Direction of South Korea's Climate Change Response: Focusing on the Advisory Opinion on Climate Change by the International Tribunal for the Law of the Sea (ITLOS)

Shin Sohyun, Research Fellow
Lim Jeonghee, Senior Associate
Lee Shinhyung, Research Associate
The Asan Institute for Policy Studies
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Introduction

The rise of unprecedented heatwaves, cold spells, floods, and other natural disasters attributed to climate change has heightened awareness that the climate crisis is a collective challenge affecting us all. Nonetheless, it is clear that our responses to this pressing issue have fallen short. In light of this, international courts have recently issued advisory opinions on cases tied to the climate crisis, trying to clarify the obligations and responsibilities of states regarding climate change and emphasizing the urgency of addressing this critical issue. On May 21, 2024, the International Tribunal for the Law of the Sea (ITLOS) unanimously delivered an advisory opinion regarding climate change. At the request of the Commission of Small Island States on Climate Change and International Law (COSIS), ITLOS provided an advisory opinion on the specific obligations of parties to the United Nations Convention on the Law of the Sea (UNCLOS) to prevent, reduce, and control pollution of the marine environment in relation to the deleterious effects that result or are likely to result from climate change, including through ocean warming and sea level rise, and ocean acidification. In particular, the Tribunal concluded that states have an obligation to take all necessary measures to prevent, reduce, and control negative impacts on the marine environment, going beyond the general obligation of due diligence to a 'stringent' due diligence standard. This judgment emphasizes that states must take more proactive and substantial measures to respond to climate change, a stance that international courts are likely to reinforce in future rulings. On August 29, 2024, the Constitutional Court of Korea ruled that Article 8(1) of the Carbon Neutrality Act was “unconformable to Constitution”, finding that the government’s climate commitments were insufficient and unmet, thereby infringing upon the constitutionally guaranteed human rights of the Petitioners. While Korea's greenhouse gas reduction targets superficially appear to meet international standards, they have drawn criticism both domestically and internationally for yielding only minimal actual reductions. In light of the advisory opinion from the International

Tribunal for the Law of the Sea, it is anticipated that subsequent rulings from other international and domestic courts will further delineate and reinforce governmental obligations regarding climate change. Consequently, there is an urgent necessity to revise climate crisis response policies and legal frameworks to align with these evolving standards.

1. Main Aspects of the Advisory Opinion on Climate Change by the International Tribunal for the Law of the Sea[1]

Globally, while awareness and discourse surrounding the climate crisis are expanding, the pace of substantive changes in government policy and responses remains disproportionately slow. The reluctance of nations to adopt more proactive measures in addressing the climate crisis can be attributed not only to considerations of domestic industries but also to their failure to recognize climate change as a pressing threat relative to other issues. Additionally, poor enforcement of climate laws intensifies this situation, as enforcement mechanisms and penalties for non-compliance are frequently inadequate. Recent climate litigation questioning governmental obligations and responsibilities regarding climate change has emerged in domestic courts worldwide, including the European Court of Justice (ECHR)[2], reflecting an escalating concern. Advisory opinions have been delivered from the International Tribunal for the Law of the Sea[3], the International Court of Justice (ICJ)[4], and the Inter-American Court of Human Rights (IACHR)[5] concerning the specific obligations and responsibilities of states in the context of climate change. On May 21, 2024, the International Tribunal for the Law of the Sea unanimously adopted its advisory opinion on this matter.[6] In South Korea, constitutional challenges have arisen regarding the government's compliance with greenhouse gas reduction laws and target-setting, raising questions about potential infringements on fundamental rights. On August 29, 2024, the Constitutional Court of the Republic of Korea issued a pivotal ruling stating that the absence of reduction targets for the period of 2031 to 2049 under Article 8(1) of the Carbon Neutrality Act(Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis), transfer an excessive burden to the future, failing to meet the minimum protective measures necessary to correspond to the critical situation posed by the climate crisis.[7] Consequently, it was determined to be in violation of the "Principle of Prohibition of Insufficient Protection" (or "Principle Against Underprotection"). Planning greenhouse gas reduction targets and pathways during this period requires a high degree of social consensus, and the core elements must, therefore, be directly stipulated by law, leading to the judgment that the "Principle of Statutory Reservation" was also violated. Accordingly, Article 8(1) of the Carbon Neutrality Act was found to infringe upon the petitioners' right to a healthy environment and was thus declared unconformable to Constitution. However, acknowledging that lawmakers need time to reach a social consensus on specific

quantitative greenhouse gas reduction targets for the years 2031 to 2049, the Court required the Government to enact revised legislation by 28 February 2026, allowing for the temporary application of the provision until the necessary amendments are implemented. International discussions on the climate crisis have progressed beyond the signing and implementation of related international treaties. Now, states are directly going to various international courts to determine the specific scope and content of obligations and responsibilities. This signifies that responses to the climate crisis are no longer confined to political accountability or public opinion; instead, the focus is shifting toward concrete governmental actions and international accountability. In its recent advisory opinion, the Tribunal concluded that states bear a "stringent" standard of due diligence obligation given the high risks of serious and irreversible harm to the marine environment from climate change impacts and ocean acidification.

