
Ecoproportionality in a time of environmental and climate emergency

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ABSTRACT

Ecoproportionality lies at the heart of sustainable development. This paper examines how ecoproportionality is operationalized in legal and decision-making frameworks aimed at sustainability. It concludes that the pressing context of climate and environmental emergency demands a new perspective on ecoproportionality in public decision making to achieve truly sustainable outcomes.

KEYWORDS

Ecoproportionality; Environmental law; Sustainability; Balancing; DNSH principle; Emergency declarations; Alternatives

1. Introduction: ecoproportionality in the Anthropocene

The principle of proportionality is inextricably linked to the very essence of justice, expressing the idea that fairness arises from balance and equilibrium¹. Legal decisions guided by the proportionality principle must carefully weigh competing interests, ensuring that rights and obligations are aligned with the challenges they address and the objectives they seek to achieve.

In an ecological law (Bosselmann, 2017a) framework, ecoproportionality refers to the application of the principle of proportionality in environmental law. The intrinsic connection between proportionality and justice conveys the idea that equitable environmental outcomes depend on a certain symmetry or consistency between the environmental needs and the correlated legal action.

¹ The principle is usually studied associated with human rights and constitutional justice (Lopes et al., 2021).

However, environmental protection requirements depend on the current state of the environment, whose evolution closely influenced by direct or indirect human activities. This is where Anthropocene law plays a role. In ancient times, human knowledge of the environment, and their ability to understand and control the Earth's forces, were extremely limited. In their struggle to survive the harsh elements that seemed hostile to humans, communities relied on strategies such as sacred rituals, magic, celebrations and sacrifices to placate enraged volcanoes, storms, floods, and droughts (Brockwell et al., 2013). In the Anthropocene, the status quo has changed radically. Over the last centuries, humans have developed great knowledge about the Earth's biogeochemical processes and great technical capacity to influence natural processes deliberately. Humans are now the main force shaping and transforming the Planet (Crutzen, 2002). Consequently, the objective of preserving the Earth System in a certain desired state depends on humans more than ever.

In this text, ecoproportionality is at the core of the critical decisions that must be taken to face and desirably *escape* (Stiegler, 2017), the Anthropocene:

- Decisions on climate adaptation policy requiring the construction of large-scale infrastructures, such as hydropower dams, massive water transfer between river basins, or large coastal protection works such as dikes, breakwaters, seawalls, and similar structures....
- Decisions on energy and climate policy, in order to phase out conventional fossil fuels, like nuclear fusion power plants, investing on the quest for nuclear fission energy², engaging in geological carbon sequestration (Directive 2009/31/EC)...
- Decisions regarding new promising products and prospective technologies, such as nanomaterials or smart materials, 5G internet or quantum computing, satellite launches or lunar colonization...

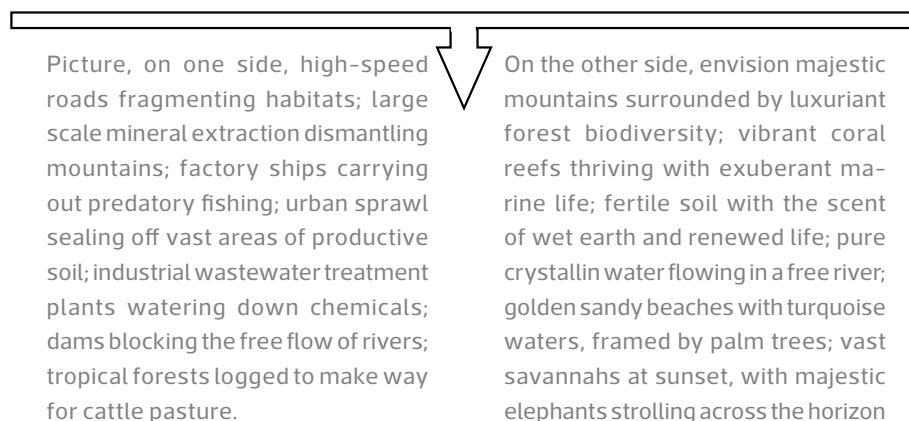
All of humanity's major advances through activities, products, processes, projects, plans, programs or investments, now require legal considerations that must be guided by the principle of ecoproportionality.

