Unpacking Corporate Due Diligence in Transnational Climate Litigation: A Planetary Perspective

ESMERALDA COLOMBO*

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ABSTRACT: Straddling national and transnational law, corporate due diligence presents a legal quandary. How should business entities address climate change matters? Due diligence generally implies the duty to assess and disclose potential risks and uncertainties in addition to the duty to prevent and manage risks and uncertainties based upon global standards of expected conduct. In this context, has a duty of climate due diligence emerged to protect both society and shareholders? Further, what legal sources are currently shaping climate due diligence?

This article explores the implications of due diligence derived from transnational climate change litigation against business entities. The research field is still nascent — with only one decision clearly addressing the benchmark against which business entities shall conduct climate due diligence. In this landmark case, Milieudefensie v Shell (2021), the District Court of The Hague mandated climate due diligence obligations upon Royal Dutch Shell, as aligned with Dutch tort law, international law, the European Convention on Human Rights case law, and transnational soft law instruments, notably the United Nations’ Guiding Principles on Business and Human Rights (UNGPs) and the reports of the Intergovernmental Panel on Climate Change (IPCC).

Focusing on the underexplored topic of due diligence in transnational law, this article sheds light on the ground-breaking, albeit methodologically problematic, treatment of legal sources in the due diligence benchmark elucidated in Milieudefensie v Shell. Moreover, the paper explores how the planetary boundaries theory can provide courts with a toolbox to operationalise IPCC reports and the UNGPs and anchor them in the doctrine of legal sources for corporate accountability over climate issues. Because no general principle of due diligence exists, transnational climate litigation proves key to articulating science-based business duties in mandatory due diligence over climate matters.

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* Dr. Esmeralda Colombo, Esq., Marie Skłodowska-Curie Postdoctoral Fellow, RFF-CMCC European Institute on Economics and the Environment (EIEE) and Information Systems for Climate science and Decision-making (ISCD) Division (Milan, Italy). E-mail: esmeralda.colombo@cmcc.it. https://orcid.org/0000-0001-7731-9093. The author would like to express her deepest gratitude to the Special Issue Guest Editors, Andreas Hösli and Alessandro Monti, for helpful views on the article and their unrelenting commitment to this special issue. A heartfelt thanks goes to anonymous peer-reviewers for their sharp and supportive comments. This publication resulted in part from research funded by the Professor Arvid Frihagens offentligrettslige minnefond, Saks nr 2019/52/FOL, which I gratefully acknowledge.

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I. Introduction

Over the past few years, a barrage of lawsuits has been filed against corporate and financial entities over climate change-related violations. The phenomenal growth is known as ‘third-wave litigation’, following two more contained waves defined by jurisdiction (i.e. the USA, Australia, or Europe). Third-wave litigation has been marked by an uptick in cases concerning corporate and financial entities and a geographical expansion to 40 countries and 13 regional and international jurisdictions. The legal theories argued are often novel and aim at strategically establishing at least four types of corporate climate responsibility: (1) for historical and present emissions of carbon majors, pertaining to the energy sector, and other emitters (e.g. in the transport and meat industries); (2) for deceptive action concerning climate change (e.g. fraud and misrepresentation) or corporate mitigation policies (e.g. greenwashing); (3) for any inadequate accounting of assessment and management risks and duties, including the fiduciary duties of disclosure and corporate due diligence over climate change; and (4) for the inadequate discharge of climate-related human rights responsibilities and tort-based duties, including through corporate due diligence.

Stemming from its increasing invocation, the topic of due diligence has raised several questions of late. For example, how should business entities address climate change matters? Due diligence means undertaking controlled processes to identify, prevent, and manage risks and uncertainties. It generally implies the duty to assess and disclose potential risks and uncertainties, but also a duty to prevent and manage risks and uncertainties against global standards of expected conduct, namely a benchmark. Consequently, has a duty of climate due diligence emerged to protect society and shareholders? As such, what legal sources are currently shaping climate due diligence?

