting specific reduction targets makes it difficult to ensure the proactivity and consistency of GHG reduction policies.

Setting GHG reduction targets and planning corresponding reduction pathways impose extensive and continuous restrictions on the fundamental rights of the current population. However, given the nature of the climate crisis as risk situation, the most ambitious reduction target must be set and continuously be advanced to avoid exacerbating future burdens. As various interests may cause sharp conflict around the issue of specific reduction measures, planning mid- to long-term GHG reduction targets and pathways requires a high level of social consensus. Therefore, the general framework for the period after 2031 should be directly prescribed in ‘law,’ the highest form of social consensus following the

Constitution.

Meanwhile, the legislators, who are appointed through regular elections, may structurally struggle to effectively address long-term issues such as climate crisis. This is particularly concerning given that future generations, who will bear the greater impacts of the climate crisis, are not able to participate in the current democratic political process. Given these factors, legislators have a heightened obligation and responsibility to enact more specific legislation concerning mid- to long-term GHG reduction plans.

Thus, the failure of Article 8(1) of the *Carbon Neutrality Framework Act* to establish even a rough quantitative level for the reduction targets from 2031 to 2049 constitutes a violation of the principle of statutory reservation, which includes the principle of parliamentary reservation.

(4) Whether the Right to Environment is Infringed and the Operative Part of the Decision

(a) Article 8(1) of *the Carbon Neutrality Framework Act*

Article 8(1) of the *Carbon Neutrality Framework Act* fails to establish any quantitative targets for the years from 2031 to 2049. This omission violates both the principle of prohibition against insufficient protection and the principle of statutory reservation, thereby breaching the duty to protect fundamental rights and infringing upon Complainants' right to healthy environment.

When the State sets GHG reduction targets and implements various reduction policies to achieve them, the objective is to ensure that the actual amount of GHG emissions accumulating in the atmosphere is reduced in accordance with those targets. Only in this way do such measures hold significance as protective measures to safeguard fundamental rights, including the right to healthy environment of Complainants, in response to the irreversible and urgent risk situation posed by the climate crisis. For these protective measures to be effective at even a minimum level, GHG reduction targets must be quantitatively planned, their implementation must be managed. In a State governed by the rule of law, the effectiveness of such measures must be guaranteed by law.

Without quantitatively defined GHG reduction targets, it is impossible to measure whether the reductions are being properly achieved, to manage the reduction measures, or to improve and advance these policies.

Although determining the specific numerical figure of GHG reduction targets involves consideration of various interests, including scientific, policy-related, and diplomatic factors, and thus falls within the responsibility of legislators and their delegated executives, it is the duty of the Constitutional Court, under the principle of the rule of law, to affirm and declare the legislator’s duty to institutionalize these targets effectively.

In particular, legislation that sets GHG reduction targets inherently restricts the fundamental rights of the current population to safeguard the future population’s fundamental rights. Since future generations have even more limited participation in the democratic political process, judicial review of the fulfillment of the legislative duty in this area must be much stricter. This point is symbolically highlighted by a statement made by Ms. Han (12 years old), a Complainant in this case, during a hearing: “Grown-ups can elect members of the National Assembly or the President through voting, but children do not have that opportunity. Participating in this lawsuit was the only action I could take, and had to take, for the future."

2) However, it is difficult to view the specific percentage set for the Mid-to Long-Term Reduction Target up to 2030 under Article 8(1) of the *Carbon Neutrality Framework Act* as a violation of the principle of prohibition against insufficient protection or the principle of statutory reservation. Further, if this provision were to lose its effect in its entirety over the regulatory scope, the quantitative intermediate target that exists, albeit limitedly, prior to the 2050 carbon neutrality goal would also be nullified, resulting in a more unconstitutional situation where the institutional mechanism for GHG reductions would regress.

Moreover, the legislature has wide legislative authority in determining how to set the level of

quantitative GHG reduction targets for the years from 2031 to 2049, as well as in deciding how these targets should be structured and codified in law.

Therefore, regarding Article 8(1) of the *Carbon Neutrality Framework Act*, instead of issuing a simple unconstitutionality decision, the Court should issue a decision of nonconformity to the Constitution, ordering it to remain in effect until February 28, 2026, by which time improved legislation must be enacted. This takes into account factors such as Korea's upcoming NDC submission schedule, the time taken in the legislation process of the National Assembly for revision of legal framework during the repeal of the former *Green Growth Act* and the enactment of the *Carbon Neutrality Framework Act* (approximately 14 months), the institutional foundation necessary for using specialized technical data, the urgency of the climate crisis requiring rapid GHG reduction efforts, the need to provide timely policy direction, and the time needed for the legislature to reach social consensus on the overall quantitative GHG reduction targets for the years from 2031 to 2049. However, it should be noted that if improved legislation is not enacted by February 28, 2026, nullifying the already established reduction targets for 2030 would still contradict the purpose of the constitutional nonconformity decision, which is to ensure the planning mid- and long-term quantitative GHG reduction targets and managing their implementation.

(b) Article 3(1) of the Enforcement Decree of the *Carbon Neutrality Framework Act*

Article 3(1) of the Enforcement Decree of the *Carbon Neutrality Framework Act* simply sets the figure of the specific ratio of the Mid- to Long-Term Reduction Target for 2030 as delegated by Article 8(1) of the same Act. It does not regulate the GHG reduction targets or mechanisms for ensuring the achievement of emission reduction targets for the years from 2031 to 2049. Moreover, as previously noted, the percentage set for the 2030 Mid- to Long-Term Reduction Target alone cannot be considered to have missed the minimum characteristics required for a protective measure against the climate crisis.

Therefore, it cannot be said that Article 3(1) of the Enforcement Decree of the *Carbon Neutrality Framework Act* violated the duty to protect fundamental rights in violation of the principle of prohibition against insufficient protection, and accordingly it does not infringe the fundamental rights, including the right to healthy environment, of Complainants.

C. Judgment on the Sectoral and Annual Reduction Targets

(1) Summary of the Issues

(a) The Sectoral and Annual Reduction Targets are administrative plans outlining the specific GHG reduction pathway from 2023 to 2030. These plans serve as means to achieve the Mid-to Long-Term Reduction Target up to 2030 set under Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act and are also part of Korea's domestic mitigation measures to fulfill its NDCs under the Paris Agreement.

If an administrative plan on GHG reduction pathway is designed in a way that shifts excessive burden to the future, it fails to meet the minimum characteristics required for protective measures corresponding to the risk situation posed by the climate crisis.

Furthermore, if the administrative plan established to achieve the legally mandated GHG reduction targets is structured in a way that makes it impossible to meet those targets, it becomes evident that the legally mandated reduction targets cannot result in actual GHG reductions to the required extent. Such administrative plans would then lack the minimum characteristics required as protective measures corresponding to the risk situation, in terms of their effectiveness as a legal framework.

To determine whether the Sectoral and Annual Reduction Targets violate the principle of prohibition against insufficient protection, these issues must be evaluated in light of scientific facts and international standards.

(b) Regarding the Sectoral and Annual Reduction Targets, Complaints argue that due to the proportions of the carbon capture, utilization, and storage (CCUS) and of the international reduction sector, it has resulted in a convex reduction pathway, which increases cumulative GHG emissions and shifts a greater burden to the future. They further claim that these targets excessively rely on uncertain reduction methods, thereby significantly lowering the likelihood of achieving the 2030 reduction target.

As a result, the key issues to be examined are whether the Sectoral and Annual Reduction Targets, as administrative plans regarding GHG reduction pathways and methods, have been designed in a manner that shifts excessive burdens to the future, and whether they are structured in such a way that it would be impossible to achieve the Mid- to Long-Term Reduction Target for 2030 set under Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act.

(c) The Sectoral and Annual Reduction Targets are based on the 2018 national GHG emissions, using a 'total emissions' baseline of 727.6 million tons. However, the 2030 national GHG emissions target, which aims for a 40% reduction compared to this baseline, is set at 436.6 million tons and is calculated on the basis of 'net emissions,' which excludes absorbed and removed emissions from the total.

The issues at hand are whether this method of calculating the emissions target is permissible under the framework of the *Carbon Neutrality Framework Act*, and whether, in this context, the Sectoral and Annual Reduction Targets are structured as an administrative plan designed to achieve the Mid- to Long-Term Reduction Target for 2030, as set forth in Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act.

The issue with the calculation method also raises the question of whether the Sectoral and Annual Reduction Targets violate the principle of prohibition against insufficient protection. At the same time, it questions whether the administrative plan established under Article 8(2) and Article 8(3) of the *Carbon Neutrality Framework Act*, aimed at achieving the 2030 Mid- to Long-Term Reduction Target set forth in Article 8(1) of the same Act, violates the principle of the supremacy of law under the rule of law in administration.

(d) Complainants argue that the Framework Plan violates Article 10(1) of the *Carbon Neutrality Framework Act,* which sets the commitment period at 20 years, because the Sectoral and Annual Reduction Targets, finalized in 2023, only establish plans up to 2030 and do not address the years from 2031 to 2042. However, the 20-year commitment period stipulated by Article 10(1) of the *Carbon Neutrality Framework Act* encompasses not only GHG reductions—classified as ‘mitigation measures’ in response to the climate crisis—but also the other contents listed under Article 10(2), such as ‘adaptation measures.’ In this context, the Sectoral and Annual Reduction Targets specifically establish sectoral reduction targets under Article 8(2) and annual reduction targets under Article 8(3) of the *Carbon Neutrality Framework Act*, which serve as the basis for the ‘sectoral and annual measures to attain the mid-to long-term reduction target, etc.,’ under Article 10(2)4 of the *Carbon Neutrality Framework Act*. These targets are based on the Mid-to Long-Term Reduction Target to be achieved by 2030 stipulated in Article 8(1). Therefore, GHG emission targets after 2031 are not within the scope of the Sectoral and Annual Reduction Targets under the applicable legal provisions. As a result, no further judgement will be made regarding the claim of violation of Article 10(1) of the *Carbon Neutrality Framework Act*.

