

Climate Guardians: Navigating the Future in the 2021 German Climate Verdict and Constitutional Landscape

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Abstract

In the realm of intergenerational justice, green constitutionalism underscores the necessity for present generations to make choices that do not jeopardize the capacity of future generations to fulfill their needs independently. The climate verdict defending the rights of future generations by the German Federal Constitutional Court (*Bundesverfassungsgericht*) of March 2021 was a game changer in that regard. For the first time in Germany’s climate litigation, the fundamental rights of future generations were subject to constitutional claim and enforceable. They were no longer just a normative claim. Constitutional courts can be seen as defenders of the fundamental rights of future generations where constitutions include such normative perspectives. While the Court upheld the infringement of the fundamental rights of the adolescent plaintiffs in the future, the representation of not-yet-born generations remains unclear. This article examines how the 2021 German climate verdict and constitutional provisions address the representation and protection of the interests of future generations represented by the plaintiffs concerning climate change on the one hand and discusses the potential of protecting the fundamental rights of not-yet-born future generations. The article considers the implications for intergenerational justice and explores how these legal frameworks provided by the Constitution may contribute to the formulation of sustainable policies aimed at ensuring the long-term well-being of future generations. There is an urgent need to develop an institutional regime where the needs and rights of future generations are being considered and included in decision-making processes.

Keywords

climate litigation; Federal Climate Protection Act; German Federal Constitutional Court; Germany; green constitutionalism; intergenerational justice; sustainable development

1. Introduction

To defend the freedom rights of future generations, there is a need for a voice representing those who cannot yet speak for themselves. Institutions and legal frameworks that allow societies to have the will to be the voice of future generations and to assert their rights are important elements for a sustainable democratic system and the fight against climate change. An example of this institutional framework is Article 20a of the German Constitution, established on 27 October 1994, defining climate protection for future generations as a governmental goal. A governmental goal defined in the constitution is a constitutional norm with a “legally binding effect” (Deutscher Bundestag, 2013). Article 20a states that:

Mindful also of its responsibility toward future generations, the state shall protect the natural foundations of life and animals [the protection of animals was added on 1 August 2002] by legislation and, in accordance with law and justice, by executive and judicial action, all within the framework of the constitutional order. (Federal Ministry of Justice, n.d.)

This is what Tremmel (2006) described as the structural foundation for an institutional system that includes representation of future generations. Until the 2021 verdict, the “responsibility toward future generations” had not been the subject of climate litigations since its introduction into the constitution.

With climate litigations, activists seek to force governments or industries to reduce their CO₂ emissions or to take responsibility for climate change-related negative impacts, pollution, or damages, to prevent the construction of infrastructure or investment in projects that are known to contribute to climate change, and overall demand better adaptation measures (Aykut, 2022). Climate litigation has become an important weapon in the arsenal of activists fighting for better climate policies and taking governments, as well as industry, into account. In particular, the younger generation is increasingly concerned about their future under rapidly progressing climate change. According to the Global Climate Litigation Report of 2023, by the end of the year 2022, 2,180 climate-related cases in 65 jurisdictions were filed (United Nations Environment Programme, 2023). Among those, 53 cases have been filed in Germany since 2006 (Sabin Center for Climate Change Law, n.d.). It remains unclear whether climate litigations are the right way to effectively create more ambitious climate policies and fulfill the Paris Agreement because, despite the revised Climate Protection Act, a more drastic reduction of CO₂ emissions was not achieved (United Nations Environment Programme, 2023). This, however, does not imply that the quality of the Court’s decision was deficient, but rather the action of the executive branch. In line with the report by the Expert Council on Climate Change Issues (Expertenrat für Klimafragen, 2023), the revision was still lacking the necessary reduction targets to be able to achieve their goals.