² In southern France, 33 countries are collaborating to build an International Thermonuclear Experimental Reactor – ITER, the world's largest magnetic fusion device that has been designed to prove the feasibility of fusion as a large-scale and carbon-free source of energy based on the same principle that powers the Sun and the stars (more information on the ITER project <https://www.iter.org/few-lines>).

2. Understanding ecoproportionality

The best image to understand the role of proportionality in environmental law is the old metaphor of the balance scale. This ancient symbol that can be found in the classical representations of justice, both in the Greek and Roman mythology (Curtis & Resnik, 1986).

What can be found on the two pans of the ecoproportionality balance scale? In a context of sustainable development, the typical sustainability decision is made using a mental balance scale with two pans, one side standing for the economic activities contributing to human development and the other for pristine natural spaces and a clean environment. Visualizing the metaphor through concrete examples can vividly convey a stereotypical image of what is at stake in sustainability decisions based on the principle of ecoproportionality.



In any of the sketched scenarios, ecoproportionality involves balancing environmental protection with competing interests, in a way that ensures environmentally sustainable results. Using another visual metaphor, ecoproportionality can also be seen as the literal translation of the *sustainability wedding cake*³.

In the next sections we will dive into ecoproportionality from the perspective of European Union, as an omnipresent principle in EU law that must be considered in every public decision-making processes. Subsequently, we will

³ The Sustainability Wedding Cake is a diagram was elaborated in 2017 at the Stockholm Resilience Centre. It is based on the sustainable development goals, approved by the UN in 2015 (United Nations General Assembly Resolution A/RES/70/1, 2015) but replaces the rectangular layout and the coloured box by three concentric overlapped circles with a bottom layer representing the ecological limits, an intermediate social layer and an upper economic layer (Rockström & Sukhdev, 2016).

unveil the new context of ecological emergency and the changes it introduces in ecoproportionality judgments.

3. What is at stake? The ubiquity of ecoproportionality

If we want to have a deeper understanding of the environmental values which are to be protected through ecoproportionality, we must look for them in the legal regimes that were designed to support decision-makers in balancing environmental and non-environmental values. The paradigmatic example is the administrative procedure of environmental impact assessment (EIA). Established in EU law in the 80's, the European EIA directive (Council Directive 85/337/EEC) currently enumerates a list of all the environmental “factors” that must be considered before approving a project: population, human health, biodiversity, land, soil, water, air, climate, material assets, cultural heritage and landscape, including risks of major accidents or disasters⁴.

These are the factors that suffer the effects of projects and economic activities that pollute and degrade the environment. The factors are ambient elements that shape living conditions and influence the health and wellbeing of humans⁵, non-human species, and ecosystems, in line with the One Health approach⁶.

Simultaneously, the factors influence each other mutually. In the words of the Directive, “the interaction between the factors” must as well be assessed and taken into account (Center for International Environmental Law, 2023). Air pollution contaminates the water, which contaminates the soil, and altogether constitute a threat to human health, fauna and flora. Soil and water contamination (e.g. microplastics) lead to air contamination which again jeopardizes health.

This is what makes the balancing required by ecoproportionality so hard.

Meanwhile, on the non-environmental side of the pan, we find projects⁷, but we can also find public policies. The Directive on the assessment of the

⁴ Article 3 of the EIA Directive 2011/92/EU.

⁵ Using Mapping and Assessment of Ecosystems and their Services (MAES) methodologies (<https://biodiversity.europa.eu/europes-biodiversity/ecosystems/maes>) to evaluate, communicate and balance the gains and losses of ecosystem services would contribute to clarify the relative relevance of natural values, building consensus on sound decision criteria (Aragão, 2021).

