# Ecocide, Ecocentrism and Social Obligation

**Frances Medlock & Rob White***

**Abstract**

The cataclysmic consequences of climate change and biodiversity loss are revealed in the climate disruptions and escalating extinction of species around the globe. The causes of global warming are directly associated with carbon emissions, the result of the fossil fuel industry and deforestation. Species extinction stems from unfettered resource extraction and the contamination and modification of Nature linked to the growth imperatives of global capitalism. These are crimes of ecocide, crimes that involve foreknowledge, government-provided legitimacy and unprecedented harms to humans, ecosystems and non-human environmental entities such as rivers, mountains, trees, birds and koalas. This article synthesises ideas about ecocentrism, rights of Nature and ecocide within a general framework of criminal law (e.g. prohibition via criminalisation) and social obligation (e.g. prescription via a general environmental duty of care). How best to bring carbon criminals and environmental vandals to justice is the crucial question of our age. As with crimes of the powerful generally, there are profound difficulties in dealing with corporate criminality and state-corporate crime. And yet climate justice demands nothing less than transformative change in circumstance. An ecology-based general duty of care provides a framework whereby social obligation is entrenched in a manner that simultaneously reinforces the criminality of ecocide.

**Keywords:** climate, justice, duty of care, ecocentrism, ecocide, social obligation.



## 1 Introduction

The cataclysmic consequences of climate change are revealed in the climate disruptions, extreme weather events, habitat loss, soil degradations and escalating extinction of species around the globe. The climate crisis is likewise affecting, often in dramatic fashion, human communities worldwide, with the most marginalised and those in the Global South especially vulnerable to its consequences. Global warming is fundamentally driven by corporate fossil fuel interests supported by or in collusion with governments. In effect, any mitigation of the crisis has so far failed to adequately address primary causes.

The crucial question of our age is how to bring these carbon criminals and environmental vandals to justice and/or, at the very least, to minimise the harms they cause. As with crimes of the powerful generally, there are profound difficulties in dealing with corporate criminality and state-corporate crime. And yet climate justice demands nothing less than a transformative change in circumstance. There is an obvious and pressing need to embed and institutionalise social and legal obligations that better protect against environmental harm and that hold climate and environmental criminals to account. From the point of view of law, the key question is how best to do this and to identify potential legal mechanisms for achieving the desired social outcomes.

With a focus on climate justice, this article synthesises ideas about ecocentrism, rights of Nature and ecocide within a general framework of criminal law (e.g. prohibition via criminalisation) and social obligation (e.g. prescription via a general environmental duty of care). An ecology-based general duty of care provides a framework whereby social obligation is entrenched in a manner that simultaneously reinforces the criminality of ecocide. This article argues that a triumvirate of these principles relating to ecocentrism, ecocide and an ecological duty of care are essential not only to create the necessary criminal and social obligations for radical climate action but also to ensure that the content of those obligations reflects the principles of climate justice.

The article has five sections. After this introduction, Section 2 outlines the current state of play in regard to climate change, introducing the concept of ecocide as a descriptor of the degradation and destruction of environmental well-being accompanying global warming. Ecocide has several different meanings. For instance, one usage concentrates on quantifiable measures of harm, and the term ecocide is used to emphasise the *seriousness* of the environmental harm. Another is premised on legal considerations, and the focus here is on the *criminalisation* of those who cause environmental harm.[1] The latter is considered later in the article, although the first descriptive use of the term - consisting of indicators of environmental threats, risks and damage - informs legal constructions of the proposed crime. Section 3 evaluates the concept of ecological sustainable development, arguing that as presently construed, this notion facilitates 'business as usual' rather than addressing the

* Frances Medlock works at the Environmental Defenders Office (the largest environmental legal centre in the Australia-Pacific region), Melbourne, Australia. Robert White is Emeritus Distinguished Professor of Social Sciences at the University of Tasmania College of Arts Law and Education, Australia.

1 R. White, (in press) 'Ecocide, Eco-Justice and Social Transformation', *Current Issues in Criminal Justice*.



doi: 10.5553/ELR.000220

fundamental underlying trends and issues that contribute to climate change and its consequences. In Section 4, we outline what we call a triumvirate of social obligation, measures that together provide a framework of accountability designed to prevent environmental harm and forestall further global heating. This section includes discussion of ecocentrism and the rights of Nature, duty of care variously conceived and applied, and ecocide as a crime. It is the combination of these initiatives that gives them potentially substantive legal weight. Section 5 provides a summary and conclusion.

## 2 Climate Change and Ecocide

Global temperature rise is caused by increased greenhouse gas emissions that are largely the result of the fossil fuel industry and deforestation.[2] Species extinction stems from unfettered resource extraction and the contamination and modification of Nature linked to the growth imperatives of global capitalism.[3] These have been rhetorically referred to by scientists and journalists as crimes of ecocide, crimes that involve foreknowledge, government-provided legitimacy and unprecedented harms to humans, ecosystems and non-human environmental entities such as rivers, mountains, trees, birds and koalas.

Climate change science demonstrates that global heating is escalating rapidly and is primarily due to specific types of anthropogenic (or human) causes.[4] The last major IPCC Reports were released in 2022.[5] They confirm, along with other sources,[6] that the world has gotten hotter and temperatures continue to rise. The effects of this are manifest in climate disruption, involving high-impact and extreme weather events. These include heat and cold waves, unusually dry conditions or unusually high precipitation amounts, heavy rainfalls and floods, above average tropical cyclone activity and intensity, severe storms, drought and wildfires.[7] Some measure of heating is locked in already, regardless of mitigation efforts deployed now, which means these climate disruptions will continue to increase in severity, frequency and duration.

As temperatures rise, so too will risks and harms to human and their environs. This includes all life on the planet as well as non-living environmental entities such as rivers and mountains. For example, key risks identified by the IPCC in 2014 include increased damage from wildfires, heat-related human mortality and increased damage from river and coastal urban floods. They include a distributional shift and reduced fisheries catch potential at low latitudes; compounded stress on water resources; increased mass coral bleaching and mortality; reduced crop productivity and livelihood and food security; and the loss of livelihoods, settlements, infrastructure, ecosystem services and economic stability. Other risks include spread of vector-borne diseases - the global coronavirus pandemic illustrating just how quickly future risks can translate into present harms.[8] Social inequality and environmental injustice will undoubtedly be the drivers of continuous conflicts for many years to come, as the most dispossessed and marginalised of the world's population suffer the brunt of food shortages, undrinkable water, climate-induced migration and general hardship in their day-to-day lives.[9]

Global temperature rise is generated primarily by the activities of governments and corporations that rely on or involve pumping greenhouse gases into the atmosphere. This is an established scientific fact.[10] Collectively, these forces are diminishing emission controls and environmental protections, burning forests and fracking oils and in some instances encouraging violence against Indigenous peoples and local farmers.[11] Even with foreknowledge of consequence, greenhouse gas concentrations are continuing to reach new highs.[12],[13]

Yet, in the midst of these increasing greenhouse gas emissions, '[g]lobal fossil fuel consumption subsidies increased by 50% over the past 3 years, reaching a peak of almost US$430 billion in 2018'.[14] We are in fact paying the perpetrators to pollute. This bears repeating: 'Even today, States subsidize the fossil fuel industry to the tune of $5.2 trillion per year, or 6.3 per cent of global GDP. Another trillion goes to support natural resource overexploitation'.[15] In 2022, the United Nations UN Secretary-General Antonio Guterres observed that one of the critical actions to jump-start the renewable energy



2 Intergovernmental Panel on Climate Change (IPCC), 'Special Report: Global Warming of 1.5C', *Summary for Policymakers* 2018; IPCC, 'Climate Change 2022: Impacts, Adaptation and Vulnerability', *Summary for Policymakers* 2022; World Meteorological Organisation, 'State of the Global Climate 2021', WMO-No. 1290 2022; World Meteorological Organisation, 'WMO Statement on the State of the Global Climate in 2019', WMO-No 1248 2020.