The 2021 verdict concerning Germany’s Federal Climate Protection Act (*Klimaschutzgesetz*) is considered vital in this fight. Considering Article 20a, on 24 March 2021, the German Federal Constitutional Court (*Bundesverfassungsgericht*) declared some parts of the 2019 Federal Climate Protection Act unconstitutional, demanding the government to revise the law (Bundesverfassungsgericht, 2021). Of particular interest was the decision regarding the obligation to consider negative impacts on the freedom rights of future generations concerning the expected costs of CO₂ reduction compared to the efforts made today (Bundesverfassungsgericht, 2021). While the verdict considered the future infringement of the adolescent plaintiffs’ fundamental rights, this article is interested in the potential of the Constitutional Court and a climate case such as the 2021 verdict for future not-yet-born citizens.

The 2019 Climate Protection Act specified sector-specific reduction targets up to the year 2030 but not beyond. The lack of clear reduction goals further into the future was recognized as violating the basic human rights of future generations. For the first time, the intergenerational perspective of climate change became the subject of the process for which this verdict was seen as a historic event for climate litigations across the world in terms of intergenerational justice (Callies, 2021; Ekardt, 2022; Ekardt et al., 2022; Ekardt & Heyl, 2022; Faßbender, 2021; Kirchhof, 2022) generating expectations moving towards a systemic change and more ambitious climate mitigation policies. Despite the “binding effect” of the constitution, the subjectification of the intergenerational perspective is “uncharted territory” and it remains unclear what that means for future dogmatic discourses, leaving too much room for speculation and potentially causing misunderstandings (Callies, 2021). While Kirchhof (2022) concluded that the 2021 verdict added new dimensions to climate litigations, creating a new institution for protecting the freedom rights of future generations, there remains a need to explore further what this means for building institutions for the protection of future generations.

This article explores how the 2021 German climate verdict and constitutional provisions address the representation and protection of the interests of future generations in the context of climate change, what it implies for intergenerational justice, and how these legal frameworks might contribute to sustainable policymaking for the long-term well-being of future generations. To answer these questions, the article starts with an introduction to the conflict and potential between constitutional environmental human rights and intergenerational justice, followed by a review of the verdict and its novelties. The novelties, with a focus on their implications for future generations, are discussed in terms of whether the verdict provides grounds to protect the interests of future generations, what green constitutionalism and intergenerational justice may take from this verdict, and whether we can expect a long-term effect on climate change policy-making.

2. Green Constitutionalism and Intergenerational Justice

Green constitutionalism is a theoretical framework that seeks to integrate environmental principles into constitutional law. It emphasizes the need for legal structures that promote environmental sustainability, biodiversity conservation, and ecological integrity. In the context of intergenerational justice, green constitutionalism focuses on ensuring that present generations make decisions that do not compromise the ability of future generations to meet their own needs. Tremmel (2006, p. 187) argued that electoral democracies lack representation of future generations structurally, and constitutional representation is a means to provide an additional institutional system to fill this gap. Institutions refer to structures of rules, norms, practices, and regulations including laws and social conventions both formal and informal that guide and constrain legal frameworks, political choices, and activities. Here, we are particularly interested in the formal institution of the Constitutional Court and the legally binding effect on the protection of future generations and on acting against climate change.

As democracies lack policy institutions for the representation of future generations, an additional institutional system provided by non-policy institutions such as Constitutional courts may serve to integrate the legal standing of future generations and intergenerational equity into constitutions. Investigating why countries like Germany invest in incorporating environmental rights in their constitution, Imhof et al. (2016) argue that if it serves the economic interests of financial redistribution of a future-oriented democratic

state, environmental rights and principles of sustainable development are likely to be incorporated into the constitution. According to Hiskes (2008), incorporating environmental human rights and sustainable development, as well as the legal standing of future generations, means that constitutional environmental human rights act as a medium for intergenerational justice. Hiskes (2008, p. 6) summarized the key conflict regarding the attempt to consider intergenerational justice, which is based on Hume's philosophy "because justice is a matter of reciprocal obligations." Justice cannot be relevant between a living and not-yet-born generation. The issue with the intergenerational aspect of fundamental human rights comes with the question MacAskill (2022) investigated as to what today's generation owes the future. The conflict in the discussion between intergenerational justice and fundamental environmental human rights is whether it is "just" that today's generation's fundamental rights are restricted for the sake of an unknown future generation. The same argument can be made from the other side; whether it is "just" that the fundamental human rights of future generations are infringed due to irresponsible behaviors of today's generation.

