

Regenerative approaches and environmental law: beyond sustainability?

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Regenerative Approaches and Environmental Law: Beyond Sustainability?

Chris Hilson and Annalisa Savaresi¹

1. Introduction

In this chapter, we explore the implications of regenerative approaches for environmental law – approaches that, in essence, involve the regeneration and restoration of nature. First, we analyze the relationship between regenerative and sustainability approaches. Second, we consider current instantiations of regenerative approaches in environmental law, focusing on the European Union (EU) Soil Health Law and the EU Nature Restoration Law. Third, we examine the regulation of corporate regenerative claims. Finally, we consider whether a new regenerative principle of environmental law may be emerging. We argue there might be advantages to such a principle, but that there are also barriers to consider.

2. Defining 'Regenerative'

Regenerative approaches are increasingly advocated in a variety of policy contexts and across academic disciplines, but no single definition of regenerative has emerged. According to the *Oxford Dictionary*, to 'regenerate' means to

¹ Chris Hilson's research for this chapter was funded through the Transforming the UK Food System for Healthy People and a Healthy Environment SPF Programme, delivered by UKRI, in partnership with the Global Food Security Programme, BBSRC, ESRC, MRC, NERC, Defra, DHSC, PHE, Innovate UK and FSA. Annalisa Savaresi gratefully acknowledges the support received by The Jean Monnet Network GreenDeal-NET, "The European Green Deal: Governing the EU's Transition towards Climate Neutrality and Sustainability."

'bring new and more vigorous life to' or to 'bring into renewed existence'.² Many references to regenerative approaches in policy and academic parlance hinge on visions of the world as 'built around reciprocal and co-evolutionary relationships, where humans, other living beings and ecosystems rely on one another for health,'³ and shape (and are shaped by) their connections with one another'.⁴ It follows that regenerative approaches seek to rebalance and restore these relationships.

Some authors have attempted to combine sustainability and the regenerative.⁵ From the Brundtland report⁶ to the Sustainable Development Goals,⁷ the ideas of sustainability and sustainable development have arguably become 'an unavoidable paradigm' pervading environmental, social, political, economic, and cultural discourses.⁸ Gibbons describes 'regenerative sustainability' as the 'next wave' of sustainability, based on a 'holistic worldview' which 'aims for thriving whole living systems' and which 'integrates inner and outer realms of sustainability'.⁹

For others, like Brown and co-authors,¹⁰ it is important to distinguish between sustainable and regenerative approaches. Figure 6.1 contains their diagram comparing and contrasting these two approaches. The contention is that a regenerative approach is preferable because it is aimed at making the environment positively better than it was before. Here, sustainability is merely a necessary bridge between the degenerative and the regenerative rather than itself being a desired endpoint.

² Angus Stevenson (ed), *Oxford Dictionary of English* (3rd edn, Oxford University Press 2010).

³ A key message of 'One Health' thinking: https://www.who.int/health-topics/one-health#tab=tab_1.

⁴ Royal Society of Arts www.thersa.org/regenerative-futures.

⁵ Leah Gibbons, 'Regenerative – The New Sustainable?' (2020) 12 Sustainability 5483.

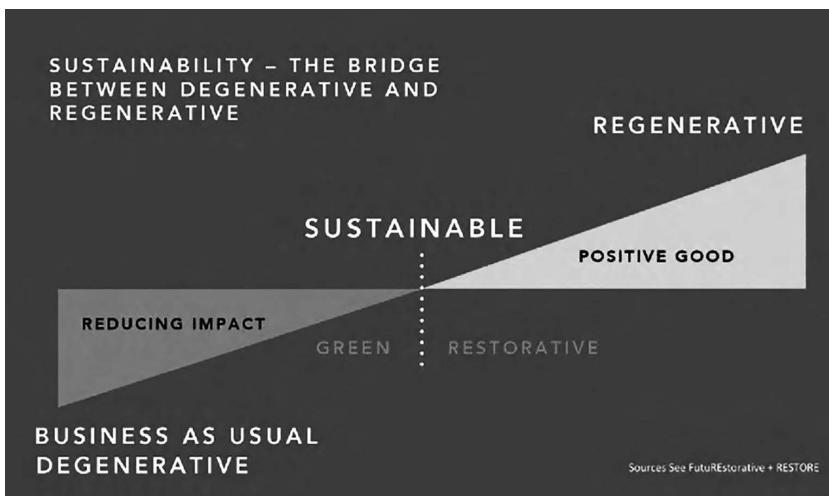
⁶ WCED, *Our Common Future* (1987).