Complainants also assert that the Plan lack annual plan for GHG reduction measures. However, the specific sectoral and annual measures to achieve the Sectoral and Annual Reduction Targets are detailed in the Framework Plan under section ‘V. Mid- and Long-Term Reduction Targets,’ particularly in subsection ‘d. Reduction Directions by Major Sectors,’ and further elaborated in section ‘VI. Initiatives for the National Framework Plan," under subsection ‘1. Sectoral Mid- and Long-Term Reduction Measures.’ These sections also specify the implementation timelines for individual and concrete reduction measures. Therefore, it cannot be said that the Plan lack annual reduction measures; rather, they adopt an approach that does not break down the reduction measures by each individual year.

Complainants further claim that the Plan lack contingency plans for addressing failures to meet annual

reduction targets. This argument aligns with the claim that there is no provision for compensating excess emissions to subsequent reduction targets if specific emission targets are not met. However, the Framework Plan was established in accordance with the *Carbon Neutrality Framework Act* and related laws. Since the issue concerning Article 8(1) of the *Carbon Neutrality Framework Act* has already been adjudicated, no separate judgment will be made regarding the Sectoral and Annual Reduction Targets.

(2) Whether the principle of prohibition against insufficient protection has been violated in relation to the reduction pathway and reduction measures

(a) Complainants argue that the cumulative reductions under the Annual Reduction Targets are approximately three times greater in 2028-2030 compared to 2023-2027, and that this convex reduction pathway, which allocates the burden of GHG reductions in the latter period, increases cumulative emissions compared to a linear reduction pathway. This, they claim, shifts excessive reduction burden onto the next administration and future generations.

In particular, Complainants highlight the potential for renewable energy in Korea and the need for active demand management of energy consumption, among other factors, asserting that it is not impossible to plan and implement a concave reduction pathway, which would achieve rapid greenhouse gas reductions at lower costs in the early stages. They argue that, in terms of balancing legal interests, the potential damage from failing to reduce GHG adequately is far greater than the short-term burden of reduction.

Since the level of global average temperature increase is proportional to the cumulative concentration of GHG in the atmosphere, the optimal reduction pathway should minimize cumulative emissions as much as possible. To avoid shifting excessive reduction burden to the future, it is essential to ensure that the reduction rate is not excessively high in any given year. Thus, as Complainants argue, a concave reduction pathway would indeed be ideal.

However, depending on the type of GHG reduction measures, significant time may be required for technology development and commercial adoption, and there may be a time gap between the implementation of policies and the realization of their effects. Therefore, from the perspective of realistic feasibility, a convex reduction pathway may be unavoidable in certain sectors. In some cases, the reduction pathways for individual sectors may also be interrelated with those of other sectors.

Additionally, large-scale infrastructure investments are necessary to overhaul the energy supply system and the broader industrial sector. When considering demand management, there may also be concerns about a sharp rise in energy costs. As a result, policymakers may need to take into account various socio-economic factors, including inflation management.

Ultimately, the shape of the reduction pathway, which includes specific annual emission targets, is determined by comprehensively considering the specific characteristics of the reduction measures available in each sector, the technical and economic conditions, and the interrelationships between individual measures and sectors. Although Article 4(1) of the Paris Agreement requires each country to plan reduction pathways based on the best available science to ensure rapid reductions, the specific form of the reduction pathway is, in principle, determined by the government's authority and responsibility to select and adjust the reduction measures for each sector.

Therefore, whether the planned reduction pathway under the Sectoral and Annual Reduction Targets violates the principle of prohibition against insufficient protection—by shifting excessive burdens to the future—should be judged based on whether there was any illegality or clear abuse of discretion in the government's exercise of authority in selecting and adjusting reduction measures for each sector, which are key elements in determining reduction pathway.

(b) Complainants argue that reducing the industrial sector's share in the Sectoral Reduction Targets, compared to what was announced by the government in 2021 for the Mid-to Long-Term Reduction Target up to 2030, contradicts the polluter-pays principle. Additionally, they claim that, in light of the global trend toward decarbonization of the economy, this reduction weakens industrial competitiveness.

However, the sectoral reduction proportions announced by the government in 2021 were not numerically specified in the NDC that Korea submitted to the UNFCCC Secretariat. Furthermore, this was not part of an official plan based on law, but rather a consideration during the policy decision-making process when preparing the proposal to revise NDC upward. The Sectoral Reduction Targets, which were later finalized based on law, reflect some adjustments to the reduction proportions between sectors.

The 'polluter-pays principle,' as referenced in Article 3, subparagraph 5 of the *Carbon Neutrality Framework Act*, pertains to 'reorganizing the taxation, financial systems, etc. to ensure that the economic costs of environmental pollution or greenhouse gas emission are reasonably reflected in the market price of goods or services.' However, it is difficult to conclude that this principle is directly linked to the proportion of emission reduction. Furthermore, there is no clear and undisputed standard for determining what level of sectoral reduction allocation would conform to the polluter-pays principle.

The issues raised by Complainants regarding the actual reduction burden of the industrial sector, its reduction potential, and the need to secure competitiveness are insufficient to establish that the government's adjustment of sectoral targets, under the Sectoral and Annual Reduction Targets, involved any illegality or a clear abuse of discretion in the exercise of its authority.

(c) The main reason the Annual Reduction Targets follow a convex shape, with higher reduction rates toward the latter period, is that the absorption through Carbon Capture, Utilization, and Storage (CCUS) is only factored in from 2026 onward, and international reductions are reflected solely in the 2030 target.

In this context, Complainants argue that relying excessively on uncertain reduction measures significantly decreases the likelihood of achieving the 2030 reduction target, and that increasing the share of international reductions while reducing the industrial sector's share violates the polluter-pays principle, as international reductions require substantial national fiscal resources.

Absorption through CCUS is not as technologically or economically mature as reduction measures in other sectors, and for both CCU (Carbon Capture and Utilization) and international reductions, there are still unresolved issues regarding the quantification of reduction amount where international consensus has not been reached. As a result, it is currently relatively difficult to make concrete predictions about the reduction amount that can be achieved through CCUS and international reductions.

Nevertheless, CCUS is part of the GHG reduction measures outlined in Article 34 of the *Carbon Neutrality Framework Act* (Fostering of Technology for Carbon Capture, Use, and Storage), and the use of international reductions for absorption and removal as a GHG reduction measure is similarly provided for in Article 35 (Implementation of International Mitigation Projects) of the same Act. Additionally, CCUS is recognized as one of the key reduction measures necessary to achieve the 1.5°C target under Decision 1/CMA.5 on the 'Global Stocktake,' paragraph 28(e), adopted at the 28th UNFCCC Conference of the Parties. Furthermore, international reductions are grounded in Article 6 of the Paris Agreement.

Regarding the Mid-to Long-Term Reduction Target, sectoral reduction targets, and annual reduction targets, Article 8(4) of the *Carbon Neutrality Framework Act* stipulates, in its main clause, that the "government shall re-examine them every five years and modify or reset such targets in accordance with the principle of progression under Article 4 of the Agreement if necessary." However, the proviso in the same paragraph states that "Provided, that the targets may be modified or reset before five years elapse if it becomes necessary due to changes in social and technical conditions etc." Furthermore, the Annual Reduction Targets include a note stating that "international reductions will be set in terms of annual targets, taking into account the finalization of relevant international standards and the expected first utilization period (anticipated in 2026), among others, and therefore is reflected 'only in the 2030 target.'' Therefore, once an international consensus on the calculation of reduction amount is finally reached, the annual targets for international reductions may be adjusted after the first application period, and the convex shape of the reduction pathway may be adjusted to a less pronounced degree.

Meanwhile, CCUS is separately categorized under the absorption and removal section in the Sectoral

and Annual Reduction Targets, but it also has characteristics that allow it to serve as a reduction measure in the energy transition or industrial sectors. International reductions, being linked to various emission sectors, are noted in the Sectoral Reduction Targets as ‘supplementary means to domestic reductions and pursued in a way that contributes to global carbon reduction efforts, in alignment with the Paris Agreement.’ As mentioned earlier, no indisputably clear standard exists for determining the level of reduction allocation that would comply with the polluter-pays principle in these respective areas.

In light of these considerations, the fact that the government, while adjusting the proportion of reduction measures across sectors, has planned specific reduction pathways that include the CCUS and international reduction sectors—measures permissible under domestic laws, international treaties and international consensus, yet still somewhat uncertain in terms of concrete reduction volume estimations— as well as mere figures of the proportions of each sector, do not, in themselves, provide sufficient grounds to conclude that the government’s exercise of authority involved illegality or a clear abuse of discretion.

(d) Therefore, it is difficult to conclude that the Sectoral and Annual Reduction Targets provide any grounds for illegality or a clear abuse of discretion in the government's exercise of authority regarding the selection and adjustment of reduction measures for each sector. Consequently, the form of the reduction pathway alone cannot be used to assert that excessive burden is being shifted to the future.

The Sectoral and Annual Reduction Targets maintain the overall post-reduction emission targets that were set when the proposal to revise NDC upward was prepared in 2021, while adjusting the proportions of the industrial sector, CCUS, and international reduction sector. In the absence of any grounds indicating illegality or a clear abuse of discretion, it is also difficult to conclude that they were designed in a way that would make it impossible to achieve the Mid- to Long-Term Reduction Target set under Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree thereof, simply based on the aforementioned adjustment of the reduction proportions across sectors.

Moreover, from the perspective of establishing reduction pathways and reduction measures, it cannot be said that the Sectoral and Annual Reduction Targets fail to provide the minimum characteristics required as protective measures corresponding to the risk situations posed by the climate crisis. Therefore, it cannot be concluded that the principle of prohibition against insufficient protection has been violated.