A case can be made for a state to integrate sustainable development and climate mitigation measures to have an interest in the future, in other words, sustaining the lives of today's as well as future generations. Gárdos-Orosz (2017) argued that intergenerational justice and constitutional fundamental rights do not stand in conflict with each other. Rather, a constitution can promote intergenerational justice. It is the interpretation of the constitution by a constitutional court that justifies the protection of future generations (Gárdos-Orosz, 2017). The promotion of intergenerational justice through a constitutional framework may depend, however, on how the rights of future generations are integrated into the constitution and whether deliberation processes to amend existing rules can improve the existing structure (González-Ricoy, 2016). The given structure and the interpretation of constitutional rights of future generations considering climate change require the consideration of uncertainties. The constitutional court has the task of weighing and balancing the short-term economic interests of present generations against future generations (Ekeli, 2007). Ekeli (2007, p. 393) argued that in cases where scientific uncertainty or fundamental disagreements exist regarding potential threats, it is not clear that substantial short-term advantages should be forfeited. Particularly when the future benefits of expensive precautionary measures remain uncertain. The uncertainty issue requires considering how the responsibility for providing evidence should be distributed in the situations being assessed. This intricate matter has been a pivotal aspect in ongoing discussions about the precautionary principle and poses a challenge to courts in cases of climate litigation (Ekeli, 2007, p. 393). Yet, in green constitutionalism, the precautionary principle suggests that potential harm that may occur in the future should be avoided.

Key aspects of green constitutionalism concerning intergenerational justice include (a) incorporating environmental rights as green constitutionalism advocates for the inclusion of explicit environmental rights in a constitution, recognizing the right to a clean and healthy environment as a fundamental right for all citizens present and future; (b) principles of sustainable development, promoting the incorporation of the principle of sustainable development into constitutional provisions. This involves balancing current development with the needs of future generations, ensuring that economic, social, and environmental considerations are integrated into decision-making; (c) the precautionary principle as green constitutionalism often supports the incorporation of the precautionary principle into legal frameworks. This principle suggests that in the absence of scientific consensus, actions or policies that may have potentially harmful effects on the environment should be avoided; (d) interconnectedness of rights as green constitutionalism

recognizes the interconnectedness of human rights and environmental protection. It emphasizes that the enjoyment of rights such as health, life, and property is closely linked to the health of the environment and ecosystems; (e) legal standing for future generations, to address intergenerational justice, green constitutionalism explores the idea of granting legal standing to future generations. This would allow them to challenge decisions and policies that could harm their environmental inheritance; and (f) intergenerational equity, as green constitutionalism seeks to embed the principle of intergenerational equity, ensuring that the benefits of natural resources are distributed fairly among current and future generations. This involves considering the long-term impacts of decisions on the well-being of future citizens.

Green constitutionalism, in the context of intergenerational justice, aims to create a legal framework that places a strong emphasis on environmental protection, sustainable development, and the fair distribution of resources across generations. It envisions a constitutional order that recognizes the inherent value of the environment and the need to safeguard it for the benefit of both present and future generations.

3. The 2021 Climate Verdict

Among 45 plaintiffs, there were 11 adolescents. While the complaint that the Federal Government of Germany failed to adopt proper measures to combat climate change, violating the Government's care duty according to Article 2 of the Constitution, was dismissed by the Court, the complaint that the calculation of the remaining CO₂ budget would put too much burden onto future generations, harming their freedom rights, was upheld. The basis of the dispute was the Climate Protection Act passed in December 2019 and the lack of mitigation commitments past the year 2030.