3 J. van der Velden and R. White, *The Extinction Curve* (2021).

4 IPCC (2018), above n. 2.

5 IPCC (2022), above n. 2.

6 World Meteorological Organisation (2022), above n. 2; World Meteorological Organisation (2020), above n. 2.

7 World Meteorological Organisation (2020), above n. 2; IPCC (2018), above n. 2; IPCC (2022), above n. 2.

8 IPCC, 'Climate Change 2014 Synthesis Report', *Summary for Policymakers* 2014.

9 A. Brisman , N. South & R. White (eds.), *Environmental Crime and Social Conflict: Contemporary and Emerging Issues* (2015).

10 IPCC (2022), above n. 2.

11 R. White, *Climate Change Criminology* (2018); R. Kramer, *Carbon Criminals, Climate Crimes* (2020); J. Heydon, *Sustainable Development as Environmental Harm: Rights, Regulation, and Injustice in the Canadian Oil Sands* (2020).

12 United Nations Environment Programme (UNEP), 'United in Science: High-Level Synthesis Report of Latest Climate Science Information Convened by the Science Advisory Group of the UN Climate Action Summit 2019', (2019); World Meteorological Organisation (2020), above n. 2.

13 Total net anthropogenic GHG emissions have continued to rise during the period 2010-2019, as have cumulative net CO2 emissions since 1850. Average annual GHG emissions during 2010-2019 were higher than in any previous decade, but the rate of growth between 2010 and 2019 was lower than that between 2000 and 2009. IPCC (2022), above n. 2, at 4.

14 N. Watts et al., 'The 2019 Report of The Lancet Countdown on Health and Climate Change: Ensuring that the Health of a Child Born Today Is Not Defined by a Changing Climate', 394 *The Lancet* 1836, at 1836 (2019).

15 United Nations Human Rights Council, 'Climate Change and Poverty: Report of the Special Rapporteur on Extreme Poverty and Human Rights,' A/HRC/41/39-24 2019, at 11.

transition is to put an end to subsidies on fossil fuels, which amount to roughly $11 million per minute.[16] Governments continue to use public taxpayer monies to fund activities that directly cause climate damage. Alongside companies, nation-states are therefore the main culprits.

As the UN Human Rights Council has pointed out, despite the urgency of the problem, the response has been appalling and involved the active collaboration of governments in wrecking environmental regulatory structures as well as contributing to global warming directly.[17] In countries such as Brazil, Australia and the United States, for example, there has been a broad shift in recent times in government administration away from the public interest and in favour of specific private industry and firm interests. Increased global heating is preventable, and every fraction of a degree of avoided heating matters. Climate change is not immutable. But powerful interests are making it inevitable.

### 2.1 Ecocide as Description of Destruction

The term ecocide is used in varying ways depending on legal and sociological context. It can relate to descriptions of ecological harm; how such harm is or might be criminalised within a given legal system; and in a way that includes principles of eco-justice.[18] For example, as a descriptor of ecological harm, ecocide refers to processes whereby specific geographies (a landscape, the Earth) experience harm in that their ecological integrity is damaged. Ecocide here therefore refers to serious destruction of or damage to the environment at substantial scale. This can occur naturally or due to human actions.[19] In this sense, ecocide refers to the *harm*, not the criminality or legal status of the actions that resulted in it.

Secondly, ecocide is used in a legal sense, referring to criminal harm that results from human actions. As it relates to human intervention, the *crime* of ecocide has been variously defined. The term has been applied to extensive environmental damage during war, as in the case of the use of defoliants (for example, Agent Orange) in the Vietnam War, and the blowing up of oil wells and subsequent pollution during the first Gulf War in Iraq and Kuwait by Saddam Hussein's retreating army. These actions involved intent to produce environmental destruction in pursuit of military and other goals.[20]

While the notion of ecocide has been actively canvassed at an international level for many years, from at least the 1960s,[21] more recent discussions have emphasised ecocide as a crime that happens in times of peace, not just war. For example, ecocide has been defined as 'the extensive damage, destruction to or loss of ecosystems of a given territory, whether by human agency or by other causes, to such an extent that peaceful enjoyment by the inhabitants of that territory has been severely diminished'.[22] Where this occurs as a result of human agency, it can be argued that such harm can be defined as a crime.

Crucially, environmental crime is typically defined on a continuum ranging from strict legal definitions to broader harm perspectives. The matter of legality does not prevent criminologists and others from critiquing certain types of ecologically harmful activities that happen to be legal, such as the clearfelling of forests or the continuing high levels of industry-related carbon emissions.[23] Critical scholarship is oriented towards *exposing* activities that cause significant damage to the environment. It is also *aspirational* in the sense of arguing for the formal criminalisation of behaviour that is particularly destructive of ecology and species. Both endeavours involve attempts to shift community thinking away from active or tacit acceptance of acts (and omissions) that are environmentally harmful to seeing these as morally wrong, as illegal and/or as criminal.[24] These tasks may be linked to public pressures that encourage virtuous rather than destructive behaviour on the part of governments, similar to discourses about states and human rights.[25] These concerns are especially pertinent in regard to global heating and associated processes of climate change contrarianism (which refers to intentional self-interested denial).

From a critical perspective, the focus is on those individuals, corporations, industries and governments that, even in the light of overwhelming scientific evidence, through acts or omissions, continue to contribute to the problem of global heating. State-corporate collusion, in particular, is viewed as intentional and systematic ecocide. Environmental harm is most often associated with exploitation of natural resources that bring profit to powerful companies (both privately owned and state owned). The science of climate change tells us that the environment cannot bear the weight of these exploitations any longer, yet sectional self-interest is preventing the application of the fire hose. Environmental collapse

16 World Meteorological Organization, 'Four Key Climate Change Indicators Break Records in 2021', Press Release Number 18052022, 18 May 2022, at 2.

17 United Nations Human Rights Council, above n. 15.

18 White, above, n. 1.

19 Natural processes of ecocide can be found where, for example, kangaroos denude a paddock of its grasses and shrubs to the extent that both specific environment and the kangaroo 'mob' are negatively affected.

20 S. Freeland, 'Addressing the Intentional Destruction of the Environment During Warfare under the Rome Statute of the International Criminal Court' [PhD Thesis, Maastricht University] (2015).

21 M. Gray, 'The International Crime of Ecocide', 26 *California Western International Law Journal* 215 (1996).

22 P. Higgins, *Earth Is Our Business: Changing the Rules of the Game* (2012), at 3.

23 R. White and D. Heckenberg , *Green Criminology: An Introduction to the Study of Environmental Harm* (2014), at 13.

24 R. White, 'Ecocide and the Carbon Crimes of the Powerful', 37 *University of Tasmania Law Review* 95 (2018). See also, E. Gibney and T. Wyatt, 'Rebuilding the Harm Principle: Using an Evolutionary Perspective to Provide a New Foundation for Justice', 9(3) *International Journal for Crime, Justice and Social Democracy* (2020), 100-115, which outlines three interlocking principles of evolutionary ethics and that argues the case for a definition of harm as 'that which makes the survival of life more fragile' (111). This, too, is aspirational in scope and future endeavour.

25 T. Ward and P. Green, 'State Crime, Human Rights, and the Limits of Criminology', 27 *Social Justice* 101 (2000).





doi: 10.5553/ELR.000220

is occurring across many different fronts, and time is rapidly running out to prevent ecocide on a grand scale. Ultimately, therefore, preventing further global heating is about politics as well as policies and laws.