This article explores the implications of due diligence derived from transnational climate litigation against business entities. While its definition is not settled, transnational climate litigation refers to the intrinsically transnational elements of climate litigation, which is part of a global climate justice movement, as well as to the operationalizations of transnational concepts or norms, such as ‘due diligence’ in climate adjudication. Because no general principle of due diligence exists, transnational

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1 See the increase since 2015 in M. Golnaraghi et al., Climate Change Litigation – Insights into the evolving global landscape (Geneva: Geneva Association 2021), p. 21.
2 Ibid., pp. 6 and 13 ff.
3 The typology of corporate climate litigation proposed is part of the original contribution of this article.
7 Milieudefensie v Royal Dutch Shell, ECLI:NL:RBDHA:2021: 5337 (District Court of The Hague, 26 May 2021). Enov Vert et al v Casino (Tribunal of Saint Etienne, 2 March 2021; complaint). The proposed typology of four types of responsibility does not include indirect responsibility through climate litigation against state actors, for instance over state subsidies to carbon-intensive industries, see also J. Setzer and C. Higham, ‘Global trends in climate change litigation: 2021 snapshot’ (London: Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science, 2021), pp. 35ff, or the approval and renewal of carbon-intensive projects and strategies, ibid., pp. 35–36. Climate litigation can be filed for antiregulatory purposes, but it most often promotes and achieves court decisions for increased climate commitments. See J. Setzer and C. Higham, ‘Global trends in climate change litigation: 2022 snapshot’ (London: Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science, 2022), p. 6. For antiregulatory litigation, see e.g., In re Exxon Mobil Corp 20-0558 (Supreme Court of Texas, 9 October 2021, complaint).
climate litigation proves key to articulating specific business duties in mandatory due diligence.

The focus on litigation is timely. Up to this date, claims concerning corporate due diligence keep on breaking new legal grounds. Further, litigation seems to be hovering over policy proposals on due diligence, notably at the EU level, where lack of reference to the Paris Agreement and the generally low level of ambition of the Commission’s proposal of a Corporate Sustainability Due Diligence Directive are telling of policymakers’ self-restraint in hammering out due diligence obligations due to corporate climate litigation risk. What is particularly worrisome for policymakers and corporate actors is the first-ever victory of a corporate climate case in terms of climate protection. On 26 May 2021, the District Court of The Hague, a Dutch court of first instance, held Royal Dutch Shell responsible for its contribution to climate change. Hailed as a revolutionary decision, Milieudefensie v Shell constitutes the first instance of the pro-regulatory adjudication of climate-related duties for businesses, namely the enhancement and acceleration of climate policies at the corporate level through litigation. This paper argues that Milieudefensie v Shell is an important contribution to transnational climate litigation jurisprudence. The reason lies in that the judgment operationalises the transnational concept of ‘due diligence’ through its application of Dutch law provisions and transnational law instruments. Nevertheless, the judgment suffers from a number of challenge ff. at limit its transnational application. Notably, the ripple effects of the decision remain unclear, with some eye-brows raised in reaction to the court’s legal reasoning.

For the further adjudication and replicability of the case, as well as for other types of climate due diligence claims, it is of interest to elucidate the court’s application of legal sources when shaping the benchmark of climate due diligence for Royal Dutch Shell.

Moreover, a meta-reflection on Milieudefensie v Shell provides an ideal opportunity to problematise and elucidate some outstanding ambiguities in the concept of climate due diligence, notably the application of transnational soft law. This article aims to help fill this gap by examining due diligence in transnational law, where the planetary boundaries theory can provide courts with a toolbox to operationalise IPCC reports and the UNGPs. This interdisciplinary approach to due diligence, involving climate science and the social sciences, may better anchor relevant sources of transnational soft law in the doctrine of legal sources for corporate accountability over climate issues. However, the study of due diligence is still in its infancy in relation to the examination of climate matters from the perspective of transnational law and interdisciplinary studies. Consequently, this article cannot possibly ‘unpack’ all outstanding issues covered by corporate due diligence over climate matters fully.