Following Germany's commitment to the 2015 Paris Agreement to limit global warming below 1.5–2 °C and the commitment to achieve net-zero carbon emissions by 2050, the 2050 net-zero goal and sector-specific CO₂ emissions reduction goals up to the year 2030 were defined in the Climate Protection Act passed in December 2019. The lack of targets beyond the year 2030 up to 2050 was the core concern of the constitutional complaints. The main reasoning was that (a) a large sum of the remaining CO₂ budget based on these goals could be used up before 2030, which leads to (b) an unfairly distributed burden of costs of CO₂ reduction being put on to future generations (Bundesverfassungsgericht, 2021). The Court mandated that the government revise the law and add specific targets for the years 2031 to 2050. The Court stated that the government is responsible for allocating the remaining CO₂ budget so that freedom rights are intertemporally balanced (Ekardt & Heyl, 2022). Less than two months after the verdict, the national parliament passed the revision of the Climate Protection Act defining new sector-specific CO₂ reduction goals and successive national CO₂ reduction goals up to the year 2040 (88%; 1990 as the base year), as well as the new net-zero target to be achieved five years earlier, by 2045, instead of 2050. The revised law was adopted on 31 August 2021 (Federal Ministry of Justice, 2021).

After the adoption of the revised law, the Expert Council on Climate Change Issues criticized that based on the 1.5 °C target calculations, particularly in the transport and building sectors, the new targets are still not sufficient to achieve the Paris Agreement as most of the CO₂ budget will be used up before 2030 and, besides reduction targets, concrete policy instruments were still lacking (Ekardt & Heyl, 2022; Expertenrat für Klimafragen, 2023).

When the German Federal Constitutional Court announced that the 2019 Climate Protection Act was, in part, violating the Constitution, it was received both domestically and internationally with great expectations for the future of climate mitigation policies. Kirchhof (2022, p. 3) noted that the decision created a new institution, the intertemporal protection of basic freedom rights, but noted that the Court did not specifically “endorse the idea that future generations are entitled to protection.” Ekardt (2022), Ekardt et al. (2022), and Ekardt and Heyl (2022) saw the decision to be a “landmark” for climate litigation across the world as it “was probably the most far-reaching judgment on climate protection ever issued by a supreme court anywhere in the world” and “it fundamentally repositions the normative framework of liberal democracies” (Ekardt & Heyl, 2022, p. 697). Minnerop (2022, p. 2) classified it as a “momentous climate case” marking “a significant development for German constitutional law,” yet concludes that the intergenerational justice approach by the Court remains fairly limited as the use of carbon budgeting for the argument of future freedom rights is faulty. Theil (2023) found the impact of the verdict to be more modest and criticized why some of the enthusiasm might be unjustified. Kotulla and Kotulla (2022) criticized the Court’s interpretation of freedom rights and that protecting one generation’s freedom rights eventually limits the freedom rights of another generation.

4. The German Climate Verdict and Constitutional Representation of Future Generations

4.1. Incorporating Environmental Rights in Constitutions and the Potential of Climate Litigations

Climate litigation is nothing novel. By the end of 2022, 2,180 cases across the world were filed (United Nations Environment Programme, 2023). While the US has the most filed climate cases with 1,693, none of these cases had much success. Examples of revolutionary cases regarding governmental obligation based on constitutional law in light of demanding more climate action are the Dutch case of the Urgenda Foundation against the State of the Netherlands and the Belgian *Klimaatzaak* (commonly known as the “climate case”) where over 58,000 citizens faced the Kingdom of Belgium.

The Urgenda Foundation, alongside 900 Dutch citizens, filed a lawsuit against the Dutch government, urging stronger actions to combat global climate change. The Hague Court directed the Dutch state to decrease greenhouse gas emissions to 25% below 1990 levels by 2020. The Urgenda case was the first instance globally where a court has mandated states to limit greenhouse gas emissions for reasons other than statutory requirements. In other words, the court deemed the government’s commitment to a 17% reduction insufficient to meet its equitable share in the UN’s goal of capping global temperature increases at 2 °C above pre-industrial levels. The ruling emphasized the state’s responsibility to undertake climate change mitigation measures, citing various legal frameworks such as Article 21 of the Dutch Constitution, EU emissions targets, and principles from international agreements (*Urgenda Foundation v. State of the Netherlands*, 2015). The Belgian *Klimaatzaak* was initiated by a group of concerned citizens and 58,000 citizen co-plaintiffs. They contended that Belgian law necessitates a more assertive approach from the Belgian government in reducing greenhouse gas emissions. On 17 June 2021, the Brussels Court of First Instance determined that the Belgian government had violated its duty of care by neglecting essential measures to mitigate the adverse impacts of climate change. However, the Court refrained from establishing specific emission reduction targets, citing concerns related to the separation of powers (*VZW Klimaatzaak v. Kingdom of Belgium & Others*, 2014).