## 3 Sustainable Development Is Business as Usual

The strategies that nation-states use to deal with environmental concerns are contingent on the social and class interests associated with political power. The power of transnational corporations finds purchase in the interface between the interests and preferred activities of the corporation and the specific protections and supports proffered by the nation-state. The latter can be reliant on or intimidated by particular industries and companies. Tax revenue and job creation, as well as media support and political donations, hinge on specific state-corporate synergies. Politicians also financially benefit from knowledge they obtain and decisions they make while in office. This undermines the basic tenets of democracy and collective deliberation over how best to interpret the public or national interest.[26]

Critics have noted that 'sustainable development' is frequently at the centre of government policy and has guided development of environmental law in ways that have clearly not protected against harm.[27] That is, the principles and practices associated with sustainability and development have largely failed to address these environmental harms or even create a system of social obligation that punishes (whether socially, criminally or economically) these actions. Rather, sustainable development as a concept has achieved the status of a philosophical proposition but lacks a transformative political programme.[28] Sustainable development, and associated principles, have historical roots in international fora such as the United Nations Conference on Environment and Development (UNCED), also known as the Rio Conference or Earth Summit, and may have been subject to 'radical' or ecocentric interpretations that lead to better environmental outcomes.[29] However, at the core of sustainable development is the explicit acknowledgment of the environmental rights of humans, rather than any intrinsic rights or values of Nature (or the 'environment').[30] In contrast to critical scholarship that aims to expose environmental damage while aspiring to criminalise behaviour that causes it, in terminology and in practice, sustainable development in most circumstances has been co-opted as an economic strategy and a tool to ensure business as usual.[31]

The taken-for-granted framework of 'sustainable development', often expressed through the language of 'ecologically sustainable development' (ESD), is itself part of the problem that needs to be addressed if we are to counter climate change and widespread environmental degradation. In practice, ESD is generally considered in terms of 'sustainable management' or 'sustainable use'.[32] The goal of sustainable use or sustainable development (as distinct from ecological sustainability) reflects the anthropocentric instrumentalism that confounds the ecocentric objective. The emphasis or weighting of underlying values thus shapes the ends to which an ecosystem approach is used. Where there are competing values embedded in legislation, multiple interpretations of statutory obligation are possible.[33] Such configurations are a natural pathway to green growth and green capitalist mindsets, which do little to address the social and political causes of environmental degradation.[34] This instrumental view has been, broadly, ineffective at protecting Nature.

For example, the principles of ESD provide a guiding framework for many of the deliberations about natural resource use and environmental protection in countries such as Australia. Duties and obligations will vary depending on whether ESD is an object of legislation, a relevant consideration or a strategic concept applied by administrators. A significant practical issue is whether the procedural use of ESD principles is obligatory (that is, required) or advisory (simply encouraged). For example, in the Australian *Environmental Protection and Biodiversity Conservation Act*, Australia's overarching environmental framework, ESD is listed as a preambular principle to be considered in decision-making and to guide application of the act. Given that economic considerations must be taken into account under a separate heading, it is clear that environmental protection is not the primary intention. This has been made clear in recent years, with activists trying and failing in the courts to find legal hooks to prevent development to the benefit of the environment. The intention of the EPBC Act to 'promote' ESD principles is a legally weak framing, which does little to underpin action.[35]

The composite principles of ESD, in addition to the way these concepts are embedded in actual legislation, prioritise an instrumental viewpoint. Key principles of ESD, such as the integration principle (integration between long- and short-term economic, environmental,



26 See e.g. Australian Democracy Network, 'Confronting State Capture', (2022) www.australiademocracy.org.au/statecapture [accessed 21 October 2022].

27 V. de Lucia, 'Competing Narratives and Complex Genealogies: The Ecosystem Approach in International Environmental Law', 27 *Journal of Environmental Law* 91 (2015).

28 B. Santamarina , 'The Sterilization of Eco-Criticism: From Sustainable Development to Green Capitalism,' 14 *Artículos* 13, at 19 (2015); T. Wanner, 'The New "Passive Revolution" of the Green Economy and Growth Discourse: Maintaining the "Sustainable Development" of Neoliberal Capitalism', 20 *New Political Economy* 21 (2015).

29 J. Davidson, 'Sustainable Development: Business as Usual or New Way of Living?' 22(1) *Environmental Ethics* 25 (2000).

30 White (2018), above n. 11.

31 Davidson, above n. 29, at 29.

32 K. Bosselmann , 'Losing the Forest for the Trees: Environmental Reductionism in the Law,' 2 *Sustainability* 2424 (2010); de Lucia, above n. 27.

33 de Lucia, above n. 27.

34 Santamarina, above n. 28.

35 https://attwoodmarshall.com.au/minister-for-the-environment-does-not-have-a-duty-of-care-to-protect-young-people-from-climate-change/?fbclid=IwAR3Ju_p5whgximYUbd27Nr1Vt7_et0p2c0eLQVO8dQhV7BzX9TyDK9QfYqM (last visited 2 June 2022).

social and equitable considerations) have the effect of watering down environmental protection. That is, where economic or development principles are considered within ESD analysis, the importance of environment is diluted. Unless it is embedded in legislation as an environmental bottom line, it tends to be weakened in 'overall judgment approaches' that weigh the economic, the social and the environmental as if they were equal.[36] With little analysis of what 'development' looks like in this context (i.e. divorced from an international obligations to raise people out of poverty and instead focused on growth and profit maximalisation), and based on legislative wording that waters down ecological considerations, sustainable development becomes a tool that simply facilitates exploitation of natural resources and generates even deeper social inequalities.[37]

ESD may be deployed primarily in a methodological sense - that is, as a tool to achieve sustainable development - rather than for the purposes of preservation. Nature, in this view, is conceptualised primarily as a resource and service provider and ESD and ecosystem approaches merely as tools for its further exploitation.[38] For example, carbon offsets have emerged as a new strategy to manage carbon emissions and promote sustainable development.[39] Internationally, this has implications for 'carbon colonialism' as Northern countries and companies profit from Southern resources. Overall, these processes simply provide excuses for business as usual, with the tokenistic acknowledgment of sustainability principles and an emphasis on development outcomes.[40] Wanner writes:



Sustainable development emerged as a passive revolution to maintain capitalist hegemony and economic growth in the light of environmentalist critiques about disastrous social and environmental consequences of industrial modern capitalism and calls for 'limits to growth'. In this way, by diverting the counter-hegemonic challenge of environmentalism, the sustainable development discourse has been part of the sustainable development of capitalism.[41]

The current model of ESD is predicated on an anthropocentric view of humans and natural resources. What is needed is an ecocentric model of law and policy development. That is, not simply natural resource management in the context of capitalist growth but an understanding of the inherent values that exist aside from human use. The concept of ESD has, so far, failed to do this. The rest of this article puts forward three intersecting modes of legal reasoning that could provide new ways of moving forward.

## 4 The Triumvirate of Obligation

A key underlying concept of this article is 'obligation', which means different things to different people, and which is highly context-bound. For example, it refers to a moral obligation to Nature (as suggested by environmental activists); it is embedded as part of Indigenous cosmology (that is, obligation stems from holistic relationships with Nature), and it refers to legal obligations to act/not act in certain ways, as specified in legislation and case law.[42] Our concern herein lies mainly with how obligation, as manifest in various legal initiatives, can be mobilised to leverage political debates and institutional practices in favour of climate justice and ecological responsibility.

Climate laws provide an important focus for legal interventions pertaining to global warming. For example, as noted by the IPCC:

> Climate laws enable mitigation action by signalling the direction of travel, setting targets, mainstreaming mitigation into sector policies, enhancing regulatory certainty, creating law-backed agencies, creating focal points for social mobilisation, and attracting international finance. By 2020, "direct" climate laws primarily focussed on GHG reductions were present in 56 countries covering 53% of global emissions. More than 690 laws, including "indirect" laws, however, may also have an effect on mitigation. Among direct laws, "framework" laws set an overarching legal basis for mitigation either by pursuing a target and implementation approach, or by seeking to mainstream climate objectives through sectoral plans and integrative institutions.[43]

Climate litigation is also growing and likewise can affect the outcome and ambitions of climate governance.[44]

Protection of the environment may be based on either one or a combination of conceptions of the rights of Nature (both as subject with rights or object worthy of protection) and duties to Nature (its intrinsic worth. which therefore imposes a moral obligation and duty of care).[45] Criminalisation is related to these violations of rights and obligations as well as gross destruction of environments. Environmental protection laws, while not necessarily reflecting movement towards legal status per se,

36 Bosselmann , above n. 32; G. Dwyer and M. Taylor, 'Moving from Consideration to Application: The Uptake of Principles of Ecologically Sustainable Development in Environment Decision-Making in New South Wales', 30 *Environmental Planning and Law Journal* 185 (2013).

37 Santamarina , above n. 28, at 22.

38 de Lucia, above n. 27.

39 A.G. Bumpus and D.M. Liverman , 'Carbon Colonialism? Offsets, Greenhouse Gas Reductions, and Sustainable Development', in R. Peet, P. Robbins & M. Watts (eds.), *Global Political Ecology* (2011) 203.