(1) Request for Advisory Opinion

Small Island Developing States (SIDS), which hold the least responsibility for climate change, are the nations poised to experience its most significant impacts, both in the short and long term. These states are set to face direct impacts and severe damage over the coming decades from climate-driven oceanic changes, including sea level rise, extreme weather events, and the loss of marine biodiversity and fisheries. Additionally, these states face the existential threat of territorial (island) submersion, posing a direct risk to their sovereignty. In response to this existential threat and the international community's inaction on climate change, the Commission of Small Island States on Climate Change and International Law(COSIS) was established.[8] On December 12, 2022, the Commission formally requested an advisory opinion from the International Tribunal for the Law of the Sea regarding the specific obligations of the parties of the United Nations Convention on the Law of the Sea in addressing climate change impacts, including sea warming, sea level rise, and ocean acidification.[9] ITLOS was established by UNCLOS to resolve disputes concerning the interpretation and application of the Convention. The Tribunal's advisory opinion on climate change may encourage further efforts to address the impacts of climate change on the marine environment.

(2) Key Aspects of the Advisory Opinion

The specific legal questions requested by the Commission for an advisory opinion to the Tribunal are as follows:
First, what are the specific obligations of State Parties to the United Nations Convention on the Law of the Sea to prevent, reduce and control pollution of the marine environment in relation to the deleterious effects that result or are likely to result from climate change, including through ocean warming and sea level rise, and

ocean acidification, which are caused by anthropogenic greenhouse gas emissions into the atmosphere?
Second, what are the specific obligations of State Parties to UNCLOS to protect and preserve the marine environment in relation to climate change impacts, including ocean warming and sea level rise, and ocean acidification?[10]

Both questions raise broader issues related to the connection between the law of the sea and climate change. They concern whether one regime imposes limitations on state actions under the other, as well as the timing and manner of such limitations. For instance, in light of the obligations under the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement, what are the rights and obligations of States Parties under UNCLOS concerning climate mitigation and adaptation in the marine environment? Additionally, what are the potential liabilities for harm caused by climate change impacts on the oceans and marine ecosystems of states and other actors? What measures can be taken to promote international cooperation and coordination concerning the effects of climate change on the marine environment?[11]

During the Third United Nations Conference on the Law of the Sea (UNCLOS III), discussions highlighted the necessity of regulating marine pollution and the comprehensive protection of the marine environment. As a result, Part XII of the United Nations Convention on the Law of the Sea, titled "Protection and Preservation of the Marine Environment," was introduced. This part includes general provisions for the protection of the marine environment, obligations related to international and regional cooperation, and mandates for legislative and enforcement measures for each source of pollution. It also addresses technical assistance, monitoring, and environmental impact assessments, establishing a comprehensive set of obligations for marine environmental protection. Article 192 imposes a general obligation on states to protect and preserve the marine environment, while Article 194 requires states to take all necessary measures to prevent, reduce, and control marine pollution from "all sources" of pollution. Many provisions of Part XII are directly or indirectly related to the obligation to prevent, reduce, and control marine environmental pollution.[12] The obligations outlined in Article 194 are further specified in Articles 207 to 212, which mandate states to adopt domestic legislation based on specific sources of pollution and to apply with the international rules and standards.[13] In other words, the Convention requires States to take "all necessary measures" to prevent marine environmental pollution by adopting laws and regulations at the national level and endeavor to comply with various relevant international rules and standards in order to fulfill their obligations.

So, what are the specific obligations of States Parties to UNCLOS in relation to climate change? Numerous participants in the proceedings asserted that Article 194

constitutes the most pivotal provision related to the first question of the advisory opinion request. The Tribunal reflected this view, interpreting the term "necessary" in Article 194's phrase "all necessary measures" broadly to encompass meanings such as "indispensable", “requisite” or "essential."[14] Furthermore, the Tribunal recognized that "necessary measures" include not only those actions that are indispensable for preventing, reducing, and controlling marine pollution but also other measures aimed at achieving those objectives.[15] Article 194(3) stipulates that measures shall be taken to minimize the release of substances that are toxic or harmful to the marine environment to the fullest possible extent.

The International Tribunal for the Law of the Sea has stated that, in the context of climate change, such measures correspond to what are known as "mitigation measures." Among these mitigation measures, the most critical is the reduction of anthropogenic greenhouse gas emissions.[16] This highlights the connection between greenhouse gas reduction measures and the obligations established by the United Nations Convention on the Law of the Sea to prevent, reduce, and control marine environmental pollution.

