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**Climate and environmental protection as a challenge for the law, especially criminal law\*\***

**ABSTRACT:** Climate protection is one of the most urgent tasks to be addressed by international, EU, and national law. This affects international and constitutional law, environmental administrative law, as well as criminal and civil law. Climate protection is increasingly being strengthened by the judgment of the European Court of Human Rights, the opinion of the International Court of Justice, and decisions of national courts based on fundamental and human rights. Legal proceedings are increasingly being conducted strategically in order to force states to take climate protection measures and thus help international treaties such as the 2015 Paris Agreement to achieve a breakthrough. Even if these court decisions do not specifically deal with criminal law, the European Convention on Human Rights and the Charter of Fundamental Rights of the European Union provide a framework for criminal law within which the European Union Directive on environmental criminal law (2024) and the Convention on the Protection of the Environment through Criminal Law of the Council of Europe (2025) must comply. When implementing these legal requirements into national law, criminal law has a considerable degree of methodological, conceptual, and argumentative independence from constitutional law. Therefore, effective and consistent penal solutions must be developed in national criminal law systems.

**KEYWORDS:** climate protection, environmental and climate criminal law, ECHR, ICJ, green criminology.

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## 1. Climate protection as the challenge of the 21<sup>st</sup> century

Hardly any other development has had such a transformative impact on a global scale as the climate crisis, with its ecological challenges resulting from increasingly extreme weather conditions, rising sea levels, and accelerating species extinction. 1972, the Club of Rome, an association of experts from various disciplines from more than 30 countries committed to a sustainable future for humanity, pointed to the limits to growth and warned of the urgent need for effective protection of natural resources and the environment.<sup>1</sup> Shortly thereafter, the 1987 Brundtland Report of the United Nations established a link between security and the effective protection of natural resources, highlighting conflicts over limited resources on the one hand and migration caused by environmental problems on the other.<sup>2</sup> A second report by the Club of Rome, published 40 years later, predicted that the planet would collapse in the foreseeable future if growth policies remained unchanged and the associated damage to the natural environment continued.<sup>3</sup> Although all the essential scientific findings<sup>4</sup> have been available for more than 40 years,<sup>5</sup> the measures implemented to reduce greenhouse gas emissions are insufficient to achieve the goal set out in the United Nations Framework Convention on Climate Change *adopted at the first Rio Earth Summit in 1992*. This raises the question of which instruments are needed to protect the natural foundations of human life.

From a legal policy perspective, it has proven particularly relevant that the protection of natural resources cannot be reduced to a national issue, meaning that environmental law issues arise in the context of international law, EU law, and national law. The integration of environmental and climate protection law is a particular challenge for the legislative and executive branches, which have had to and must continue to deal with climate protection, adaptation to climate change, species protection, and resource management in order to combat the causes of anthropogenic climate change as quickly and comprehensively as possible. But the courts

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<sup>1</sup> Meadows, Randers and Behrens, 2005.

<sup>2</sup> Brundtland-Report, 1987.

<sup>3</sup> Randers, 2012.

<sup>4</sup> A summary of the recognized findings of scientific climate research can be found in the IPCC's 6<sup>th</sup> Assessment Report, [Online]. Available at: <https://www.de-ipc.de/307.php> (Accessed: 01 January 2026).

<sup>5</sup> On the development of the discussion in the USA between 1979 and 1989 see Rich, 2019.

have also had to deal with an increasing number of climate lawsuits,<sup>6</sup> including lawsuits against states<sup>7</sup> as well as civil lawsuits against large corporations<sup>8</sup> and administrative lawsuits.<sup>9</sup> The transformative momentum is being reinforced above all by the climate protection decisions of national constitutional and supreme courts, the European Court of Human Rights, and the advisory opinion of the International Court of Justice, which decided on the obligation of states to protect the climate on the basis of fundamental and human rights. This will be addressed in the first part, which deals with the obligation to protect the climate as the basis of human life as reflected in the case law of the highest courts, in particular the ECtHR and the ICJ, as well as selected decisions of national supreme courts (see 2.).

Subsequently, the expansion and tightening of environmental and climate protection criminal law will be discussed, as called for in particular in Directive (EU) 2024/1203 on the protection of the environment through criminal law of 11 April 2024 and in the Convention on the Protection of the Environment through Criminal Law (CETS 172) of the Council of Europe. In this context, the connection to the protection of life as a mandatory area of legal protection will be highlighted and comments will be made on specific criminal law issues in connection with environmental and climate protection (see 3.).

## **2. The legal obligation to protect the basis of life as reflected in the case law of the ECtHR, the ICJ, and the national courts of EU member states**

In this context, the climate protection decisions of national constitutional and supreme courts,<sup>10</sup> the European Court of Human Rights, and the opinion of the International Court of Justice, which comment on the obligation of states to protect the climate on the basis of fundamental and human rights, are of central importance.

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<sup>6</sup> See Peel and Osofsky, p. 37; Kahl and Weller, 2021; Franzius, 2022a, § 7 no. 4 ss. Differentiating between claims based on ambition, civil liability claims, and claims against admission decisions; see also Franzius, 2025, pp. 67 ss.

<sup>7</sup> Wernicke, 2025, pp. 54 ss.

<sup>8</sup> Tran, 2024, pp. 24 ss.; Schlacke, 2020, p. 355 ss.

<sup>9</sup> Franzius, 2025, p. 72 ss.

<sup>10</sup> In detail below 2.1.

### ***2.1. Climate protection decisions by national constitutional and supreme courts***

Climate protection was initially the subject of various supreme court decisions in Europe, for example in the Netherlands in 2019,<sup>11</sup> in Norway,<sup>12</sup> Ireland,<sup>13</sup> Austria,<sup>14</sup> Switzerland<sup>15</sup> in 2020, in Belgium,<sup>16</sup> Germany,<sup>17</sup> France,<sup>18</sup> Great Britain,<sup>19</sup> Ireland<sup>20</sup> in 2021, Czech Republic<sup>21</sup> in 2022, Estonia<sup>22</sup> and Spain<sup>23</sup> in 2023, and Norway<sup>24</sup> in 2024.

A milestone was the decision by the Dutch Supreme Court, which was the first successful climate protection case before a national court to result in a CO<sub>2</sub> reduction obligation for the state. Furthermore, the decision of the German Federal Constitutional Court (BVerfG) in spring 2021 attracted a great deal of attention because the German Federal Constitutional Court took an innovative approach to fundamental rights doctrine in order to guarantee the basis and prerequisites for the exercise of all human freedoms without specifying the future use of freedom in certain forms.<sup>25</sup> Finally, of central importance are the decision of the ECtHR in the *Clima Senior Switzerland* case and the Advisory Opinion of the ICJ, which essentially confirms the decision of the ECtHR.

<sup>11</sup> Hoge Raad, 20.12.2019, 19/00135 – Urgenda.

<sup>12</sup> Noregs Høgsterett, 22.12.2020 – People/Arctic Oil, 20-051052SIV-HRET.

<sup>13</sup> High Court of Ireland, 31.7.2020, 205/19 – Friends of the Irish Environment.

<sup>14</sup> Verfassungsgerichtshof G 123/2023-12 – Klimaschutzgesetz; dec. 30.9.2020, G 144-145/2020-13 – Greenpeace/Österreich; furthermore Verfassungsgerichtshof v. 27.6.2023, E 1517/2022-14 – Fliegenschnee.

<sup>15</sup> Swiss Federal Court, 5.5.2020, 1C\_37/2019 – Climate Senior Switzerland.

<sup>16</sup> Tribunal de première instance francophone de Bruxelles, 30.11.2023, 2021/AR/ 1589 – Klimaatzaak.

<sup>17</sup> German Federal Constitutional Court, BVerfGE 157, 30.

<sup>18</sup> Conseil Constitutionnel v. 13.8.2021, Commune de Grande Synthe; Tribunal Administratif de Paris, 3.2.2021 and 14.10.2021, 1904967 – Greenpeace/France.

<sup>19</sup> High Court of Justice, 21.12.2021, CO/1587/2021 – Plan B Earth/Premierminister.

<sup>20</sup> High Court of Ireland, 31.7.2020, 205/19 – Friends of the Irish Environment.

<sup>21</sup> Mestský soud v Praze, 15.6.2022, 14A 101/2021 Czech Republic: Klimaticka.

<sup>22</sup> Riigikohus, 11.10.2023, 3-20-771 – Fridays for Future Estonia/Eesti Energia.

<sup>23</sup> Tribunal Supremo, 24.7.2023, STS 3556/2023 – Greenpeace/Spain.

<sup>24</sup> Oslo Tingrett, 18.01.2024, 23-099330TVI-TOSL/05, Greenpeace/Norway.

<sup>25</sup> For the decision of the Federal Constitutional Court, see Calliess, 2021, p. 355; Ekardt and Heß, 2021, p. 579; Hofmann, 2021, p. 1587; Meßerschmidt, 2021, p. 109; Möllers and Weinberg, 2021, p. 1069; Polzin, 2021, p. 1089 ss.; Ruttloff and Freihoff, 2021, p. 917; Schlacke, 2021, p. 912; Britz, 2022, p. 825; Fister, 2022, p. 460; Jahn, 2022, p. 47; Wolf, 2022, p. 451; Holoubek, 2022, p. 102 ss.

### 2.2.1. Climate protection ruling by the Dutch Supreme Court

In 2019, the Dutch Supreme Court addressed climate protection in its *Urgenda* ruling. It obliged the Netherlands to reduce Greenhouse gas emissions by 25% by 2020 compared to 1990 levels.<sup>26</sup> Previously, a reduction of only 17% had been planned. The lawsuit was brought by the non-governmental organization *Urgenda*, together with 886 private plaintiffs, by means of a public interest lawsuit, which is possible under the Dutch legal system.<sup>27</sup> With this ruling, the Hoge Raad confirmed the ruling of the Court of Appeal (Civil Court) in The Hague, which had ordered the Netherlands to reduce greenhouse gas emissions by 2020 to the extent just outlined.

The Hoge Raad based its decision on Articles 2 and 8 of the ECHR,<sup>28</sup> which Dutch courts are required to observe under the Constitution,<sup>29</sup> as well as on an environmental protection clause in the Dutch Constitution, obligations under international law, and the environmental protection provisions in the TFEU. According to the case law of the ECtHR, the fundamental rights to protection of life and private and family life give rise to environmental protection obligations on the part of the contracting states. These must take state measures to avert real and imminent threats to these fundamental rights. The court classified the dangers as a real threat posing a serious risk that the current generation of citizens would be confronted with the loss of life and/or a disruption of family life.<sup>30</sup> Whether these dangers threatened individuals or large groups or the entire population, and whether the dangers were imminent or would only materialize in the future, was irrelevant. Although it cannot be inferred from fundamental rights that the state must undertake impossible or disproportionate protective measures, measures may be required that are suitable for averting potential infringements of fundamental rights as far as possible.<sup>31</sup>

To specify these measures, the Hoge Raad relied on the UN Climate Convention and on the state's legal obligations to protect the lives and well-

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<sup>26</sup> See also Binder and Huremagic, 2021, p. 109; Kahl and Weller, 2021, p. 363, p. 366; Ennöckl, 2022, p. 137, p. 147.

<sup>27</sup> Vgl Burtscher and Schindl, 2022, p. 649, p. 651 s.

<sup>28</sup> Hoge Raad, 20.12.2019, 19/00135, no. 5.8 ss.

<sup>29</sup> See Ennöckl, 2022, p. 137, p. 150 ss.

<sup>30</sup> Hoge Raad, 20.12.2019, 19/00135, no. 4.2.

<sup>31</sup> Wegener, 2019, p. 3.

being of its citizens. It drew on the 2007 report by the Intergovernmental Panel on Climate Change (IPCC) 2007, which sets out specific reduction targets for states for certain periods of time that are widely agreed upon, as well as from the Dutch government's voluntary commitment to specific CO<sub>2</sub> reduction obligations (25% instead of 17%), and affirmed an obligation to reduce harmful greenhouse gases in connection with the duty to protect fundamental rights.<sup>32</sup> The Dutch government had not presented sufficient reasons why it had deviated from the target it had originally pursued in favor of a reduced reduction of only 20%. In its decision, the Hooge Raad saw neither an inadmissible interference in the decision-making sphere of politics nor a contradiction with the global nature of the problem of the obligation to reduce emissions.