40 See e.g., L. Lohmann, *Carbon Trading: A Critical Conversation on Climate Change, Privatisation and Power* (2006).

41 Wanner , above n. 28, at 27.

42 For example, see M. Graham, 'Some Thought about the Philosophical Underpinnings of Aboriginal Worldviews', 3 *World Views Environmental Culture Religion* 105 (1999).

43 IPCC (2022), above n. 2, at 109.

44 *Ibid.*; M. Burger et al., *The Status of Climate Change Litigation: A Global Review* (2017); L. Merner , B. Franta & P. Frumhoff , 'Identifying Gaps in Climate-Litigation-Relevant Research: An Assessment from Interviews with Legal Scholars and Practitioners', *The Climate Science Network* (2022), https://www.cssn.org/ [accessed 21 October 2022].

45 D. Fisher, 'Jurisprudential Challenges to the Protection of the Natural Environment', in M. Maloney and P. Burdon (eds.), *Wild Law: In Practice* (2010).



doi: 10.5553/ELR.000220

nonetheless signal the value of Nature (although how value is construed depends on whether it is viewed as being for human benefit or for Nature's benefit). A 'rights of Nature' approach, for instance, places emphasis on the status and legal standing of the non-human. An 'ecocide' approach, however, is concerned primarily with preventing harms to the environment.[46]

In this section we examine law-making and judicial decision-making from the point of view of obligation. Specifically, we argue for a threefold approach to climate justice - one that incorporates ecocentrism and the rights of Nature in legal discourse and deliberation, the entrenchment of a general environmental duty of care on the part of citizens and the state, and the establishment of the crime of ecocide in law.

Other legal paradigms may likewise come to similar conclusions without necessarily sharing in the 'rights of Nature' perspective.[47] Ultimately, these various legal initiatives converge in attempting to provide a legal basis for enhanced protection of the environment in its own right.

### 4.1 Ecocentrism , Rights of Nature and Ecological Sustainability

Ecocentrism refers to the view that the environment ought to be valued for its own sake apart from any instrumental or utilitarian value to humans.[48] A fundamental aspect of ecocentrism is that it views entities such as animals, plants and rivers as potential rights-holders and/or objects warranting a duty of care on the part of humans because non-human entities' interests are seen as philosophically significant - that is, deserving greater respect and formal recognition by humans than has hitherto been the case.[49]

Earth Jurisprudence is a philosophical expression of ecocentrism within legal studies that places moral weight on the worth of non-human environmental entities.[50] One way to implement Earth Jurisprudence is through 'wild law', which refers to an approach to human governance that seeks to prioritise the long-term preservation of all Earth's subjects by regulating human behaviour.[51] Advocates for 'wild law' highlight how laws might be changed, reformed or bolstered to better recognise non-human interests.[52] Support of the extension of legal rights to natural objects is expressed, for example, in arguments that all things have the right to 'be' and to 'do' in ways that reflect their core or defining trait or characteristic, including abiotic or non-living entities, such as the right of a river to flow.[53]

The constitution of Ecuador is often cited as an example of this type of legal initiative. Adopted in 2008, it has provisions that explicitly refer to the 'rights of Nature'. The intrinsic rights of Nature have also been acknowledged in specific laws recently passed in New Zealand. These pertain to Te Urewer (land) and Te Awa Tupua (water).[54] The laws acknowledge this land and this river as having their own mana (its own authority) and mauri (its own life force). In a similar vein to developments in Ecuador, the landscape/river is personified - it is its own person and cannot be owned - and this is established through legislation that acknowledges their status as a legal 'person'. This means that Nature (in its various manifestations) is recognised as a subject within law. In the case of the *Te Urewera Act 2014*, the land is to be preserved in its natural state, introduced plants and animals exterminated (that is, invasive species eradicated), and the Tuhoe people and the Crown are to work together in a stewardship role. Similarly, the *Te Awa Tupua Act 2016* grants legal recognition to the Whanganui River and, while neutralising ownership issues pertaining to the Whanganui Iwi (who sought recognition of their authority over the river), provides for a co-management regime involving the Whanganui Iwi and the Crown. Nature as subject does not, however, preclude Nature as an object also being a beneficiary of law, as demonstrated in the UN Convention of Natural Heritage.[55]

The notion of stewardship (or custodianship) is central to the granting of personhood rights to non-human entities. This raises the question of who the legitimate proxies and spokespeople are or should be for entities that cannot otherwise articulate their claims to intrinsic value, legal status and social protection. One might agree, for example, with the sentiment that we need to 'hear' what the voiceless have to say, whether this refers to trees, soils, bees or orchids. This, in turn, should involve active listening, by humans, to the non-verbal communication from Nature, the signals emanating from the natural world and its inhabitants that denote things such as the impacts of climate change (e.g. oceans warming, insect eggs hatching earlier).[56] But to translate this into suitable deliberative processes and practical outcomes is complicated.

One way to approach this issue of stewardship (and, related to this, adjudication that weighs up rights, interests, harms and justice) is to initially describe those who speak for Nature as advocates and those who speak about Nature as experts. There is an overlap between those two groups, and the composition of each is diverse. Abstractly, when we talk about speaking *for* Nature, there is a need to explain why certain groups are or



46 Gray, above n. 21; Higgins (2012), above n. 22; P. Higgins, *Eradicating Ecocide: Laws and Governance to Prevent the Destruction of Our Planet* (2010).
47 B. Donnelly and P. Bishop, 'Natural Law and Ecocentrism', 19 *Journal of Environmental Law* 89 (2007).
48 T. Berry, *The Great Work: Our Way into the Future* (1999).
49 D. Schlosberg, *Defining Environmental Justice* (2007).
50 J. Koons, 'What Is Earth Jurisprudence?: Key Principles to Transform Law for the Health of the Planet', 18 *Penn State Environmental Law Review* 47 (2009).
51 C. Williams, 'Wild Law in Australia: Practice and Possibilities', 30 *Environmental Planning and Law Journal* 259 (2013).
52 P. Burdon, 'Wild Law: The Philosophy of Earth Jurisprudence', 35 *Alternative Law Journal* 62 (2010); Higgins (2010), above n. 46; M. Maloney and P. Burdon (eds.), *Wild Law: In Practice* (2014).
53 C. Cullinan, *Wild Law: A Manifesto for Earth Justice* (2004).
54 See Te Urewera Act 2014 and Te Awa Tupua Act 2016.
55 Fisher, above n. 45.
56 Schlosberg, above n. 49; F. Besthorn , 'Speaking Earth: Environmental Restoration and Restorative Justice', in K. Wormer and Walker (eds.), *Restorative Justice Today: Practical Applications* (2012) 233.

should be privileged over others when institutionalising who speaks for what, when and why (e.g. Indigenous elder, scientist, government official, environmental activist). Here we can point to concrete examples of how this might be achieved, for instance, where Indigenous rights and standing are embedded in legislation; this then provides a legal platform for the recognition of their relationship with the land, which also thereby opens the door to official acknowledgment of their voice.[57]

In regard to speaking *about* Nature, it likewise needs to be acknowledged that there are different knowledges of Nature. For example, a river is defined quite differently by an ecologist and by a geomorphologist and by an Indigenous person. They each have a very different construct of what the river means, utilising different analytical, scientific and spiritual lenses. In a similar vein, there are hunters and foresters who know the woods and who want to protect what they do in the woods, and fishers who want to protect the oceans and the fish, even though in each case, to others, they may be seen as part of the problem. Expertise and the right to speak are not only varied but subject to ongoing political contestation. Moving forward, a blend of expertise and ideas from many different quarters (including scientists, traditional users of land, environmental activists and laypeople, among others) should ideally be part of the continuing dialogue around stewardship, custodianship and protection of Nature generally.