Many participating states and relevant organizations emphasized that the determination of what constitutes necessary measures is left to the contracting parties. However, they asserted that such determinations should not be made arbitrarily by the parties, but rather based on objective criteria.[17] The International Tribunal for the Law of the Sea also noted that, assessing the necessary measures to prevent, reduce, and control marine environmental pollution resulting from anthropogenic greenhouse gas emissions, a range of factors must be considered in objectively. These include scientific evidence, international rules and standards related to climate change, other relevant elements, the feasibility of the means, and the capabilities of the states involved.[18]

In particular, it was specified that consideration should be given to the Assessment Reports issued by the Intergovernmental Panel on Climate Change (IPCC), a United Nations body for assessing the science related to climate change. According to the IPCC's Special Report on "Global Warming of 1.5°C"[19] published in 2018, if the increase in global average temperature exceeds 1.5°C compared to pre-industrial levels[20], the risk of exacerbated consequences significantly increases.[21] Conversely, achieving a target of net-zero carbon dioxide emissions by 2050 is necessary to maintain the rise in global average temperature within 1.5°C. Limiting the temperature increase to within 1.5°C can substantially reduce the risks associated with climate change compared to a 2°C increase.

The International Tribunal for the Law of the Sea recognized that, in relation to the specific role of science[22], other relevant factors must also be taken into account. This

implies that a precautionary approach should be adopted, whereby actions are taken to address potential adverse effects even in the presence of scientific uncertainty. Relevant international rules and standards serve as references for determining what constitutes "necessary measures." Additional climate change-related treaties and instruments that may be considered include the United Nations Framework Convention on Climate Change, the Paris Agreement, the International Convention for the Prevention of Pollution from Ships (MARPOL), the Chicago Convention on International Civil Aviation, and the Montreal Protocol on Substances that Deplete the Ozone Layer.

The United Nations Framework Convention on Climate Change and the Paris Agreement were frequently referenced by many participating countries, which highlighted two primary obligations. Firstly, all appropriate measures must be taken to limit the increase in global average temperature to 1.5°C. Secondly, as mandated by Article 4(2) of paragraph 2 of the Paris Agreement, parties are required to establish Nationally Determined Contributions (NDCs) [23] and to implement domestic mitigation measures to achieve these targets.

The obligations under the Paris Agreement are separate sets of obligations with those under UNCLOS. They serve as a reference for determining the scope of climate change-related obligations under UNCLOS; however, compliance with the obligations of the Paris Agreement does not imply fulfillment of those under UNCLOS. In other words, even if a state has established and implemented voluntary reduction targets and publicized pathways for achieving them, it may still incur international responsibility if it is determined that it has not taken "all appropriate measures" as required by UNCLOS.[24]

The International Tribunal for the Law of the Sea has indicated that phrases such as "the best practicable means at their disposal" and "in accordance with their capabilities" allow for a degree of flexibility in assessing states' compliance obligations, aimed at alleviating excessive burdens on states. However, it emphasized that the obligations under Article 194 of UNCLOS are obligations that all states must comply with and should not be used as an excuse to unduly postpone, or be exempt from the implementation of the obligation to take "all necessary measures."[25]

Furthermore, under Articles 207, 211, 212, 213, and 222 of UNCLOS, parties are obliged to adopt necessary legislation or regulations to prevent, mitigate, and control marine pollution resulting from greenhouse gas emissions. They also have a duty to cooperate in accordance with Articles 197, 200, and 201, which include specific obligations to promote research related to marine pollution from anthropogenic greenhouse gas emissions, facilitate scientific investigations, and encourage the exchange of information and data. Additionally, pursuant to Article 202, there is an obligation to assist developing countries particularly vulnerable to climate change.

Moreover, Articles 204, 205, and 206 impose requirements to continuously monitor and assess the risks and impacts of anthropogenic greenhouse gas emissions on the marine environment, to publish these findings in reports, and to conduct Environmental Impact Assessments (EIA) when planned activities could potentially cause pollution or significant changes to the marine environment.[26]

The second question is closely related to many aspects addressed in the first question, particularly concerning Articles 192 and 194(5) of the UNCLOS. States have a special obligation to protect and preserve the marine environment from the impacts of climate change and ocean acidification, which includes, for instance, the obligation to restore marine habitats and ecosystems. The obligations mentioned under Article 192 and the following articles are of a substantive nature. Given that climate change and ocean acidification cause the high risks of serious and irreversible harm to the marine environment, it has been stated that the standards of due diligence obligations must be stringent. In relation to Article 194(5), paragraph 5, it has been determined that states bear a special obligation not only to protect the habitats of endangered species but also to protect and preserve vulnerable ecosystems themselves.[27]

(3) Obligations for States: "Stringent" Due Diligence Obligations.