4.2. *Novelties About the German Climate Verdict*

Even though Germany might seem to be a minor part of the total share of filed cases on climate change with 53 filed cases (Sabin Center for Climate Change Law, n.d.; United Nations Environment Programme, 2023), the impact of climate litigations cannot be evaluated by the number of cases alone. The 2021 climate verdict at the Federal German Constitutional Court had a global impact. Even though climate litigations are not new, four points about this case are novel and make it unique in the history of climate litigations: (a) legal standing of non-German citizen plaintiffs; (b) elevation of the “future generation protection” obligation in Article 20a of the Constitution from a theoretical to a justifiable objective; (c) application of the precautionary principle and uncertainties of future harm, based on (d) the formation of a new institution for protecting basic freedom rights of future generations.

4.2.1. *Legal Standing of Non-German Citizen Plaintiffs*

The Court upheld complaints from plaintiffs from Bangladesh and Nepal. In other words, the Court’s decision acknowledged an “extraterritoriality of human rights” (Main-Klingst & Ott, 2023). While their complaint was deemed admissible, the Court rejected it, asserting that the German government would not breach its basic duty of care since the concerns raised about potential violations from the perspective of intergenerational justice, stemming from the adverse side effects of the climate mitigation pathway on the fundamental freedom rights, do not extend to residents outside Germany (Bundesverfassungsgericht, 2021). The reasoning behind this decision is that individuals beyond Germany are not subject to the regulatory framework, and, therefore, the German government cannot be held accountable for regulations in other countries (Theil, 2023).

The extent of responsibility to protect the fundamental freedom rights of people affected by climate change outside of Germany remains an open question considering the global effect of climate change caused by local actions (Winter, 2022). Nevertheless, it is expected that in the future more complaints will succeed at the admissibility stage due to this novel move by the Court (Theil, 2023). Although the Court acknowledged that the German government potentially holds the responsibility for climate change effects beyond German borders, whether the government or companies are in fact responsible for events caused by climate change in other places in the world remains a tentative argument (Theil, 2023). Theil (2023) concluded that while the decision on the care obligation is tentatively recognized yet reluctant, a fundamental shift can be observed considering the interpretation of the intergenerational justice perspective based on Article 20a.

4.2.2. *Legal Standing for Future Generations: Elevation of the “Future Generation Protection” Obligation in the Constitution*

Another novelty was the new interpretation of the intergenerational care duty, put differently, an obligation to protect the health, well-being, and freedom rights of future generations. The intergenerational care duty as stated in Article 20a has not been applied this way and discussion of care duties towards future generations was limited to theoretical or philosophical discussions (Callies, 2021). The application of the intergenerational justice perspective in the Court’s decision about the Climate Protection Act was, however, novel in that regard. For the first time, the Court recognized the government’s obligation to protect the health, wealth, and freedom rights of future generations. Future generations’ basic freedom rights would be infringed by the unequal distribution of the carbon budget defined in the 2019 act, allowing current

generations to use most of the carbon budget today and constrain life in the future. The Court implicitly declared intergenerational justice as a justiciable objective (Rath, 2021; Theil, 2023; Winter, 2022).

4.2.3. Application of the Precautionary Principle and Uncertainties of Future Harm

The infringement of freedom rights for future generations and of people in other countries are two of the core novelties of this verdict. Eventually, for the claim to be upheld, harm to people and the infringement on freedom rights caused by governmental action or inaction must be proven. Where harm from climate change is concerned, not only today but more so future harm, the extent of the actual harm or infringement lacks absolute certainty. Therefore, the decision relies also on the potential extent of the harm as can be expected according to scientific knowledge. The verdict is the first case in which the Court accepted a level of uncertainty of potential future harm from climate change as described by current scientific knowledge to be admissible grounds for the complaints (Ekardt & Heyl, 2022). In other words, it is the first time that the precautionary principle, that is the long-term uncertain future harm and infringement of freedom rights was “applied to fundamental rights” (Ekardt & Heyl, 2022, p. 698).