⁷ UN, 'Transforming Our World: The 2030 Agenda for Sustainable Development' (2015).

⁸ Virginia Barral, 'Sustainable Development in International Law: Nature and Operation of an Evolutive Legal Norm' (2012) 23 European Journal of International Law 377.

⁹ Gibbons (n 5).

¹⁰ Martin Brown and others, 'RESTORD 2030: A Regenerative Guide for Educators, Students and Practitioners', COST Action CA16114 RESTORE (Eurac Research 2021) 24.



Source: Martin Brown and others, 'RESTORD 2030: A Regenerative Guide for Educators, Students and Practitioners', COST Action CA16114 RESTORE (Eurac Research 2021) 24.

Figure 6.1 Distinguishing regenerative from sustainable

The notions of sustainability and sustainable development have come under increasing critical scrutiny in recent years. Some suggest that the institutionalization of sustainability has had merely 'discursive' political impacts, whereas normative and institutional impacts are few and far between.¹¹ Others criticize sustainable development as a non 'socio-ecologically friendly principle', which 'drives environmentally destructive neoliberal economic growth that exploits and degrades the vulnerable living order'.¹² If sustainability and sustainable development have become damaged goods, then that too speaks against combining them with the regenerative, and for seeing the latter as a distinct and preferable alternative.¹³

¹¹ Frank Biermann and others, 'Scientific Evidence on the Political Impact of the Sustainable Development Goals' (2022) 5 *Nature Sustainability* 795.

¹² Louis Kotzé and Sam Adelman, 'Environmental Law and the Unsustainability of Sustainable Development: A Tale of Disenchantment and of Hope' (2023) 34 *Law and Critique* 227.

¹³ Sam Buckton and others, 'The Regenerative Lens: A Conceptual Framework for Regenerative Social-Ecological Systems' (2023) 6 *One Earth* 824.

In recent years, civil society organizations have advocated for *regenerative economics* based on ‘ecological restoration, community protection, equitable partnerships, justice, and full and fair participatory processes’.¹⁴ Such an approach is contrasted with extractive economics which, conversely, ‘perpetuates the enclosure of wealth and power for a few through predatory financing, expropriation from land and commonly accessed goods/services, and the exploitation of human labour’.¹⁵ A ‘just transition’ is identified as the frame to make the shift from an extractive to a regenerative economy.¹⁶

Regenerative economics has also made strides in academia. Oxford University has launched a Regenerative and Circular Economy Lab.¹⁷ Raworth’s work on planetary boundaries and ‘Doughnut Economics’ openly advocates shifting from a ‘linear economy’ to a circular economy based on ‘regenerative design’.¹⁸ The literature also suggests that while regenerative business models have commonalities with sustainable and circular models, they differ from them in their goals and systemic perspectives.¹⁹

¹⁴ United Frontline Table, ‘A People’s Orientation to a Regenerative Economy’ (2020) <https://climatejusticealliance.org/wp-content/uploads/2020/06/ProjectRepairInvestTransformdoc22x.pdf>.

¹⁵ Ibid.

¹⁶ Ibid.

¹⁷ E.g., ‘Regenerative and Circular Economy Lab’ www.sbs.ox.ac.uk/research/centres-and-initiatives/skoll-centre-social-entrepreneurship/social-impact-education/circular-economy-lab.

¹⁸ Kate Raworth, *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist* (Chelsea Green Publishing 2017). On the circular economy, see Lesniewska, ‘Making a Case for Radical Circular Economy Legal Research’, ch 17 this Volume.

¹⁹ Jan Konietzko, Ankita Das and Nancy Bocken, ‘Towards Regenerative Business Models: A Necessary Shift?’ (2023) 38 Sustainable Production and Consumption 372.