The following is premised on several assumptions and limitations. First, by climate litigation, I mean judicial ‘litigation where climate change or greenhouse gases are an explicit subject of the case, though not necessarily the only subject’. In this context, climate litigation is transnational when it purports to apply a set of legal principles developed at the international and transnational levels across jurisdictional borders. While the traditionalist approach to international law has resisted directly imposing legal duties upon businesses, calls for a modernised doctrine

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14 A. Van den Bergh et al., ‘Crucial Moment to Ensure EU Companies Respect the Paris Agreement Due to Corporate Climate Litigation Risk’ (Euronews Green, 8 Feb 2023).
20 On the informal law character of the UNGPs and IPCC reports, see Colombo, ‘Access to justice reloaded’, pp. 58 and 103.
23 On the traditionalist approach, see S.R. Ratner, ‘Business’ in D. Bodansky, J. Brunnée and E. Hey (eds), The Oxford Handbook
have been launched.\textsuperscript{24} Such calls follow a turn to transnational law, which moves beyond the state to shed light on the interaction of public and private actors,\textsuperscript{25} the breaking of traditional ‘frames’ in the domestic adjudication of soft law,\textsuperscript{26} and the transjurisdictional crossing of legal ideas and practice.\textsuperscript{27} Ultimately, the result is ‘transnational public law litigation’, a unique merging of international law – classically bound by state-to-state relations – and domestic fora – available against states and private actors but traditionally applying domestic law.\textsuperscript{28} In this article, I argue that Milieudefensie v Shell falls within what can be argued to be transnational private law litigation, given the pivotal role of tort law to operationalise human rights hard and soft law.\textsuperscript{29}

The article proceeds as follows. Firstly, it examines climate due diligence as originating from transnational law, implying the lack of a consensus-based and coherent single approach to its articulation and deployment. Second-\textsuperscript{ly,} it summarises Milieudefensie v Shell and clarifies the court’s use of transnational soft law in shaping mandatory due diligence over climate change, discussing the problems and process entailed in this approach. Section 3 offers a novel, planetary perspective that can better anchor Milieudefensie v Shell in the doctrine of legal sources, with broader ramifications for climate litigation. Finally, conclusive remarks are offered on the developments brought by transnational litigation to the fluid regulatory architecture of corporate climate due diligence.

II. Due Diligence in Transnational Law

Originating from Roman private law,\textsuperscript{30} due diligence mutated to interstate relations when 17th-century jurists of the calibre of Grotius and Pufendorf shaped a notion of diligence in matters of diplomatic protection. Pursuant to this notion, sovereign states were bound to prevent injury, punish acts of violence, and provide reparations for injuries to foreign nationals.\textsuperscript{31} The historical framework of due diligence obligations in international law follows this development. It rests with the so-called Alabama principles, mandating states to organise their territory to comply with international obligations, including supervision of the activities of non-state actors.\textsuperscript{32} Over time, due diligence seems to have displaced the once fundamental distinction between public and private activities,\textsuperscript{33} leading to two notable developments: states’ obligation of diligent control over sources of harm constituted by non-state actors – even beyond their jurisdiction\textsuperscript{34} – and the imposition of a flexible set of procedures and obligations upon non-state actors.\textsuperscript{35}


Gradually, due diligence has emerged as a controlled set of processes that help identify, prevent, and manage risks and uncertainties. Absent a general principle of due diligence, the latter depends on the substantive standards of each regime. This means that due diligence is not a legally binding duty in and of itself: it rather operationalises existing standards of conduct spanning several branches of law. Such standards are embedded in primary rules that, in fact, determine the typology of due diligence obligations, which can be of conduct alone or also based upon results. If international law–based due diligence is an obligation, which can be of conduct alone or also based upon rules that, in fact, determine the typology of due diligence obligations, which can be of conduct alone or also based upon results. If international law–based due diligence is mainly applied to private parties indirectly, it should be stressed that due diligence also originates at the national and transnational levels, often importing direct accountability. Because of its contextual nature, it is not recommended to insist on a generalised set of due diligence obligations. Instead, the following elucidates the under-explored notion of the due diligence of non-state actors in transnational law.