There are then complexities and conundrums associated with ecocentrism - both conceptually and in relation to its translation into practical contexts. Not the least of these difficulties is the fact that Nature, itself, is dynamic and ever changing. How 'harm' is conceived depends very much on the yardstick by which worth is determined. To assess the severity of harm requires criteria linked to value, scale and measure.[58] Value is measured through quantitative assessments (the extent and type of harm) and moral or qualitative assessments (whether to include some types of activities as harm).[59] Assessment of 'worth' is partly dependent on the scale at which evaluation occurs. Is the focus on individual species or entire ecosystems? Should value also be applied to individual organisms, and, if so, should this apply to every, and all, plant and animal? Ecosystems incorporate the biotic (plants, animals) and the abiotic (water, soil) that have value in their own right as self-maintaining and self-perpetuating systems. How does one determine the relative value of individual organism, particular species and overarching biotic communities relative to each other? Interconnection and overlapping interests are as important to consider as discrete needs, rights and concepts of justice. Determining the nature of the harm refers to efforts to put a value - monetary, ecological, aesthetic, cultural - on the harm. This involves attempts to make the harm visible and assess the type and magnitude of the harm (e.g. as minor, major or catastrophic, and in relation to what or whom). The key questions here are who is doing the valuing and what tools are utilised to assign value.[60]

A major challenge, therefore, is how to measure ecocentrism – to have suitable ecological metrics – if and when it is manifest within the criminal justice institutional sphere. With respect to this, in theoretical terms we can identify five key indicators of ecocentrism:

- The extent to which the intrinsic value or worth of the non-human environmental entity is taken into consideration
- The use of ecological perspectives to estimate the degree of harm to non-human environmental entities
- The kinds of expertise mobilised within and demonstrated by a court to capture adequately the nature and complexities of environmental harm
- The gravity of the offence against the non-human entity as reflected in the penalties given, and
- The measures taken to ensure the maintenance, restoration or preservation of ecological integrity.[61]

An example of how ecological metrics are utilised in practice is provided by the New South Wales Land and Environment Court (NSWLEC) - one of the oldest specialist environment courts in the world. As part of its proceedings, the court carries out assessments of environmental harm, as well as sentencing offenders for criminal offences pertaining to environmental laws. The Court needs to be cognisant of the elements constitutive of 'ecologically sustainable development' as outlined in the *Protection of the Environment Administration Act 1991 (NSW)*. The PEA Act provides that ESD can be achieved through the implementation of particular principles and programmes (such as the precautionary principle, intergenerational equity, conservation of biological diversity and ecological integrity).

At the heart of this evaluation of circumstance is *ecology*, involving a holistic understanding of the natural world. For judicial officers this requires a modicum of specialist expertise on environmental matters and an appreciation of the importance of ecological integrity. For instance, in assessing harm arising from offences associated with the National Parks and Wildlife Act 1974 (NSW) the Court uses indicia such as direct damage (e.g. changes in a landscape or particular biotic community), the status of species damaged or destroyed (e.g. endangered and vulnerable species), the re-establishment time before damage is redressed (and whether the damage can be redressed at all) and so on,[62] Fundamentally, this process requires the elevation of the intrinsic worth of Nature (and its various component parts) to the level



57 R. White, 'Indigenous Communities, Environmental Protection and Restorative Justice', 18 *Australian Indigenous Law Review* 43 (2015).

58 R. White, *Environmental Harm: An Eco-justice Perspective* (2013).

59 *Ibid.*

60 *Ibid.*

61 R. White, 'Ecocentrism and Criminal Justice', 22 *Theoretical Criminology* 342, at 349 (2018).

62 R. White, 'Ecocentrism and Criminal Proceedings for Offences against Environmental Laws', in E. Fisher and B. Preston (eds.), *An Environment Court in Action: Function, Doctrine and Process* (2022), 213-232.



doi: 10.5553/ELR.000220

of first principles.[63] This assessment process and application of ecological metrics also extends to direct and potential harms stemming from climate change.

For example, ecological and economic concerns were apparent in *Gloucester Resources Limited v Minister for Planning [2019] NSWLEC 7*. In this instance, a mining company, Gloucester Resources Limited, proposed an open cut coal mine to produce 21 tonnes of coal over a period of 16 years. In assessing this mining development, the NSWLEC drew on a wide range of social, economic and ecological criteria. Significantly, in *Gloucester Resources Limited*, there were several climate-related issues that needed to be tackled. In Australia, a litigant typically needs to convince a court that the proponent is responsible for the ultimate burning of coal, even if it is burned by a third party, and that this will result in increased greenhouse gas emissions, which in turn contribute to climate change.

Judge Preston of the NSWLEC took a broad view of these matters, ruling that:

> The project's cumulative greenhouse gas emissions will contribute to the global total of GHG concentrations in the atmosphere. The global total of GHG concentrations will affect the climate system and cause climate change impacts. The project's cumulative GHG emissions are therefore likely to contribute to the future changes to the climate system and the impacts of climate change.[64]

The Court also resisted the 'market substitution' argument, the notion that if the proponent does not mine and sell coal, someone else will. Among other reasons, this was rejected in light of increasing global momentum to tackle climate change and therefore reject future coalmine proposals.

Overall, the NSWLEC concluded that:

> In short, an open cut coal mine in this part of the Gloucester valley would be in the wrong place at the wrong time. Wrong place because an open cut coal mine in this scenic and cultural landscape, proximate to many people's homes and farms, will cause significant planning, amenity, visual and social impacts. Wrong time because the GHG emissions of the coal mine and its coal product will increase global total concentrations of GHGs at a time when what is now urgently needed, in order to meet generally agreed climate targets, is a rapid and deep decrease in GHG emissions. These dire consequences should be avoided. The Project should be refused.[65]

This was the first time that contributions to climate change were cited as a substantial reason for stopping the mine development from proceeding. As indicated previously, the Court also undertook systematic assessments pertaining to ecological and social considerations. The importance of this is that it provides a concrete example of how courts can use ecological metrics of harm in their decision-making. Ecocentric theory can be translated concretely into institutional practice.

### 4.2 Duty of Care

Protection of the environment may stem from a variety of practical imperatives and philosophical considerations. It may be motivated by anthropocentric concerns insofar as good environments are associated with healthy conditions for the flourishing of human interests, including, for example, aesthetic and recreational values. It may be linked to a 'rights of Nature' emphasis on the intrinsic value of species, ecosystems and the abiotic components of Nature. The impetus might be simply a concern to care for that which is vulnerable to human degradation and exploitation for the benefit of both natural object and human subject. Conventional treatments of environmental protection, for example, focus on the rights of humans and that basically define the 'environment' in human-centred or anthropocentric terms. For example, the Council of Europe's Manual on Human Rights and the Environment, which reflects legislation and case law across the European Union, is concerned with the impact of environmental changes on human individuals, rather than human impacts on the environment per se.[66] In other words, the central concern is with human interests and human rights. These emphases are also reflected in recent commentary on the application of human rights law to provision of a decent or healthy environment (including considerations pertaining to climate change), as well as explicit interest by the Office of the United Nations High Commissioner for Human Rights in human rights obligations relating to the environment.[67]

Anthropocentrism privileges humans and human interests over and above those of the non-human.[68] Like the concept of ecocentrism, it too, involves a range of philosophies and practices - from disregard for the environment to stewardship models of environmental care. Nonetheless, the defining characteristic of anthropocentrism is that humans are ends-in-themselves, while other entities are only means to attain the goals of humans. This is the case even when ecologically benign measures or 'ecosystem approaches' to natural resource management are adopted insofar as these methods are employed primarily for human-centred purposes.[69] From an anthropocentric perspective, harm to the environment is thus only of consequence when it is meas-



63 White (2018), above n. 61.
64 *Gloucester Resources Limited* v. *Minister for Planning*, [2019] NSWLEC 7, at 525.
65 *Ibid*., at 699.
66 Council of Europe, *Manual on Human Rights and Environment* (2012).
67 A. Boyle, 'Human Rights and the Environment: Where Next?' 23 *European Journal of International* 613 (2012); Office of the United Nations High Commissioner for Human Rights, 'Special Rapporteur on Human Rights and the Environment', (2018).
68 de Lucia, above n. 27.
69 *Ibid*.

ured by reference to human values and interests (e.g. aesthetic, cultural, economic).[70]

Thus, while privileging the human over the non-human, anthropocentrism nonetheless can express a moral concern for Nature. This can involve an ethic of responsibility to Nature as well as responsibility for Nature, albeit framed in terms of human interests.[71] Protecting the environment for human benefit, for example, is evident in international agreements, such as the UNCED, which explicitly acknowledges the environmental rights of humans, not intrinsic environmental rights as such (Principle 1, for example, states that '[h] uman beings are at the centre of concerns for sustainable development'). Nonetheless, regimes of environmental protection increasingly incorporate elements of both anthropocentrism and ecocentrism.[72]