(3) Whether the calculation method for emission targets violates the principle of prohibition against insufficient protection or the principle of the supremacy of law

(A) Dismissal Opinion of Justices Lee Jongseok, Lee Eun-ae, Lee Youngjin, and Kim Hyungdu

1) The Sectoral and Annual Reduction Targets aim to achieve the Mid-to Long-Term Reduction Target, and Article 8(1) of the *Carbon Neutrality Framework Act*, which serves as the basis for these targets, uses the term "national greenhouse gas emissions." As such, we will examine whether the term "emissions" in Article 8(1) refers to either ‘total emissions’ or ‘net emissions,’ or exclusively to ‘net emissions,’ and whether the Sectoral and Annual Reduction Targets violate the delegating law.

a) Article 8(1) of the *Carbon Neutrality Framework Act* uses the term "emissions" without specifying ‘total emissions or ‘net emissions,’ and Article 3(1) of the Enforcement Decree of the same Act only specifies a reduction rate of 40 percent without mentioning emissions. Furthermore, neither the *Carbon Neutrality Framework Act* nor the Enforcement Decree thereof defines ‘emissions’ or specifies the method of calculating emissions. However, Article 2, subparagraph 3 of the same Act defines ‘carbon neutrality’ as a ‘state where greenhouse gas emitted, released, or leaked out into the atmosphere are offset by greenhouse gas absorption and the net emission becomes zero.’ Despite the explicit use of ‘net emissions’ in defining ‘carbon neutrality,’ the term "emissions" is simply used in Article 8(1) regarding national GHG reduction targets. In light of such circumstances, it cannot be concluded that ‘emissions’ in Article 8(1) necessarily refers to ‘net emissions.’

b) The *Carbon Neutrality Framework Act* was enacted through the consolidation and coordination of

eight climate change-related legislative bills proposed by lawmakers in the Environment and Labor Committee. Among these, six bills included provisions similar to Article 8(1) on 'Mid-to Long-Term Reduction Target,' with four of them using the term 'total greenhouse gas emissions,' one using 'greenhouse gas emissions,' and another simply stating that a 'mid- to long-term national greenhouse gas reduction target shall be set.' It appears that no specific discussion took place during the process of passing the consolidated bill regarding the specific meaning of 'emissions.'

c) Article 25(1) of the 2019 Enforcement Decree of the former *Green Growth Act*, which was repealed by the enactment of the Enforcement Decree of the *Carbon Neutrality Framework Act*, stated, "The greenhouse gas reduction target pursuant to Article 42(1)1 of the Act shall be to reduce total nationwide emissions of greenhouse gas of 2030 by 24.4 percent relative to the total greenhouse gas emissions in 2017." This provision used the term 'total emissions' for both the base year (2017) and the target year (2030). However, paragraph 2 of the same Article stated, "In calculating the achievement of the reduction target in paragraph 1, overseas reductions using the international carbon market and carbon sinks under Article 55(2) and Article 55(3) of the Act shall be included." This means that, in practice, the 'total emissions' for 2030 could be interpreted as 'net emissions.' Thus, even though the same term is used in the same provision, it does not necessarily carry the same meaning all the time, and its interpretation can vary depending on the context. While the *Carbon Neutrality Framework Act* and the Enforcement Decree thereof do not include a provision similar to Article 25(2) of the 2019 Enforcement Decree of the former *Green Growth Act*, the fact remains that the lack of a definition or specific calculation method for 'emissions' leaves room for different interpretations depending on the context.

d) According to the NDC that Korea submitted under the Paris Agreement, 2018 is used as the base year, with emissions specified as "727.6 million tons," explicitly noting that 'Land Use, Land Use Change, and Forestry (LULUCF; see Article 2, subparagraph 9 of the *Act on the Management and Improvement of Carbon Sink*)' is excluded. Additionally, it sets a target to reduce emissions by 40 percent from the 'total national greenhouse gas emissions' of 2018 by 2030, while stating that efforts will also include LULUCF, without specifying how this will be factored in. If that is the case, the 'emissions (total)' referred to in the Sectoral and Annual Reduction Targets—where base year emissions are calculated as total emissions and target year emissions as net emissions—generally align with Korea's NDC, while the term 'emissions' is not explicitly defined in the *Carbon Neutrality Framework Act* and the Enforcement Decree thereof, as described above. As such, this method of calculation cannot be deemed a violation of Article 8(1) of the *Carbon Neutrality Framework Act*.

e) As noted earlier, Korea has continuously set national GHG reduction targets for 2030 and made efforts to implement them through Article 42(1) of the former *Green Growth Act*, which was repealed by the enactment of the *Carbon Neutrality Framework Act,* and Article 25(1) of the 2019 Enforcement Decree of the former *Green Growth Act.* Therefore, it is essential to maintain the total emissions standard for the base year as established in the previous legislation, under the new law.

f) As seen in Article 7(1) of the *Carbon Neutrality Framework Act*, the government aims to achieve carbon neutrality by 2050, and 'carbon neutrality' is defined as 'a state where greenhouse gas net emissions become zero.' Therefore, it seems reasonable to interpret the 2030 'emissions' as 'net emissions,' as they serve as an intermediate target for achieving carbon neutrality. Article 2, subparagraph 7 of the *Carbon Neutrality Framework Act* defines 'greenhouse gas reduction as 'all kinds of activities to reduce or absorb greenhouse gas emissions to alleviate or delay climate change.' Accordingly, it is necessary to reflect 'activities to absorb greenhouse gases' alongside 'activities to reduce greenhouse gas emissions' when setting emission reduction targets. However, since 2018 is a past reference point, it only serves as a comparison for determining whether targets have been achieved. Therefore, there is no compelling reason to interpret 'emissions' stated in the provision exclusively as 'net emissions."'

g) Furthermore, the Annual Reduction Targets indicate that while the carbon sink value for the base year (2018) was set at '-41.3 million tons,' the target year (2030) aims for a lower sink value of '-26.7 million tons,' with absorptions decreasing. Additionally, absorptions targets for each year from 2023 to

2030 were also set to continuously decrease. Thus, one could argue that excluding absorptions in the base year but including them only in the target year could create a distortion, making it appear as though emissions have been reduced due to increased absorptions, when in fact the absorption has declined. However, this issue ultimately arises from the fact that only 'total emissions' was indicated for the base year (2018)'s 'emissions (total sum)', without reflecting 'absorption and removal.' As previously discussed, there is no reason to interpret 'emissions' exclusively as 'net emissions' when the provision simply states 'emissions.' Therefore, this cannot be grounds for considering the Sectoral and Annual Reduction Targets as 'illegal.'

h) In light of the foregoing, since the term 'emissions' in Article 8(1) of the *Carbon Neutrality Framework Act* cannot be definitively interpreted as either 'total emissions' or 'net emissions,' it cannot be said that the Sectoral and Annual Reduction Targets violate the superior law based on such interpretation.

2) Meanwhile, the Constitutional Court has examined whether the State has fulfilled its duty to protect right to healthy environment by determining whether 'appropriate and effective minimum protective measures have at least been taken,' using the principle of prohibition against insufficient protection as a standard. Whether this principle has been violated should be specifically assessed in each case by comparing the type of legal interest at issue, its standing within the constitutional order, the nature and degree of the infringement or risk to that legal interest, and the significance of conflicting legal interests (*see* Constitutional Court Decision 2018HunMa730 rendered on December 27, 2019).

There is no disagreement that climate change constitutes a specific risk situation that can threaten the lives, physical safety of citizens including Complainants, and degrade the environment that serves as the foundation of life. Addressing this climate crisis requires an approach based on specialized and scientific forecasts and analysis, along with the necessity for international cooperation. In light of this, the Court will review whether setting the 40 percent reduction of sectoral and annual targets, based on stating the 2018 'emissions (total sum)' as 'total emissions' and the 2030 'emissions (total sum)' as 'net emissions' violates the principle of prohibition against insufficient protection as established in Constitutional precedents. This review will assess whether it infringes upon the right to healthy environment and other fundamental rights of Complainants.

a) Since Article 7(1) of the *Carbon Neutrality Framework Act* sets the goal of achieving 'carbon neutrality' by 2050, the 40 percent reduction target set by Article 8(1) of the same Act and Article 3(1) of the Enforcement Decree thereof represents an interim step toward achieving carbon neutrality. While unifying the 'emissions (total sum)' for both 2018 and 2030 as 'net emissions' might result in a reduction target slightly below 40 percent, this minor difference cannot be taken as evidence that the targets are designed to hinder the achievement of carbon neutrality or that the law fails to secure even the 'minimum' effectiveness required to regulate climate mitigation measures. The Sectoral and Annual Reduction Targets divide emissions by sector and aim for continuous annual reductions, and they account for the potential decline in carbon absorption capacity due to the aging of forests. Although the future cannot be predicted with certainty, it is reasonable to assume that technological advancements for climate crisis mitigation will continue. Given the growing international consensus on the climate crisis, it is reasonable for administrative plans to include projected increases in 'absorptions and removals,' based on technologies addressing the climate crisis and the expansion of international cooperation. Thus, it is difficult to conclude that these projections are excessive. Since the Sectoral and Annual Reduction Targets clearly aim to mitigate the climate crisis, and the specific reduction targets are provisionally reasonable, it cannot be said that the State has failed to meet its obligation to protect the right to a healthy and pleasant environment, at least at a minimum level.

b) While the fact that the Sectoral Reduction Targets indicate 'total emissions' for the base year 2018's 'emissions (total sum)', without reflecting 'absorptions and removals,' could be seen as failing to account for the decreasing carbon absorptions due to forest aging, etc., Korea's NDC specified 2018 as the base year, with GHG emissions stated as '727.6 million tons,' explicitly excluding 'Land Use, Land Use Change, and Forestry (LULUCF).' Therefore, the mere fact that the Sectoral and Annual Reduction

Targets did not reflect these trends does not mean that that violates the ‘transparency’ objectives pursued by the Paris Agreement.

c) According to Constitutional Court precedent, when examining whether Complainants' right to healthy environment have been infringed from the perspective of the State's duty to protect fundamental rights, the standard is whether ‘at least appropriate and effective minimum protective measures have been taken.’ In this context, since Article 7(1) of the *Carbon Neutrality Framework Act* sets the goal of achieving ‘carbon neutrality’ by 2050, the 40 percent reduction target specified in Article 8(1) of the same Act and Article 3(1) of the Enforcement Decree thereof represents an interim step toward this goal of carbon neutrality. There remains the potential to achieve carbon neutrality by 2050 through future administrative plans combined. Therefore, even if unifying the ‘emissions (total sum)’ in the Sectoral and Annual Reduction Targets as ‘net emissions’ results in a reduction target slightly below 40 percent, it is difficult to conclude that the State has ‘failed to meet even the minimum protective measures’ required to safeguard right to healthy environment. On the contrary, Korea has taken efforts to achieve carbon neutrality even before the enactment of the *Carbon Neutrality Framework Act*, and the Sectoral and Annual Reduction Targets also clearly aim to further expand and promote ‘GHG absorption’ activities, ultimately working toward carbon neutrality and addressing the climate crisis. In light of this clear direction, it cannot be concluded that the Sectoral and Annual Reduction Targets fall short of fulfilling the State's duty to guarantee the right to a healthy and pleasant environment, even at a minimum level.