### 2.2.2. Climate protection ruling by the German Federal Constitutional Court

In spring 2021, the German Federal Constitutional Court ruled on several climate-related constitutional complaints.<sup>33</sup> The issue at stake was whether the provisions of the Climate Protection Act of December 12, 2019 (KSG) on national climate protection targets and permissible annual emission levels until 2030 were incompatible with fundamental rights because they lacked sufficient measures for further emission reductions from 2031 onwards.

The court dealt with the civil liberties of those living today who will also live in the future, because current actions, the consequences of which will only become apparent in later years, will affect older people less than young people. The future burdens resulting from today's actions will therefore be borne more heavily by the young than by the old.<sup>34</sup> In this context, the future feasibility of fundamental freedoms is discussed both in terms of their protective dimension<sup>35</sup> and their defensive dimension.<sup>36</sup>

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<sup>32</sup> See Stürmlinger, 2020, p. 169, p. 170 ss.; Binder and Huremagic, 2021, p. 109 ff.; Ennöckl, 2022, p. 137, p. 142.

<sup>33</sup> BVerfGE 157, 3; more about this court decision Britz, 2022, p. 825 ss.; Kalscheuer, 2022, p. 463 ss.; Gärditz, 2023, p. 79 ss.; Barczak, 2023, p. 925 ss.; Hasenau, 2024, p. 361ff.; Groß, 2024, p. 893, p. 898 ff.

<sup>34</sup> Britz, 2024, pp. 199-202.

<sup>35</sup> BVerfGE 157, 30 (111 s. no. 145 s.).

<sup>36</sup> BVerfGE 157, 30 (97 ss. no. 116 ss., 130 ss., 182 ss.).

The court initially rejected the violation of duties to protect life, physical integrity, and property, thus denying any duty to protect.<sup>37</sup> The state's duty to protect, which derives from the fundamental right to life and physical integrity, also applies to measures that contribute to limiting anthropogenic global warming and the associated climate change, as well as to adaptation measures to counter the dangers posed by climate change that has already occurred or can no longer be stopped.<sup>38</sup> However, the court leaves it to the legislature to decide how these dangers should be counteracted and how a protection concept and its normative implementation should be specifically designed. In view of the legislature's scope for assessment, evaluation, and design, constitutional review is only possible to a limited extent.<sup>39</sup> A violation of fundamental rights due to insufficient fulfillment of duties to protect is therefore expressly rejected.<sup>40</sup>

The Federal Constitutional Court then develops, based in particular on the guarantee of freedom enshrined in Article 2(1) of the Basic Law in its form as general freedom of action,<sup>41</sup> the concept of "intertemporal freedom protection," to which fundamental rights oblige, in a new, "creative"<sup>42</sup> way in terms of fundamental rights doctrine.<sup>43</sup> The BVerfG defines the concept of intertemporal freedom protection as follows:

*'Under certain conditions, the Basic Law requires that freedoms protected by fundamental rights be safeguarded over time and that opportunities for freedom be distributed proportionately across generations.'*<sup>44</sup>

In order to counteract a unilateral shift of greenhouse gas emissions into the future, as stipulated by the state objective provision of Article 20a of the Basic Law (protection of natural resources), fundamental rights therefore have the effect of safeguarding freedom across time. The Federal

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<sup>37</sup> BVerfGE 157, 30 (120 ss. no. 165, 168, 170, 172).

<sup>38</sup> BVerfGE 157, 30 (113 no. 149 f.)

<sup>39</sup> BVerfGE 157, 30 (114 no. 152.)

<sup>40</sup> BVerfGE 157, 30 (123 s. no. 170, 172).

<sup>41</sup> BVerfGE 157, 30 (98 no. 117, 131 ss.; 184 ss.).

<sup>42</sup> Holoubek, 2022, p. 102 sees this decision as the "most innovative decision in terms of fundamental rights doctrine"; see also Calliess, 2021, p. 355.

<sup>43</sup> BVerfGE 157, 30 no. 116 ss. and 182 ss.; see also Ekardt and Heß, 2021, p. 579 ss.; Ruttloff and Freihoff, 2021, p. 917 s.; Schlacke, 2021, p. 912 ss.; Fister, 2022, p. 460 ss.

<sup>44</sup> BVerfGE 157, 30, 130 s. no. 183: „Das Grundgesetz verpflichtet unter bestimmten Voraussetzungen zur Sicherung grundrechtsgeschützter Freiheit über die Zeit und zur verhältnismäßigen Verteilung von Freiheitschancen über die Generationen.“

Constitutional Court sees this as an “intervention-like preliminary effect on the freedom of the complainants, which is comprehensively protected by the Basic Law,”<sup>45</sup> which must be justified.

The court considers the current measures to be an infringement on the freedom of younger generations because they will inevitably lead to comprehensive restrictions on freedom in the future due to their irreversible consequences. At issue is the excessive impact of today's actions on the fundamental conditions of existence in the future, which justifies future-oriented responsibility in the present to avert damage.<sup>46</sup> This intervention-like preliminary effect is the result of a decision by the ordinary legislature, which, under the Climate Protection Act of 2019 (KSG), allows a certain amount of CO<sub>2</sub> emissions until 2030. However, this also means that the possibilities for permissible emissions for the period after 2030 are significantly reduced.<sup>47</sup> The court refers to the state objective provision in Article 20a of the German Basic Law (GG), which, as a climate protection requirement, aims to halt the continuous global warming that has been progressing since the beginning of the industrial age, leaving only a limited CO<sub>2</sub> budget<sup>48</sup> that may be released into the atmosphere if a certain global temperature is not to be exceeded.<sup>49</sup> By deriving from the state objective provision of Article 20a of the Basic Law the obligation to allocate the restriction of emission possibilities in a forward-looking and proportionate manner, the Federal Constitutional Court concludes that the provision of the KSG 2019 constitutes an infringement of fundamental rights.<sup>50</sup>

To justify this intervention-like preliminary effect, the BVerfG assesses the temperature threshold specified in the KSG as a constitutionally relevant concretization of the climate protection goal of the Basic Law.<sup>51</sup> According to the BVerfG, the chosen climate target is covered by the legislature's “concretization prerogative” as set out in the state objective provision. However, the principle of proportionality, which requires an even distribution of CO<sub>2</sub> reduction burdens over time until climate neutrality is achieved, has been violated:

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<sup>45</sup> BVerfGE 157, 30 (130 no.183).

<sup>46</sup> Britz, 2024, p. 199, p. 207.

<sup>47</sup> BVerfGE 157, 30 (130 no. 183).

<sup>48</sup> BVerfGE 157, 30 (138 s. no. 191).

<sup>49</sup> BVerfGE 157, 30 (62 ss. no. 35 s.).

<sup>50</sup> Ekardt and Heß, 2021, pp. 579-580; Möllers and Weinberg, 2021, p. 1069, 1073; Burtscher and Schindl, 2022, p. 649, p. 654 s.

<sup>51</sup> BVerfGE 157, 30 (145 no. 209).

*However, because the course for future restrictions on freedom has already been set by the current regulation of permissible emission levels, its impact on future freedom must be proportionate from today's perspective and at the present time – when the course can still be changed.<sup>52</sup>*

The principle of equality is referred to in the prohibition of unilateral distribution of reduction burdens at the expense of the future.<sup>53</sup> Nevertheless, the subsequent remarks refer entirely to the principle of reasonableness associated with civil liberties, without referring to the need for an even distribution of burdens between today and tomorrow. This avoids a proportionality test based on equality, which would have required horizontal balance in the sense of a fundamentally symmetrical distribution.<sup>54</sup> Nevertheless, the right to freedom is linked to “echoes of equality law.”<sup>55</sup> What is required is an even distribution of the restriction of freedom, ultimately a generationally equitable distribution of burdens.<sup>56</sup> Once again, the factor relevant for assessing the evenness of the distribution of the restriction of freedom is the state objective and the resulting climate neutrality. To this end, a relationship is established between the current government measures aimed at reducing CO<sub>2</sub> emissions and the hypothetical measures that would be necessary to achieve the remaining CO<sub>2</sub> budget in an anticipated future scenario. The prerequisite for establishing this relationship is a fixed, remaining CO<sub>2</sub> budget (ascertainable “remaining budget”). This reasoning led to the provision of the KSG determining emissions until 2030 being declared unconstitutional.

The court thus bases the success of the constitutional complaint on the defensive function of fundamental rights, even though there was no current violation of fundamental rights, but only a fear of such a violation in the future. Nevertheless, the Federal Constitutional Court already declared that

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<sup>52</sup> BVerfGE 157, 30 (135 no. 192).

<sup>53</sup> BVerfGE 157, 30 (135 no. 192).

<sup>54</sup> See Britz, 2024, p. 199, p. 219.

<sup>55</sup> Britz, 2024, p. 199, p. 217; more extensive Möllers and Weinberg, 2021, p. 1069, p. 1073; Ruttloff and Freihoff, 2021, p. 917, p. 921; Holoubek, 2022, p. 107, who see this as an approach to equality.

<sup>56</sup> Ekardt and Heß, 2021, pp. 579-580; Möllers and Weinberg, 2021, p. 1069, p. 1073; Ruttloff and Freihoff, 2021, p. 917, p. 918; Schlacke, 2021, p. 912, p. 914 ss.; Wolf, 2022, p. 451, p. 462.

the complainants' fundamental rights had been violated, citing the "preliminary effect of the laws, which is equivalent to an encroachment." The contested legal situation gives rise to a "currently insufficiently contained risk of future infringements of fundamental rights."<sup>57</sup> Although the reason for the unconstitutionality of the contested provisions lies in the future, the Federal Constitutional Court extends its review to this as well.

***2.3. The ECtHR's Climate Senior Women Switzerland ruling: "Protection from the negative effects of climate change" as an expression of the right to private and family life (Art. 8 ECHR)***

The Climate Seniors ruling by the Grand Chamber of the ECtHR concerns several complaints brought by individual plaintiffs and an association seeking to obtain a ruling against Member States to protect the climate.

**2.3.1. Facts**

In November 2016, the association Climate Seniors Switzerland and four other plaintiffs, supported by the environmental organization Greenpeace, filed a petition at the Swiss federal level.<sup>58</sup> Because global warming of more than 2 degrees Celsius would very likely lead to a "dangerous anthropogenic disturbance of the climate system," the federal government's current measures to achieve its climate target violate the Swiss Federal Constitution, namely the precautionary principle and the right to life, as well as the ECHR. The risk that the federal government is taking by not pursuing the 2-degree target is unacceptable because it means that Switzerland is not adequately fulfilling its constitutionally guaranteed duty to protect the holders of fundamental rights. The Federal Department of the Environment, Transport, Energy and Communications (UVEK) refused to consider the petition.

The appeal against this decision to the Federal Administrative Court was rejected in December 2018 on the grounds that senior citizens are no more affected by the consequences of global warming than other people. The plaintiffs and the Climate Senior Switzerland association then lodged an appeal with the Swiss Federal Supreme Court. The Swiss federal government took the view that Switzerland's political system, with its instruments of direct democracy, offered sufficient opportunities to advance

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<sup>57</sup> BVerfGE 157, 30 (163 no. 243, 246 s.),

<sup>58</sup> Grosz, 2023, p. 351 ss. on climate protection in Swiss courts.

climate issues.<sup>59</sup> The judicialization of such processes conflicted with the principles of separation of powers and subsidiarity. It also curtailed democratic debate and made it more difficult to achieve political solutions. This argument must be seen in the specific context of the Swiss legal system, which provides for extensive opportunities for direct democracy but does not recognize judicial review of legislation. The Swiss Federal Supreme Court largely agreed with this view and dismissed the appeal in May 2020 on the grounds that the appellants' concerns should be addressed through political means rather than legal action. This exhausted the legal remedies available in Switzerland, as Switzerland has no constitutional court, meaning that the Federal Supreme Court was the highest national court. The climate seniors and the Climate Senior Switzerland association therefore brought an action before the ECtHR.

### 2.3.2. Decision of the Grand Chamber of the ICJ

In its judgment of April 9, 2024,<sup>60</sup> the Court ruled on these climate lawsuits. It first commented on the admissibility of the lawsuits.