The International Tribunal for the Law of the Sea stated that when taking necessary measures to prevent, mitigate, and control marine pollution in accordance with the obligations set forth in Article 194 of the United Nations Convention on the Law of the Sea, states must act in compliance with due diligence obligations.[28] Moreover, the Tribunal emphasized that the standard for the due diligence obligations that states are required to implement in order to reduce marine pollution resulting from anthropogenic greenhouse gas emissions is "stringent.[29]

The term "due diligence" refers to the requirement to "exercise reasonable care," which falls under the category of "obligation of conduct" as opposed to an "obligation of result" that mandates the achievement of a specific outcome regardless of the procedures or means employed. In contrast, an obligation of conduct requires adherence to certain processes and means. Therefore, if an actor fails to meet the required obligations or standards due to negligence, they may be subject to legal liability. Ultimately, determining whether there has been a violation of the obligation of conduct hinges on proving "negligence," which can be challenging. There are varying opinions regarding the legal status of due diligence obligations under international law, including whether they constitute customary international law or merely general principles of law. However, clearer rules and standards are emerging across various fields of international law. In essence, due diligence obligations signify a form of oversight and prevention duties that states have regarding actions taken by individuals within their territory or under their control.

There are differing views regarding the nature of the due diligence obligation implicit in Articles 192 and 194 of the United Nations Convention on the Law of the Sea, with some interpreting it as an obligation of conduct and others as an obligation of result.[30] In addressing the nature of the due diligence obligation in Article 194(1), the Tribunal concluded that it requires "taking all necessary measures" rather than achieving the result of "preventing, mitigating, and controlling marine pollution." Therefore, it categorized this obligation as an obligation of conduct. Furthermore, the Tribunal emphasized that the due diligence obligations that states must implement to reduce marine pollution resulting from anthropogenic greenhouse gas emissions are "stringent."[31] This reflects a heightened standard due to the significant negative impacts that greenhouse gas emissions can cause to the marine environment, necessitating that the obligation's criteria be set at a high level to account for such risks.

During the proceedings, many states expressed the view that the standard for due diligence should be set at a high level. They argued that the efforts required to prevent marine pollution caused by greenhouse gas emissions must exceed "best efforts" and that, particularly in the context of climate change, the level of "care" should be defined more stringently. It appears that these assertions were taken into consideration.[32]

The standard of due diligence varies depending on the specific environmental context in which the obligation applies, meaning the content of due diligence obligations is variable. In other words, for more hazardous activities, a more stringent standard of due diligence is applied in accordance with the level of risk. In this context, risk should be assessed in terms of the foreseeability of harm and its severity or magnitude.[33] Consequently, states have an obligation to take necessary measures to prevent, mitigate, and control marine pollution in accordance with the due diligence standard that corresponds to the level of risk associated with activities that result in anthropogenic greenhouse gas emissions.

The International Tribunal for the Law of the Sea interpreted the due diligence obligation under Article 194 as requiring not merely "best efforts," but rather specific and affirmative actions. This means that states must establish a comprehensive national system, including legislative, administrative procedures, and enforcement mechanisms. They are obligated to regulate activities that emit greenhouse gases and ensure that such systems function effectively to achieve the intended objectives.[34]

Several factors are considered when assessing whether the due diligence obligation has been fulfilled. Notably, this includes the affirmative duty to mandate Environmental Impact Assessments (EIA) for "all planned activities, public or private, that may cause significant pollution or serious and harmful changes to the marine environment through anthropogenic greenhouse gas emissions," including

cumulative effects. The EIA must take into account both the specific impacts of the planned activities on the marine environment and their cumulative impacts.[35]

Additionally, under Articles 202 and 203 of UNCLOS, it has been interpreted that developed countries have a special obligation to support efforts by developing countries—particularly those vulnerable to the adverse effects of climate change—to address marine pollution resulting from anthropogenic greenhouse gas emissions. This support is to be implemented through capacity building, scientific expertise, technology transfer, and other means.

On June 5, 2024, World Environment Day, UN Secretary-General António Guterres stated, "We need an exit ramp off the highway to climate hell".[36] The climate crisis poses an existential threat to humanity, necessitating active compliance with obligations by states. Particularly, rising sea levels due to climate change present a tangible threat to the national security of Pacific island nation states, as their territories are at risk of submersion, impacting the survival and human rights of their residents. Despite these significant adverse effects, there was insufficient discussion regarding the implications of sea level rise and harmful changes to the marine environment during the negotiation of UNCLOS, resulting in the exclusion of these issues from the Convention. Establishing a causal relationship between the damages related to climate change, such as rising sea levels, and specific actions by states has proven challenging, making it particularly difficult to attribute responsibility for the damages to particular states. However, the advisory opinion recently issued by the International Tribunal for the Law of the Sea suggests that obligations regarding the reduction of anthropogenic greenhouse gas emissions should be implemented as more stringent due diligence obligations, indicating a trend toward reinforcing the obligations and responsibilities of states within the international community.