3) As discussed above, there is no clear basis to conclude that interpreting the base year 2018 ‘emissions (total sum)’ as ‘total emissions’ and the target year 2030 ‘emissions (total sum)’ as ‘net emissions’ is prohibited when interpreting Article 8(1) of the *Carbon Neutrality Framework Act*. Therefore, based on this interpretation, the Sectoral and Annual Reduction Targets, which set a 40 percent reduction target by sector and year, do not violate Article 8(1) of the *Carbon Neutrality Framework Act* or Article 3(1) of the Enforcement Decree thereof. Furthermore, as long as the Sectoral and Annual Reduction Targets aim to address the climate crisis and provisionally set reasonable specific targets for mitigating the crisis, they do not violate the principle of prohibition against insufficient protection.

(B) Unconstitutionality Opinion by Justices Kim Kiyoung, Moon Hyungbae, Lee Mison, Jung Jungmi, and Cheong Hyungsik

Article 8(1) of the *Carbon Neutrality Framework Act* stipulates that “the Government shall set a national medium- and long-term greenhouse gas emission reduction target (hereinafter referred to as "Mid-to Long-term Reduction Target") to reduce national greenhouse gas emissions by a ratio prescribed by Presidential Decree to the extent of not less than 35 percent from the 2018 levels by 2030.” As such, Article 8(1) of the *Carbon Neutrality Framework Act* uses the same term ‘national greenhouse gas emissions’ for both 2018 and 2030, without providing further explanation within that provision. Therefore, under the language of this provision, the standards for ‘emissions’ for both years cannot differ.

Article 8(1) of the *Carbon Neutrality Framework Act* sets the quantitative level of the reduction target as a percentage of reduction in national GHG emissions from the base year to the target year. From this, the formula for calculating the specific emission reduction target can be derived. In terms of this calculation too, the standards applied to both the input value and the output value should not be different.

As discussed above, the quantitative level of GHG reduction targets should be, at least roughly, stipulated in law. Accordingly, the absence of a directly stipulated quantitative reduction target for the years from 2031 to 2049 in Article 8(1) of the *Carbon Neutrality Framework Act* is deemed to violate the principle of prohibition against insufficient protection and the principle of statutory reservation. The primary reason is that leaving the setting of quantitative reduction targets solely to the government's discretion could result in the government focusing only on short-term reduction burdens, thereby

exacerbating long-term reduction burdens, making it difficult to maintain consistent policy. This would undermine the institutional effectiveness required for protective measures corresponding to the climate crisis. Furthermore, if the framework of quantitative reduction targets set by Article 8(1) of the *Carbon Neutrality Framework Act* were allowed to be altered according to the government's interpretation to set specific emission targets, the above provision establishing the framework for quantitative reduction targets would lose its constitutionally mandated institutional effectiveness.

When the emission reduction targets in the Sectoral and Annual Reduction Targets are converted into the reduction percentage from the base year to the target year, the reduction percentage would be 40% based on 'total emissions - net emissions,' 36.4% based on 'net emissions - net emissions,' and 29.6% based on 'total emissions - total emissions.' By applying different standards for emissions in the base year and the target year, the Government established the emission targets based on 'total emissions - net emissions.' This approach means that, when setting reduction targets for the single year of 2030, the government used the same term 'national greenhouse gas emissions' both for the base year of 2018 and the target year of the 2030, then arbitrarily altered the framework stipulated in Article 8(1) of the *Carbon Neutrality Framework Act* which quantifies 'reduction ratio' between the two. As a result, the government effectively lowered the level of reductions, undermining the institutional effectiveness of the Mid-to Long-Term Reduction Target established by Article 8(1) of the *Carbon Neutrality Framework Act*.

Therefore, when establishing administrative plans to achieve the Mid-to Long-Term Reduction Target under Article 8(1) of the *Carbon Neutrality Framework Act*, it is impermissible to calculate sectoral and annual emission and absorption targets based on 'total emissions for the base year - net emissions for the target year,' as was done in the Sectoral and Annual Reduction Targets.

2) Article 2, subparagraph 3 of the *Carbon Neutrality Framework Act* defines 'carbon neutrality' as 'state where greenhouse gas emitted, released, or leaked out into the atmosphere are offset by greenhouse gas absorption and the net emission becomes zero,' thereby using the concept of 'net emissions.'

The Mid-to Long-Term Reduction Target set by Article 8(1) of the *Carbon Neutrality Framework Act* serves as an intermediate target toward achieving the goal of 'carbon neutrality by 2050,' as outlined in the national vision in Article 7(1) of the same Act. Whether 'a ratio prescribed by Presidential Decree to the extent of not less than 35 percent from the 2018 levels' as stated in Article 8(1) of the *Carbon Neutrality Framework Act* and '40 percent' specified in Article 3(1) of the Enforcement Decree thereof, are unconstitutional, as well as whether the failure to set quantitative reduction targets for the years from 2031 to 2049 is unconstitutional, importantly hinges on the goal of 'carbon neutrality by 2050.'

Additionally, Article 3(4) of the Enforcement Decree of the *Carbon Neutrality Framework Act* states: "Where the Government sets, modifies, or resets the mid- to long-term greenhouse gas reduction targets, etc. pursuant to Article 8(1) through (4) of the Act, it may take into account the greenhouse gas reduction performance achieved by utilizing carbon sinks, etc. under Article 33(1) of the Act and the international mitigation outcomes, etc. under the main clause of Article 35(3) of the Act."

On the other hand, Article 25(1) and Article 25(2) of the Enforcement Decree of the former *Green Growth Act* was not predicated on the concept of 'carbon neutrality.' Article 8(1) of the *Carbon Neutrality Framework Act* merely refers to 'national greenhouse gas emissions' without specifying 'total national greenhouse gas emissions,' as was done in Article 25(1) of the Enforcement Decree of the *Green Growth Act*. Additionally, while Article 3(4) of the Enforcement Decree of the former *Carbon Neutrality Framework Act* allows the government to 'take into account the greenhouse gas reduction amount achieved by utilizing carbon sinks, etc.,' when 'setting, modifying, or resetting the mid- to long-term greenhouse reduction targets, etc.,' Article 25(2) of the Enforcement Decree of the former *Green Growth Act* stipulated that 'reductions utilizing carbon sinks must be included' 'when calculating whether reduction target has been achieved.' Therefore, the two provisions differ in their frameworks, and the aforementioned provisions of the former Enforcement Decree of *Green Growth Act* do not affect the interpretation of Article 8(1) of the *Carbon Neutrality Framework Act*.

In light of these factors, when the Government sets sectoral and annual reduction targets based on Article 8(2) and Article 8(3) of the *Carbon Neutrality Framework Act* to achieve the Mid- to Long-Term Reduction Target established by Article 8(1) of the Act and Article 3(1) of the Enforcement Decree thereof, it would be reasonable to use 'net emissions' as the basis for calculating 'national greenhouse gas emissions' for both the base year and the target year, taking into account 'reduction amount utilizing carbon sinks, etc.'

In terms of science and policies, applying different standards for the base year and the target year makes it impossible to create a coherent curve for reduction pathway. The IPCC reports also use 'net emissions' as a consistent basis for reduction pathways for emissions related to 'net zero.' If, different standards were applied to the term "national greenhouse gas emission" mentioned twice in Article 8(1) of the *Carbon Neutrality Framework Act*—using total emissions for the base year and net emissions for the target year—values would be calculated using inconsistent standards at different points in time, such as 'total emissions for 2018—net emissions for 2030—net emissions for 2050.' This inconsistency would make it impossible to manage the reduction pathway scientifically and reasonably from a policy perspective.

Additionally, the carbon sink figures in the Annual Reduction Targets show that the base year 2018 had an absorption target of '-41.3 million tons,' while the target year 2030 aims for lower absorptions of '-26.7 million tons,' with absorptions targets decreasing continuously each year from 2023 through 2030. Therefore, if absorptions are not reflected in the base year, but reflected in the target year, it would create a distortion, making it appear that 'national greenhouse gas emissions' have been reduced due to increased absorptions when, in fact, carbon absorption has decreased. This would be contradictory to the 'transparency' objective pursued by the Paris Agreement and accordingly hinder efforts to strengthen effective reductions in other sectors.

Thus, interpreting "national greenhouse gas emissions" in Article 8(1) of the *Carbon Neutrality Framework Act* as 'total emissions' for the base year of 2018 and 'net emissions' for the target year of 2030 does not align with the language, structure, or legislative purpose of Article 8(1) of the *Carbon Neutrality Framework Act*. It is also inconsistent with the scientific management of the reduction pathway and the transparency pursued by the Paris Agreement. Therefore, this approach could potentially have negative impacts on global GHG reduction efforts and, thus, is not permitted.