Regardless of underlying eco-philosophy, recent legal developments speak to the importance of a duty of care to the environment. In Australia, for example, amendments to the Victoria Environmental Protection Act [2018] introduced a 'general environmental duty'.[73] This sets out responsibilities and obligations as this pertains to citizens and residents of the State of Victoria. It is linked to specific types of activities and potential harm: 'A person who is engaging in an activity that may give rise to risks of harm to human health or the environment from pollution or waste must minimise those risks, so far as reasonably practicable'.[74] There is an offence for aggravated breach of the general environmental duty. Moreover, this provision is expressly future-focused in that the environmental general duty of care is a form of preventative or precautionary regulation or risk management in that a regulator need not wait until harm has occurred before taking action. It does not require a demonstration of harm but rather a demonstration that 'reasonably practicable' measures have been taken to prevent or minimise harm.[75]



The matter of duty of care is not only pertinent to 'environments' or to a general individual obligation but also central to notions such as intergenerational equity. In this instance, the obligations are specific to nation-states (and to their citizens and residents) and are linked to protections of basic human rights, for which states are held accountable. Public trust and public interest law have been used selectively worldwide to establish future generations as victims of environmental crime.[76] Intergenerational equity, usually linked to consideration of the prospects of children and young people, has three core ideas. These are summarised by Weiss:

> The basic concept is that all generations are partners caring for and using the Earth. Every generation needs to pass the Earth and our natural and cultural resources on in at least as good condition as we received them. This leads to three principles of intergenerational equity: options, quality and access. The first, comparable options, means conserving the diversity of the natural resource base so that the future generations can use it to satisfy their own values. The second principle, comparable quality, means ensuring the quality of the environment on balance is comparable between generations. The third one, comparable access, means non-discriminatory access among generations to the Earth and its resources.[77]

These constitutive elements of intergenerational equity - conservation of options, conservation of quality and conservation of access - are seen to form the foundation for legal protections of environments, essentially for human benefit, now and into the future. Intergenerational equity is acknowledged in a number of international instruments, such as the UN Framework Convention on Climate Change and the United Nations Economic Commission for Europe's Aarhus Convention. Interest in the concept stems from the Stockholm Declaration on the Human Environment, which in turn led directly to the creation of the UN Environment Programme.[78] It is of continuing interest today. As members of this present generation, we hold the Earth in trust for future generations, while at the same time we are beneficiaries of its resources. Equity must flow to present generations from past generations, while, simultaneously, present generations must ensure that equity flows to future generations. Moreover, the dynamics of Nature (both human and non-human) demand attention to the vagaries of change that naturally occur over time.

Weiss makes the point that intergenerational planetary rights may be regarded as group rights, as distinct from individual rights, in the sense that generations hold these rights as groups in relation to other generations - past, present and future.[79] That is, these are 'generational rights' that must be conceived in the temporal context of generations, rather than rights of identifiable individuals (although there are identifiable interests of individuals that the group rights protect). These generational rights can be evaluated by applying objective criteria and indices to the planet from one generation to the next.

70 A. Lin, 'The Unifying Role of Harm in Environmental Law', 3 *Wisconsin Law Review* 898 (2006).

71 Donnelly and Bishop, above n. 47; Fisher, above n. 45.

72 Fisher, above n. 45.

73 Victoria Consolidated Acts, Environment Protection Act 2017 part 3.2. General Environmental Duty (proclaimed 1 July 2018).

74 *Ibid*., s 25(1).

75 A. Freiberg, 'General Duties as Regulatory Tools in Environmental Protection: Principles, Practice, Problems', 36 *Environmental and Planning Law Journal* 40 (2019).

76 B. Preston, 'The Use of Restorative Justice for Environmental Crime', 35 *Criminal Law Journal* 136 (2011); M. Mehta, *In the Public Interest: Landmark Judgement & Orders of the Supreme Court of India on Environment & Human Rights, Vols 1 - 3* (2009).

77 E. Weiss, 'Climate Change, Intergenerational Equity, and International Law', 9 *Vermont Journal of International Law* 615 (2008), at 624. For a perspective on harm from the point of view of evolutionary needs and ethics that is not centred on anthropocentric considerations, see Gibney and Wyatt, above, n. 24.

78 E. Weiss, 'Intergenerational Equity: A Legal Framework for Global Environmental Change', in E. Weiss (ed.), *Environmental Change and International Law* (1992) 385.

79 *Ibid.*



doi: 10.5553/ELR.000220

Ecocide as an outcome of the failure to address global warming is not just a theoretical debate about abstract propositions. The casualties of climate change are disproportionately found among the most vulnerable population groups. Intergenerational equity refers to 'vertical equity', which cuts across generations over time, and to 'horizontal equity', in which equality of rights extends across population groups as well as time.[80] There is a close connection between intragenerational and intergenerational rights (under the rubric of 'conservation of access'). The health and well-being of the next generation is entirely contingent on how children of the present generation are cherished and nurtured. Climate change challenges the planet's capacity to do this.

When it comes to matters specific to the rights of children in regard to intergenerational equity, there are occasionally instances when children's interests (both as vulnerable and as the future generation) have come to the fore. For example, in *Minors Oposa v. Secretary of State for the Department of Environment and Natural Resources*, the issue of intergenerational equity was considered by the Philippines Supreme Court. Two issues, in particular, had to be decided: whether future generations should have standing and how to respond to the claimants, who in this case were a group of children, and who sought an order to the government to discontinue existing and future timber licence agreements: 'The claimants alleged that deforestation was causing environmental damage which affected not only young but also future generations and they sought to establish standing for both present and future generations.'[81] The Supreme Court held that standing be granted to the claimants and that they had adequately asserted a right to a balanced and healthful ecology.

How intergenerational obligations are constructed is subject to various legal contestations. For example, in a recent case in Australia, the Minister for the Environment, Susan Ley, successfully appealed the *Sharma*decision, which had imposed a new duty of care to protect Australia's young people from the harmful impacts of climate change.[82] This case was filed by eight teenagers in a class action in the Australian Federal Court, seeking an injunction against ministerial approval of a coalmine expansion, on the basis that the expansion endangered the applicants' future by exposure to climatic hazards. In the original case, the judge held that in deciding whether to approve the development, the minister owed a duty of care to Australia's young people not to cause them physical harm in the form of personal injury arising from climate change.

However, the Appellate Court's decision was not based on whether the minister ought to have a duty of care to future generations. Rather, it was based on the notion that the duty could not be implied under the *Environment Protection and Biodiversity Conservation (EPBC) Act*. As one commentator pointed out:

> While appealing the decision might seem like a callous and ludicrous move from the Minister for Environment, the trial, together with the appeal judgment, exposes a vital truth - our environment law framework is not designed to protect the environment. Instead, it serves to legitimise development, and in doing so, it ultimately fails to protect our environment and humanity.[83]

In His Honour's judgment, for example, Chief Justice Allsop noted:

> The [EPBC] Act is not concerned generally with the protection of the environment nor with any response to global warming and climate change.[84]

There has been no attempt by the Commonwealth Parliament to translate international agreements concerning climate change, particularly the Kyoto Protocol ... or the Paris Agreement into Commonwealth law.[85]

This legal interpretation dovetails with our earlier discussion of 'ecological sustainable development' as currently construed by governments and businesses in Australia. For instance, permit systems are designed precisely to allow pollution to occur, setting thresholds and limits as to what is acceptable. They do not function to stop or prevent the pollution. Environmental harm is generally constructed through the lens of *malem prohibitum* (regulatory infringement) rather than *malem in se* (intrinsically harmful). The green light for 'business as usual' continues, and this recent High Court case only serves to confirm this tendency. It also confirms the central importance of politics in determining the parameters of legal intervention and highlights the bastardy of the social forces behind continued global warming.

A final comment on duty of care acknowledges that it is not only citizens and states that are being held to account under potential and emerging legal regimes. The same concept is also being applied to company directors. Specifically, there is growing interest in the idea of using company and securities law to highlight disclosure requirements regarding foreseeable climate risk and viewing climate obligations as linked to director duties and liabilities.[86] This is also manifest in the insurance industry and ongoing interest in and debates over whether and to what extent companies can be held accountable for the economic consequences of climate change. Thus, disputes over obligation and duty of care



80 R. White, 'Imagining the Unthinkable: Climate Change, Ecocide and Children', in J. Frauley (ed.), *C. Wright Mills and the Criminological Imagination* (2015), 219-240.