4.2.4. Formation of a New Institution for Protecting Basic Freedom Rights of Future Generations

Ekardt and Heyl (2022) argued further that the verdict opened a discussion on fundamental changes in liberal democracies. Kirchhof (2022, p. 9) described such a fundamental change as the formation of a new institution; the “intertemporal protection of basic freedom rights.” Article 20a of the constitution already included the normative dimension of the future in terms of the government’s responsibility to protect citizens from harm caused by climate change as shown in the Article 20a’s quotation in Section 1. What is also unique is that it is expected to be generalizable and potentially applicable across issue topics, such as social security or pension systems covering more than Article 20a of the Constitution, and is thus not solely applicable to climate change litigations (Kirchhof, 2022). It is the concrete target setting like in the Paris Agreement or the Climate Protection Act which requires the intertemporal protection of basic freedom rights institutionalized to be applicable (Kirchhof, 2022).

5. Representation and Protection of Future Generations

5.1. *The Constitutional Court: Guardian of the Constitution, Guardian of Future Generations?*

In principle, any state system with a social security and pension system, state debt, and fossil fuel and nuclear energy consequently has inter and cross-generational issues on the agenda. Different energy technologies have different future impacts of varying degrees and time frames. Nuclear energy with its nuclear waste disposal problem is considered the one type of technology with the most long-lasting impact on future generations into a very distant future, and the use of fossil fuels is the major cause of climate change causing a generational conflict of climate mitigation responsibilities. The management of nuclear waste and the consequences of climate change will be relevant for several thousand years. Whether these issues are directly and actively discussed and acted on, depends on law, regulations, and the constitutional framework.

The role of the German Federal Constitutional Court, its competencies, and its authorities were often a topic of political and public criticism. After its establishment in 1951, the relationship with government politics

was conflictual, the Court was criticized for taking politics into its own hands or restricting policy decision-makers and government authorities (Vorländer, 2011). Vorländer (2011) described how the Court prevented several reform projects in the 1970s, causing a conflict that questioned the authority of the Court, and how the Court's decision to reject the legal obligation defined by the state of Bavaria that a cross must hang in every classroom in public schools was not accepted by the public. Either the constitutional jurisdiction was criticized to be politicized or politics were criticized to be judicialized. It took some decades until the Court established its role of being respected as the guardian of the Constitution (Vorländer, 2011). This verdict prompted the question (again) of whether the Court overstepped its authorities and whether it violated the power separation between it and the governmental institutions. For example, the former president of parliament, Norbert Lammert, criticized that the Court had oversteered its authority ("Lammert kritisiert Klimabeschluss," 2021). Winter (2022) concluded that concerns about whether the Court would directly affect policy-making were a superficial misinterpretation. The Court's decision may have an indirect effect as it required the revision of the law but the separation of political power was not harmed and they acted "within the proper realm of the judiciary" (Winter, 2022, p. 220).

The Constitutional Court cannot and must not determine policy because the Court is not a political body. However, their decisions can impact legislation. It "determines the constitutional framework within which policies may develop" (Bundesverfassungsgericht, 2023). In other words, the Court cannot provide specific details on how climate change policy should be implemented. It is, however, an important political actor as its decisions affect policies and regulations. The Court has the authority to mandate that the government "make better policies" that are consistent with current knowledge and to adequately protect the rights of liberty, including the rights of future generations. It cannot provide specifics on how to do so (Groß, 2023).

5.2. Institutions for Representing Future Generations

Currently, five institutions examine the potential impact of today's actions on the environment and citizens in the future in Germany. The Committee of Experts on Environmental Issues, the Council for Sustainable Development, the Committee of Experts on Global Change, the Expert Council on Climate Change Issues, and the Parliamentary Council on Sustainable Development. These institutions create a network to assess climate change-related issues and their impacts to help decision-makers formulate policies. Of these, the courts are the only institutions with the power to block legislation and government projects. It is the network of multiple institutions, including the courts, that have the potential to effectively protect future generations (Hartwig, 2023).