Regarding the 2030 national GHG emission target set under the Sectoral and Annual Reduction Targets, if 'national greenhouse gas emissions' referred to in Article 8(1) of the *Carbon Neutrality Framework Act* is interpreted as 'net emissions,' the target represents reduction of 36.4% from the 2018 levels, and if it is interpreted as 'total emissions,' it represents a 29.6% reduction from the 2018 levels—neither of which meets the 40% reduction target set by Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act.

Article 8(1) of the *Carbon Neutrality Framework Act* establishes the method for setting the Mid-to Long-Term Reduction Target, delegating only the exact percentage to be determined by Presidential Decree, to the extent of not less than 35 percent. Additionally, the Sectoral Reduction Targets are set as a means of achieving the 2030 Mid-to Long-Term Reduction Target set under Article 8(1) based on Article 8(2) of the same Act, while the Annual Reduction Targets are set under Article 8(3) to achieve both the Mid-to Long-Term Reduction Target and the Sectoral Reduction Targets. According to this framework of Article 8 of the *Carbon Neutrality Framework Act*, the 2030 national GHG emission target set in the Sectoral and Annual Reduction Targets would represent a 36.4% reduction from 2018 levels based on 'net emissions,' which may satisfy the 'not less than 35 percent' reduction requirement but not the 40 percent reduction 'prescribed by Presidential Decree,' meaning this target fails to achieve the Mid- to Long-Term Reduction Target set under Article 8(1) of the *Carbon Neutrality Framework Act.*

As examined above, the Sectoral and Annual Reduction Targets were designed in a way that makes it impossible to achieve the 2030 Mid- to Long-Term Reduction Target set by Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree thereof, when the calculation of

the 2030 national GHG emission target is based on either ‘net emissions’ or ‘total emissions’ consistently between the base year and the target year. This is regardless of the share of each sector’s reduction target or the shape of the reduction pathway. As such, it is evident that the GHG reduction targets set by these provisions cannot effectively lead to the actual reduction of GHG to the required extent. Therefore, the Sectoral and Annual Reduction Targets have failed to secure effectiveness as a legal framework for regulating climate mitigation measures in response to the climate crisis.

3) According to the principle of the rule of law in administration, administrative actions must comply with the law, which is governed by the “principle of the supremacy of law.” Additionally, the “principle of statutory reservation” applies, requiring that any essential matter in an administrative action must have an explicit legal basis. In such cases, the judiciary holds the final authority to interpret the law, in accordance with the principle of separation of powers.

In particular, the application of the principle of prohibition against insufficient protection to the formation and execution of protective measures against risk situations where fundamental rights are at risk of infringement, must begin with respect for the legislature. It is impermissible for a delegated executive body to arbitrarily alter the framework established by the legislature, through its own interpretation of the law, thereby lowering the level of protective measures.

From the perspective of legally institutionalizing GHG reduction targets as protective measures corresponding to the risk situation posed by the climate crisis, when a quantified reduction target framework is established by law, an administrative plan that sets specific emission and absorption targets by sector and year constitutes an administrative action subject to the principle of the supremacy of law. The Sectoral and Annual Reduction Targets also fall under such administrative actions. Therefore, the final authority to interpret Article 8(1) of the *Carbon Neutrality Framework Act*, which governs the calculation method for emission targets, as well as Article 8(2) and Article 8(3) regarding the interaction between the Mid-to Long-Term Reduction Target and the Sectoral and Annual Reduction Targets, lies with the Constitutional Court conducting the judicial review.

However, the method the government adopted to calculate the Sectoral and Annual Reduction Targets—using ‘total emissions for the base year - net emissions for the target year’—arbitrarily alters the framework of quantified GHG reduction targets established by the legislature in Article 8(1) of the *Carbon Neutrality Framework Act*, as previously discussed. By doing so, it lowers the level of protective measures intended to mitigate the climate crisis, which is why such an interpretation by the government cannot be accepted.

4) Therefore, the Sectoral and Annual Reduction Targets not only deviate from the language, structure, and legislative intent of the *Carbon Neutrality Framework Act* in terms of the method used to calculate emission targets, but they also fail to meet the minimum characteristics required for protective measures corresponding to the risk situation posed by the climate crisis. This is because the targets do not align with the scientific facts and international action standards that should guide the calculation of specific GHG reduction targets, nor do they achieve the institutional effectiveness required for an administrative plan designed to meet the GHG reduction targets set by law. As a result, they violate the principle of prohibition against insufficient protection. Furthermore, as administrative plans in which the government has arbitrarily altered the quantified reduction target framework established by Article 8(1) of the *Carbon Neutrality Framework Act*— thereby lowering the level of protective measures—they also violate the principle of the supremacy of law in administration grounded in rule of law.

In the management and progress of GHG reduction measures, setting the quantitative level of the reduction target is crucial, but it is equally important to accurately measure the already established reduction levels. If these levels are not properly measured, and the data is distorted, it will inevitably result in the inability to effectively manage reduction measures.

Regarding the implementation status of the Sectoral and Annual Reduction Targets, the Carbon Neutrality Green Growth Commission disclosed estimates for the GHG emissions of the four major sectors for 2023 on April 7, 2024, in materials attached to a press release. These estimates, expressed

in million tons, were: ‘203.7 for energy, 244.7 for industries, 45.2 for buildings, and 95.0 for transportation.’ Although these are provisional estimates, it appears that, for 2023 alone, GHG reductions in the four major sectors exceeded the targets set by the Annual Reduction Targets by approximately 32.3 million tons. This figure surpasses the difference between the Sectoral and Annual Reduction Targets' 2030 net emissions target of 436.6 million tons and the 2030 net emission target of 411.7 million tons, which would result from applying the 40% reduction rate relative to the 2018 levels, assuming ‘net emissions’ were used consistently for both the baseline and target years.

There may be various policy perspectives on whether the specific figures for the Sectoral and Annual Reduction Targets are appropriate in light of the reduction potential of each sector, and judicial review based on these perspectives would be difficult. However, at least in the first stage of establishing an administrative plan to implement the policy to achieve the Mid-to Long-Term Reduction Target set by law, the question of whether the method for calculating specific emission targets aligns with the language and structure of the law—and whether this method distorts the evaluation of reduction performance, thereby negatively impacting global reduction efforts—falls within the scope of judicial review.

5) The Sectoral and Annual Reduction Targets violate the principle of prohibition against insufficient protection or the principle of the supremacy of law in relation to the method for calculating national GHG emission targets, thereby breaching the State's duty to protect fundamental rights and infringing upon the right to healthy environment of Complainants.

However, if the effectiveness of the Sectoral and Annual Reduction Targets were to be immediately nullified, individual GHG reduction measures planned on the basis of these targets would lose their quantitative goals, resulting in an even more unconstitutional situation where the institutional mechanism for reducing GHG emissions would regress.

Furthermore, while rectifying the calculation standards for emissions in the base year and the target year according to the interpretation of Article 8(1) of the *Carbon Neutrality Framework Act*, the government retains broad discretion in shaping administrative plans, including how to adjust the specific figures for sectoral and annual emission targets.

Article 75(3) of the Constitutional Court Act states: "In the case referred to in paragraph (2), the Constitutional Court may nullify the exercise of governmental power which infringes fundamental rights or confirm that the inaction thereof is unconstitutional." This provision presupposes that the Constitutional Court has the discretion to decide whether to nullify the exercise of government power under review if a constitutional complaint is upheld. While the Sectoral and Annual Reduction Targets are declared to be unconstitutional, it is reasonable not to issue a decision nullifying them, but instead to maintain their effect until the government develops and implements a plan to revise the sectoral and annual reduction targets in line with the intent of this decision, based on the binding effect of the ruling.

Therefore, with respect to the Sectoral and Annual Reduction Targets, it is necessary to issue a ruling confirming that they infringe upon Complainant’s right to healthy environment, and are, therefore, unconstitutional.

(4) Sub-conclusion

With respect to the Sectoral and Annual Reduction Targets, the mere shape of the reduction pathway for the years from 2023 to 2030, resulting from specific adjustments to the proportion of reductions across sectors, cannot, by itself, serve as grounds for determining a violation of the principle of prohibition against insufficient protection.

Regarding the calculation of national GHG emission targets based on ‘total emissions for the base year - net emissions for the target year,’ Justices Lee Jongseok, Lee Eun-ae, Lee Youngjin, and Kim Hyungdu hold the dismissal opinion that the principle of prohibition against insufficient protection and the

principle of the supremacy of law were not violated. In contrast, Justices Kim Kiyoung, Moon Hyungbae, Lee Mison, Jung Jungmi, and Cheong Hyungsik hold the unconstitutionality opinion, finding that both the principle of prohibition against insufficient protection and the principle of supremacy of law were violated, infringing upon Complainants' right to healthy environment.

8. Conclusion

In view of the foregoing, Article 8(1) of the *Carbon Neutrality Framework Act* does not conform to the Constitution, and it shall remain in force until February 28, 2026, by which time it must be amended. The complaints regarding Article 3(1) of the Enforcement Decree of the same Act, as well as the Sectoral and Annual Reduction Targets, are without merit and are therefore dismissed in their entirety. All other complaints lodged by Complainant, as well as the applications for joint intervention in adjudication and for auxiliary intervention by Applicant, are found to be unlawful and are accordingly rejected. The ruling is rendered as stated in the Operative Part.

As to the complaint concerning the Sectoral and Annual Reduction Targets, Justices Lee Jongseok, Lee Eun-ae, Lee Youngjin, and Kim Hyungdu are in favor of dismissal, while Justices Kim Kiyoung, Moon Hyungbae, Lee Mison, Jung Jungmi, and Cheong Hyungsik express the opinion of unconstitutionality. As such, a majority of the Justices hold that they are unconstitutional for infringing upon Complainants' right to healthy environment. However, as the necessary quorum for rendering a decision in favor of a constitutional complaint, as prescribed by Article 113(1) of the Constitution and Article 23(2), Proviso 1 of the Constitutional Court Act, has not been met, a decision of dismissal is hereby rendered, and the Justices involved were unanimous in their opinions regarding the remaining complaints.