2. The Status of South Korea's Climate Change Response

(1) Characteristics of Implementation under the Paris Agreement and the New Climate Regime[37]

The Paris Agreement, in Article 2, establishes a long-term temperature goal for the international community to keep the global temperature increase well below 2°C above pre-industrial levels while pursuing efforts to limit the increase to 1.5°C.[38] The Intergovernmental Panel on Climate Change (IPCC) also recommended in its 2018 Special Report that the increase be limited to 1.5°C, outlining the efforts necessary to mitigate the impacts of temperature rise and achieve this goal.[39] Thus, 1.5°C can be considered the threshold that the international community has committed to in order to prevent the climate crisis.

Following the adoption of the Paris Agreement in 2015, all countries, regardless of whether they are developed or developing, are required to submit their NDCs as specified in Article 3 of the Agreement every five years.[40] NDCs represent the greenhouse gas reduction targets determined by each party. The Paris Agreement grants individual countries the authority to autonomously set their reduction targets based on their good will, and it stipulates that each contracting party shall make its best efforts to achieve these targets.[41] Additionally, the Agreement introduces the principle of "progression," which mandates that newly submitted NDCs must not reflect a regression in greenhouse gas reduction levels compared to the previous submissions but instead demonstrate heightened ambition. In accordance with this framework, South Korea has established and submitted its reduction target to be achieved by 2030.

(2) South Korea's Climate Change Response and Implementation Status

Domestic climate change response and greenhouse gas reduction policies in South Korea have made significant progress since the enactment of the Framework Act on Low Carbon, Green Growth in 2010[42] and the establishment of the National Strategy for Low Carbon, Green Growth[43]. Subsequent to the signing of the Paris Agreement in 2015, South Korea established a Nationally Determined Contribution aimed at achieving a 37% reduction in emissions relative to Business As Usual (BAU)[44] projections by 2030, and introduced a roadmap to fulfill this objective in 2016.[45] Starting with the declaration of carbon neutrality in 2020, South Korea formed a Carbon Neutrality Commission, which was later restructured into the Carbon Neutrality and Green Growth Commission.[46] In 2021, an upward adjustment was proposed to increase the reduction target to a 40% decrease in greenhouse gas emissions compared to 2018 levels. Currently, South Korea's climate change response policies are based on the Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis, known as the Carbon Neutrality Act[47], which passed the National Assembly on August 31, 2022. In April 2023, the first national basic plan based on the Carbon Neutrality Act was established, outlining specific implementation plans for the reduction targets.[48] Article 7 of the Carbon Neutrality Act stipulates the national vision of achieving a carbon-neutral[49] society by 2050, where the net greenhouse gas emissions reach 'zero' by reducing emissions and increasing absorption.[50] This aligns with the global trend of countries declaring "carbon neutrality by 2050." As such, with the Carbon Neutrality Act serving as its legal foundation, the Republic of Korea has, to a considerable extent, established an institutional framework for implementation by declaring its 2050 carbon neutrality goal and upwardly revising its 2030 national greenhouse gas reduction target. The long-term emission target for South Korea remains at 436.6 million tons by 2030 (a 40% reduction compared to the country's peak emission in 2018), in compliance with the elevated NDC submitted in 2021.[51]

However, South Korea has maintained the reduction targets outlined in the revised Nationally Determined Contribution submitted in 2021 while adjusting between and within sectors based on the feasibility of reduction measures.[52] As indicated in the table above, South Korea's reduction targets have been adjusted downward for the industrial sector, considering the conditions of the domestic industry. The corresponding reduction amount (approximately 8 million tons) is being distributed across the transition sector, which includes clean energy sources such as solar and hydrogen, as well as the international reduction sector. Although Article 6[53] of the Paris Agreement provides a pathway for countries to achieve their reduction targets through overseas reductions, similar to the market mechanisms[54] established under the Kyoto Protocol, parties are fundamentally required to make substantial reductions domestically to meet their NDCs. Furthermore, South Korea has established a reduction pathway that imposes significantly greater burdens in later years compared to the initial reduction amounts, leading to skepticism and criticism from the international community regarding the feasibility of achieving the final reduction targets. In other words, while the domestic NDC targets may superficially appear to align with international standards, it is questionable whether substantial greenhouse gas reductions are actually being realized. Nonetheless, on August 29, 2024, the Constitutional Court dismissed challenges regarding sectoral and annual reduction targets, respecting the government's authority to choose and adjust sector-specific reduction measures in its ruling.