81 K. Schneeberger , 'Intergenerational Equity: Implementing the Principle in Mainstream Decision-making', 23 *Environmental Law & Management* 20, at 26 (2011).

82 *Minister for the Environment* v. *Sharma (No 2)*, [2022] FCAFC 65.

83 https://attwoodmarshall.com.au/minister-for-the-environment-does-not-have-a-duty-of-care-to-protect-young-people-from-climate-change/?fbclid=IwAR3Ju_p5whgximYUbd27Nr1Vt7_et0p2c0eLQVO8dQhV7BzX9TyDK9QfYqM (last visited 2 June 2022).

84 www.judgments.fedcourt.gov.au/judgments/Judgments/fca/full/2022/2022fcafc0035/_nocache.

85 *Minister for the Environment* v. *Sharma*, [2022] FCAFC 35, at 5, 101.

86 F. Haines and C. Parker, 'Moving towards Ecological Regulation: The Role of Criminalisation', in C. Holley and C. Shearing (eds.), *Criminology and the Anthropocene* (2017), 86-108.

range across a variety of substantive areas of law, economics and politics.

Of recent concern, however, is the pushback by governments *against* environmental, social and governance investment policies that involve companies excluding energy companies in their investment decisions (presumably because of perceived social and environmental obligations, responsibilities and consequences). The Texas Comptroller of Public Accounts, for example, has published a 'blacklist' of companies judged to have 'boycotted energy firms'. As a result of being included on the blacklist, Texas governmental bodies such as the hundreds of billions dollar teachers' retirement system are prohibited from investing in these firms and must divest from any holdings in them that they currently own. This is a clear case of divestment in favour of the status quo, one that is in direct opposition to the goals of climate and social justice.[87]

### 4.3 Ecocide

Global heating is mainly due to the continued collusion of key political leaders with the fossil fuel industries and other degraders of the environment. Collectively, they are actively 'doing bad'. As such, their actions can be analysed through the lens of criminal law, albeit from a critical perspective.

Conceptually, crime involves several elements. It involves *actus rea* that refers to acts and/or omissions. In this instance, global heating is generated by the activities of governments, corporations and individuals that rely on or involve pumping greenhouse gases into the atmosphere. It is also fostered by the failure of governments to regulate carbon emissions, for example, letting the dirty industries continue to do what they do best - which is to continue to profit from irresponsible and destructive behaviours. Crime involves serious harm. Climate disruption is serious in itself and must therefore be considered serious enough to warrant criminal laws and criminal prosecutions for those contributing most to the problem.



Crime also involves *mens rea* or the guilty mind. Among other things, this involves foreknowledge. In this regard, there has been public knowledge and governmental agreement on the negative impacts of climate change since the United Nations Rio Summit in 1992, while corporate entities like ExxonMobil have known of the effects of carbon pollution from at least as early as 1977. Thus, the problem and its consequences have been known for decades.

These observations mean that we can frame climate change to include discussion of perpetrators and offenders, victims and survivors and to speak of threats, risks, prevention and precaution. It also means that those perpetrating the harms need to be held to account. Who this ought to include is rightfully a core concern of contemporary critiques.[88] The carbon criminals are those who pretend that climate change is not happening or who believe that climate policy should not take precedence over immediate economic gain. Many are contrarians - eschewing scientific evidence in favour of bias and ill-informed opinion.[89] Nothing will convince them otherwise because their specific sectoral interests override universal human and ecological interests.

The carbon criminals also include those who continue to facilitate carbon emissions: governments that foster deforestation and massive oil, gas and coal projects, and the corporations that influence their decision-making, construing energy policy as fundamentally about fossil fuels not alternative sources. These are the purveyors of future costs that are already hurting us in the here and now.

Additionally, the carbon criminals are those who fail to prevent and stop the activities and policies that are killing the planet and life as we know it. Delayed action is in effect a green light to even greater climate disruption happening at an even greater pace. Time is of vital concern here. Global temperature rise is accelerating, and in-built biophysical feedback loops (such as melting ice sheets) mean that it is likely to happen even faster than it already is today as time goes by. Moreover, each delay now means that deeper cuts to carbon emissions are needed.[90]

Discussions of ecocide from a legal standpoint describe an attempt to criminalise human activities that destroy and diminish the well-being and health of ecosystems and the species within these, including humans. Climate change and the gross exploitation of natural resources are undermining existing ecosystems and habitats. This is the essence of ecocide on a planetary scale.

In 2021, the UK-based campaign 'Stop Ecocide International' (through the Stop Ecocide Foundation, 2021) commissioned an independent expert panel to put together a legal definition of ecocide relevant to the Rome Statute of the International Criminal Court (building on the earlier work of Polly Higgins[91]). This proposed definition describes ecocide as follows:

1. For the purpose of this Statute, "ecocide" means unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts.
2. For the purpose of paragraph 1:
   a. "Wanton" means with reckless disregard for damage which would be clearly excessive in relation to the social and economic benefits anticipated;
   b. "Severe" means damage which involves very serious adverse changes, disruption or harm to any element of the environment, including grave impacts on human life or natural, cultural or economic resources;

87 A. Lester, 'US States Target ESG Investment as US SIF Hits Back at "Political" Attacks', *Environmental Finance* (2022), 25 August.

88 Kramer, above n. 11; White (2018), above n. 11.

89 A. Brisman , 'The Cultural Silence of Climate Change Contrarianism', in R. White (ed.), *Climate Change from a Criminological Perspective* (2012) 41-70.

90 UNEP, above n. 12.

91 Higgins (2010), above n. 46; Higgins (2012), above n. 22.



doi: 10.5553/ELR.000220

c. "Widespread" means damage which extends beyond a limited geographic area, crosses state boundaries, or is suffered by an entire ecosystem or species or a large number of human beings;
d. "Long-term" means damage which is irreversible or which cannot be redressed through natural recovery within a reasonable period of time;
e. "Environment" means the earth, its biosphere, cryosphere, lithosphere, hydrosphere and atmosphere, as well as outer space.[92]

Previously, there had been a major attempt to include ecocide among the crimes associated with the establishment of the International Criminal Court (ICC), although the final document refers only to war and damage to the natural environment.[93] Recent efforts have been directed at making 'ecocide' the fifth International Crime Against Peace.

Debate continues over what precisely ecocide as a crime should entail. For instance, the expert panel definition is oriented towards the ICC and, accordingly, it reflects a human rights emphasis. Others argue for a more expansive definition, one that incorporates an ecocentric perspective that views the environment as having value for its own sake. Ecocide, from this viewpoint, should be framed as a crime not only against humans but against non-human environmental entities.[94] Ideally, then, cases should be able to be brought to court on behalf of entities such as rivers, mountains, trees and birds, if they are affected by ecocide-related acts and omissions. The matter of 'intent' is also contentious.[95] Strict liability may be applied to more severe risks and harms, given the seriousness of the harm, in which case *mens rea* (the mental element) is less important than *actus reus* (the act itself) (although subjective factors are nonetheless taken into consideration as part of the sentencing deliberations). Proving intent in cases where ecocide occurs can be extremely difficult (for instance, corporations are motivated by profit-making; damage to the environment may be a collateral effect unrelated to intent). If widespread destruction and damage does occur, this should trigger prosecution and conviction regardless of the mental element. Even with strict liability, questions of intent and foreknowledge still play a significant role in sentencing insofar as they relate to aggravating (for example, intentional disregard of licensing provisions) and mitigating factors (for example, attempts to repair the harm).

The urgency and impetus for making ecocide a crime has been heightened by the woefully inadequate responses by governments, individually and collectively, to global warming and to threats to biodiversity. Climate change is rapidly and radically altering the very basis of world ecology; meanwhile, one million species are considered to be at threat of extinction.[96] Ecocide has become a global phenomenon rather than being limited to specific zones and geographical territories.