Chief Justice Lee Jongseok

Justice Lee Eun-ae

Justice Lee Youngjin

Justice Kim Kiyoung

Justice Moon Hyungbae

Justice Lee Miseon

Justice Kim Hyungdu

Justice Jung Jungmi

Justice Cheong Hyungsik

[Translation]

[Appendix 1] List

[Complainants in Case 2020HunMa389]

(The names of Complainants are omitted.)

Counsel for Complainants: Attorneys-at-law Shin Youngmu, Lee Keunung, Seong Kimun,-
Kim Minkyeong, Youn Sejong, Kim Jujin

Substitute Counsel for Complainants: Attorney-at-law Choi Changmin

Counsel for Complainants 1, 2, 3, 5, 6, 8, 10, 11, 12, 14, 15, 16, 17, 18: DLG Law Corporation
Responsible attorneys-at-law: Choi Jaewook,
Kim Yonghyeok, Cho Seonhee,
Kang Song-wook
Attorneys-at-law Lee Byungjoo, Choi Changmin

[Complainants in Case 2021HunMa1264]

(The names of Complainants are omitted.)

Counsel for Complainants: HAEWOO Lawfirm,
Responsible Attorney-at-law: Lee Chiseon
Jayeon Lawfirm
Responsible attorney-at-law: Choi Jaehong
Jihyang Lawfirm
Responsible attorney-at-law: Kim Youngju
Attorneys-at-law Seo Chaewan, Cho Eunho, Kim Seokyeon, Kim Younghee,
Ji Hyeonyeong, Lee Suyeon

[Complainants in Case 2022HunMa854]

(The names of the Complainants are omitted.)

Counsel for Complainants: Jayeon Law Firm
Responsible attorneys -at-law Lee Youngki, Choi Jaehong
CHANG JO Law Firm
Responsible attorney-at-law Lee Deokwu
HAEWOO Law Firm
Responsible attorney-at-law Lee Chiseon
Jinshim Law Firm
Responsible attorneys-at-law Lee Jeongmin, Ryu Jaeseong, Yoon Ducheol,

[Translation]

Chang Woohyeok

Attorneys-at-law Kim Seokyeon, Kim Younghee, Seo Chaewan,

Lee Suyeon, Cho Eunho, Seo Seongmin

[Complainants in Case 2023HunMa846]

(The names of the Complainants are omitted.)

Attorneys for Complainants:

Counsel for Complainants: Jayeon Law Firm

Responsible attorneys-at-law Lee Youngki, Choi Jaehong

Attorneys-at-law Kim Younghee, Kim Seokyeon, Lee Byungjoo

[Joint Intervenor]

Kang ○○

[Translation]

[Appendix 2] Plans Subject to Review

B Sectoral Reduction Targets

□ **2030 Post-Reduction Emissions: 436.6 million tons (△40% from the 2018 emission levels)**

○ **Conversion sector**: **a 45.9% reduction** through harmonizing nuclear power with renewable energy, and accelerating the transition to clean energy, such as solar power and hydrogen.

○ **Industrial sector: a reduction of 11.4%,** considering the commercialization timeline of technological advancements, through raw material/fuel switching and reduction of process emissions.

○ **Buildings, transportation, agriculture/livestock/fisheries, wastes**, and other sectors: **a reduction of 27.1% to 46.8%** by identifying reasonable means of implementation, with **emissions offset** through **carbon sinks, CCUS**, etc.

○ **International reductions**: These will be used as supplementary means to domestic reductions and pursued in a way that contributes to **global carbon reduction efforts,** in alignment with the Paris Agreement.

[Sectoral Emission Targets]

(Unit: million tons CO_{2e}, figures in parentheses indicate reduction rates relative to the 2018 levels)

Category	Sector	2018 Results	2030 Targets	
			Existing (Oct. 2021)	Amended (Mar. 2023)
Emissions (total sum)		**727.6**	**436.6 (40.0%)**	**436.6 (40.0%)**
Emissions	Conversion	269.6	149.9 (44.4%)	145.9 (45.9%)[1)]
	Industry	260.5	222.6 (14.5%)	230.7 (11.4%)
	Buildings	52.1	35.0 (32.8%)	35.0 (32.8%)
	Transportation	98.1	61.0 (37.8%)	61.0 (37.8%)
	Agriculture, Livestock, Fisheries	24.7	18.0 (27.1%)	18.0 (27.1%)
	Wastes	17.1	9.1 (46.8%)	9.1 (46.8%)
	Hydrogen	(-)	**7.6**	8.4[2)]
	Fugitive emissions, etc.	5.6	3.9	3.9
Absorptions & Removals	Carbon Sinks	(-41.3)	-26.7	-26.7
	CCUS	(-)	-10.3	-11.2[3)]
	International Reductions	(-)	-33.5	-37.5[4)]

※ The base year (2018) emissions are based on total emissions / the 2030 emissions are based on net emissions (total emissions minus absorptions and removals).

1) An additional reduction of 4 million tons will be achieved through the expansion of clean energy, such as solar power and hydrogen.

2) Hydrogen demand to be updated (+105,000 tons for blue hydrogen), with carbon captured from blue hydrogen reflected in the CCUS sector (0.8 million tons).

3) Domestic CCS potential factored in (0.8 million tons), with an additional expansion based on the proven progress of CCU (0.1 million tons).

4) An expansion of international reduction efforts by 4 million tons through identification of public-private partnership initiatives and increased investment.

C Annual Reduction Targets

□ The annual reduction targets are set considering the **time lag** between **the full initiation of GHG reduction policies** and the realization of **tangible effects**.

[Annual Emission Targets]

(Unit: million tons CO_{2e})

Sector	2018 (Baseline year)	2023	2024	2025	2026	2027	2028	2029	2030
Total	**686.3***	**633.9**	**625.1**	**617.6**	**602.9**	**585.0**	**560.6**	**529.5**	**436.6****
Conversion	269.6	223.2	218.4	215.8	211.8	203.6	189.9	173.7	145.9
Industry	260.5	256.4	256.1	254.8	252.9	250.0	247.3	242.1	230.7
Buildings	52.1	47.6	47.0	46.0	44.5	42.5	40.2	37.5	35.0
Transportation	98.1	93.7	88.7	84.1	79.6	74.8	70.3	66.1	61.0
Agriculture, Livestock, Fisheries	24.7	22.9	22.4	21.9	21.2	20.4	19.7	18.8	18.0
Wastes	17.1	15.1	14.7	14.1	13.3	12.5	11.4	10.3	9.1
Hydrogen	(-)	3.4	4.1	4.8	5.5	6.2	6.9	7.6	8.4
Fugitive emissions, etc.	5.6	5.1	5.0	5.0	4.9	4.8	4.5	4.2	3.9
Carbon Sink	-41.3	-33.5	-31.3	-28.9	-30.4	-29.1	-28.3	-27.6	-26.7
CCUS	(-)	-	-	-	-0.4	-0.7	-1.3	-3.2	-11.2

* While the total emissions submitted to the international community for 2018 amounted to 727.6 million tons, the net emissions were 686.3 million tons. All annual totals are based on net emissions (with sectoral figures rounded down to the nearest decimal place).

**International reductions will be reflected only in the 2030 target, considering the finalization of

relevant international standards and the expected initial utilization period (anticipated for 2026).

VII. Fiscal Plan and Expected Benefits

1. Fiscal Investment Plan

□ It is estimated that over the next five years (2023–2027), a **total of KRW 89.9 trillion** or more will be required to support carbon neutrality and green growth.

○ The breakdown includes sectoral reduction measures (KRW 54.6 trillion), climate change adaptation measures (KRW 19.4 trillion), and green industry growth initiatives (KRW 6.5 trillion), among others.

○ **The average annual growth rate for the years from 2023 to 2027 is projected to be approximately 11.5%,** surpassing the government's overall fiscal growth rate over the past five years (which averaged 8.0% per annum).

(unit: KRW 100 million, %)

Category	2023	2024 ~ 2027	Total	Annual Average Growth Rate
Total	**133,455**	**765,738**	**899,193**	**11.54**
► Sectoral mid- to long-term reduction measures	79,480	466,283	545,763	11.48
►Climate change adaptation measures	29,856	164,213	194,068	9.43
►Green industry growth	10,459	54,453	64,912	7.34
►Just transition	2,366	19,837	22,203	37.57
►Regional carbon neutrality and green growth	4,602	30,319	34,922	25.36
►Workforce development and awareness raising	5,999	26,881	32,881	2.11
►International cooperation	693	3,751	4,444	1.59

※ The specific investment plan may be subject to change, taking into account the financial conditions, project feasibility, and other comprehensive considerations.

[Appendix 3] Complainant's Claims and Opinions of Interested Institutions

A. Complainant's Claims

(1) It is an uncontested scientific fact that climate change is occurring as a result of anthropogenic GHG emissions, leading to unprecedented and rapid changes in the climate. If this trend persists, it will inflict severe damage on the natural environment and ecosystems, posing significant risks to human life, health, social stability, and economic activities, with Korea being no exception.

(2) As agreed under international treaties such as the Paris Agreement, it has been established that, in order to limit climate change induced by GHG emissions to a level tolerable by humanity, efforts must be made to ensure that the global average temperature rise remains well below 2°C above pre-industrial levels, with further efforts to limit the rise to within 1.5°C. Internationally recognized scientific findings, including those presented in IPCC reports, demonstrate that cumulative GHG emissions must remain within the permissible threshold of the 'carbon budget' to avert catastrophic climate impacts. Accordingly, each country is obligated to refrain from emitting more than its equitable share of this carbon budget into the atmosphere.