#### A) Recognition of the right to protection from the negative effects of climate change

In the “Climate Senior Switzerland” case, the European Court of Human Rights (ECHR) concluded that the Swiss courts had violated the right of access to a court (Art. 6 ECHR) by dismissing the case.<sup>61</sup> Furthermore, the Grand Chamber affirms a violation of Article 8 of the ECHR due to slow and insufficiently determined government measures to combat the negative effects of climate change. Article 8 of the ECHR, which protects the right to respect for private and family life, home, and correspondence, is assigned climate protection as one of its protective dimensions. However, it does not protect a “new right to climate protection.” In this regard, the Court clarifies that “no article of the Convention specifically aims to ensure general

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<sup>59</sup> *Case of Verein Klimaseniorinnen Schweiz and Others v. Switzerland*, App. No. 53600/20, 9 April 2024.

<sup>60</sup> *Case of Verein Klimaseniorinnen Schweiz and Others v. Switzerland*, App. No. 53600/20, 9 April 2024; *Case of Carême v. France (dec.)*, App. No. 7189/21, 9 April 2024; *Case of Duarte Agostinho and Others v. Portugal and 32 Others (dec.)*, App. No. 39371/20, 9 April 2024.

<sup>61</sup> *Case of Verein Klimaseniorinnen Schweiz and Others v. Switzerland*, App. No. 53600/20, 9 April 2024, no. 570-640.

protection of the environment as such.”<sup>62</sup> It is a question of “the existence of a harmful effect on a person and not simply the general deterioration of the environment.”<sup>63</sup>

The right to protection from the negative effects of climate change is protected by Article 8 of the ECHR because the harmful effects of a lack of climate protection hinder the exercise of the right to shape one's personal sphere, one's privacy. The state must grant this protection. This is an expression of the state's duty to protect, which must prevent violations of citizens' rights through breaches of climate law. In addition, Article 2 of the ECHR – protection of life and health – is examined and found to have been violated. However, this standard is ultimately irrelevant to the decision because Article 8 of the ECHR already carries the result and the action must therefore be upheld.

The ECtHR is hereby applying its case law on the violation of positive obligations to climate impacts when the rise in temperature gives rise to a concrete risk of violations of fundamental rights because extreme weather conditions cause flooding or create landslide or avalanche risks in certain locations. Even before this decision in 2024, the ECtHR had already recognized the principle of positive obligations on the part of the state and, in several cases relating to environmental law, had found violations of Convention rights, in particular Articles 2 and 8 ECHR. However, a duty to protect requires that the environmental impacts asserted are of a certain magnitude and pose a real and immediate risk to the legal interests of the respective complainants.<sup>64</sup> In order to reach the threshold of an infringement of fundamental rights requiring justification, it was required that the danger to the protected interests of life, private life, family, or property, if not realized, had at least intensified and become more concrete, and that state authorities could recognize that a danger existed (“foreseeable”).<sup>65</sup>

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<sup>62</sup> *Case of Verein Klimaseniorinnen Schweiz and Others v. Switzerland*, App. No. 53600/20, 9 April 2024, no. 445.

<sup>63</sup> *Case of Verein Klimaseniorinnen Schweiz and Others v. Switzerland*, App. No. 53600/20, 9 April 2024, no. 446.

<sup>64</sup> *Case of Öneriyildiz v. Turkey*, App. No. 48939/99, 30 November 2004, no. 90; *Case of Budayeva and Others v. Russia*, App. Nos. 15339/02, 21166/02, 20058/02, 11673/02 and 15343/02, 29 September 2008, no. 160; *Case of Kolyadenko and Others v. Russia*, App. Nos. 17423/05, 20534/05, 20678/05, 23263/05, 24283/05 and 35673/05, 09 July 2012, no. 187, 217; *Case of Fadeyeva v. Russia*, App. No. 55723/00, 30 November 2005, no. 134

<sup>65</sup> App. Nos. 15339/02, 21166/02, 20058/02, 11673/02 and 15343/02, 29 September 2008, no. 158.

As a further prerequisite, the ECtHR required that the positive obligation not place a disproportionate burden on the state, thus granting it broad discretion.<sup>66</sup> The cases in which the ECtHR had previously affirmed environmental protection obligations concerned exclusively situations involving potential hazards from immediate sources of danger such as a landfill site, a gold mine, or a river prone to flooding. General threats that have not yet materialized, such as those caused by climate change, have not yet been successfully asserted before the ECtHR.

Now, in the context of climate change, the criterion of “real and immediate” is understood as “a serious, actual, and sufficiently determinable threat to life, health, well-being, and quality of life, which includes an element of material and temporal proximity of the threat to the alleged damage. According to the established case law of the ECtHR on the exercise of protective duties in the context of environmental issues, states are obliged to establish a legal and administrative framework that ensures effective protection of human health and life, and they must apply this legal and administrative framework in a timely and effective manner.” In doing so, the state has a wide margin of discretion in exercising its protective duty. The ECtHR merely reviews whether the state matter has been addressed with due care and whether all competing interests have been taken into account.

The Grand Chamber substantiates the state's responsibility under the ECHR for CO<sub>2</sub> emissions in detail, citing scientific studies and international conventions and resolutions.<sup>67</sup> On this basis, environmental protection, which affects the foundations of life and is therefore important for all human rights guarantees, is integrated into the Convention. This leads to a duty on the part of the state to reduce emissions, even though the state itself does not produce the emissions.<sup>68</sup> It is held responsible for the absence or inadequacy of legal regulations if it fails to fulfill its duty to minimize CO<sub>2</sub> emissions and introduce appropriate laws. It is therefore not held

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<sup>66</sup> *Case of Hatton and Others v. The United Kingdom*, App. No. 36022/97, 8 July 2003, no. 100; *Case of Taşkin and Others v. Turkey*, App. No. 46117/99, 30 March 2005, no. 116; *Case of Fadeyeva v. Russia*, App. No. 55723/00, 30 November 2005, no. 134; *Case of Budayeva and Others v. Russia*, App. Nos. 15339/02, 21166/02, 20058/02, 11673/02 and 15343/02, 29 September 2008, no. 134 ss.

<sup>67</sup> *Case of Verein Klimaseniorinnen Schweiz and Others v. Switzerland*, App. No. 53600/20, 9 April 2024, no. 102-120, 412, 431.

<sup>68</sup> *Case of Verein Klimaseniorinnen Schweiz and Others v. Switzerland*, App. No. 53600/20, 9 April 2024, no. 545, 548.

accountable for legislative behavior that violates or jeopardizes the ECHR, but for failing to prevent damage caused by third parties. Switzerland has not fulfilled its obligations in this regard.<sup>69</sup> The state's obligations to act are based on national and international commitments to minimize CO<sub>2</sub> emissions. Since the violations or threats are relevant within the framework of Article 8 ECHR, the state must be regarded as the violator, upon whom corresponding obligations to remedy the situation must be imposed.<sup>70</sup>

B) Foundations of international law and standards of human rights obligations, with particular reference to the Paris Agreement (2015)

As a basis and benchmark for the obligation, the ECtHR refers in particular to the Paris Agreement (2015), which was adopted at the 21<sup>st</sup> Conference of the Parties to the United Nations Framework Convention on Climate Change in Paris in December 2015 and entered into force on November 4, 2016. By 2023, 195 countries had signed the Paris Agreement. This international treaty obliges the signatory states to combat climate change. The signatory states commit themselves to limiting global warming to well below 2°C, and if possible to 1.5°C, compared to pre-industrial levels. The individual states agreed to set their own national targets for achieving CO<sub>2</sub> neutrality. Specifically, the states committed to climate protection by submitting climate action plans for reducing their emissions. The Paris Agreement relies on national commitments, known as Intended Nationally Determined Contributions (INDCs): each country is to declare by what percentage it intends to reduce its climate-damaging emissions. Most countries had already made such commitments in the run-up to the climate summit. What is new compared to the previous Kyoto Protocol is that not only industrialized countries, but also emerging and developing countries have made such commitments. The agreement also stipulates that governments must submit new and stricter targets every five years (known as the “ratchet mechanism”) and report transparently on their progress (biennial transparency reports) in order to make compliance with the targets verifiable (“naming and shaming”). In addition, the signatory states commit to not falling short of the targets achieved to date. The treaty has a legally

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<sup>69</sup> *Case of Verein Klimaseniorinnen Schweiz and Others v. Switzerland*, App. No. 53600/20, 9 April 2024, no. 72-75, 782, 569 ss.

<sup>70</sup> *Case of Verein Klimaseniorinnen Schweiz and Others v. Switzerland*, App. No. 53600/20, 9 April 2024, no. 539-550.

binding framework, while the specific climate targets (NDCs) are primarily based on the voluntary commitments of the states.<sup>71</sup>

The Paris Agreement represents a milestone in that it marks a shift in how countries work together on climate change. The 1992 UN Framework Convention on Climate Change and the 1997 Kyoto Protocol were still based on a two-tiered approach: binding commitments for industrialized countries and low expectations for developing countries. The Paris Agreement replaced top-down targets for some countries with a bottom-up model in which all countries were required to specify nationally determined contributions to environmental protection, which were to be enforced not through legal obligations but through transparency, peer pressure, and regular reviews. This systemic change in international climate negotiations increased the capacity for action and significantly improved the conditions for change.

The ECtHR explicitly refers to this agreement and states that, by ratifying this treaty, Switzerland has committed itself to complying with the obligations set out therein and to making the contributions it has specified. Each individual state is called upon to define its own national path to achieving carbon neutrality. If the ECtHR derives the obligation to act from international agreements that Switzerland has signed and which are binding under international law, in particular the Paris Agreement and the Aarhus Convention, this requires justification, because environmental protection agreements do not, in principle, have any legal significance for the validity and application of the ECHR. In this regard, however, the Grand Chamber states:<sup>72</sup> “The States' obligations under Articles 2 and 8 should be read in the light of the precautionary principle, the principle of intergenerational equity, and the duty of international cooperation.”<sup>73</sup> If Articles 2 and 8 of the ECHR must be interpreted in the light of the precautionary principle, intergenerational equity, and the duty of international cooperation, this assigns a binding and justiciable effect to the obligations of states under international law, thus counteracting the weakness of international law in enforcing obligations, which does not provide for sufficient sanctions in the event of treaty violations. This continues the previous case law of the

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<sup>71</sup> See Bodle, Donat and Duwe, 2016, pp. 5 ss.

<sup>72</sup> *Case of Verein Klimaseniorinnen Schweiz and Others v. Switzerland*, App. No. 53600/20, 9 April 2024, no. 377.

<sup>73</sup> *Case of Verein Klimaseniorinnen Schweiz and Others v. Switzerland*, App. No. 53600/20, 9 April 2024, no. 377.

ECtHR, which treats environmental protection as a guarantee under the Convention<sup>74</sup> and has used the importance of environmental protection to expand the scope of the Convention. In this context, the Grand Chamber adopts a creative and progressive interpretation in light of modern developments (Convention as a living instrument).

### 2.3.3. Statement on the ECtHR's Climate Senior Women Switzerland ruling

With its ruling on Climate Senior Switzerland, the ECtHR has continued the development of human rights – a history of expansion, extensification, intensification and unfolding of human rights functions as defensive rights against the state and protective obligations. Overall, the ECtHR refers to the need for an evolutionary interpretation of human rights in light of the conditions in today's society. It has not adhered to a traditional, restrictive understanding of jurisdiction, but has developed its case law, interpreted its own competence extensively<sup>75</sup> and greatly expanded its supervisory function.

In this regard, the allegation is often made that the climate protection law encroaches on the political sphere.<sup>76</sup> Admittedly, the far-reaching protective effect of the human rights guarantees of the Convention, which the Grand Chamber accepted in its Climate Seniors decision, is new. However, the Court intervenes far less in the legislative branch's sphere of competence than it appears at first glance. This is because the ECJ fills the gaps in human rights law with regard to environmental protection, which require legal policy decisions, by drawing on obligations under international law that parliaments have agreed to when ratifying international treaties. In doing so, the ECtHR gives international law an unusually strong enforcement power, which does not usually exist and is often cited as a weakness of international law.