Regenerative approaches feature in a range of other fields beyond economics, including tourism,²⁰ architecture,²¹ planning,²² and design.²³ However, the idea has arguably become best known for its application in agriculture, where the regenerative has gained increasing currency, including among NGOs,²⁴ governments,²⁵ and international institutions.²⁶

A 2020 review of the use of the term 'regenerative agriculture' reveals that some definitions and descriptions are based on processes (such as use of cover crops, integration of livestock, and reducing or eliminating tillage), whereas others are based on outcomes (including improving soil health, sequestering carbon, and increasing biodiversity), or combinations of the two.²⁷ Some have raised concerns over the role of large agri-food corporations in defining the contours of regenerative agriculture;²⁸ others have questioned the scientific evidence supporting regenerative agriculture claims, including its soil carbon

²⁰ Green Guides, 'Sustainable Travel vs. Regenerative Travel: What's the Difference?' www.greenguides.net/post/sustainable-travel-vs-regenerative-travel-what-s-the-difference.

²¹ Ankitha Gattupalli, 'What Is Regenerative Architecture? Limits of Sustainable Design, System Thinking Approach and the Future' *ArchDaily* (5 March 2023) www.archdaily.com/993206/what-is-regenerative-architecture-limits-of-sustainable-design-system-thinking-approach-and-the-future.

²² Duncan Crowley and others, 'Towards a Necessary Regenerative Urban Planning' (2021) SP21 Cidades <http://journals.openedition.org/cidades/3384>.

²³ Konietzko, Das and Bocken (n 19).

²⁴ E.g., WWF https://wwf.panda.org/discover/our_focus/food_practice/sustainable_production/; The Nature Conservancy www.nature.org/en-us/what-we-do/our-priorities/provide-food-and-water-sustainably/food-and-water-stories/regenerative-food-systems/.

²⁵ E.g., Government of Western Australia, Department of Primary Industries and Regional Development www.agric.wa.gov.au/land-use/regenerative-agriculture-and-pastoralism-western-australia.

²⁶ United Nations Convention to Combat Desertification, *The Global Land Outlook: Land Restoration for Recovery and Resilience* (2nd edn, 2022); COP28, Action Agenda on Regenerative Landscapes (2023).

²⁷ Peter Newton and others, 'What Is Regenerative Agriculture? A Review of Scholar and Practitioner Definitions Based on Processes and Outcomes' (2020) 4 *Frontiers in Sustainable Food Systems* www.frontiersin.org/articles/10.3389/fsufs.2020.577723.

²⁸ Ethan Gordon, Federico Davila and Chris Riedy, 'Regenerative Agriculture: A Potentially Transformative Storyline Shared by Nine Discourses' (2023) 18 *Sustainability Science* 1833.

sequestration potential.²⁹ There has also been criticism of a frequent focus on the field or farm scale rather than taking the wider landscape or regional scale approach needed for effective biodiversity improvement.³⁰

There has been further criticism of regenerative agriculture as Global North-centric and a principle that ignores issues of power and equity in food systems.³¹ Sustainable development, with its (sometimes controversial) emphasis not only on the environmental but also on the social and economic, is regarded by some as better able to cope with these wider issues.³² However, while there is a danger of large Global North multinational corporations using their economic power to impose 'top-down' regenerative directives on producers in the Global South, regenerative supporters point to the possibility of a more 'bottom-up' approach, reflecting the fact that local producers can often draw upon long-established practices of regenerative agriculture.³³ As for equity, there are regenerative approaches in various jurisdictions that stress, for example, payment of a living wage to farm workers, which is one aspect of food system equity.³⁴ It is, therefore, possible for regenerative agriculture to reflect economic and social issues around equity just as sustainable development does.³⁵

²⁹ Ken Giller and others, 'Regenerative Agriculture: An Agronomic Perspective' (2021) 50 *Outlook on Agriculture* 13.

³⁰ EASAC, *Regenerative Agriculture in Europe: A Critical Analysis of Contributions to European Union Farm to Fork and Biodiversity Strategies* (2022) 26. cf, e.g., PepsiCo, which claims a landscape focus: www.pepsico.com/our-impact/esg-topics-a-z/agriculture.

³¹ Anja Bless, "Regenerative Agriculture" Is All the Rage – But It's Not Going to Fix our Food System' *The Conversation* (9 May 2023) <https://theconversation.com/regenerative-agriculture-is-all-the-rage-but-its-not-going-to-fix-our-food-system-203922>.