(3) Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act, which set the 2030 GHG reduction target, violate the principle of prohibition against insufficient protection with respect to the State's duty to safeguard the right to life, the right to pursue happiness, and the environmental right for the people and future generations who will live beyond 2031. These provisions disproportionately and preemptively infringe upon the fundamental rights of future generations, as compared to those living during the 2020–2030 period, and violate intergenerational equity regarding carbon emissions, thereby infringing upon the right to equality.

(a) Article 8(1) of the *Carbon Neutrality Framework Act* sets the national GHG reduction target for 2030 by a ratio, as prescribed by Presidential Decree to the extent of not less than 35 percent from the 2018 levels, while Article 3(1) of the Enforcement Decree of the same Act sets this ratio at 40 percent. However, from the perspective of the carbon budget and related criteria, these provisions fall significantly short of the minimum thresholds established by climate science and international standards.

The IPCC Sixth Assessment Report presents the global remaining carbon emission allowance, or 'carbon budget,' as of 2020, based on target temperature limits and the likelihood of restricting the rise in global average temperature relative to pre-industrial levels. When this global carbon budget is apportioned based on Korea's population relative to the global population, it provides a fair and reasonable estimate of Korea's carbon budget. Applying the 2030 GHG reduction target set by these provisions and the annual emission targets outlined in the Plans Subject to Review, Korea's carbon budget, based on the 1.5°C target, will be exhausted by approximately 2025, and by approximately 2028 for the 1.7°C target. The 2030 GHG reduction target set by these provisions is grossly inadequate, as underscored by the UNEP Emissions Gap Report, and when compared to the reduction targets of other OECD countries.

(b) Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act do not establish any GHG reduction targets for the period between 2031 and 2050.

(c) Article 8 of the *Carbon Neutrality Framework Act* lacks legal provisions intended to ensure the effective execution of the national GHG reduction targets as described above.

(4) Article 8(1) of the *Carbon Neutrality Framework Act* only sets a minimum threshold for GHG emissions by 2030, while delegating the specifics of setting and modifying the targets to regulatory orders. In doing so, not only is the reduction target for 2030 delegated, but other essential matters that significantly affect the national community and its members—such as economic sector-specific and year-by-year emission targets, and the reduction pathway toward carbon neutrality by 2050—are left undetermined by law and instead indiscriminately delegated to Presidential Decree, without specifying appropriate and detailed requirements for the scope of authority granted to regulatory order, thereby violating the principle of legislative reservation and the principle of prohibition against blanket

delegation.

(5) The Plans Subject to Review shift the responsibility for reducing GHG emissions from the current generation to future generations, fail to implement appropriate and effective minimum protective measures to combat climate change, and fall short of adequately fulfilling the State's duty to safeguard the fundamental rights of Complainants. Consequently, this infringes upon Complainants' rights to life, health, equality, environment, property, and the pursuit of happiness.

(a) The Plans Subject to Review set the 2018 national GHG emissions based on 'total emissions' of 727.6 million tons, yet the 2030 national GHG emissions target—representing a 40% reduction from this level—was set at 436.6 million tons based on 'net emissions,' excluding absorptions and removals. This translates to only a 29.6% reduction in 'total emissions' and 36.4% reduction in 'net emissions' from 2018 levels, falling short of the reduction target specified in Article 8(1) of the *Carbon Neutrality Framework Act.*

(b) The cumulative reduction for the years from 2023 to 2027, based on the Annual Reduction Targets, amounts to 48.9 million tons, while the cumulative reduction for the years from 2028 to 2030 reaches 148.4 million tons, effectively deferring 75% of the total reduction burdens by 2030 to the next administration. This convex, back-loaded reduction pathway increases total GHG emissions during the commitment period, resulting in an additional 515 million tons of emissions compared to the GHG reduction pathway established in 2021 based on linear reduction under the Annual Reduction Targets. Such a reduction pathway delays the implementation of the 2030 GHG reduction target until well after 2028, failing to satisfy the principle of proportionality which mandates a balanced distribution of the reduction burden over time to achieve carbon neutrality. It also transfers a disproportionate share of the reduction burden to the next administration and future generations, placing excessive burdens on them.

(c) The Plan, while mandated to cover 20-year commitment period, only set Sectoral and Annual Reduction Targets up to 2030 and lack any plans for the years from 2031 to 2042, violating Article 10(1) of the *Carbon Neutrality Framework Act*. Furthermore, by not setting reduction targets for post-2031 emissions, they fail to meet the principle of clarity.

The Plan only list the reduction targets for each year but do not provide measures for reducing emissions annually or contingency plans for failing to meet the reduction targets.

(d) When Korea's 2030 national GHG reduction target (NDC) was announced in 2021, the reduction rate for the industrial sector was set at 14.5% reduction from 2018 levels. However, under the Sectoral Reduction Targets, this rate has been lowered to 11.4%. By reducing the burden on the industrial sector and increasing reliance on international reductions, the burden shifts from industries to the government, thereby increasing the fiscal burden of securing international reductions. This sends the wrong signal that GHG reductions are not an urgent matter for industries, hampers the proper functioning of the emissions trading system, and contradicts the global trend toward decarbonization, ultimately harming the economy. The industrial sector, one of the largest sources of emissions, accounting for 35% of national GHG emissions in 2018, is assigned the smallest reduction, violating the polluter-pays-principle.

(e) Carbon capture, utilization, and storage (CCUS) technologies have not yet been sufficiently proven in terms of technical and economic feasibility. Carbon capture and utilization (CCU) is not currently recognized as GHG reduction under the IPCC guidelines, which serve as the international standards for calculating national GHG emissions. Carbon capture and storage (CCS) technologies face domestic challenges, including the lack of suitable offshore sites for storing captured carbon, such as oil and gas fields, and the high cost associated with the technology. Furthermore, CCS is primarily used in the production of fossil energy, raising concerns about extending the lifespan of the fossil energy industry.

As for international reductions, negotiations on related matters are still ongoing, and since developing countries are now also obligated to reduce emissions under the Paris Agreement, it is difficult to fully count international reductions as actual reductions. This approach would require the investment of billions of dollars in national funds.

The Sectoral and Annual Reduction Targets have increased reliance on unproven and uncertain reduction measures such as CCUS, and while aiming to reduce 37.5 million tons of emissions through international reductions by 2030, they fail to provide specific figures on annual reductions or detail the necessary financial resources.

(f) The Fiscal Plan estimates that a total of over KRW 89.9 trillion will be required to support carbon neutrality and green growth over the next five years (2023-2027). However, it lacks detailed funding plans and significantly underestimates the necessary financial resources. Moreover, the Fiscal Plan only covers the upcoming five years, without providing projections for the full 20-year period mandated by the *Carbon Neutrality Framework Act*.

(6) Article 42(1)1 of the former *Green Growth Act*, and Article 25(1) of the 2016 and 2019 Enforcement Decree of the former *Green Growth Act* also violated the fundamental rights of Complainants.

(a) Article 42(1)1 of the former *Green Growth Act* failed to establish specific national GHG reduction targets by law, instead delegating this authority entirely to the executive branch. This violates Article 35(2) of the Constitution, which requires that the content and exercise of right to healthy environment be prescribed by law, as well as the principle of statutory reservation. It also breaches the principle of prohibition against blanket delegation stipulated in Article 75 of the Constitution.

(b) Article 25(1)1 of the 2016 Enforcement Decree of the former *Green Growth Act* set a national GHG reduction target for 2030 at a similar level to that of 2020, despite the government's failure to meet the 2020 target. This allowed the President to arbitrarily abolish the 2020 GHG reduction target.

(c) The 2019 Enforcement Decree of the former *Green Growth Act*, which set the 2030 national GHG reduction target at 24.4 % of the 2017 emissions, fails to meet the minimum protective measures required to effectively prevent the climate disaster risks under international treaties such as the UNFCCC and the Paris Agreement, thereby violating the principle of prohibition against insufficient protection with respect to the State’s duty to protect fundamental rights.

B. Opinions of the Minister for Government Policy Coordination and the Minister of Environment

(1) This Constitutional Complaint does not meet the requirement for legality.

(a) The former *Green Growth Act* has been replaced by the *Carbon Neutrality Framework Act* which includes strengthened regulations on GHG reduction and is no longer in effect. Therefore, the provisions of the former *Green Growth Act* and the Enforcement Decree thereof, which are among the provisions under review, are no longer acts of public authority. Additionally, the Plan is an administrative plan that do not, in and of themselves, have the direct effect of restricting the rights and obligations of the people. As such, these provisions are not acts of public authority subject to a constitutional complaint.

(b) Complainants are not directly affected by the provisions or plans subject to review but merely have a factual interest in them. Thus, Complainants lack personal relevance. Furthermore, the provisions and plans subject to review are implemented through specific GHG reduction policies, and therefore lack direct effect. Moreover, no current infringement on fundamental rights resulting from the Plans Subject to Review can be acknowledged.

(c) Article 42(1)1 of the former *Green Growth Act*, which came into effect on April 14, 2010, and Article 25(1) of the 2016 Enforcement Decree of the former *Green Growth Act*, which came into effect on June 1, 2016, were challenged in this constitutional complaint approximately 10 years and 4 years thereafter, respectively. As such, this complaint does not comply with the prescribed filing period for constitutional complaints.

(2) Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act do not violate the principle of prohibition against insufficient protection with

regard to the State's duty to protect fundamental rights.

(a) The decision in Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree thereof to set the 2030 GHG reduction target at 40% from 2018 levels significantly raises the existing reduction target. This target exceeds the 2030 reduction (37.5%) required under a linear reduction pathway from the peak GHG emissions in 2018 to the carbon neutrality goal by 2050.