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<sup>74</sup> Critical of this Kühne, 2024, p. 917, p. 920.

<sup>75</sup> Langer, 2023, p. 159, p. 161.

<sup>76</sup> See Wegener, 2022, p. 425, p. 430; Wagner, 2021, p. 2256. Calliess, 2024, p. 820 (828 f.), takes a different view, seeing the limitation of the Federal Constitutional Court to an evidentiary review of violations of fundamental rights protection obligations as an "idealistic overestimation" of the legislature; see also Franzius, 2022b, p. 383 (425 f.). On the judiciary as a climate actor, see Völzmann, 2024, p. 903.

#### 2.3.4. Significance of the Climate Seniors ruling for Council of Europe member states

##### A) Consequences of the duty to protect against climate change and its consequences for national legal systems

It has become apparent that threats to climate protection are increasingly being linked to fundamental and human rights, which predominantly give rise to a far-reaching state duty to protect against climate change and its consequences or, according to the German Federal Constitutional Court, an obligation 'to safeguard freedoms protected by fundamental rights over time and to distribute opportunities for freedom proportionately across generations'. The courts have not recognised an independent right to climate protection, as demanded by NGOs.

Despite the courts' commitment to the separation of powers and their lack of jurisdiction over independent climate policy, the decisions outlined above have led to stricter control of national climate protection plans. The courts are demanding clear and precise guidelines on how states intend to implement their self-imposed climate protection commitments in a manner that preserves freedom and is fair to future generations, and are pointing to the inadequate action taken by their governments. To justify the failure of governments, reference is made to the IPCC reports and other scientific findings on climate protection, in particular the 2015 Paris Climate Agreement and the commitments made by states in connection with it. These guidelines are declared to be the standard to be adhered to. This counteracts the weakness of international law, which lies in the lack of enforcement mechanisms.

##### B) Human rights complaints before the ECtHR as a means of enforcing obligations under international law

The ECtHR's ruling in the Climate Seniors case means that all member states of the Council of Europe are obliged to protect against the negative effects of climate change. In particular, they will be measured against the 2015 Paris Agreement, insofar as they have ratified it and reported long-term net-zero targets in their nationally determined contributions to the agreement. These commitments cover approximately 90% of global economic activity, with the aim of achieving net-zero emissions between 2050 and 2070.<sup>77</sup> The ECtHR's Climate Senior Switzerland ruling shows

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<sup>77</sup> Allen et al., 2022.

that international law obligations are being used to specify human rights protection duties. This creates a law enforcement mechanism that eliminates a weakness in international law, namely the lack of sanctions. As further climate protection lawsuits are pending and new lawsuits are expected, it is likely that the ECtHR will continue to exercise stricter control over national climate protection plans.

#### **2.4. Case law of the European Court of Justice on climate protection**

The European Court of Justice in Luxembourg has also dealt with climate lawsuits on several occasions. The majority of the relevant cases concerned EU emissions trading. Member States in particular questioned the competence of the European Commission to review national allocation plans or the legality of the procedures.<sup>78</sup> Plant operators also attempted to bring cases before the Court, but their actions were not admitted.<sup>79</sup> In its rulings, the Court reaffirmed the high importance of climate protection and the significance of EU emissions trading, but concluded that the European Commission should not take market consequences into account in its review of national action plans.<sup>80</sup>

In 2018, an EU court dealt with a case comparable to the current climate lawsuits for the first time: In the People's Climate Case, ten families from the EU, Kenya and Fiji brought an action before the Court of Justice of the European Union (CJEU) against the European Parliament and the Council of the European Union on the grounds of the dangers of climate change directly affecting them, with the aim of achieving stricter EU climate targets.<sup>81</sup> The lawsuit was dismissed in May 2019 as inadmissible

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<sup>78</sup> See Case C-503/07 P, *Saint-Gobain Glass Deutschland GmbH v Fels-Werke GmbH, Spenner-Zement GmbH & Co KG, Commission of the European Communities*, 8 April 2008; Case C-6/08 P, *Steel Košice vs Commission*, 19 June 2008; T-374/04, *Federal Republic of Germany v Commission of the European Communities*, 7 November 2007; General Court of ECJ, 23.11.2005, T-178/05, *United Kingdom of Great Britain and Northern Ireland v Commission of the European Communities*, 23 November 2005; T-183/07, *Republic of Poland v Commission of the European Communities*, 23 September 2009.

<sup>79</sup> T-28/07, *Fels-Werke GmbH, Saint-Gobain Glass Deutschland GmbH and Spenner-Zement GmbH & Co. KG v Commission of the European Communities*, 11 September 2007.

<sup>80</sup> T-178/05, *United Kingdom of Great Britain and Northern Ireland v Commission of the European Communities*, 23 November 2005, no. 60; T-183/07, *Republic of Poland v Commission of the European Communities*, 23 September 2009, no. 113.

<sup>81</sup> T-330/18, *Armando Carvalho and Others v European Parliament and Council of the European Union*, 8 May 2019.

due to a lack of individual concern. The plaintiffs lodged an appeal with the ECJ in July 2019.<sup>82</sup> The main point of contention was the interpretation of “individual concern”, which is required for a natural or legal person to have standing to bring an action for annulment under Article 263(4) TFEU. Both the General Court and the ECJ followed previous case law and denied that the plaintiffs were affected in a special way, as required by the so-called Plaumann formula,<sup>83</sup> which had been developed 60 years earlier.<sup>84</sup> With this decision, the ECJ confirmed that legal protection for individuals must generally be granted by the courts of the Member States, thereby declaring climate lawsuits brought by individuals on the basis of fundamental rights to be inadmissible.

### ***2.5. Advisory Opinion of the International Court of Justice on the threat to human rights posed by climate change***

The United Nations General Assembly has adopted a resolution requesting the International Court of Justice (ICJ) in The Hague to issue an opinion on the obligations of States in relation to climate change and to identify the relevant legal bases. The main issues addressed in relation to climate protection were the existence of an obligation under international law to protect the climate and possible claims for damages between states in the event of non-compliance. Numerous states and international organisations participated in these proceedings, and civil society actors also submitted statements. In addition, the International Court of Justice heard expert testimony on climate change.

#### **2.5.1. Advisory Opinion of the ICJ**

The ICJ, acting as a kind of global constitutional court,<sup>85</sup> took on this task and, in its Advisory Opinion issued on 23 July 2025,<sup>86</sup> established a comprehensive obligation for all states worldwide to protect the climate and compensate for damage caused by climate change, based primarily on

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<sup>82</sup> Case C-565/19 P, *Armando Carvalho and Others v European Parliament and Council of the European Union*, 25 March 2021.

<sup>83</sup> Case C-25/62, *Plaumann & Co. v Commission of the European Economic Community*, 15 July 1963; see Fitz and Rathmayer, 2021, p. 32; Winter, 2022, p. 367; Christiansen and Masche, 2023, p. 31, p. 32 s.

<sup>84</sup> C-330/18, *Bruno Gollnisch v European Parliament*, 21 March 2019, no. 71 ss.

<sup>85</sup> See Ekardt and Heß, 2025, p. 1297 ss.

<sup>86</sup> IGH, Advisory Opinion: Obligations of State in Respect of Climate Change, 23.7.2025.

international climate law, human rights and customary international law, including other international treaty law. The court concluded that climate change poses a significant threat to all states. Therefore, states must take measures against climate change, which, given its negative effects, impairs a number of human rights. This is because protecting the environment is a prerequisite for the exercise of many human rights, in particular the right to life and health. The ICJ emphasises the importance of the human right to a clean, healthy and sustainable environment for climate protection and refers to the difficulties of fulfilling numerous human rights obligations without simultaneously guaranteeing the protection of the human right to a healthy environment. To this end, it is necessary for states – in addition to taking their own measures against climate change – to also oblige companies to behave in a climate-friendly manner. This is particularly relevant at present because climate protection regulations aimed at companies are being repealed worldwide, such as the EU Supply Chain Directive on corporate due diligence, which is to be deregulated and de-bureaucratised.

The ICJ also refers to the 2015 Paris Agreement. It reaffirms that states must aim for 1.5 degrees and not ‘well below 2 degrees’, as the 1.5-degree target of the Paris Agreement has now become legally binding. It implicitly assumes that the structure of Articles 2, 3 and 4 of the Paris Agreement suggests that the target pursued therein is legally binding.

The ICJ sees environmental protection and human rights as closely linked. The current major international climate agreements, namely the UN Framework Convention on Climate Change, the Kyoto Protocol and the Paris Agreement, are not definitive regulations for combating climate change. Rather, climate protection is an obligation that already arises from human rights treaties: ‘The Court thus concludes that, under international law, the human right to a clean, healthy and sustainable environment is essential for the enjoyment of other human rights.’ Therefore, even those states that are not (or no longer) party to climate protection agreements but are party to human rights treaties are also obliged to protect the climate. The 1.5-degree limit is justified by the fact that climate change currently poses a double threat to the freedoms guaranteed by the constitution in liberal democracies: on the one hand, there is a danger that the basic prerequisites for freedom – life, health and a minimum standard of living – will be destroyed. Secondly, there is a danger that effective climate protection will be postponed until it can only be implemented extremely quickly and in a way that challenges freedom. Unlike the German Federal Constitutional

Court, the ICJ<sup>87</sup> focuses on the right to a healthy environment and not on the danger of massive future infringements of freedom if no environmental protection measures are taken now. The ICJ refers to this as the right to a healthy environment. However, it does not consider this right to be comprehensively protected as such, but only to the extent that the impairment of the environment affects the life, health and minimum subsistence level of human beings, which are explicitly included in national and transnational human rights catalogues. These rights arise implicitly from the guarantees of freedom: without life, health and a minimum subsistence level, there is no freedom.

Furthermore, the ICJ bases the obligation to adhere to the 1.5-degree limit on customary international law. In particular, the court refers to the customary legal obligation to avoid significant environmental damage by observing duties of care with regard to technical risks.<sup>88</sup> This may give rise, on the one hand, to an obligation to refrain from further damage and, on the other hand, to a liability for damages on the part of states towards other states if they have contributed to climate change in a negligent and culpable manner, thereby causing certain damage elsewhere. This is of particular practical significance because industrialised countries have contributed disproportionately to greenhouse gases in the atmosphere.

With this advisory opinion, the ICJ has aligned itself with the advisory opinion of the United Nations International Tribunal for the Law of the Sea on climate change of 2024. It also refers to the decisions of regional human rights courts, such as the Inter-American Court of Human Rights and the European Court of Human Rights, which have dealt with the relationship between human rights and climate change. The ICJ concludes that human rights establish a state duty to protect, to take decisive action to combat climate change and to take mitigation, adaptation and cooperation measures in the context of climate change.

### 2.5.2. On the significance of the ICJ legal opinion<sup>89</sup>

A comparison of the ICJ Advisory Opinion with the decision of the German Federal Constitutional Court reveals that the German view that protective rights or 'protective obligations' are, in cases of doubt, less important and

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<sup>87</sup> No. 369 ss. and 387 ss. of the Opinion.

<sup>88</sup> No. 271 ss. of the Opinion.

<sup>89</sup> See Ekardt and Heß, 2025, p. 1297 ss.

more open to consideration than defensive rights is not shared. On the other hand, the ICJ implicitly shares the view that fundamental rights have a precautionary dimension, as affirmed by the Federal Constitutional Court when examining the 'present nature' of the infringement of fundamental rights. Furthermore, unlike the German Federal Constitutional Court, the ICJ does not deal in detail with the requirements arising from the principle of proportionality.

Furthermore, the ICJ's reference to customary international law and human rights is of central importance. This has significant implications for countries that have withdrawn from the Paris Agreement, such as the United States, as primary and secondary claims resulting from climate change are recognised independently of the Paris Agreement and can therefore form the basis of climate lawsuits against both states and companies.

Although this opinion is not legally binding on states, it can nevertheless have an impact in many areas. National and regional courts repeatedly refer to the International Court of Justice in their decisions and follow its reasoning. Civil society can also use the opinion to strengthen its demands for more climate protection from states.