³² As too is 'agroecology' as a political movement: Pablo Tittonell and others, 'Regenerative Agriculture – Agroecology Without Politics?' (2022) 6 *Frontiers in Sustainable Food Systems* www.frontiersin.org/articles/10.3389/fsufs.2022.844261.

³³ E.g., www.institutoregenera.org.br/.

³⁴ Food and Land Use Coalition, 'Growing Better: Ten Critical Transitions to Transform Food and Land Use' (2019) 78.

³⁵ And agroecology, Tittonell and others (n 32).

3. Applications of Regenerative Approaches in Environmental Law

The above understandings of regenerative approaches are a useful starting point for thinking about what this increasingly popular term might mean in the context of environmental law. We begin by examining the EU Soil Monitoring Law proposal, which is currently the only EU legal instrument to mention the regenerative approach in a significant way.³⁶ We then explore the EU's framing of the matters of restoration, sustainability, and regeneration. Finally, in this section, we explore corporate regenerative claims and the ways in which environmental law might respond to these.

3.1 Existing legislative examples: the EU soil monitoring law and nature restoration law

The EU's 8th Environment Action Programme set the priority objective that, by 2050, 'people live well, within the planetary boundaries in a well-being economy where nothing is wasted, growth is regenerative, climate neutrality in the Union has been achieved and inequalities have been significantly reduced'.³⁷ Some of the enabling conditions needed to meet that objective include tackling soil degradation and ensuring the protection and sustainable use of soil. It is in this context that the EU Commission issued its proposed 'Soil Monitoring Law'.³⁸

The proposal includes the long-term objective to 'put in place a solid and coherent soil monitoring framework for all soils across the EU and to continuously improve soil health in the Union with the view to achieve healthy soils by 2050'.³⁹ The Commission proposes a step-wise approach to achieve this

³⁶ Cf one-off mentions in e.g., the Circular Economy Action Plan COM(2020) 98 final (regenerative growth), and Renewable Energy Directive (EU) 2018/2001 [2018] OJ L328/82 (biomass and forest regeneration). See also mention of 'no tilling' and 'cover crop' processes associated with regenerative agriculture in the context of the EU Council and Parliament agreement to establish an EU carbon removals certification framework: www.consilium.europa.eu/en/press/press-releases/2024/02/20/climate-action-council-and-parliament-agree-to-establish-an-eu-carbon-removals-certification-framework/.

³⁷ Decision (EU) 2022/591 on a General Union Environment Action Programme to 2030 [2022] OJ L114/22, art 2.

³⁸ Proposal for a Directive on Soil Monitoring and Resilience (Soil Monitoring Law) COM(2023) 416 final.

³⁹ Ibid art 1.

objective. The first stage consists of setting up the soil monitoring framework and assessing the situation of soils throughout the EU. In this period, Member States are required to lay down measures to manage soils sustainably and regenerate unhealthy soils, but there are no substantive obligations imposed on Member States to achieve healthy soils by 2050. In the second stage, based on the results of this first assessment of soils, the Commission will take stock of the progress towards the overall 2050 EU objective and propose a review of the Directive if necessary.⁴⁰

The Soil Monitoring Law defines 'regeneration' as an intentional activity aimed at reversing soil from a degraded to a healthy condition.⁴¹ What standard one regenerates to is important. 'Healthy' soil is described in terms of good chemical, biological and physical condition.⁴² The Commission clarifies that when adopting soil regeneration measures, Member States are 'required to take into account the outcome of the soil health assessment and to adapt those regeneration measures to the specific characteristics of the situation, the type, the use and the condition of the soil and the local, climatic and environmental conditions'.⁴³

The proposal also requires Member States to take measures defining sustainable soil management practices.⁴⁴ These measures must respect the sustainable soil management principles and take into account various programs, plans, targets and measures listed in the Annexes.⁴⁵

The Soil Monitoring Law does not, therefore, impose an obligation of result on Member States to achieve healthy soils, nor does it require them to create any new programs or soil health plans.⁴⁶ Rather, it seems designed to 'proceduralize' regeneration,⁴⁷ by means of the introduction of indicators and data and an obligation to report to the Commission.⁴⁸

⁴⁰ Ibid recital 23.

⁴¹ Ibid art 3(22).