(b) Korea's peak GHG emissions occurred later than in most major developed countries, leaving it a shorter reduction timeframe. As a result, Korea's annual average reduction rate from 2018 to 2030 is 4.17%, which is higher than that of most major developed countries. Moreover, due to Korea's industrial structure—where manufacturing, a high-emission sector, accounts for a larger share of the economy compared to other nations—the Mid- to Long-Term Reduction Target is highly ambitious. Additionally, many in the business and industrial sectors have raised concerns about the significant burden this entails.

(c) Different countries have varying peak years for GHG emissions, emission volumes, industrial structures, and timelines for initiating GHG reductions, leading to inevitably divergent linear reduction pathways. Consequently, reduction standards must be tailored to each country's specific circumstances. Therefore, it is inappropriate to compare Korea's aforementioned 2030 GHG reduction target solely with the median value in the range of global average reduction targets suggested by the IPCC and to claim it constitutes a constitutional violation.

The IPCC does not calculate carbon budgets on a country-specific basis but rather on a global scale, and these figures are also presented as ranges. Additionally, unlike the European Union, which has imposed stricter national reduction obligations through its Parliament, Korea has not established its own national remaining carbon budget. Since carbon emissions are heavily influenced by industrial structures, it is unreasonable to assume that carbon budgets should be allocated to countries based on population. Under the Paris Agreement, which relies on voluntary national targets as opposed to the binding commitments of the Kyoto Protocol, it is difficult to argue that the laws and plans governing GHG reduction targets violate the Constitution based on unagreed concepts.

(d) Specific reduction targets and pathways from 2031 to 2050 are largely already in place through the 2050 carbon neutrality goal, with a framework requiring the establishment of targets every five years for 10 years thereafter, and applying the principle of progression.

(e) A global mechanism is in place to ensure implementation through the Global Stocktake (GST) every five years under the Paris Agreement, as well as the submission and review of Biennial Transparency Reports (BTRs) every two years. Domestically, implementation is ensured through legal mechanisms, such as the inspection of the current status of implementation under Article 9 of the *Carbon Neutrality Framework Act*, the progress review of the National Framework Plan under Article 13, and the active control of emissions through the emission trading system's carry-over and borrowing mechanisms, which apply to more than 70% of Korea's total GHG emissions. Additionally, the auditing function of the Board of Audit and Inspection further ensures compliance. Therefore, sufficient mechanisms are in place to ensure the effective implementation of the GHG reduction targets.

(f) Therefore, it cannot be said that the GHG reduction targets set by Article 8(1) of the *Carbon Neutrality Framework Act* and Article 3(1) of the Enforcement Decree of the same Act constitute a failure by the State to take protective measures to safeguard citizens' legal interests concerning the environment, nor can it be argued that the measures taken are entirely inadequate or clearly insufficient to protect those interests.

(3) Article 8(1) of the *Carbon Neutrality Framework Act* sets only the minimum threshold for the national GHG reduction target, with the specifics to be determined by Presidential Decree based on that standard. It is not a law that directly restricts or infringes on fundamental rights, like criminal or tax laws. Given the highly variable and frequently changing nature of the regulated matters, the requirements for specificity and clarity in delegation are relaxed. Therefore, it does not violate the principle of legislative reservation or the principle of the principle of prohibition against blanket delegation.

(4) The Plans Subject to Review do not violate the principle of prohibition against insufficient protection concerning the State's duty to protect fundamental rights.

(a) Carbon neutrality is not solely about reducing GHG emissions; it also requires more active and proactive measures to absorb already emitted GHGs. Therefore, reviewing the constitutionality of the Plans Subject to Review based solely on the reduction in 'total emissions' is inconsistent with the legislative intent of the *Carbon Neutrality Framework Act*. Moreover, the method of calculating emission targets based on the 'total emissions for the base year – net emissions for the target year' follows precedents set by some Annex 1 countries under the Kyoto Protocol.

(b) The Plans Subject to Review take into account the interests of future generations, as achieving institutional effectiveness in such policy goals often requires long-term implementation. Thus, whether the annual reduction plans are appropriate inevitably falls within the broad discretion of the State. The IPCC does not allocate carbon budgets per country but instead calculates them globally and presents them as ranges. Thus, it is an excessive logical leap to link the carbon budget—which was neither allocated nor assigned to individual countries under the Paris Agreement—to the limitation of fundamental rights of future generations in each country. The back-loaded reduction pathway, with greater reductions in the latter half of the period, is inevitable due to the time required for the development and commercialization of technologies, as well as the time lag between the full initiation of policies and the realization of their effects. Consequently, the fact that the Plans Subject to Review adopt a convex rather than a linear reduction plan does not constitute a violation of the duty to protect fundamental rights. The shape of the reduction pathway must be considered in light of the State's broad discretion in integrating and coordinating various means to achieve its administrative goals.

(c) The Plans Subject to Review are subject to future supplementation and modification. Under the principle of progression outlined in Article 4 of the Paris Agreement and Article 8(4) of the *Carbon Neutrality Framework Act*, it is impossible to lower the reduction targets once they have been set, necessitating a cautious approach to setting such targets. Given that Korea is scheduled to submit its 2035 NDC in 2025, it is reasonable that the GHG reduction plans beyond 2031 will be based on a review of the implementation performance and monitoring data over the preceding five years.

The Plans Subject to Review do not violate the principle of clarity, and all policy measures should be pursued comprehensively across all sectors. Therefore, there is no basis to argue that combining specific measures for each year is necessary to ensure their constitutionality.

(d) The decision to decrease the industrial sector's reduction burden in the Plans Subject to Review takes into account the domestic context where carbon reduction is challenging in key industries such as steel, petrochemicals, and semiconductors, which constitute a significant portion of the country's manufacturing sector. This decision also considers the economic impact and the principle of "just transition." Simply adjusting the reduction percentages for certain sectors cannot be deemed unconstitutional.

(e) Incorporating new technologies, such as carbon capture, and utilizing international reductions, along with a comprehensive fiscal plan, are inherent aspects of administrative planning and cannot be considered unconstitutional.

Currently, major countries worldwide are expected to use 'Carbon Capture, Utilization, and Storage (CCUS)' as a core technology for achieving carbon neutrality. In Korea, the *Act on Carbon Dioxide Capture, Transportation, Storage, and Utilization* is scheduled to come into effect on February 7, 2025, and the final outcome document of the 28th Conference of the Parties to the UNFCCC also explicitly agreed to accelerate CCUS technology as part of GHG reduction efforts, reflecting a growing international consensus on the role of CCUS in reducing GHG emissions.

International reductions provide a valuable means for achieving GHG reduction targets, offering a way to supplement domestic limitations in reduction, while aligning with the needs of developing countries and yielding cost-effective outcomes. This approach also supports the Paris Agreement's goal of promoting global cooperation in reducing GHG emissions by having developed nations assist

developing countries.

Unless there is clear evidence that the administrative measures adopted by the government are entirely ineffective or are unnecessary, mere disagreement with the chosen measures or the percentage of reductions targeted does not make the administrative plan unconstitutional.

(5) The provisions and plans subject to review do not infringe upon Complainants' right to healthy environment, right to life, right to pursue happiness, or right to equality.

(a) It cannot be recognized that Complainants have any specific rights to demand certain actions or inactions from the government concerning the establishment and implementation of GHG reduction targets. Therefore, their right to healthy environment cannot be considered infringed. Additionally, the mere possibility that Complainants may experience future climate-related disasters due to GHG emissions does not constitute an infringement of their right to life. Since the issue of whether the environmental right or right to life has been violated has already been addressed, it is unnecessary to separately adjudicate whether the right to pursue happiness has been violated. Moreover, it cannot be reasonably argued that Complainants' right to pursue happiness has been specifically or actually infringed by the laws and plans related to GHG reduction targets.

(b) The provisions and plans under review merely outline the government's roles and plans in addressing climate change, without any discrimination against future generations from the current one. Their effects apply uniformly to the entire population, without differential effects or impact of the government's measures based on age or generation. As no actual discrimination can be identified, there is no issue of infringement on the right to equality, and it is difficult to assert a violation of intergenerational liberty. Regarding the 'intergenerational inequality' raised by Complainants, it is not feasible to compare the present situation with an uncertain future across time, nor can any discriminatory future state be concretely anticipated at this stage.

(6) Article 42(1)1 of the former *Green Growth Act* and Article 25(1) of the 2016 and 2019 Enforcement Decrees of the former *Green Growth* Act did not infringe upon Complainants' fundamental rights.

(a) Regarding Article 42(1)1 of the former *Green Growth Act*, it is not appropriate for the National Assembly to legislate specific GHG reduction targets, given the numerous variables and the nature of such targets. Instead, these figures should be determined by the government based on expert analysis, parliamentary discussions, and public hearings. In this regard, the government's legislation of Article 25(1) of the Enforcement Decree of the former *Green Growth Act* constitutes an 'executive order' under the latter part of Article 75 of the Constitution. As such, the question of whether it violates the principle of prohibition against blanket delegation, which presupposes a delegated order, does not arise. Even if such a question were to arise, Article 42 of the former *Green Growth Act* specifically sets out the criteria and direction for setting GHG reduction targets, meaning it does not violate the principle of prohibition against blanket delegation.

(b) Article 25(1) of the 2016 Enforcement Decree of the former *Green Growth Act*, which set the 2030 GHG reduction target at 37% from the emission projections, was determined based on an analysis that incorporated various variables reflecting the reality, making the target ambitious at that time. Terms like 'target' and 'pursuit of efforts' in agreements like the Paris Agreement imply that after once the target is set based on thorough analysis, efforts must be made to achieve it. The fact that the target was not met or was modified during the implementation process due to unforeseen variables does not render the act itself unlawful.

(c) Article 25(1) of the 2019 Enforcement Decree of the former *Green Growth Act*, which set the 2030 GHG reduction target at 24.4% from the 2017 emission levels, merely transitioned from an emission projection-based approach to an absolute amount-based approach without altering the specific emission target of 536 million tons. This modification was made to address concerns that the previous roadmap could lead to unproductive disputes and a lack of clarity whenever future projections change.