## ***2.6. Significance of the Climate Seniors ruling and the Advisory Opinion of the ICJ for the member states of the Council of Europe***

### **2.6.1. Consequences of the duty to protect against climate change and its consequences for national legal systems**

It has become apparent that threats to climate protection are increasingly being linked to fundamental and human rights, which predominantly give rise to a far-reaching state duty to protect against climate change and its consequences or, according to the German Federal Constitutional Court, an obligation 'to safeguard freedoms protected by fundamental rights over time and to distribute opportunities for freedom proportionately across generations'. The courts have not recognised an independent right to climate protection, as demanded by NGOs.

Despite the courts' commitment to the separation of powers and their lack of jurisdiction over independent climate policy, the decisions outlined above have led to stricter control of national climate protection plans. The courts are demanding clear and precise guidelines on how states intend to implement their self-imposed climate protection commitments in a manner

that preserves freedom and is fair to future generations, and are pointing to the inadequate action taken by their governments. To justify the failure of governments, reference is made to the IPCC reports and other scientific findings on climate protection, in particular the 2015 Paris Climate Agreement and the commitments made by states in connection with it. These guidelines are declared to be the standard to be adhered to. This counteracts the weakness of international law, which lies in the lack of enforcement mechanisms.

The ECtHR's ruling in the *Climate Seniors* case means that all member states of the Council of Europe are obliged to protect against the negative effects of climate change. In particular, they will be measured against the 2015 Paris Agreement, insofar as they have ratified it and reported long-term net-zero targets in their nationally determined contributions to the agreement. These commitments cover approximately 90% of global economic activity, with the aim of achieving net-zero emissions between 2050 and 2070.<sup>90</sup>

#### 2.6.2. Human rights complaints before the ECtHR as a means of enforcing obligations under international law

The ECtHR's *Climate Seniors* ruling and the Advisory Opinion of the ICJ show that obligations under international law are being used here to give concrete form to human rights protection obligations. This creates a law enforcement mechanism that eliminates a weakness in international law, namely the lack of sanctions. As further climate protection lawsuits are pending and new lawsuits are expected, it is likely that the ECtHR will continue to exercise stricter control over national climate protection plans.

In contrast, the German Federal Constitutional Court has chosen a new construct for the protection of future freedom and has derived from this an obligation to set targets, but not to take concrete measures.<sup>91</sup> These decisions, which are often classified as the result of strategically conducted

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<sup>90</sup> Allen et al., 2022.

<sup>91</sup> BVerfGE 157, 30 no. 182 ff.

litigation,<sup>92</sup> have a significant impact on the future and thus take into account the ‘generation-oriented dimension’ of human rights.<sup>93</sup>

### 3. The call for criminal law to protect the environment and climate

In view of the dramatic reports on the current state of affairs and the equally dramatic future scenarios in the field of environmental and climate protection, it is not surprising that there are increasing calls to use criminal law to protect the natural environment and climate. Environmental criminal law concerns those offences that are central to the protection of ecological sustainability goals<sup>94</sup> – the interlinking of economic, social and ecological concerns, taking into account the interests of future generations.<sup>95</sup> Climate criminal law, on the other hand, primarily concerns the protection of the atmosphere, which is polluted by greenhouse gases, especially CO<sub>2</sub>. Unlike environmental criminal law, climate criminal law is not primarily concerned with the pollution of the air as such, but with long-term changes to the atmosphere. The injustice of ‘climate crimes’ is seen in the fact that greenhouse gases are emitted without appropriate compensation measures being taken to achieve climate neutrality.<sup>96</sup> From a criminal law perspective, this raises the question of whether the atmosphere needs criminal law protection by making climate-damaging behaviour punishable by law.<sup>97</sup>

Requirements for environmental and climate criminal law can be found in European Union law,<sup>98</sup> which also aims to strengthen the criminal law protection of the environment and climate with the Green Deal.<sup>99</sup> Particularly noteworthy in this context is Directive (EU) 2024/1203 of the European Parliament and of the Council of 11 April 2024 on the protection of the environment through criminal law, which specifies the minimum offences that Member States must criminalise and the minimum upper limits

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<sup>92</sup> Vgl. Hahn, 2024, *passim*; Graser, 2019, 317. For the decision of the German Federal Constitutional Court see Wieland, 2022, p. 167 ss.; for a different view see Wolff, 2024, p. 1402.

<sup>93</sup> Schmalenbach, 2024, p. 55 ss.

<sup>94</sup> Schmoller, 2025, p. 75.

<sup>95</sup> Calliess, 2025, p. 1 ss.; Glaser, 2006, p. 44; Kahl, 2009, p. 2, p. 6.

<sup>96</sup> Satzger, 2024, p. 280, p. 281.

<sup>97</sup> In more detail Kaiafa-Gbandi, 2023, p. 41, p. 45 ss.; Satzger and von Maltitz, 2021, p. 1 ss.; Schmoller, 2025, p. 112.

<sup>98</sup> Calliess, 2025, p. 1 ss.; Glaser, 2006, p. 44; Kahl, 2009, p. 2, p. 6.

<sup>99</sup> Mitteilung der Kommission v. 11.12.2019 3 KOM (2019) 640 endg.

for sanctions. In particular, new criminal offences and tougher sanctions for individuals and companies are planned. This directive also contains provisions on the framework conditions and procedures, e.g. for the systematic collection and publication of data and information on environmental crime and for cooperation between Member States. The Member States of the European Union must transpose the provisions of this Directive, which the European Union has adopted to combat transnational, organised, profit-driven environmental crime through criminal law, into national law by May 2026 (see 3.1.).

The Council of Europe has also been active in the field of environmental criminal law for decades. With the Convention on the Protection of the Environment through Criminal Law of 4 November 1998,<sup>100</sup> it pursued the goal of harmonising environmental criminal law<sup>101</sup> and formulated environmental criminal offences in which intentional or negligent acts are punishable. The Council of Europe has pursued the goal of harmonising environmental criminal law and formulated environmental criminal offences in which intentional or negligent acts are to be punished if they have caused or are likely to cause lasting damage to the quality of the air, soil or water or to animals and plants. However, this convention did not enter into force because the minimum number of three ratifications required for its entry into force was not reached. In 2025, the Council of Europe pushed for criminal law protection of the environment and climate through new, stricter regulations by adopting the groundbreaking Convention of the Council of Europe Convention on the Protection of the Environment through Criminal Law in May 2025 (see 3.2).

These activities at the level of the European Union and the Council of Europe, which provide for significant tightening of environmental and climate criminal law, raise a number of questions when transposed into national law, which will be addressed in conclusion (see 3.3.).

### ***3.1. Green Criminology and the European Union's Green Deal: Combating transnational, organised, profit-driven environmental crime through criminal law***

The European Union sees environmental and climate protection as a new priority and calls for effective criminal, administrative and civil sanctions to protect human rights and the environment, especially the foundations of life.

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<sup>100</sup> See Hecker, 2024, chap. 3 No. 11.

<sup>101</sup> See Knaut, 2005, p. 243 ss.

However, if fundamental and human rights and environmental protection are to be guaranteed by legal measures, reference is made to values that are generally recognised and are not further questioned or justified. The means to be used to achieve effective protection of these values alone are open to debate. Nevertheless, constitutional concerns have been raised, particularly in Germany, regarding the use of criminal law to protect the climate, especially from the perspective of the constitutional principle of proportionality and the idea of *ultima ratio*.<sup>102</sup> However, since all EU law takes precedence over the national law of EU Member States and, in the opinion of the ECJ, this also applies if the national law is constitutional law,<sup>103</sup> the criminal law provisions of the European Union, as set out in Directive 2024, must be transposed into national law by the Member States without regard to the constitutional provisions of national law, such as the *ultima ratio* principle.<sup>104</sup> National law is ‘superseded’ by EU law.

### 3.1.1. European Union activities in the field of environmental criminal law up to the Green Deal

In order to adequately sanction legal violations in the field of environmental and climate protection, a set of supervisory measures and penalties is available in environmental, administrative and criminal law that can and should be used effectively. Although the European Union does not have the power to introduce criminal sanctions at EU level, it does have the power to oblige Member States to introduce criminal measures and to set minimum maximum penalties. It has been making use of this power in the field of environmental criminal law for more than 20 years.

#### A) Proposal of a Directive on the protection of the environment through criminal law (2001)

The Commission first presented a Proposal of a Directive on the protection of the environment through criminal law on 13 March 2001.<sup>105</sup> It assumed that the criminal sanctions imposed by Member States were not sufficient to ensure full compliance with Community environmental law. Article 3 of the

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<sup>102</sup> In particular Burchard and Schmidt, 2023, p. 83 ss.; Ransiek, 2024, p. 644 ss.

<sup>103</sup> Case C- 6/64, *Flaminio Costa v E.N.E.L.*, 15 July 1964.

<sup>104</sup> See Brodowski and Jahn, 2017, p. 363, p. 366; Eckardt, 2024, p. 85 ss.; Luef-Kölbl, 2024, p. 65 ff.

<sup>105</sup> KOM (2001) 139 endg.

proposed directive therefore obliged Member States to make certain intentional or grossly negligent activities punishable by criminal penalties if they violate specific environmental protection regulations of the European Community or regulations of the Member States implementing such regulations. The proposed directive did not contain any further provisions on the structure of the general and specific parts of environmental criminal law or on the legal consequences. However, this proposal for a directive from the Commission was rejected by the Member States in the Council due to reservations regarding the competence of the European Community. The Council therefore adopted Framework Decision 2003/80/JHA on the protection of the environment through criminal law,<sup>106</sup> which contained a list of environmental offences that should be punishable by effective, proportionate and dissuasive penalties in the Member States. In terms of content, the Framework Decision was largely aligned with the Convention on the Protection of the Environment through Criminal Law (ETS No. 172) of 4 November 1998,<sup>107</sup> which never entered into force because the required minimum number of ratifications or accessions was not reached.

B) EU powers with regard to the criminal law of Member States for the protection of the environment

However, the Commission took the view that the Council had encroached on the European Community's powers to issue instructions in the field of criminal law by adopting the Framework Decision,<sup>108</sup> and therefore brought an action before the ECJ for the annulment of the Framework Decision. In its judgment of 13 September 2005, the ECJ declared the Framework Decision invalid.<sup>109</sup> Environmental protection is one of the Community's essential objectives. In principle, criminal law and criminal procedure do not fall within the competence of the Community. However, this could not prevent the Community legislator from taking measures relating to the criminal law of the Member States which were necessary to ensure the full effectiveness of the legal norms it had adopted for the protection of the environment, if the application of effective, proportionate and dissuasive

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<sup>106</sup> ABl EG 2003 Nr. L 29, S. 55; see Knaut, 2005, p. 340 ff.; Lienert, 2022, p. 102 ff.

<sup>107</sup> See Knaut, 2005, pp. 243–295.

<sup>108</sup> Heger, 2009, pp. 118 ff.; Hugger, 2000, p. 92 f.

<sup>109</sup> EuGHE 2005, 7879 = JZ 2006, 307; see Kisseler, 2021, p. 53 ff.; Lienert, 2022, p. 92 ff.; Plump, 2021, p. 227 ss.

penalties by the competent national authorities constituted a measure essential for combating serious damage to the environment.

C) Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law

In light of this ruling by the ECJ, on 9 February 2007 the Commission presented a new proposal for a directive on the protection of the environment through criminal law, which came into force on 26 December 2008 as Directive 2008/99/EC of the European Parliament and of the Council of 19 November 2008 on the protection of the environment through criminal law.<sup>110</sup> This directive, which has been described as a ‘prototype for the Europeanisation of economic and environmental criminal law’,<sup>111</sup> concerned in particular air pollution and the disposal of hazardous waste. The ECJ regarded the necessary competence for this as an ancillary criminal law competence to environmental law. According to this, air, soil and water must be protected by criminal law from significant unlawful damage caused by intentional or at least grossly negligent acts. Furthermore, Member States had to establish criminal provisions on the management and shipment of waste, the operation of dangerous installations, the handling of nuclear materials or other radioactive substances, and the protection of living animals and plants. Sanctions had to be provided for both natural and legal persons.

D) Evaluation of the Directive on the protection of the environment through criminal law

In March 2019, the Commission initiated an evaluation of European environmental criminal law,<sup>112</sup> which concluded that the 2008 Directive had not had a significant impact. Over the past ten years, the number of cases of environmental crime that have been successfully investigated and prosecuted has been very low. In addition, the penalties imposed have been too low to have a deterrent effect. It was therefore recommended that the

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<sup>110</sup> *OJ L 328*, 6.12.2008, pp. 28–37; see Kisseler, 2021, p. 66 ff.; Lienert, 2022, p. 92 ff.