⁴² Ibid recital 2

⁴³ Ibid recital 41.

⁴⁴ Ibid art 10.

⁴⁵ Ibid.

⁴⁶ Ibid, explanatory memorandum, 13.

⁴⁷ On proceduralization of EU environmental governance, see Mariolina Eliantonio, 'The Proceduralisation of EU Environmental Legislation: International Pressures, Some Victories and Some Way to Go' (2015) 8 Review of European Administrative Law 99.

⁴⁸ Soil Monitoring Law (n 38) explanatory memorandum, 13.

In the proposal, the Commission uses the terms ‘regenerate’ and ‘restore’ interchangeably.⁴⁹ While it uses the wording of restoring, maintaining and enhancing when referring to the EU and Member States’ international commitments on soil health,⁵⁰ the proposal more typically speaks of maintaining or enhancing soil health.⁵¹ It also sees this maintenance or enhancing as being achieved by the sustainable management of soils,⁵² and defines ‘sustainable soil management’ to mean ‘soil management practices that maintain or enhance the ecosystem services provided by the soil’.⁵³ Elsewhere, there is mention of ‘sustainable use and restoration of soils’,⁵⁴ and of ‘sustainable soil management and regeneration’.⁵⁵ This appears to imply that, in this context, sustainability, and regeneration or restoration, are separate things: sustainable soil use maintains or enhances good soil health, while regeneration or restoration is about transitioning soil from a degraded to a healthy state.⁵⁶

While the Soil Monitoring Law expressly uses regenerative language, the new EU Nature Restoration Law⁵⁷ can also be viewed as an example of regenerative legislation, despite not using the term. After all, it still has the aim of regenerating degraded EU nature. The term it uses instead is ‘restoration’, defined as ‘the process of actively or passively assisting the recovery of an ecosystem in order to improve its structure and functions, with the aim of conserving or enhancing biodiversity and ecosystem resilience, through improving an area of a habitat type to good condition, re-establishing favourable reference area, and improving a habitat of a species to sufficient quality and quantity’.⁵⁸

This definition of restoration does not imply merely restoring what was there before, even if that was degraded. Rather, it at least involves helping ecosystem recovery via improving habitats to a good or sufficient condition. We have seen that, in the Soil Monitoring Law, the Commission uses restore and regenerate

⁴⁹ Ibid, explanatory memorandum, 12: ‘restoration (regeneration) of soil health’; 13 ‘restore/regenerate unhealthy soils’.

⁵⁰ Ibid recital 6.

⁵¹ Ibid recitals 22, 37.

⁵² Ibid recital 37.

⁵³ Ibid art 3(5).

⁵⁴ Ibid, explanatory memorandum, 3.

⁵⁵ Ibid recitals 23, 42 and, similar, 3, 11.

⁵⁶ Issues of maintenance versus restoration also arise with rewilding (see Fleurke, ‘New Approaches in Nature Conservation: The Legal Nexus Between Rewilding and Nature Conservation in the EU’, ch 19 in this Volume).

⁵⁷ Regulation (EU) 2024/1991 on Nature Restoration [2024] OJ L2024/1991.

⁵⁸ Ibid art 3(3).

interchangeably, with the aim being to restore or regenerate degraded soils back to a healthy or good state. Sustainability there seems to entail sustaining healthy soils, not merely sustaining degraded ones in an unhealthy condition.

3.2 Regenerative claims and labelling

As more companies jump on the regenerative bandwagon – including multi-national food businesses like McCain⁵⁹ and PepsiCo,⁶⁰ luxury group Kering,⁶¹ and agrochemical producers like Bayer⁶² – so concerns have been raised about ‘greenwashing’⁶³ and how law should go about regulating regenerative claims to avoid it.⁶⁴ As will be seen below, law can either place general controls requiring substantiation of all green claims, or it can impose specific controls on certification and labeling, as seen more broadly in environmental law with eco-labelling schemes.⁶⁵

⁵⁹ ‘Smart Sustainable Farming’ www.mccain.co.uk/sustainability/smart-sustainable-farming/.

⁶⁰ ‘Agriculture’ www.pepsico.com/our-impact/esg-topics-a-z/agriculture.

⁶¹ ‘Sustainability’ www.kering.com/en/sustainability/safeguarding-the-planet/regenerative-fund-for-nature/.