⁶ The One Health approach emphasizes the interconnection between human, animal, and environmental health. The One Health Joint Plan of Action (2022 – 2026) https://wedocs.unep.org/bitstream/handle/20.500.11822/40843/one_health.pdf?sequence=1&isAllowed=y is the first joint plan launched together by the UN Food and Agriculture Organization, the Environment Programme, the World Health Organization, and the World Organisation for Animal Health.

⁷ A project is the execution of construction works or of other installations or schemes, or other

effects of certain plans and programmes on the environment (Directive 2001/42/EC) imposes the fulfilment of a strategic environmental assessment, for most public plans and programmes, such as plans adopted for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use, plans likely to produce effects in Natura 2000 sites, or plans or programmes which set the framework for future development consent of projects. Strategic ecoproportionality contributes to the democratization of political choices, preventing precipitated, unfunded or biased decisions.

In any case, whether for projects, plans or programmes, how can decisions be ecoproportional?

A decision is ecoproportional when all reasonable less environmental-unfriendly alternatives (Winter, 2018) have been considered and the mitigation hierarchy has been respected. In the words of the Commission, “alternatives are essentially different ways in which the Developer can feasibly meet the Project’s objectives, by carrying out a different type of action, choosing an alternative location or adopting a different technology or design for the Project for example. Alternatives may end up becoming part of the Project’s final design, or its methods of construction or operation, in order to avoid, reduce or remedy environmental effects” (European Union, 2017, 45).

Returning to the scale metaphor, testing alternatives corresponds to having a scale that has more than two pans. In the project side of the scale, the decision-maker must consider more than one version of the project. The alternatives can be based on the diverse nature, size or location of the project⁸ and must also include the so called “zero option” or do-nothing scenario (European Union, 2017, 46). Metaphorically, the abstention scenario is not represented by an empty pan, but rather by two pans. One, containing a depiction of the current status of the geographic area where it is intended to develop the project, and the other a projection of the same area in the future. How much

interventions in the natural surroundings and landscape including those involving the extraction of mineral resources. Some examples are projects for the development of agriculture, silviculture and aquaculture, industry, tourism and leisure, infrastructure (urban development, transport, dams, aqueducts and pipelines, coastal protection, water abstraction and transfer), waste management, etc., mentioned in annex I and II of the Directive.

⁸ Article 2 n1. Of the EIA Directive: “Member States shall adopt all measures necessary to ensure that, before development consent is given, projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects on the environment”.

into the future must the natural evolution of the area be assessed depends on the expected life-span of the project⁹ or on the level of prevision intended¹⁰.

The mitigation hierarchy means that the choice should favour the option that best avoids the impacts, or, if that is not possible, on the one that most reduces the impacts. Alternatively, complementary measures should be considered to minimize those impacts, and only as a last resort, if none of these options are feasible, compensation measures for the impacts should be adopted (Aragão & van Rijswijk, 2014). This is the mitigation hierarchy, or the avoid-reduce-compensate (ARC) approach¹¹.

The mitigation strategy relies strongly on fundamental environmental principles, the most important of which are enshrined in the Treaties, as will be seen in the following section.

4. Ecoproportional to what? Examining sustainability and its subprinciples

In the European Union, the range of European policies has expanded over time. To prevent contradictions that may arise during the implementation of measures, the Treaty on European Union explicitly emphasises the need for coherence across all EU policies¹².

Coherence means that policies should not conflict with one another and should, whenever possible, promote synergies. Regarding environmental protection, coherence requires integrating¹³ environmental requirements “into the definition and implementation of the Union’s policies and activities, in particular with a view to promoting sustainable development”¹⁴. Agriculture, transport, energy, fisheries, industry, trade, employment, health, civil

⁹ For instance, the useful life of a dam is around 100 years (Wieland, 2010).