<sup>111</sup> Heger, 2012, p. 211, p. 212.

<sup>112</sup> Commission Staff Working Document Evaluation of the Directive 2008/99/EC of the European Parliament and of the Council of 19.11.2008 on the protection of the environment through criminal law 3 SWD (2020) 259 final; see Schnichels and Seyderhelm, 2020, p. 829, p. 832.

2008 Environmental Crime Directive be revised with the aim of updating the scope of the Directive and clarifying or deleting vague terms in the definitions of environmental crime. It was recommended that penalties in the Member States be harmonised, that the level of penalties be more closely linked to the financial situation of legal persons, and that aspects of cross-border and organised crime be taken into account.

On 15 December 2021, based on this recommendation, the Commission presented a proposal for a directive on the protection of the environment through criminal law and replacing Directive 2008/99/EC, which was also intended to be part of the European Green Deal climate plan.<sup>113</sup> The proposal aimed to increase the effectiveness of criminal law in combating environmental crime.

E) Directive (EU) 2024/1203 on the protection of the environment through criminal law of 11 April 2024

On 20 May 2024, Directive (EU) 2024/1203 of the European Parliament and of the Council of 11 April 2024 on the protection of the environment through criminal law and replacing Directives 2008/99/EC and 2009/123/EC entered into force.<sup>114</sup> In the Directive on the protection of the environment through criminal law, the Commission sees criminal law as part of a comprehensive EU strategy to protect and improve the state of the environment, to be used as a last resort when other measures are not sufficient to ensure compliance with environmental and climate protection regulations. It bases its call for more effective environmental criminal law on the central role of transnational organised environmental crime and the assumption that considerable criminal profits are made in this field. The prospect of criminal profits, reinforced by low risks of prosecution, creates significant incentives for organised crime groups. Certain forms of waste crime and trade in protected species, such as wildlife trafficking, poaching of elephants and rhinos, deforestation of tropical forests and illegal mining in Europe, are particularly lucrative. Although these offences are less significant in Europe than in the countries of origin, Europe plays a key role as a sales market. However, Europe plays a central role as a sales market: it is one of the most important sales markets, especially for protected species and tropical woods. In this respect, there are points of contact for European countries arising from the illegal import and transit of timber, fauna, flora

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<sup>113</sup> COM(2021) 851 final; see Burgert and Veljovic, 2023, p. 156 ff.; Heghmanns, 2024, p. 256 ff.

<sup>114</sup> *OJL*, 2024/1203, 30.4.2024.

and other products related to environmental protection and/or other conflict resources.<sup>115</sup>

Furthermore, reference is made to the low risk of detection and prosecution in the area of environmental crime, as well as to inadequate cooperation between administrative and law enforcement authorities, because environmental authorities do not consistently forward information about crimes committed to law enforcement authorities in order to avoid exposing their own failings or questionable cooperation practices with industry. If no remedy is found here, it is unlikely, for procedural reasons, that environmental criminal law will go beyond punishing easily visible everyday actions or dealing with spectacular accidents. In addition, action must be taken against public corruption in this context.

The environment as a (natural) basis of life, biodiversity and species protection are cited as legal interests worthy of protection. Member States are obliged to introduce new environmental and climate offences.<sup>116</sup> In future, for example, illegal timber trade, illegal recycling of environmentally harmful ship parts ('beaching')<sup>117</sup> and serious violations of chemical legislation will be penalised.<sup>118</sup> The Environmental Crime Directive also contains provisions for 'behaviour comparable to ecocide' and recommends the inclusion of ecocide in the Rome Statute. This development marks a clear shift from voluntary protection measures to enforceable international standards aimed at preventing, deterring and prosecuting the most serious environmental damage.

The Commission proposes a common minimum level of penalties for environmental and climate offences. For offences that result or may result in the death or serious injury of a person, Member States must provide for a minimum prison sentence of up to ten years.

Member States shall ensure that legal persons can be held liable for criminal offences where such offences have been committed for the benefit of those legal persons by any person who has a leading position within the legal person concerned, acting either individually or as part of an organ of that legal person. Member States shall take the necessary measures to ensure that, at least for legal persons, criminal offences are punishable by criminal

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<sup>115</sup> Price, Donovan and de Jong, 2007, p. 117.

<sup>116</sup> Heghmanns, 2024, p. 256, p. 259 ff.

<sup>117</sup> De lege lata, see Altenburg and Kremer, 2023, p. 133 ff.; Elsner, 2023, p. 135 ff.; Saliger, 2023, p. 585 ff.

<sup>118</sup> Hecker and Lorenz, 2024, p. 33.

or non-criminal fines. New sanctions are also being called for for legal entities, ranging from exclusion from public funding or tenders to the withdrawal of licences and the obligation to establish compliance management systems.<sup>119</sup>

An act is ‘unlawful’ within the meaning of Article 3(1) of Directive 2024 if it infringes Union law, national laws or administrative provisions of a Member State, or a decision of a competent authority of a Member State implementing the Union law referred to in point (a). Such an act is also unlawful if it is committed in the context of a permit issued by a competent authority of a Member State, if that permit was obtained fraudulently or through corruption, extortion or coercion, or if that permit clearly contravenes the relevant substantive requirements. The Directive 2024 thus ties in with the structure of offences under European environmental criminal law, which is ancillary to Union law and was already implemented by the Environmental Criminal Law Directive 2008.

Furthermore, cooperation in criminal prosecution will be strengthened, and Member States will be obliged to support persons who report environmental offences.

### ***3.2. Activities of the Council of Europe in the field of environmental criminal law***

The Council of Europe, being the institution which adopted the first international instrument to combat environmental crime in the Convention on the Protection of the Environment through Criminal Law of 1998 (CETS 172) acknowledges, as well as the European Union, the need for an enhanced international approach to combat these crimes. The 1998 Convention never entered into force as the necessary minimum number of ratifications or accessions was not attained. Therefore, the Steering Committee of the Council of Europe for overseeing and coordinating activities in the field of crime prevention and crime control established a Working Group of Experts on the Protection of the Environment through Criminal Law to consider in a Feasibility Study the possible way forward, by assessing whether the elaboration of a new Convention was feasible and appropriate. In June 2022 this group of experts decided that a new Convention was feasible and appropriate. On 23 November 2022, the Committee of Ministers of the Council of Europe adopted the Terms of

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<sup>119</sup> Burgert and Veljovic, 2023, p. 156, p. 161.

Reference for a new Committee of Experts on the Protection of the Environment through Criminal Law.

On 14 May 2025, the Committee of Ministers of the Council of Europe adopted the Convention on the Protection of the Environment through Criminal Law (CETS 172). This Convention is the first international legally binding instrument to address environmental crime, covering a broad range of criminal acts that aggravate the triple planetary crisis of climate change, pollution and biodiversity loss. The purpose of the Convention is to prevent and combat environmental crime, promote national and international cooperation, and establish minimum legal standards to guide States in their national legislations. The main goal is the promotion and enhancement of the protection of the environment.

The convention establishes a wide range of environmental offenses and enables states to prosecute intentional conduct resulting in environmental disasters tantamount to ecocide. Provisions on corporate liability, sanctions, and organised crime reflect the evolving nature of environmental offenses and their links to transnational criminal networks. The convention includes a mechanism to monitor implementation and accountability.

Concerning the consistency with existing policy provisions in the policy area of the European Union, the European Commission, representing the Union in the negotiations of the Convention and participating actively in the negotiations, agreed on the text of the new Convention and declared this Convention fully compatible with Union law in general, and the European Criminal Directive in particular.<sup>120</sup> While the European Criminal Directive only concerns environmental criminal offences in the European Union, the Convention has a broader geographic reach encompassing Council of Europe members and third states around the world that can become parties to the Convention. The Convention thus represents the opportunity to foster environmental protection beyond the Union in an international legally binding treaty.

### **3.3. Statement**

The climate crisis is omnipresent, and extreme weather conditions, floods, and crop failures attributable to anthropogenic climate change are now

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<sup>120</sup> Council Decision (EU) 2025/2493 of 1 December 2025 on the signing, on behalf of the European Union, of the Council of Europe Convention on the Protection of the Environment through Criminal Law, no. 3.

almost a daily occurrence. This raises the question of whether “securing the future by means of criminal law” is necessary<sup>121</sup> and what answers criminal law has to offer in response to the climate crisis.<sup>122</sup> In Germany, there are some who question whether criminal law is a suitable means of controlling behavior.<sup>123</sup> However, the European Union and the Council of Europe have decided to use criminal law in the climate crisis.<sup>124</sup> This is because punishment alone—in contrast to purely preventive measures—aims at repression and retribution for legally prohibited behavior<sup>125</sup> and therefore cannot be replaced by other sanctions.

### 3.3.1. Lack of sufficient quantitative and qualitative empirical data

However, critics of the European Union's approach point out that there are considerable shortcomings in the field of environmental criminology, both in terms of quantitative and qualitative data.<sup>126</sup> However, the lack of quantitative data is less significant than is often assumed, because it may be sufficient for legal policy measures if qualitative studies, such as those frequently conducted by and in the EU through expert surveys, can prove the existence of criminal behavior, even if the frequency remains unknown or the manner in which it is carried out often cannot be clarified, e.g., whether and to what extent it involves organized (economic) crime.

### 3.3.2. Dogmatic and criminal policy challenges in implementing international and EU law requirements in national law

Although the EU and the Council of Europe have established far-reaching requirements, there are considerable dogmatic and criminal policy challenges in implementing international and EU law requirements in national law, which future environmental and climate criminal law will have to address.<sup>127</sup>

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<sup>121</sup> So already Stratenwerth ZStW 105 (1993), 679.

<sup>122</sup> See Schrott, 2024, p. 59, p. 62 ss.

<sup>123</sup> Burchard and Schmidt, 2023, p. 83. Prittwitz and Tiedeken, 2024, p. 59, p. 81.

<sup>124</sup> Also advocating the use of criminal law Frisch, 2024, p. 23 ss.; Satzger and von Maltitz, p. 1.

<sup>125</sup> Federal Constitutional Court BVerfGE 20 323, 331; Appel, 1998, p. 217 ff; Jescheck and Weigend, 1969, § 8 I 2; Schmidhäuser, 2004, p.1. p. 16.

<sup>126</sup> Albrecht, 2023, p. 29, p. 35 ss.; Heghmanns, 2024, p. 256 ss.

<sup>127</sup> Schrott, 2024, p. 59, p. 62 ss.

The classic dogmatic categories of attribution of success and individual responsibility raise questions. When defining offenses, it is therefore particularly important to ensure that harmful consequences can be traced back to the actions of individuals. However, threats to the environment and climate are often not caused directly by individuals or single causes, but rather result from cumulative effects. This raises the question of whether the cumulative risk justifies the threat of punishment.<sup>128</sup> At the same time, the requirements of the principle of specificity (*nullum crimen sine lege*) must be upheld.<sup>129</sup>

Another key aspect concerns the administrative accessory nature of environmental criminal law, which both the European Union and the Council of Europe rightly advocate. Overall, criminal law needs to be designed in an administratively accessory manner, with priority given to the principles of (ecological) sustainability and precaution. In order to prevent gaps in criminal liability, specific regulations are required in this regard for illegally obtained permits, for the recording of circumvention acts, and for the cross-border effect of environmental permits and their limits.

In the business sector, gross negligence should be punishable by law in addition to intentional conduct. Emphasis should be placed on the criminal and administrative liability of legal entities and companies, as well as on confiscation. Furthermore, provisions need to be made for compensation for damages—as a rule, not in the form of restoration to the previous state, but in the form of the most environmentally compatible state.

Environmentally destructive practices that take place outside the Member States of the European Union (e.g., deforestation of rainforests) should also be made punishable in the Member States of the European Union so that companies from the European Union that instigate criminal offenses in non-European countries can be prosecuted in the European Union. It is not sufficient to extend national criminal law rules, as the conditions for double criminality—criminality at home and abroad—are often a prerequisite for the application of criminal law (criminal law norms with foreign connections).<sup>130</sup>

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<sup>128</sup> In detail, see Krell, 2024, p. 139 ss.