Yet very little action has been taken by states or corporations to rein in the worst contributors to the problem. Importantly, states continue to enable corporate criminals through regulatory and policy failure, as well as by continuing to provide tax incentives and ministerial approval. A comprehensive crime of ecocide must be broad enough to incorporate state-sanctioned criminality, as well as acts that are already subject to civil sanction (such as a licence breach). Carbon emissions are not decreasing, and habitat is being destroyed as pollution continues to contaminate land, air and water, affecting all that live on the planet. Underpinning this systemic destruction and degradation are specific corporate and elite interests. And these are inseparable from the dominant global mode of production - capitalism - the driver of which is an inherent growth imperative.[97]

A key defining feature of ecocide perpetrated by the powerful is that such crimes involve actions (or omissions and failures to act) that are socially harmful and carried out by elites and/or those who wield significant political and social authority in the particular sectors or domains of their influence. Such harms are inseparable from those who has power, how they exercise this power, and who ultimately benefits from the actions of the powerful. These social interests not only perpetuate great harms but also obscure and mask the Nature of harm production. They are also best placed to resist the criminalisation process generally.[98] Under these social arrangements, ecocide is inevitable.

Ecocide describes an attempt to criminalise human activities that destroy and diminish the well-being and health of ecosystems and species within these, including humans. Climate change and the gross exploitation of natural resources are leading to our general demise - hence increasing the need for just such a crime.



92 Stop Ecocide Foundation, 'Independent Expert Panel for the Legal Definition of Ecocide: Commentary and Core Text', (2021) June 2021. https://static1.squarespace.com/static/5ca2608ab914493c64ef1f6d/t/60d7479cf8e7e5461534dd07/1624721314430/SE+Foundation+Commentary+and+core+text+revised+%281%29.pdf.

93 P. Higgins, D. Short & N. South, 'Protecting the Planet: A Proposal for a Law of Ecocide', 59 *Crime Law and Social Change* 251 (2013).

94 R. White, *Theorising Green Criminology: Selected Essays* (2022), White, above, n. 1.

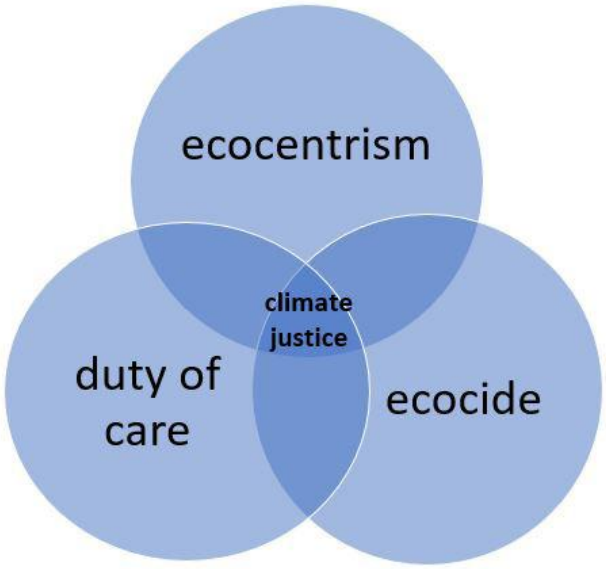
95 O. Hasler, 'Green Criminology and an International Law Against Ecocide: Using Strict Liability and Superior Responsibility to Prevent State and Corporate Denial of Environmental Harms', in J. Gacek and R. Jochelson (eds.), *Green Criminology and the Law* (2022) 387.

96 H. Portner et al., 'IPBES-IPCC Co-sponsored Workshop Report on Biodiversity and Climate Change', (2021), IPBES and IPCC. DOI: 10.5281/zenodo.4782538.

97 Kramer, above n. 11; Van der Velden and White, above n. 3; D. Whyte, *Ecocide: Kill the Corporation before It Kills Us* (2021).

98 D. Rothe and D. Kauzlarich , *Crimes of the Powerful: An Introduction* (2016); S. Tombs and D. Whyte, *The Corporate Criminal: Why Corporations Must Be Abolished* (2015).

*Figure 1* *Overlapping Legal Initiatives Tackling Climate Change Harms*




## 5 Conclusion

Social obligation as a legal phenomenon may be found in statements of general obligation (e.g. environmental duty of care), but the status of this partly depends on whether the sanction includes criminal provisions -denoting that failure to carry out this obligation is regarded as socially and institutionally serious. It may also be found in express commitments not to do harm, as in, for example, proposed ecocide laws that impose penalties for doing the wrong thing. It may also surface in the form of 'rights of Nature' discourse, for example when personhood (and equivalent protections) is granted to the Earth or a particular river or mountain as a legal person. Violation of the integrity of these legal persons therefore constitutes a breach of law and thereby prevents fulfilment of the social obligation to treat the 'other' with full legal respect.

At a practical level, the concept of social obligation also requires some sense of threshold. That is, there must be a metric by which to measure when someone has not fulfilled their legal obligations - i.e. to carry out their duty of care or to not engage in ecocidal activities. This requires a grounded sense of how to determine the nature and quantum of harm, as well as a moral compass. This is certainly feasible, as demonstrated in concrete examples of how ecocentrism is currently being translated into institutional-level practice (for example, the deliberations and assessments by specialist environment courts). A core consideration is how to further embed or institutionalise social obligations to Nature such that environmental harm is minimised. As part of this, it is important that administrative and civil measures interact with criminal law remedies to ensure compliance and to foster the prevention and repair of environmental harm. All these considerations are vital to combatting climate change and enhancing climate justice.

Law reformers argue that the law itself must be radically altered and that fundamental social transformation is required to reset the ecological clock. The push to introduce ecocide as a crime parallels other legal developments such as climate litigation and the use of public interest law to establish future generations as victims of environmental crime, the victims including humans as well as non-human environmental entities such as rivers, for which surrogate victims or stewards (such as NGOs or Indigenous communities) provide representation.[99] Threats to Nature's rights can be conceptualised as, in essence, a crime of ecocide and thus punishable by law. These developments are adding to the complexity of the law and challenging many long-standing assumptions about the Nature-human relationship.

If we imagine the harms of climate change at the fulcrum of legal initiative and future prospects (see Figure 1), then a triumvirate of responses becomes not only evident but also essential.

New ways of thinking - incorporating concerns with ecocentrism, duty of care and ecocide - are important because these concepts can shape the content and substance of obligations, rather than just provide an avenue for recourse. For instance, they provide a platform for holding a government not just to its own legislated targets but, in order to avoid committing ecocide, to the need for *stronger* targets. Acknowledging ecocentric worldviews within policymaking and legal determinations will lead to better laws and better implementation of our current laws. Enacting and implementing reforms underpinned by these ideas and practices require persistent legal activism that substantially challenges the status quo. Such calls for legal reform are simultaneously aspirational as well as designed to shape the wider political agenda.

On their own, climate laws and legal reforms are not enough to fundamentally change the dire circumstances

99 Mehta, above n. 76; White (2022), above n. 94.





doi: 10.5553/ELR.000220

in which we find ourselves, given the strength and range of elite forces ranged against us. Yet rights of Nature laws reinforce the intrinsic value of Mother Earth and particular rivers and mountains, as well as the centrality of stewardship. They also highlight Indigenous claims to custodianship of land and water. Similarly, climate laws do help to set targets and make governments accountable within narrow terms of reference (e.g. carbon emission policies); climate litigation does help to put pressure on governments and companies to change their policies and activities in ways that positively impact on global warming (e.g. industrial processes, deforestation and intergenerational equity); and ecocide laws alert us to the gravity and scope of the harms even if they do not provide immediate workable remedies (e.g. see the history of the ICC). Laws, courts and government policies are fundamentally and inherently political in terms of content and composition. Accordingly, our focus needs to be on the power and interests that perpetuate the global calamities now besetting our planet.

Countries are made up of citizens and residents who have differential access to the levers of power and who command uneven access to and mobilisation of resources. It is governments of nation-states that bear responsibility for climate change policy, but they do so in the context of the interpenetration of corporate and state power. Critical discussion of responsibility, accountability and prosecution must privilege these factors and relationships. Most importantly, there is a need to understand the close structural relationship between states and incorporated entities (that include both private and state corporations) as a fundamental feature of global capitalism. To tackle climate change through law reform is, therefore, inevitably a struggle against elite privilege and structural power. With stakes this high, however, this too is an unavoidable feature of the class dynamics determinate of climate change and attempts to mitigate its causes and adapt to its consequences.



doi: 10.5553/ELR.000220