As guardian of the Constitution, the Constitutional Court must check laws and regulations regarding their constitutional correctness when brought to the Court, and their decisions have the power to terminate laws if these were ruled to violate the Constitution. The Court is tasked with ensuring a fair distribution of costs and benefits across citizens—and generations—of Germany. With the new intertemporal institution developed out of the climate verdict (Kirchhof, 2022), the task of assessing the equal distribution of costs and benefits through regulations and policy programs has become more difficult as the costs and benefits not only have to be equally distributed within current generations but also across future generations (Ekardt & Heyl, 2022). Article 20a of the Constitution is meant to oblige policymakers to take the effects of their decisions in the future into account. The verdict by the Constitutional Court obliged the government to revise the Climate Protection Act accordingly. However, one might criticize that the new sector-specific targets set in the revised

version of the act are not significantly more ambitious compared to the targets defined in the original version, though the Court's verdict did not oblige the government to set higher targets. The Court mandated the government to define more detailed targets between 2031 and 2050 and define a gradual reduction of CO₂ emissions, allocating the CO₂ budget across time. Setting new targets was not directly mandated. With the new targets, the government responded to criticism that the specified targets were not sufficient to meet the Paris Agreement of limiting global warming to below 1.5 °C–2 °C. This may lead to further climate litigations against the Federal Climate Protection Act. Within the legal and constitutional framework, the Constitutional Court has the potential to act as a guardian for future generations.

Because electoral democracies lack the representation of future generations structurally, as they do not have a vote, an additional institutional structure is needed in the form of a constitutional representation (Tremmel, 2006). Therefore, the Constitutional Court acts as a guardian for future generations within its judicial power. However, the Court alone, without a system of political institutions to enforce its will, would also mean that it would not have the political power to effectively represent and protect the rights of future generations. A constitutional representation of the rights of future generations obliges current governments, as well as the electorate, to consider the effects of their actions in the distant future.

The establishment of a new intertemporal institution for protecting the freedom rights of future generations implies that future generations have the right to be represented and that their needs and interests are valid and must be considered. Considering that not-yet-born future generations have no voice, the issue becomes who is eligible to represent them. Those who are already suffering from the consequences of climate change are expected to suffer more, such as the younger generation, can represent future generations (Byskov & Hyams, 2022). The plaintiff groups are those who suffer and are expected to suffer in the future from the consequences of climate change and may be representatives of not-yet-born future generations while being negatively affected by increasing climate change impacts themselves.

5.3. Contributions to Sustainable Policymaking for the Long-Term Well-Being of Future Generations

This ruling transforms the concepts of future generations' rights and intertemporal freedom in the context of climate change from abstract or philosophical notions into concrete legal subjects. One of the most noteworthy aspects of this case is that, although the German Federal Constitution Court is responsible for protecting the rights of future generations in the context of the protection of the natural environment as a resource for human life, as stipulated in Article 20a of the Constitution, this right was for the first time the subject of an explicit and demonstrable claim. These ideas are grounded in constitutional rights, allowing them to be asserted in court if they are ever infringed upon. The potential infringement in the future, which is not clearly definable today, yet enough grounds for the court to rule for the protection on behalf of future generations is a significant novelty about this verdict. Previously, this right was only a normative, theoretical, or implied aspect of constitutional and governmental responsibility.

Intergenerational justice, when enshrined in a constitution, becomes a guiding principle for policy and decision-making. A constitution acts as a beacon, setting the standards for responsible governance that consider the long-term impacts of present actions. The verdict demonstrates that present generations have a responsibility to adopt measures that safeguard the interests of future generations, but also that governments must balance between meeting the needs of the present without compromising the ability of

future generations to meet their own needs. This extends beyond moral considerations, as there is a growing recognition of the need for legal frameworks to enforce these principles. The legal standing of future generations becomes paramount, necessitating mechanisms that transcend the temporal boundaries of the present. Legally binding instruments, such as constitutional environmental human rights, play a pivotal role in embedding intergenerational justice into the fabric of governance. By incorporating environmental human rights and sustainable development principles into the legal framework, a constitution serves as a medium for ensuring that decisions made today do not jeopardize the well-being and environmental resources essential for the livelihood of future generations. A constitutional court, through its decisions, can play a crucial role in justifying the protection of the interests of future generations. The court's interpretation can ensure that the legal frameworks in place effectively serve the cause of intergenerational justice.