¹⁰ When the project is expected to be operational indefinitely, as in the case of roads or other infrastructure construction.

¹¹ This concept has been thoroughly developed in French law. See, for instance, Ministère de l’Écologie, du Développement Durable, des transports et du logement (2012).

¹² Article 11 n.3. “The European Commission shall carry out broad consultations with parties concerned in order to ensure that the Union’s actions are coherent and transparent”.

¹³ The original version of what is called today the “integration principle” was less strong. In the wording of the article 130R n.2 of the European Economic Community: “environmental protection requirements shall be a component of the Community’s other policies”.

¹⁴ Article 11 n.1 of the Treaty on the Functioning of the European Union.

protection, scientific research, tourism, are just some examples of European policies and actions that must integrate environmental requirements (Dhondt, 2003), in accordance with the integration principle (Montini, 2018).

But what if during the process of integration of the environment in other policies, there are serious clashes of values, severe contradictions of objectives, or insurmountable conflicts of interest? The answer is simple: in the European Union, a high level of environmental protection should prevail (Squintani, 2019). This position is sharply stated in European Union primary law: “the Union policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Union. The Union policy on the environment (...) shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay”¹⁵.

Another equally clear statement is contained in the Charter of Fundamental Rights of the European Union, giving both the integration and the high level of protection principle an even stronger legal status: “a high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development”¹⁶. In this context, the high level of protection is a surrogate of ecoproportionality, clearly indicating a preference for strong environmentally sustainable outcomes.






Furthermore, proportionality is the heart of sustainable development (Bosselmann, 2017b), an *umbrella* principle that encompasses the other principles, and also at the core of each and every environmental sub-principle mentioned in the Treaty¹⁷: namely precaution, prevention (De Sadeleer, 1999), correction at the source (Krämer, 2018), and polluter pays (Aragão, 2022). In the operationalization of the various principles, the question arises: to what should the necessary environmental protection measures be proportional?

In a very schematic way, the necessary weighing, rooted in proportionality assessments, to be carried out during the application of the European Union’s fundamental environmental principles, is as follows:

¹⁵ Article 191 n.2 of the Treaty on the Functioning of the European Union.

¹⁶ Article 37 on Environmental protection.

¹⁷ Article 191 n.2 of the Treaty on the Functioning of the European Union.

<p>Sustainability</p> 	<p>In sustainability-driven decision making, the weighing depends on the envisioned future and on the level of effort deemed necessary and acceptable to achieve it. Environmental protection measures should be proportional to the level of environmental, economic or social priorities of the desired future (How green is the envisioned future? How much effort to achieve it?)</p>
<p>Precaution</p> 	<p>Precaution applies in contexts of uncertainty, when the causal nexus between polluting activities and environmental deterioration is undetermined. Environmental protection measures should be proportional to the nature of the risks addressed (severity/plausibility of risks) and to the safety ambition (How safe is safe enough?).</p>
<p>Prevention</p> 	<p>Prevention applies when the causal nexus between the polluting activities and environmental deterioration is known and predictable. Environmental protection measures should be proportional to nature of the risks addressed (severity/probability of risks) and to the intended results (How “clean” is “clean” enough?)</p>
<p>Correction at the source</p> 	<p>Correction at the source aims at independent prevention measures, and proscribes ex post and third parties’ solutions. Independent but end of pipe or outsourced prevention measures are only second best. Proportionality looks at the efficacy and efficiency of independent/preventive versus outsourcing/end of pipe solutions (What can effectively be done at the source?)</p>
<p>Polluter pays</p> 	<p>Making the polluter pay is a tool to achieve fairer results through effective preventive measures borne by the polluter. Proportionality of the payments should be assessed considering the current status of the environment and the intended environmental results. (How much should the polluter pay and when should the payments be done to be more effective?)</p>

This is how the ecoproportionality contributes to the normative densification (Thibierge, 2014) of sustainability and other environmental sub-principles in order to achieve a high level of environmental protection through the integration of environmental considerations in other areas (Aragão, 2018).