The current due diligence discourse is rooted in a transnational social norm, not an international legal norm. This transnational social norm has grown by the accumulation of multiple voluntary instruments, starting in the 1970s, when codes of conduct arose in response to increased concerns over the activities of transnational corporations (TNCs). Often instigated by intergovernmental organisations and interspersed with references to international law, codes of conduct have been established through a bottom-up approach, with the participation of global corporate actors. As transnational soft law instruments, codes of conduct contribute to breaking the frame of the state monopoly of control over non-state actors. Turning to transnational law to impose obligations on business and financial entities counters the notion, embedded in mainstream international law theory, that corporate actors are not formal subjects of international law. In this regard, the OECD Guidelines for Multinational Enterprises, the 2011 UN Guiding Principles on Business and Human Rights, and the UN Global Compact Principles rank among the most influential transnational initiatives.

To understand businesses as actors in terms of climate due diligence, one should turn to the UN Guiding Principles on Business and Human Rights (UNGPs), the international standard in the field of business and human rights. The UNGPs consist of 31 principles that the UN Human Rights Council endorsed in 2011. Built on the Protect, Respect, and Remedy framework, the UNGPs require that states protect human rights, that enterprises respect human rights, and that victims of human rights abuses are granted access to effective remedies.

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45 Benjamin, ‘The Responsibilities of Corporations’, p. 235, including relevant references.
UNGPs can be applied to all enterprises, including investors.50

Due diligence appears in the second pillar of the UNGPs, which addresses human rights and includes adopting a human rights policy, assessing the human rights impacts ensuing from business endeavours, the integration of the findings and appropriate action, and tracking and monitoring activities.51 Nevertheless, businesses routinely carry out due diligence processes to manage risks for particular transactions, including environmental and social risks,52 the UNGPs require due diligence for the business as a whole and add a standard of conduct.53 In 2011, the OECD Guidelines for Multinational Enterprises were updated to align with the UNGPs. In this context, two provisions are particularly relevant: that enterprises shall ‘[s]eek ways to prevent or mitigate adverse human rights impacts that are directly linked to their business operations, products or services by a business relationship, even if they do not contribute to those impacts’,54 tracking UN Guiding Principle 13; and that enterprises ‘[c]arry out human rights due diligence as appropriate to their size, the nature and context of operations and the severity of the risks of adverse human rights impacts’,55 tracking UN Guiding Principle 17. Nevertheless, the referenced instruments remain soft law, and many corporations fall short of integrating human rights due diligence into their existing corporate risk management systems, with subsequent missed opportunities to gauge and prevent adverse human rights impacts.56 Climate litigation is arguably a reaction to regulatory shortcomings,57 notably states’ failure to effectively mitigate or adapt to climate change,58 including by instigating diligent behaviours in enterprises.

While mainstream legal theory posits that state and non-state regulations are mutually exclusive, transnational legal theory helps shine the spotlight on ‘transnational corporate governance’, namely the entwinement of different regulatory regime actors and processes for the overall regulation of corporate actors through private and public ‘blended’ objectives.59

III. Climate Due Diligence in Transnational Law

Climate due diligence is a relatively novel concept, defined as an ‘emerging notion […] requiring corporations to assess and address risk, as well as to integrate the climate change dimension into vigilance planning, corporate reporting, external communication and investment decisions’.60 In this narrow construction, the climate constitutes a dimension of human rights due diligence.61 Beyond human rights due diligence, certain extant principles of international law can influence the interpretation of any due diligence standard of care relating to the environment, notably the prevention and precaution principles.62 To this end, legislative initiatives on mandatory due diligence are tentatively shaping a coherent framework for both human rights and environmental due diligence, including on climate change, but the concrete implications