<sup>129</sup> Schrott, 2024, p. 59, p. 64.

<sup>130</sup> Satzger and von Maltitz, 2021, p. 1, p. 25 ss.; on the principle of universality, see Papathanasiou, 2024, p. 421, p. 423 ss.

### 3.3.3. Necessity to develop consistent penal solutions

From a legal policy perspective, it has proven particularly relevant that the protection of natural resources cannot be reduced to a national issue, meaning that environmental law issues arise in the context of international law, EU law, and national law. National criminal law occupies a special position in this regard. It is not only applied or concretized constitutional law, but also enjoys a considerable degree of methodological, conceptual, and argumentative independence.<sup>131</sup> Therefore, in criminal law, the non-criminal discourse referred to in section 2 must be taken up and dealt with independently in order to develop effective and consistent penal solutions.

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<sup>131</sup> Auer, 2007, p. 27, p. 40; zustimmend Schrott, 2024, p. 59, p. 68; furthermore, see Hesse, 1995, p. 265, p. 268; Wahl, 1981, p. 485, p. 507.

**Bibliography**

- [1] Albrecht H.-J. (2023) ‘Bewältigung von Umwelt Beeinträchtigungen durch Strafrecht’, in *Festschrift für Dieter Dölling*, Baden-Baden: Nomos Verlagsgesellschaft, pp. 29-43.
- [2] Allen, M. R., Friedlingstein, P., Girardin, C. A. J., Jenkins, S., Malhi, Y., Mitchell-Larson, E., Peters, G. P., Rajamani, L (2022) ‘Net Zero: Science, Origins, and Implications’, *Annual Review Environment and Resources*. 2022/47, pp. 49-887; <https://doi.org/10.1146/annurev-environ-112320-105050>.
- [3] Altenburg, J., Kremer, M. (2023) ‘„Beaching – Die Strafbarkeit der Entsorgung von Schiffen‘, *Zeitschrift für Wirtschafts- und Steuerstrafrecht (wistra)*, 2023, pp. 133-141.
- [4] Appel, I. (1998) *Verfassung und Strafe*. Berlin: Verlag Duncker & Humblot; <https://doi.org/10.3790/978-3-428-49212-1>.
- [5] Auer, M. (2007) ‘Die primärrechtskonforme Auslegung‘, in Neuner, J. (ed.) *Grundrechte und Privatrecht aus rechtsvergleichender Sicht*, Tübingen: Verlag Mohr Siebeck. pp. 27-54.
- [6] Barczak, T. (2023) ‘Demokratische Zukunftsverantwortung zwischen Verfassungsrecht und Verfassungspolitik‘, *Die Öffentliche Verwaltung (DÖV)*, 2023, pp. 925-935.
- [7] Binder, C., Huremagic, H. (2021) ‘Menschenrechtsverpflichtung zur Reduzierung von Treibhausgasemissionen, Nachhaltigkeitsrecht‘, *Zeitschrift für das Recht der nachhaltigen Entwicklung (NR)*, 2021, pp. 109-113; <https://doi.org/10.33196/nr202101010901>.
- [8] Bodle, R., Donat, L., Duwe, M. (2022) ‘The Paris Agreement: Analysis, Assessment and Outlook‘, *Carbon & Climate Law Review*, 10(1), pp. 5-22.

- [9] Britz, G (2024) ‘„Gleichheit in der Zeit“ – Gleichheit als Grund, nicht aber als Maß der Langzeitverantwortung gegenüber künftig Lebenden’, in Kirchhof, G., Wolff, D. (eds.) *Zukunftssicherndes Verfassungsrecht*, Tübingen: Mohr Siebeck.
- [10] Brodowski, D., Jahn, M. (2017) ‘Das Ultima Ratio-Prinzip als strafverfassungsrechtliche Vorgabe zur Frage der Entbehrlichkeit von Straftatbeständen’, *Zeitschrift für die gesamte Strafrechtswissenschaft (ZStW)*, Vol. 129, pp. 363-381; <https://doi.org/10.1515/zstw-2017-0015>.
- [11] Brundtland-Report (1987) *Report of the World Commission on Environment and Development*. Oslo: Our Common Future.
- [12] Burchard, C., Schmidt, F.-L. (2023) ‘Kritik des Klimastrafrechts’, in Satzger, B., von Maltitz, N. (eds) *Klimastrafrecht*, Baden-Baden: Nomos Verlag, pp. 83-110; <https://doi.org/10.5771/9783748919384-83>.
- [13] Burgert, V., Veljovic, M. (2023) ‘Zur Extension des Umweltstrafrechts unter besonderer Berücksichtigung des europäischen Richtlinienvorschlags’, *Zeitschrift für Umweltrecht (ZUR)*, 2023, pp. 156-161.
- [14] Burtscher, B., Schindl, D. (2022) ‘Klimaklagen. Eine Zeitwende?’, *Österreichische Jurist:innenzeitung (ÖJZ)*, 2022, pp. 649-657.
- [15] Calliess, C. (2021) ‘Das „Klimaurteil“ des Bundesverfassungsgerichts: „Versubjektivierung“ des Art. 20a GG’, *Zeitschrift für Umweltrecht (ZUR)*, 2021, pp. 355-357.
- [16] Calliess, C. (2024) ‘75 Jahre Grundgesetz und Umweltstaat: Zukunftsverantwortung des Parlaments und umweltverfassungsrechtliche Schutzlücke des Bundesverfassungsgerichts’, *Deutsches Verwaltungsblatt (DVBL)*, 13/2024, pp. 820-829.

- [17] Calliess, C. (2025) ‘Der Europäische Green Deal als Konkretisierung von Art. 11 AEUV und Baustein der Nachhaltigkeit in der EU: Inhalt, Reformen und ihre Grenzen’, *Berliner Online-Beiträge zum Europarecht*, No. 155, pp. 1-30.
- [18] Christiansen, L., Masche, C. (2023) ‘Klimarechtsschutz und Paradoxien beim EuGH – Warum die Plaumann-Formel nicht mehr zeitgemäß ist, *Zeitschrift für europarechtliche Studien*’, *Zeitschrift für europarechtliche Studien (ZEuS)*, 2023, pp. 31-56; <https://doi.org/10.5771/1435-439X-2023-1-31>.
- [19] Eckardt, S. (2024) *Das ultima ratio-Prinzip im Strafrecht*. Baden-Baden: Nomos Verlag, Zürich/St. Gallen: Dike Verlag; <https://doi.org/10.5771/9783748944768>.
- [20] Ekardt, F., Heß, F. (2021) ‘Freiheitsgefährdung durch Klimawandel oder durch Klimapolitik?’, *Zeitschrift für Umweltrecht*, 2021/11, pp. 579–585.
- [21] Elsner, M. (2023) ‘Zur Strafbarkeit des “Schiffsrecyclings”’, *Neue Zeitschrift für Strafrecht (NStZ)*, 2023, pp. 135-139.
- [22] Ennöckl, D. (2022) ‘Klimaklagen – Strukturen gerichtlicher Kontrolle im Klimaschutzrecht, Teil 1’, *Recht der Umwelt (RdU)*, 4/2022, pp. 137-142.
- [23] Fister, M. (2022) ‘Intertemporale und intergenerationelle Grundrechtswirkungen – Am Beispiel des Klimaschutzrechts’, *Journal für Rechtspolitik (JRP)*, 2022, pp. 460-465; <https://doi.org/10.33196/jrp202204046001>.
- [24] Fitz, J., Rathmayer, F. (2021) ‘Heute für Morgen: Über die Entdeckung der Generationengerechtigkeit im deutschen Grundgesetz’, *Recht der Umwelt (RdU)*, 3/2021, pp. 32-37.

- 
- [25] Franzius, C. (2022a) ‘Die Rolle von Gerichten im Klimaschutzrecht’, in Rodi, M. (ed.) *Handbuch Klimaschutzrecht*, München: C.H. Beck, § 7.
- [26] Franzius, C. (2022b) ‘Prävention durch Verwaltungsrecht: Klimaschutz’, *Veröffentlichungen der Vereinigung der Deutschen Staatsrechtslehrer (VVDSRL)*, 81(2022), pp. 383-436.
- [27] Franzius, C. (2025) *Klimaschutzrecht: eine Momentaufnahme*, Research Paper no. 19/2025, pp. 2-74.
- [28] Frisch, W. (2024) ‘Strafrechtliche Klimaschutz – Notwendigkeit und grundsätzlicher Zuschnitt’, in Satzger, H., von Maltitz, N. (eds.) *Klimastrafrecht*, Baden-Baden: Nomos Verlag, pp. 23-40; <https://doi.org/10.5771/9783748919384-23>.
- [29] Gärditz, K. F. (2023) ‘Zukunftsverfassungsrecht’, *Archiv des öffentlichen Rechts (AöR)*, 2023, pp. 79-114; <https://doi.org/10.1628/aoer-2023-0006>.
- [30] Glaser, A. (2006) *Nachhaltige Entwicklung und Demokratie*. Tübingen: Mohr Siebeck.
- [31] Graser, A. (2019) ‘Strategic Litigation – oder: Was man mit der Dritten Gewalt sonst noch so anfangen kann’, *Rechtswissenschaft (RW)*, 2019/10, pp. 287-316; <https://doi.org/10.5771/1868-8098-2019-3-317>.
- [32] Groß, T. (2024) ‘Das Staatsversagen angesichts der Klimakrise’, *JuristenZeitung (JZ)*, 2024, pp. 893-903; <https://doi.org/10.1628/jz-2024-0276>.
- [33] Grosz, M. (2023) ‘Klimaschutz vor Schweizer Gerichten’, *Swiss Review of International and European Law (SRIEL)*, 33(3), pp. 351-365.

- [34] Hahn, L. (2024) *Strategische Prozessführung im Klagekollektiv*. Baden-Baden: Nomos Verlag; <https://doi.org/10.5771/9783748943525>.
- [35] Hasenau, B. M. (2024) 'Die intertemporale Freiheitssicherung – Ein alter Bekannter', *Klima und Recht (KlimaR)*, 2024, pp. 361-364.
- [36] Hecker, B. (2024) *Europäisches Strafrecht*. 7th ed. Berlin, Heidelberg: Springer Verlag; <https://doi.org/10.1007/978-3-662-69492-3>.
- [37] Hecker, B., Lorenz, M. (2024) 'Systematische Übersicht der Rechtsprechung zum Umweltstrafrecht', *NStZ Rechtsprechungsreport Strafrecht (NStZ-RR)*, 2024, pp. 33-36.
- [38] Heger, M. (2009) *Die Europäisierung des deutschen Umweltstrafrechts*. Tübingen: Verlag Mohr Siebeck.
- [39] Heger, M. (2012) 'Das 45. Strafrechtsänderungsgesetz - Ein erstes europäisiertes Gesetz zur Bekämpfung der Umweltkriminalität', *HRRS*, pp. 211-223.
- [40] Heghmanns, M. (2024) 'Die neue EU-Richtlinie über den strafrechtlichen Schutz der Umwelt v. 11. April 2024', *Zeitschrift für Internationale Strafrechtswissenschaft (ZfISw)*, 4/2024, pp. 256-266.
- [41] Hesse, K. (1995) 'Verfassungsrechtsprechung im geschichtlichen Wandel', *JuistenZeitung (JZ)*, 1995, pp. 265-273.
- [42] Hofmann, E. (2021) 'Der Klimaschutzbeschluss des BVerfG', *Neue Zeitschrift für Verwaltungsrecht (NVwZ)*, 2021, pp. 1587-1590.
- [43] Holoubek, M. (2022) *Grundrechtsschutz vor neuen Herausforderungen*, 21. ÖJT Band I/1, Wien: Manz Verlag; <https://doi.org/10.5771/9783214164898-1>.
- [44] Hugger, H. (2000) *Strafrechtliche Anweisungen der Europäischen Gemeinschaft*. Baden-Baden: Nomos Verlag.