However, although the law provides all the necessary legal tools to make sound and sustainable decisions, in practice this is not always the case.

5. Poor ecoproportionality assessment: two case studies

It is not rare that the Administration or the Courts decide against the environment and in favour of economic development, making the poor use – or no use at all – of ecoproportionality. What is even more concerning is that there are also cases of poor balancing in the laws. The next examples serve to illustrate the prevalence of non-environmental interests over ecological values, disregarding the fundamental environmental balance, at the expense of future generations, non-human species and ecosystems.

The first example comes from the European Union, in the context of the European energy policy. In response to the hardships and global energy market disruption caused by Russia's invasion of Ukraine, the European Commission implemented the so-called REPowerEU Plan, to phase out Russian fossil fuel imports¹⁸. The motto of the plan is “affordable, secure and sustainable energy for Europe”. Cost-effectiveness comes first, sustainability comes last, indicating the hierarchy of values behind the new European approach to energy. In practice, this ambition, to rapidly increase renewable energy installation, is operationalized through a presumption that renewable energy projects that are developed in a “renewables acceleration area”, do not have significant effects on the environment (Directive 2023/2413). If the renewable energy plant and its related infrastructure is declared “of overriding public interest, serving public health and safety”, the presumption can only be rebutted in duly justified and specific circumstances, such as reasons related to... national defense.

This radical regime demonstrates how, in the grave context of war at Europe's doorstep, environmental values are subverted in a dangerous way.

¹⁸ https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repower-eu-affordable-secure-and-sustainable-energy-europe_en

Such disproportional decisions may be understandable in the short term, but can be highly detrimental and potentially devastating in the long term.

The second example comes from Portugal. At the national level, the most outstanding case of poor balancing is the legal simplification created to attract and support large investment projects by streamlining and speeding up permit procedures (Decree Law 154/2013). These investment projects are called PIN+: projects of potential national interest. The conditions for the declaration of a project as a PIN+ are mostly the amount of financial investment, the number of jobs created, and the advancement of the technological solutions implemented. When a project is pronounced as PIN+, the obstacles raised by environmental and nature conservation laws become flexible and can be smoothly overcome. Declaring a project as having “potential national interest” in Portugal, is equivalent, in the European Union, to pronouncing its top priority based on “imperative reasons of overriding public interest” (IROPI). The IROPI requirement, set forth by the Natura 2000 directives, serves as a condition for authorizing projects likely to disturb protected wild species or natural habitats. In Portugal, the PIN+ regime has been used to accelerate huge touristic projects, large industrial sites, massive data centres, mega hydropower dams, vast agricultural developments based on intensive irrigation, high-volume aquaculture facilities, etc. (Ledo & Santos, 2017). These large projects are sometimes located in, or at least very close to, Natura 2000 sites, on which they usually produce extensive environmental impacts¹⁹.

The two cases of insufficient consideration of ecoproportionality described, highlight the importance of having access to an additional legal tool to establish limits on the acceptable compromise of environmental values in favour of conflicting social or economic interests.

Such a tool is the “do no significant harm” principle, also known as DNSH principle (TSI, 2023).

6. The core of protection: the “do no significant harm” principle

The DNSH principle serves as the ultimate stronghold against sustainability policies that prioritize economic growth and social progress

¹⁹ Since 2018, this system has been enlarged to support investments in the low populational density and less developed regions of the country (Decree law 111/2018, article 4).

at the expense of environmental protection. In this sense, it is also a legal instrument for the normative densification of ecoproportionality.

Its origin is in the 2020 European Regulation on the Taxonomy of Sustainable Investments (Regulation 2020/852). The Taxonomy Regulation introduced the idea that investments are only sustainable if they do not cause significant harm to the environment. The taxonomy Regulation indicates, in a high degree of detail, the general conditions that must be met, the environmental objectives that cannot be harmed, and the minimum safeguards that must be guaranteed, in order to allow the classification of an economic activity as sustainable.