⁶² ‘Regenerative Agriculture’ www.bayer.com/en/agriculture/regenerativeag.

⁶³ Chris Casey and Shaun Lucas, ‘Regenerative Ag Is Driving Food Sustainability Promises, But Is It Greenwashing?’ *FOODDIVE* (27 April 2023) www.fooddive.com/news/regenerative-ag-is-driving-food-sustainability-promises-but-is-it-greenwas/648583/; Philippa Nuttall, ‘Bayer Accused of Greenwashing Over “Regenerative Agriculture” Claims’ *Sustainable Views* (25 October 2023) www.sustainableviews.com/bayer-accused-of-greenwashing-over-regenerative-agriculture-claims/; Friends of the Earth, *Genetically Engineered Soil Microbes: Risks and Concerns* (2023) <https://foe.org/resources/ge-soil-microbes/#:~:text=The%20report%20details%20a%20range,over%20life%20and%20the%20food>.

⁶⁴ As opposed to regulating the underlying practice itself. Some claim that only an outcomes-based approach to what counts as regenerative agriculture can properly ensure claimed positive environmental benefits and avoid greenwashing (Casey and Lucas, n 63).

⁶⁵ E.g., Ming Du, ‘Voluntary Ecolabels in International Trade Law: A Case Study of the EU Ecolabel’ (2021) 33 JEL 167; Jason Czarnezki, Margot Pollans and Sarah Main, ‘Eco-Labelling’ in Emma Lees and Jorge Viñuales (eds), *The Oxford Handbook of Comparative Environmental Law* (Oxford University Press 2019).

The EU proposal for a Directive on Substantiation and Communication of Explicit Environmental Claims ('Green Claims Directive')⁶⁶ is a good example of the first of the above approaches. The proposed Directive requires companies to validate the green claims they make in business-to-consumer commercial practices by adhering to various requirements related to their assessment, such as adopting a life-cycle perspective. It does not prescribe a singular method for this assessment. Additionally, the proposal establishes requirements for communicating these claims, and for informal environmental labels (a subset of green claims).

An alternative approach could involve specific regulation of 'regenerative' claims. This might take the form of legal controls on certification and labeling, similar to those already in place for organic farming. Just as organic claims have been specifically regulated under EU Law,⁶⁷ so too specific controls on regenerative claims could emerge, beyond the general EU Green Claims Directive above. There are already some voluntary frameworks, such as SAI Platform's global framework for regenerative agriculture,⁶⁸ as well as voluntary certification schemes. The latter includes general schemes like that of A Greener World in the United States,⁶⁹ and also agricultural sector-specific ones, like the international voluntary certification scheme and certified seal of the Regenerative Viticulture Alliance.⁷⁰

Demonstrating that certification need not be either organic or regenerative but can be both,⁷¹ there is also Regenerative Organic Certification from the Regenerative Organic Alliance.⁷² With or without such frameworks and

⁶⁶ COM/2023/166 final.

⁶⁷ Regulation (EU) 2018/848 on organic production and labelling of organic products [2018] OJ L150/1.

⁶⁸ 'World's leading FMCG companies commit to new global framework for regenerative agriculture practices' *SAI Platform* (27 September 2023) <https://saipratform.org/our-work/news/worlds-leading-fmcg-companies-commit-to-new-global-framework-for-regenerative-agriculture-practices/>.

⁶⁹ 'Regenerative Certification for Real Change' <https://greenerworld.org/certifications/certified-regenerative/>.

⁷⁰ 'International Certification, Regenerative Viticulture Alliance' www.viticulaturaregenerativa.org/en/rva-certification.

⁷¹ Samantha Mills, 'What's the Difference Between Organic and Regenerative Agriculture (Or is There One?)' (Organic Council of Ontario, 16 February 2022) <https://organiccouncil.ca/whats-the-difference-between-organic-and-regenerative-agriculture-or-is-there-one/>.