3. Implications for South Korea's Responsibilities in Climate Change Implementation

Although advisory opinions do not possess the legally binding effect of judgments rendered by international courts, the legal interpretations and applications provided by such authoritative bodies, such as the International Tribunal for the Law of the Sea and the International Court of Justice, are afforded significant deference and carry considerable weight within the international legal community.55 Presently, there is no binding mechanism to enforce accountability for states that fail to meet their reduction targets under the new climate regime. Climate change-related cases brought before international and domestic courts aim to leverage judicial authority to address and enhance this flexible compliance framework, thereby promoting substantive enforcement. On March 29, 2023, the United Nations General Assembly adopted a resolution requesting an advisory opinion from the International Court of Justice concerning the obligations of states in relation to climate change.[56] The central inquiry focuses on identifying the international legal obligations of states to protect the climate system and other environmental components from anthropogenic greenhouse gas emissions for the benefit of present and future generations. In contrast to previous

requests for advisory opinions made to the International Tribunal for the Law of the Sea, this request to the International Court of Justice includes specific questions, such as: "What are the legal consequences under these obligations for States where they, by their acts and omissions, have caused significant harm to the climate system and other parts of the environment?" The request particularly emphasizes the legal obligations and responsibilities towards Small Island Developing States that are especially vulnerable to the adverse effects of climate change due to their geographical conditions and developmental status, as well as the current and future generations affected by these changes.[57]

While predicting the outcome of the International Court of Justice's deliberations is inherently uncertain, it is likely to be challenging to arrive at a conclusion that contradicts the advisory opinion of the International Tribunal for the Law of the Sea, especially given the prevailing trends in various domestic and international judicial forums. Moreover, the request for an advisory opinion from the International Court of Justice encompasses legal consequences related to breaches of state obligations regarding climate change, a topic not addressed in the advisory opinion from the International Tribunal. Thus, there exists a possibility that the Court may also explore the state's responsibility such violations. As these judgments from international courts accumulate, domestic courts may reference them when assessing government compliance with climate change obligations. Consequently, the evolving dynamics of international law and societal movements may compel individual states to adopt more stringent greenhouse gas reduction obligations and responsibilities for climate change action. In light of this, it is essential to monitor these international developments and, in accordance with the decision of the Constitutional Court, establish reduction targets for the years 2031 to 2049 while implementing more robust and proactive climate crisis response policies and revising the relevant legal frameworks.

[1] The advisory opinions of the International Court of Justice lack binding legal force but possess authoritative legal effects that influence states. They function as a legal service provided to assist states in adhering to their international obligations by elucidating the principles and specific details of these obligations. IISD, "Ongoing Climate Proceedings: Setting the Stage for ICJ's Opinion", 1 May, 2024, <https://sdg.iisd.org/commentary/policy-briefs/ongoing-climate-proceedings-setting-the-stage-for-icjs-opinion/>, Carlos A. Cruz Carrillo, "ITLOS Advisory Opinion on Climate Change and Oceans: Possibilities and Benefits",*Opinio Juris*, 21 July, 2021, <https://opiniojuris.org/2021/07/21/itlos-advisory-opinion-on-climate-change-and-oceans-possibilities-and-benefits/>

[2] European Court of Human Rights, Press Release, "Violations of the European Convention for failing to implement sufficient measures to combat climate change", <https://hudoc.echr.coe.int/eng-press#{%22itemid%22:[%22003-7919428-11026177%22]}>

[3] ITLOS, "Tribunal Delivers Unanimous Advisory Opinion in Case No. 31", ITLOS/Press 350 (21 May 2024) <https://www.itlos.org/fileadmin/itlos/documents/press_releases_english/PR_350_EN.pdf>

[4] Request for Advisory Opinion transmitted to the Court pursuant to General Assembly resolution 77/276 of 29 March 2023, Obligations of States in respect of Climate Change

[5] Request for an Advisory Opinion on Climate Emergency and Human Rights to the Inter-American Court of Human Rights from the Republic of Colombia and the Republic of Chile (9 January 2023) <https://climatecasechart.com/wp-content/uploads/non-us-case-documents/2023/20230109_18528_petition-2.pdf>

[6] ITLOS, *Request for an Advisory Opinion Submitted by the Commission of Small Island States on Climate Change and International Law*, *Advisory Opinion*, No. 31 (21 May 2024) <https://www.itlos.org/fileadmin/itlos/documents/cases/31/Advisory_Opinion/C31_Adv_Op_21.05.2024_orig.pdf>.; Thirty-four state parties, including South Korea, along with the UN, the International Union for Conservation of Nature (IUCN), the International Maritime Organization (IMO), the Commission of Small Island States on Climate Change and International Law (COSIS), the United Nations Environment Programme (UNEP), and nine other international organizations, submitted written statements. Public hearings were held from September 11 to 25, 2023, during which, in addition to COSIS, 35 state parties and three international organizations participated in the oral proceedings.