52 Lindsay, ‘Human rights responsibilities in the oil and gas sector: applying the UN Guiding Principles’, p. 19.


55 Ibid., IV.5 (emphasis added).


60 Ibid., p. 94.

of this broad notion of due diligence remain unclear. It seems assured that the due diligence steps required by each business will be influenced by the sector, size, and context of its operations, but the benchmarks of climate due diligence for each sector and industry have yet to emerge.

Overall, the translation of the UNGPs into climate matters has been problematic, and mainstream corporate practice has yet incorporated little climate due diligence. A first reason can be seen in the lack of a specific focus on the UNGPs on human rights violations that are not only direct but also cumulative, such as those accruing from activities contributing to environmental damage and climate change. Further, because the UNGPs are entrenched in the social norm of corporate compliance with human rights (supra 2), the protection of non-anthropocentric interests (e.g. nature conservation) is not directly limned within them. A third reason for the missing translation can be found in the soft law quality of the UNGPs. This attribute characterises them as an instrument of voluntary implementation that may be subject to the whims of private entities until enforceability is imposed by either legislation or adjudication, making the UNGPs dependent on state-centric enforcement tools. Fourthly, climate impacts spread and multiply across global value chains (GVCs), which are networks of labor and production processes whose end result is a finished commodity. The coordination of GVCs varies, ranging from compact to fluid value chains that can avoid liability for their adverse impacts. Such an accountability gap occurs through the fiction of the corporate veil, which construes each separately incorporated subsidiary as a distinct legal person. At times, domestic courts have been able to devise and apply civil liability theory to pierce the corporate veil and impose responsibility on the parent firm for the conduct of a subsidiary. This approach is a notable development leading to corporate value chain liability models, whereby under certain circumstances, a company can be held liable for damage-causing events in its value chain. The UNGPs engage in regulating GVCs through the concept of leverage, defined as the ability to wield corporate power to change the practice of business partners across the value chain. However, the relevant norms derivable from the UNGPs are still opaque. For example, the UNGPs do not clarify whether a parent company is automatically responsible for the conduct of one of the businesses in the

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64 Macchi, ‘The Climate Change Dimension of Business and Human Rights’, p. 112.
67 See, however, the recognition of ‘delayed effects’ and environmental impacts in OHCHR, The Corporate Responsibility to Respect Human Rights. An Interpretive Guide, UN Doc HR/PUB/12/02. (2012), pp. 8 and 53. See also Lindsay et al., ‘Human rights responsibilities in the oil and gas sector’.
68 Teubner, ‘Costituzionalismo della società transnazionale’, p. 4.
70 A. Aseeva, ‘Intergenerational Climate Justice’ in T. Cottier, S. Lalani and C. Siziba (eds.) Intergenerational Equity Environment and Cultural Concerns (Leiden: Brill, 2019), pp. 54–56. See also Lindsay, ‘Human rights responsibilities in the oil and gas sector’, p. 44.
74 UNGP 22.
Duty of Vigilance imposes parent-based due diligence obligations covering both human rights and the environment.\textsuperscript{75} Comparatively, only France’s 2017 Law on the Duty of Vigilance imposes parent-based due diligence obligations covering both human rights and the environment.\textsuperscript{76}