⁷² 'Regenerative Organic Certified' <https://regenorganic.org/>.

certification schemes, misleading regenerative claims are likely to give rise to greenwashing claims against companies in the way we are increasingly seeing in other areas, especially in climate change litigation.⁷³ As the EU itself has come to realize, particularly concerning carbon removals, implementing legislation on certification schemes can be a proactive way to try to combat greenwashing.⁷⁴

4. A New Environmental Law Principle?

Given its recent appearance in EU law and policy parlance, the question that arises is whether we might be starting to see the emergence of a regenerative principle in environmental law. As Scotford highlights, environmental principles are deeply influential concepts for scholars contemplating the essence of environmental law as a discipline.⁷⁵ Judges also typically use environmental principles to advance legal reasoning, thereby enabling progress in the development of legal doctrines on environmental issues.

Since regenerative approaches are only beginning to appear in legislation, it would be premature and beyond the scope of the present chapter to conduct an analysis like those already undertaken to ascertain the status of sustainable development as a principle of environmental law.⁷⁶ Nevertheless, one crucial question concerns whether and how such a principle would add value and the extent to which it would be similar to, or different from, that of sustainable development. In this connection, Scotford reminds us that environmental principles are generally expected to serve dual purposes: providing solutions to environmental problems, and addressing legal challenges within environmental law.⁷⁷ Environmental principles can act as universal and foundational concepts that bring coherence and moral legitimacy to environmental law, and

⁷³ Joana Setzer and Catherine Higham, *Global Trends in Climate Change Litigation: 2023 Snapshot* (Grantham and London School of Economics 2023).

⁷⁴ Proposal for a Regulation establishing a Union Certification Framework for Carbon Removals COM(2022) 672 final.

⁷⁵ Eloise Scotford, *Environmental Principles and the Evolution of Environmental Law* (Hart 2017) 2.

⁷⁶ See e.g., Barral (n 8); and Christina Voigt, *Sustainable Development as a Principle of International Law: Resolving Conflicts Between Climate Measures and WTO Law* (Martinus Nijhoff 2009).

⁷⁷ Scotford (n 75) 3.

as tools to align environmental law with other established legal disciplines in order to overcome the considerable methodology challenges in environmental law scholarship.⁷⁸ The principle of sustainable development has arguably performed all these roles in different phases of its formation.⁷⁹

What then of the regenerative approach? As highlighted earlier, the primary rationale for advocating it stems from the notion that sustainability tends to uphold the status quo rather than foster improvement. However, as demonstrated in the examination of terminology used in EU legislation, sustainability does not inherently imply the perpetuation of a degraded environment. Nonetheless, there is evident value in placing greater emphasis on the restoration and enhancement of degraded environments.

If there are advantages to the regenerative approach, are there any barriers to consider, beyond the issue of principle-creep and potential dilution of existing environmental law principles from over-supply? One problem may be justiciability. Would such a principle be deployable in court, and if so, how? Would it be any better than the already weakly justiciable principle of sustainable development, with its 'uncertain legal role'⁸⁰ in EU jurisprudence? Could a claimant argue that the regenerative principle requires a degraded environment to be restored and improved? How would that sit with environmental liability and statutory clean-up duties and powers? These are all questions for future research to consider.

5. Conclusion

This chapter has explored the emerging concept of a regenerative approach within the realm of environmental law and policy. We noted how the regenerative approach is the 'new kid on the block' in this context. It seeks to challenge conventional notions of environmental conservation and sustainability, by advocating for practices that actively rejuvenate and restore ecosystems, rather than merely preventing their further degradation.

One key finding from this examination is the blurred line that often separates regenerative approaches from those associated with sustainable development.

⁷⁸ Ibid.

⁷⁹ Ibid 192–8.

⁸⁰ Ibid 194.

While both concepts share the overarching goal of preserving the environment for future generations, the regenerative approach seemingly emphasizes a more proactive stance in healing and revitalizing ecosystems, making it distinct from sustainability paradigms.

Despite the growing interest and references to the regenerative approach in academic and grey literature, there is limited concrete evidence of its endorsement in positive legal developments. The concept clearly holds promise and resonates with many environmentalists, policymakers, and scholars. However, translating it into actionable legal frameworks is a complex and challenging endeavor, not helped by the ambiguity surrounding the definition and operationalization of regenerative practices, nor by potential conflicts with existing legal norms.

In conclusion, the regenerative approach represents a potential paradigm shift in environmental law and policy discussions, but its journey from concept to concrete legal practice remains a work in progress. It calls for further research, dialogue, and experimentation to bridge the gap between theory and implementation.