[7] The Constitutional Court of Korea, Decision on the Constitutionality of Article 42, Paragraph 1, Subparagraph 1 of the Framework Act on Low Carbon, Green Growth, et al. (2020Hun-Ma389, 2021Hun-Ma1264, 2022Hun-Ma854, 2023Hun-Ma846 [consolidated]) <https://ecourt.ccourt.go.kr/coelec/websquare/websquare.html?w2xPath=/ui/coelec/dta/casesrch/EP4100_M01.xml&eventno=2020%ED%97%8C%EB%A7%88389>

[8] On the eve of the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP26), the Commission of Small Island States on Climate Change and International Law (COSIS) was established, primarily through the initiative of the Prime Ministers of Antigua and Barbuda and Tuvalu, with the objective of promoting the development of international law pertaining to climate change. At present, the Commission comprises eight member states: Antigua and Barbuda, Tuvalu (whose Prime Ministers serve as Co-Chairs), Palau, Niue, Vanuatu, Saint Lucia, Saint Vincent and the Grenadines, and Saint Kitts and Nevis. Pursuant to the founding agreement, membership in the Commission is open to all member states of the Alliance of Small Island States (AOSIS). (Commission of Small Island States on Climate Change and International Law, 'About COSIS', <https://www.cosis-ccil.org/>)

[9] ITLOS, "The International Tribunal for the Law of the Sea receives A Request for an Advisory Opinion from the Commission of Small Island States on Climate Change and International Law", ITLOS/Press 327 (12 December 2022) <https://www.itlos.org/fileadmin/itlos/documents/press_releases_english/PR_327_EN.pdf>

[10] Ibid.

[11] Maria José Alarcon, Maria Antonia Tigre, "Navigating the Intersection of Climate Change and the Law of the Sea: Exploring the ITLOS Advisory Opinion's Substantive Content", *Climate Law (A Sabin Center Blog)*, April 24, 2023.

[12] *Supra* note 10, para. 189.

[13] Ibid, para. 190.

[14] Ibid, para. 189-190.

[15] Ibid, para. 203.

[16] Ibid, para. 205.
[17] Ibid, para. 206.
[18] Ibid, para. 207.
[19] The IPCC Special Report on Global Warming of 1.5°C refers to a report requested by the Conference of the Parties to the United Nations Framework Convention on Climate Change from the Intergovernmental Panel on Climate Change (IPCC) to provide scientific basis for the 1.5°C target established in the Paris Agreement of 2015.
[20] While neither the United Nations Framework Convention on Climate Change nor the Paris Agreement explicitly defines the precise timeframe for the "pre-industrial" period, the Intergovernmental Panel on Climate Change (IPCC) generally utilizes the global average temperature during the period of 1850-1900 as a baseline reference. This information is cited from the Republic of Korea's Ministry of Environment's publication: "파리협정 함께 보기", March 2022, page 18. <https://www.2050cnc.go.kr/download/BOARD_ATTACH?storageNo=3388>
[21] Ibid, para. 208; IPCC, 'Summary for Policymakers', *Global Warming of 1.5°C,* Special Report 10.
[22] *Supra* note 10, para. 212.
[23] Park Deok-young, "Major Contents of the Paris Agreement," International Environmental Law and Domestic Environmental Law (2020): 30
[24] Ibid, para. 222-223.
[25] Ibid, para. 225-226.
[26] ITLOS, "Tribunal Delivers Unanimous Advisory Opinion in Case No. 31 Request Submitted to the Tribunal by the Commission of Small Island States on Climate Change and International Law", ITLOS/Press 350 (21 May 2024), 2-4.
<https://www.itlos.org/fileadmin/itlos/documents/press_releases_english/PR_350_EN.pdf>
[27] Ibid, 4-5.
[28] Ibid, para. 234-235.
[29] Ibid, para. 241.
[30] Ibid, para. 237.
[31] Ibid, para. 241.
[32] *Supra* note 10, para. 240.
[33] Ibid, para. 239.
[34] Ibid, para. 235.
[35] Ibid, para. 365.
[36] UN News, "There is an exit off 'the highway to climate hell', Guterres insists" (5 June 2024) <https://news.un.org/en/story/2024/06/1150661>
[37] The "New Climate Regime" refers to the new climate paradigm that applies following the expiration of the 1997 Kyoto Protocol regime. The Kyoto Protocol regime was originally set to expire in 2012 but was extended until 2020. At the 17th Conference of the Parties (COP17) in 2011, it was agreed to begin negotiations for establishing a new climate regime, with the aim of reaching an agreement by 2015.The Paris Agreement, concluded in 2015, can be said to form the foundation of this new climate regime. Unlike the Kyoto Protocol regime, which imposed greenhouse gas reduction obligations only on developed countries, the new regime is evaluated as establishing a universal system where all countries participate by reflecting their national circumstances.
[38] Article 2 of the Paris Agreement
[39] IPCC, *Global Warming of 1.5°C. An IPCC Special Report*, Cambridge University Press (2018)
[40] From the Terminology Dictionary of the Carbon Neutrality and Green Growth Commission: <https://www.2050cnc.go.kr/base/board/list?boardManagementNo=25&page=1&searchCategory=&searchType=&searchWord=&menuLevel=2&menuNo=125&korVal=&engVal=N>
[41] Article 4, Paragraph 3 of the Paris Agreement ('will reflect its highest possible ambition')
[42] Framework Act on Low Carbon, Green Growth https://www.law.go.kr/lsInfoP.do?lsiSeq=202753#0000
[43] From the Presidential Archives, Green Growth Committee National Strategy Website, Ministry of the Interior and Safety <http://17greengrowth.pa.go.kr/?page_id=2450>
[44] BAU (Business As Usual) is a concept used to project future values of certain variables under normal circumstances. In the context of emissions, BAU emissions refer to the projected trend of future greenhouse gas emissions under given economic conditions. Generally, it assumes that the trends in greenhouse gas reduction technology development or gradually strengthening greenhouse gas reduction policies observed from the past to the present will continue into the future. BAU serves as the baseline for