These conditions, objectives and safeguards function as checklists to evaluate and rate the environmental sustainability of public or private investments. Consequently, both investments authorized by Member States (especially within the scope of the European Recovery and Resilience Mechanism (Regulation 2021/241)), and the investments on activities of economic business operators under the conditions established by European legislation on due diligence (Directive 2022/2464) are covered.

The operationalization of the “do no significant harm” principle was undertaken by a delegated regulation²⁰, a directive (Directive 2022/2464) and communications (Commission Notice 2021/C 58/01, 2023/C 211/01, C/2023/111) from the European Commission, which helped to operationalize, with practical examples, the obligations that are enumerated, but scarcely developed, in the Taxonomy Regulation.

Yet, the Taxonomy Regulation contains a catalogue of six environmental objectives (article 9): climate change mitigation; adaptation to climate change; protection and sustainable use of water and marine resources; transition to a circular economy; pollution prevention and control; protection and restoration of biodiversity and ecosystems.

According to the Delegated Regulation, for an activity to be qualified as environmentally sustainable, three main conditions must be met. It must make a substantial contribution to at least one environmental objective; do not cause significant damage to any of the other five environmental objectives; comply with minimum safeguards.

²⁰ Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 and Directive 2013/34/EU concerning environmentally sustainable economic activities <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A02021R2178-20230101> (amended by the Commission Delegated Regulation (EU) 2022/1214 of 9 March 2022 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32022R1214>).

The environmental ambitions that must be pursued by sustainable economic activities are: contributing to the reduction of greenhouse gas emissions (the target being a 55% reduction in 1990 levels by 2030); carbon neutrality and adaptation to inevitable climate change by 2050; protecting, conserving and improving the European Union's natural capital; protecting human health and well-being from environmental risks; and leaving no one, and no place, behind.

In short, the DNSH principle means that even if on one pan of the ecoproportionality scale there are enormous benefits, the environmental objectives on the other pan cannot be ignored or set aside. The guidelines provided by the DNSH principle are particularly important for intra-environmental conflicts. In fact, it is not uncommon that projects aimed at achieving one environmental objective, to unintentionally undermine another.

The most frequent clash is between climate change (mitigation or adaptation) on one hand and biodiversity, water, or circular economy on the other. The examples abound: windmills require vast open areas which may lead to deforestation; large birds collide with the blades of wind turbines and small birds and bats die from lung collapse due to low pressures near the turbines (Baerwald et al., 2008); hydropower dams prevent the fish from migrating upstream to spawn, and aggravate water eutrophication due to overheating and lack of oxygenation in the stagnant water of the reservoir (Cabral et al., 2024); thermoelectric power plants operating on forest biomass prevent the use of woody products (resulting from forest cleaning) for the production of wood-based products such as particleboard or fibreboard; the permanent need for raw materials to burn due to the thermal inertia of the installation may induce clearcutting (Zero, 2021). The list could go on...

Being quite recent, the capacity of this principle to serve as a compass to guide decision-makers and to overcome the oxymoron inherent in the concept of sustainable development (Redclift, 2005) remains to be seen.

7. Ecoproportionality in a time of emergency

Since the mid-20th century, the climate and ecological crises have escalated and reached unprecedented levels, as a consequence of the intensification of water, energy and natural resource consumption, necessary to economic

development. This phenomenon of symmetric growth of economic indicators in parallel with environmental degradation and resource depletion indicators is known as the *great acceleration* (Stephen et al., 2015). The fatal mismatch between global development trends and the limited Earth's capacity²¹ lead to the overshoot of the planetary boundaries (IPBES, 2019).

The growing number of climate and environmental emergency declarations reflects increasing political concern over the severity and aggravation of the global ecological crisis. According to the Climate Emergency Initiative²², the number of emergency declarations (by cities, regions, states and international organizations) is expanding rapidly. By 2024, in 40 countries and 2,364 jurisdictions, representing a combined population of 1 billion, had issued official climate emergency declarations.