However, the issue of uncertainty shown in the verdict complicates the path to justice. Assessing the impact of present decisions on future generations involves navigating through unknowns. The responsibility for providing evidence in such situations becomes a critical consideration. A thoughtful approach is required to distribute this responsibility, acknowledging the uncertainty inherent in predicting the needs and challenges of the future. The connection among present decisions, legal frameworks, and the interests of future generations forms the essence of intergenerational justice. The legal standing of future generations, embedded in constitutional environmental human rights, creates a foundation for responsible governance. As constitutional courts interpret these laws, they become the guardians of intergenerational equity, ensuring that justice prevails not only between the living but also for those generations yet to inherit the consequences of today's actions.

6. Conclusions

This article explored how the 2021 German climate verdict and constitutional provisions address the representation and protection of the interests of future generations in the context of climate change, and how this verdict may contribute to sustainable policymaking for the long-term well-being of future generations.

The 2021 German climate verdict was novel regarding the legal standing of non-German citizen plaintiffs, the legal standing of future generations, the application of the precautionary principle and uncertainties of future harm, and the formation of a new institution for protecting basic freedom rights of future generations. Expectations that the ruling would fundamentally change international climate change policy and liberal democracy, as Ekardt and Heyl (2022) argued, may have been overly ambitious. Nevertheless, the verdict is seen as pivotal for global climate litigations where constitutional rights are involved, such as the Dutch case of the Urgenda Foundation and the Belgian *Klimaatzaak*. Regardless of the novelties and global recognition of the verdict, without the necessary reception by government leadership in policy-making, the impact of domestic climate change policies remains limited. Neither the ruling itself nor the Constitutional Court has been able to completely change the political direction of the country. Yet, such a ruling can be a strategic tool to push for political solutions, but it lacks the impact to fundamentally change political will and climate policy.

This case showed that representation for future generations is limited and depends on how the political leadership puts it into practice. One of the key challenges is that the needs of future generations compete

with the needs and interests of the current generation. The uncertainty of climate change effects in the future will remain an obstacle to the new institution as the Court requires certainty of violations of fundamental rights to uphold complaints. To what extent uncertainty will be accepted in future cases remains to be seen.

Several types of institutions have been put in place attempting to provide future generations with better representation. For example, the Ombudsman system, commissions for future generations, or constitutional representation. Neither normative frameworks in constitutions nor a constitutional court alone can protect the freedom rights of future generations. It requires a network of institutions and a legal framework that allows the representation of future generations. Article 20a and the Constitutional Court are key elements of such a framework. While the 2021 ruling may not have had the desired impact on German climate change policy, the new institution of intertemporal protection of freedom rights currently questions more than climate policies. It opened a new discourse on future generation-oriented, constitutional climate mitigation responsibility by national, EU, and international politics.

Between rights and social reality, and between constitutional authority and the government, several dimensions challenge the status quo (Walter, 2000). Even though the Constitution is supposed to give a stable democratic structure and framework, it is not impervious to changes over time and adapting to changing social conditions. Changes in the interpretation of the Constitution under conditions of climate change provide the most recent examples. As Article 20a was adopted in 1994, the grounds of the argument in the 2021 verdict about intergenerational justice and the government's responsibilities was a new take on the normative framework that existed before.

The Court based its decision on the Intergovernmental Panel on Climate Change assessment reports which, over time, published more concrete evidence on the causes of climate change. The increasing knowledge base forces the reinterpretation of the normative framework. The verdict concerning changing conditions and new knowledge on the climate change issue, as well as the increased interest in the effects on future generations, affect the status quo. The consideration of negative impacts on the freedom rights of future generations due to the progression of climate change has the potential to create an institutional framework for better representation of future generations' fundamental environmental rights.

Conflict of Interests

The author declares no conflict of interests.

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