- [45] Jahn, J. (2022) ‘Internationaler Klimaschutz mithilfe nationaler Verfassungsgerichte? Erkenntnisse aus dem Klimabeschluss des BVerfG’, *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht (ZaöRV)*, 2022, pp. 47-72; <https://doi.org/10.17104/0044-2348-2022-1-47>.
- [46] Jescheck, H.-H., Weigend, T. (1969) *Lehrbuch des Strafrechts, Allgemeiner Teil*, 5<sup>th</sup> ed., Berlin: Verlag Duncker & Humblot.
- [47] Kahl, W. (2009) ‘Staatsziel Nachhaltigkeit und Generationengerechtigkeit’, *Die Öffentliche Verwaltung (DÖV)*, 2009, pp. 2-13.
- [48] Kahl, W., Weller, M.-P. (eds.) (2021) *Climate Change Litigation. A Handbook*. München/Baden-Baden/Oxford: C.H. Beck/Nomos/Hart Publishing; <https://doi.org/10.17104/9783406779237>.
- [49] Kaiafa-Gbandi, M. (2023) ‘Strafrecht und Klimawandel: Macht die Klimakrise die Anerkennung eines neuen Rechtsguts notwendig?’, in Satzger, H., von Maltitz, N. (eds.) *Klimastrafrecht. Die Rolle von Verbots- und Sanktionsnormen im Klimaschutz*, pp. 41-57; <https://doi.org/10.5771/9783748919384-41>.
- [50] Kalscheuer, F. (2022) ‘Endlichkeit im Recht – der Versuch einer verfassungsrechtlichen Einordnung’, *Rechtsphilosophie (RphZ)*, 2022, pp. 463-479; <https://doi.org/10.5771/2364-1355-2022-4-463>.
- [51] Kisseler, V. (2021) *Die Europäisierung des Abfallstrafrechts in Deutschland und England*. Baden-Baden: Nomos Verlag; <https://doi.org/10.5771/9783748924883>
- [52] Knaut, S. (2005) *Die Europäisierung des Umweltstrafrechts: Von uneinheitlichen nationalen Regelungen über einheitliche europäische Mindeststandards hin zur Optimierung der Umweltstrafrechtsordnungen*. Pfaffenweiler: Centaurus Verlag.

- [53] Krell, P. (2024) ‘Zur Legitimation von Kumulationsdelikten’, in Satzger, H., von Maltitz, N. (eds.) *Klimastrafrecht*, Baden-Baden: Nomos Verlag, pp. 139-173; <https://doi.org/10.5771/9783748919384-139>.
- [54] Kühne, H.-H. (2024) ‘Das Urteil des EGMR zum Klimaschutz – Menschenrechte als Allzweckwaffe?’, *JuristenZeitung (JZ)*, 2024, pp. 917-923; <https://doi.org/10.1628/jz-2024-0283>.
- [55] Langer, L. (2023) ‘Der Klimawandel vor Gericht: Klimaklagen als institutionelles Dilemma?’, *Swiss Review of International and European Law (SRIEL)*, Vol. 33, pp. 159-166.
- [56] Lienert, K. (2022) *Die Europäische Verwaltungsakzessorietät des Umweltstrafrechts*. Baden-Baden: Nomos Verlag, Zürich/St. Gallen: Dike Verlag; <https://doi.org/10.5771/9783748930082>.
- [57] Luef-Kölbl, H. (2024) ‘Strafrecht als ultima ratio’, in Hochmayr, G., Hinerhofer, H. (eds) *Festschrift für Schmoller, K.* Wien: Jan Sramek Verlag, pp. 65-81; <https://doi.org/10.52018/INKB-00366-B006>.
- [58] Meadows, D. L., Randers, J., Behrens, W. (2005) *Club of Rome, The limits to Growth*. London: Earthscan.
- [59] Meßerschmidt, K. (2021) ‘Der Karlsruher Klimaschutzbeschluss – kein Vorbild!’, *Österreichische Zeitschrift für Wirtschaftsrecht (ÖZW)*, 2021, pp. 109-120.
- [60] Möllers, C., Weinberg, N (2021) ‘Die Klimaschutzentscheidung des Bundesverfassungsgerichts’, *JuristenZeitung (JZ)*, 2021, pp. 1069-1078; <https://doi.org/10.1628/jz-2021-0346>.
- [61] Papathanasiou, K. (2024) ‘Lässt sich das Klimastrafrecht im Universalitätsprinzip zuordnen? Zugleich ein Beitrag zum sog. internationalen Strafrecht’, in Satzger, H., von Maltitz, N. (eds.) *Klimastrafrecht*, Baden-Baden: Nomos Verlag, pp. 421-436; <https://doi.org/10.5771/9783748919384-421>.

- [62] Peel, J., Osofsky, H. (2018) 'A Rights Turn in Climate Change Litigation?', *Transnational Environmental Law*, 7(1), pp. 37-67; <https://doi.org/10.1017/S2047102517000292>.
- [63] Plump, G. M. (2021) *Europäisches Strafrecht nach dem Vertrag von Lissabon: Macht die Reform den Weg frei?* Baden-Baden: Nomos Verlag; <https://doi.org/10.5771/9783748922018>.
- [64] Polzin, M. (2021) 'Menschenrechtliche Klimaklagen: Kreative Justiz und überforderte Grundrechte', *Die Öffentliche Verwaltung (DÖV)*, 2021, pp. 1089-1099.
- [65] Price, S., Donovan, D., de Jong, W. (2007) 'Confronting Conflict Timber', in de Jong, W., Donovan, D., Ken-Ichi Abe (eds.) *Extreme Conflict and Tropical Forest*, Dordrecht: Verlag Springer, pp. 117-132; [https://doi.org/10.1007/978-1-4020-5462-4\\_7](https://doi.org/10.1007/978-1-4020-5462-4_7).
- [66] Prittwitz, C., Tiedeken, T. (2024) 'Vom Nutzen und Nachteil eines Klimastrafrechts', in Satzger, H., von Maltitz, N. (eds.) *Klimastrafrecht*, Baden-Baden: Nomos Verlag, pp. 59-81; <https://doi.org/10.5771/9783748919384-59>.
- [67] Randers, J. (2012) *2052: A Global Forecast for the Next Forty Years*. Vermont: University of Cambridge.
- [68] Ransiek, A. (2024) Rezension von Satzger, H., von Maltitz, N. Klimastrafrecht – Zur Rolle von Verbots- und Sanktionsnormen im Klimaschutz, Goldammers Archiv (GA) 11/2024.
- [69] Rich, N. (2019) *Losing Earth: A Recent History*. Berlin: Rowohlt Verlag.
- [70] Ruttloff, M., Freihoff, L. (2021) 'Intertemporale Freiheitssicherung oder doch besser „intertemporale Systemgerechtigkeit“? – auf Konturensuche', *Neue Zeitschrift für Verwaltungsrecht (NVwZ)*, 2021, pp. 917-922.

- [71] Saliger, F. (2023) ‘Strafbarkeit von Beaching?’, *Neue Zeitschrift für Strafrecht (NStZ)*, 2023, pp. 585-591.
- [72] Satzger, H., von Maltitz, N. (2021) ‘Das Klimastrafrecht – ein Rechtsbegriff der Zukunft’, *Zeitschrift für die gesamte Strafrechtswissenschaft (ZStW)*, Vol. 133, pp. 1-34; <https://doi.org/10.1515/zstw-2021-0001>.
- [73] Satzger, H. (2024) ‘Klimawandel und Strafrecht – auf dem Weg zu einem (globalen) Klimastrafrecht?’, *StraFo*, 2024, pp. 278-285.
- [74] Schlacke, S. (2020) ‘Klimaschutzrecht im Mehrebenensystem – Internationale Klimaschutzpolitik und aktuelle Entwicklungen in der Europäischen Union und in Deutschland’, *Zeitschrift für das gesamte Recht der Energiewirtschaft (EnWZ)* 2020, pp. 355-363.
- [75] Schlacke, S. (2021) ‘Klimaschutzrecht – Ein Grundrecht auf intertemporale Freiheitssicherung’, *Neue Zeitschrift für Verwaltungsrecht (NVwZ)*, 2021, pp. 912-917.
- [76] Schmalenbach, K. (2024) ‘Zukunftsschutz im Völkerrecht’, in Kirchhof, G., Wolff, D. (eds.) *Zukunftssicherndes Verfassungsrecht*, Tübingen: Mohr Siebeck, pp. 55-74.
- [77] Schmidhäuser, E. (2004) *Vom Sinn der Strafe*, Berlin: Logos Verlag.
- [78] Schmoller, K. (2025) ‘Strafrecht 50 Jahre StGB - nachhaltiges Strafrecht für alte und neue Herausforderungen?’, in *Verhandlungen des 22. Österreichischen Juristentages*, Wien: Manz Verlag; <https://doi.org/10.5771/9783214262938>.
- [79] Schnichels, D., Seyderhelm, J. (2020) ‘Die Reform des europäischen Umweltstrafrechts’, *Europäische Zeitschrift für Wirtschaftsrecht (EuZW)*, 20/2020, pp. 825-864.

- [80] Schrott, N. (2024) ‘Krisensicheres Strafrecht oder sichere Strafrechtskrise? – Strafrechtliche Rechtsanwendung und Gesetzgebung in Zeiten des Klimawandels’, in Petzsche, A. Schuchmann, I. Steinl, L. Werkmeister, A. (eds.) *Strafrecht und Krise*, Baden-Baden: Nomos Verlag, pp. 59-73; <https://doi.org/10.5771/9783748919889-59>.
- [81] Stürmlinger, M.-C. (2020) ‘Klimaschutz durch Grundrechte – gerichtliche Kontrolle staatlicher Klimaschutzmaßnahmen’, *Zeitschrift für Europäisches Umwelt- und Planungsrecht*, (EurUP) 2020, pp. 169-185.
- [82] Tran, M.-L. (2024) *Klimaklagen im Privatrecht*. Tübingen: Verlag Mohr Siebeck.
- [83] Völzmann, B. (2024) ‘Gesellschaftliche Teilhabe über den Zugang zu Gericht: Zugleich ein Blick auf die KlimaSeniorinnen-Entscheidung des EGMR’, *JuristenZeitung (JZ)*, 2024, pp. 903-910; <https://doi.org/10.1628/jz-2024-0287>.
- [84] Wagner, G. (2021) ‘Klimaschutz durch Gerichte’, *NJW*, 2021, pp. 2256-2563.
- [85] Wahl, R. (1981) ‘Der Vorrang der Verfassung’, *Der Staat* 20, 1981, pp. 485-516.
- [86] Wegener, B. (2019) ‘Urgenda – Weltrettung per Gerichtsbeschluss?, Klimaklagen testen die Grenzen des Rechtsschutzes’, *Zeitschrift für Umweltrecht (ZUR)*, 2019, pp. 3-13.
- [87] Wegener, B. (2022) ‘Menschenrecht auf Klimaschutz?’, *NJW*, 2022, pp. 425-431.
- [88] Wernicke, A. M. (2025) *Klimaschutz und Justiz. Klimaklagen in der nationalen und internationalen Rechtsprechung*. Berlin: Dunker & Humblot; <https://doi.org/10.3790/978-3-428-59570-9>.

- 
- [89] Wieland, J. (2022) ‘Die Klimaklagen vor dem Bundesverfassungsgericht als Beispiel für strategische Prozessführung’, in Schiedermaier, S., Cole, M. D., Wagner, E. E. (eds.) *Die Entfaltung von Freiheit im Rahmen des Rechts, Festschrift für Dieter Dörr*, Heidelberg: Verlag C.F. Müller, pp. 167-177.
- [90] Winter, G (2022) ‘Not fit for purpose. Die Klagebefugnis vor dem Europäischen Gericht angesichts allgemeiner Gefahren’, *Europarecht (EuR)*, 2022, pp. 367-399; <https://doi.org/10.5771/0531-2485-2022-3-367>.
- [91] Wolf, R. (2022) ‘Eigenrechte der Natur oder Rechtsschutz für intertemporalen Freiheitsschutz?’, *Zeitschrift für Umweltrecht (ZUR)*, 2022, pp. 451-463.
- [92] Wolff, D. (2024) ‘Strategische Verfassungsprozessführung, das Bundesverfassungsgericht und der Klimaschutz’, *Deutsches Verwaltungsblatt (DVBl.)*, 2024, pp. 1402–1406.