In the European Union context, a climate and environmental emergency Resolution was adopted by the European Parliament in November 2019 (Resolution 2019/2930), benefiting nearly 450 million European inhabitants. The wording of the Resolution is quite strong, and the sense of urgency is impressive: "immediate and ambitious action is crucial to limiting global warming to 1,5° C and avoiding massive biodiversity loss. (...) Declares a climate and environment emergency; calls on the Commission, the Member States and all global actors, and declares its own commitment, to urgently take the concrete action needed in order to fight and contain this threat before it is too late".

The formal recognition of the climate and environmental emergency by the only institution of the European Union that is democratically elected by the European citizens²³, cannot fail to have legal implications.

One of the most obvious implications is giving prominence to ecoproportionality and shifting from a balanced scale to a scale tipping in favour of the environment. This interpretation was supported by the European Court of Human Rights in the *Klimaseniorinnen* Case decided by the Court in 2024: "Having regard, in particular, to the scientific evidence as regards the manner in which climate change affects Convention rights, and taking into account the scientific evidence regarding the urgency of combating the

²¹ In the 60's Kenneth E. Boulding had developed the metaphor of a spaceship to describe the radical finitude of Earth's resources (Boulding, 1966).

²² More information at <https://climateemergencydeclaration.org/>.

²³ In accordance with article 223 of the Treaty on the Functioning of the European Union.

adverse effects of climate change, the severity of its consequences, including the grave risk of their reaching the point of irreversibility, and the scientific, political and judicial recognition of a link between the adverse effects of climate change and the enjoyment of (various aspects of) human rights (see paragraph 436 above), the Court finds it justified to consider that climate protection should carry considerable weight in the weighing-up of any competing considerations. Other factors militating in the same direction include the global nature of the effects of GHG emissions, as opposed to environmental harm that occurs solely within a State's own borders, and the States' generally inadequate track record in taking action to address the risks of climate change that have become apparent in the past several decades, as evidenced by the IPCC's finding of "a rapidly closing window of opportunity to secure a liveable and sustainable future for all" (see paragraph 118 above), circumstances which highlight the gravity of the risks arising from non-compliance with the overall global objective"²⁴.

In other words, in a context of proclaimed emergency, the "do no significant harm" approach is not sufficient anymore. What should be categorically prohibited is environmental harm – either significant or not so significant. Only insignificant harm could be tolerated (and should nevertheless be compensated).

Besides, in a context of formally proclaimed emergency, environmental policy should be much more ambitious. Aiming at *no harm* is not enough. Neutrality is insufficient. Restoration (Regulation 2024/1991), rehabilitation, remediation, recovery, regeneration (Mendes et al., 2022) are, more than ever, necessary. Environmental-positivity is an imperative and the only proportional approach.

8. Conclusion: evolution of ecoproportionality

The examples of flawed ecoproportionality assessments emphasize the necessity of strong legal tools, such as the DNSH principle, to support accurate legal interpretation. However, the alarming climate and biodiver-

²⁴ Paragraph 542 of the European Court of Human Rights judgement of the 9th April 2024 on the Application no. 53600/20 in the Case of Verein Klimaseniorinnen Schweiz and Others V. Switzerland (2024).

sity crises call for an evolution towards and even stricter interpretation of ecoproportionality²⁵, one that focuses on environmental-positivity. Human activities must contribute to enhancing the state of the environment and reversing climate change²⁶.

More than ever, ecoproportionality must gain doctrinal attention, legal importance, and practical relevance. Most of all, this principle must evolve to meet the escalating demands of a time marked by the environmental and climate emergencies.

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²⁵ On the evolution of the proportionality principle, Silva (2012).

²⁶ This is not utopic, and numerous examples demonstrate the technical feasibility and the legally mandatory nature (Aragão, 2024).

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