setting national reduction targets. (Source: Ministry of Environment, Greenhouse Gas Inventory and Research Center, FAQ. What are BAU emissions?) <https://www.gir.go.kr/home/board/read.do;jsessionid=iWax3xRn56LVKGtppXHDyqnr1SMCbBIiNOG8ETeIvvz1taOcbLavv4WSzCZv2PBc.og_was1_servlet_engine1?pagerOffset=0&maxPageItems=10&maxIndexPages=10&searchKey=&searchValue=&menuId=16&boardMasterId=1&boardId=3>

[45] From the summary of the 1st National Basic Plan for Carbon Neutrality and Green Growth

[46] From the Republic of Korea Policy Briefing, 2050 Carbon Neutrality (2021) <https://www.korea.kr/special/policyCurationView.do?newsId=148881562>

[47]"Framework Act on Carbon Neutrality and Green Growth for Coping with Climate Crisis" (Effective as of September 25, 2022) Article 8 (Mid- to Long-term National Greenhouse Gas Reduction Targets, etc.) ① The government shall set as its mid- to long-term national greenhouse gas reduction target (hereinafter referred to as "mid- to long-term reduction target") to reduce national greenhouse gas emissions by 2030 by a percentage specified by Presidential Decree within a range of at least 35 percent compared to the national greenhouse gas emissions in 2018.

[48] *Supra* note 45, 5

[49] Article 2(3) of the Carbon Neutrality Act

[50] Article 7 f the Carbon Neutrality Act

[51] *Supra* note 45, 10.

[52] *Supra* note 45, 10-11.

[53] Article 6 of the Paris Agreement

[54] The market mechanisms of the Kyoto Protocol refer to a system that introduces greenhouse gas reduction schemes based on market principles, allowing countries to achieve joint reduction targets through international cooperation. Specifically, the market mechanisms stipulated in the Kyoto Protocol include the Emissions Trading (ET) system, the Clean Development Mechanism (CDM), and Joint Implementation (JI).The Emissions Trading system allows developed countries with greenhouse gas reduction obligations (Annex I countries) to buy and sell emission allowances among themselves. The Clean Development Mechanism is a system where developed countries can offset part of their allocated reduction obligations with reduction credits (Certified Emission Reductions, CERs) obtained by implementing reduction projects in countries without reduction obligations (non-Annex I countries), i.e., developing countries. Joint Implementation is a system where an Annex I country can receive credit for its own reductions by investing in reduction projects in another Annex I country.(Source: Choi Hyun-jung, "Main Agenda and Prospects of the 25th Conference of the Parties to the UN Framework Convention on Climate Change (COP25)", Issue Brief of the Asan Institute for Policy Studies, December 9, 2019.)

[55] Maria Antonia Tigre and Jorge Alejandro Carrillo Bañuelos, "The ICJ's Advisory Opinion on Climate Change: What Happens Now?", *Climate Law*, A Sabin Center blog (29 March 2023)

[56] UNGA, *Request for an advisory opinion of the International Court of Justice on the obligations of States in respect of climate change* (29 March 2023 A/RES/77/276)

[57] Ibid.

Shin Sohyun
Center for Foreign Policy and National Security

Dr. Shin Sohyun is an associate research fellow in the Centre for Foreign Policy and National Security at the Asan Institute for Policy Studies. Her research mainly focuses on the international norm change and progress in the new spaces: cyberspace and outer space following the development of emerging technologies such as ICT, AI, space technology and quantum computing, etc. Dr. Shin has interests in interdisciplinary and socio-legal research combining new technologies and law and policy relating to armed conflict, military operations, weapons, cyber espionage and intelligence as well as disaster, environment and human rights. She was the founding member of Sejong Institute Cybersecurity Centre(2020-2022) and organised 'Cybersecurity Forum'. She worked as a research fellow of Korea University Institute of Cyber Security & Privacy. Dr. Shin published "The Regulation of State's Hostile Disinformation Operations in Cyberspace", "Space Security and International Law", and "Cyber Deterrence and US Defence Forward Strategy in International Law", etc.