This four-pronged reasoning results in the following reflection. Climate due diligence lacks a coherent, contextual, and enforceable set of approaches across industries regarding its articulation and deployment. The adequate protection of human rights and globally shared resources (e.g. the climate system) is thus at risk. Notably, the most influential standard in the field, the UNGPs, was meant to signify a transition from the primacy of shareholder value to stakeholder interests\textsuperscript{77} in the process of self-limitation of corporate power when the latter results in abuse. Given the steady increase of GHGs and lacking cogency of net-zero commitments,\textsuperscript{78} the transition to stakeholder interests does not seem to have occurred. The underlying dynamic is arguably socio-legal: corporations do not voluntarily practice self-limitation due to their natural tendency towards expansion.\textsuperscript{79} Outsiders, such as political actors and social movements, have the intrinsic motivation to limit corporate expansionism, but these actors usually lack the competence to calibrate productivity and restraint.\textsuperscript{80} The extant ‘motivation–competence–dilemma’ can be overcome only by a different and more independent dynamic of corporate limitation,\textsuperscript{81} which domestic courts are painstakingly attempting to shape (\textit{infra 2}).

\textbf{IV. A Case Study on Transnational Climate Due Diligence: \textit{Milieudefensie v Shell}}

\textbf{A. Case Summary}

In 2019, six NGOs and over 17,000 people lodged a complaint with The Hague District Court requesting that it order the oil and gas company Royal Dutch Shell (RDS) to reduce all its CO\textsubscript{2} emissions by 45% by 2030 and by 72% by 2040, compared to 2010 levels, as well as to reduce emissions to zero by 2050, pursuant to the Paris Agreement.\textsuperscript{82} On 26 May 2021, the District Court of The Hague largely supported the plaintiffs’ construction of RDS’s legal duties and ordered the company to reduce its CO\textsubscript{2} emissions by a net 45% by 2030, compared to 2019 levels. The reduction is to be effected through the Shell Group’s corporate policy because RDS is the overall holding company of the Shell Group and determines its general policy.\textsuperscript{83} Rather than tagging RDS’s conduct as unlawful, the court chose to certify RDS’s imminent violation of its emissions reduction duties, thus framing its decision as ‘an order for compliance’.\textsuperscript{84} Furthermore, because RDS was in the process of modifying its corporate policy, the court rejected the plaintiffs’ claims concerning the unlawfulness of future actions by Shell.\textsuperscript{85} On 20 July 2021, Royal Dutch Shell appealed the decision.

This article focuses on the climate due diligence dimensions of the decision and, precisely, on the court’s use of transnational soft law to flesh out RDS’s due care. The court-mandated climate due diligence obligations upon RDS as aligned with Dutch tort law, international law, ECHR law, and transnational soft law instruments, notably the United Nations’ Guiding Principles on Business and Human Rights and IPCC reports. In particular, by translating the landmark case Urgenda to apply to business matters,\textsuperscript{86} \textit{Milieudefensie et al. v Royal Dutch Shell} is the first climate ruling imposing obligations on businesses that are partly grounded in international law and trans-

\textsuperscript{75} Lindsay et al., ‘Human rights responsibilities in the oil and gas sector’, p. 15.


\textsuperscript{77} See also Teubner, ‘Costituzionalismo della società transnazionale’, p. 4.


\textsuperscript{79} D. Carlin, ‘Separating Green from Greenwash: Key Questions For Evaluating Net-Zero Commitments: Part I’ Forbes, 28 April 2022.


\textsuperscript{81} Ibid., pp. 330–331.

\textsuperscript{82} Milieudefensie et al. v. Royal Dutch Shell plc. Hague District Court, 90046903 (5 April 2019: summons), p. 204.

\textsuperscript{83} Milieudefensie et al. v. Royal Dutch Shell, paras 2.2, 4.1.4, 4.5.3 and 4.4.55.

\textsuperscript{84} Ibid., para 4.5.3.

\textsuperscript{85} Ibid., para 4.5.10.

national law.87 The decision spelt out RDS’s inadequate discharge of climate-related human rights responsibilities and tort-based duties, including those related to corporate due diligence.88

The pivoting provision in Milieudefensie et al. v Royal Dutch Shell concerns hazardous negligence and is enshrined in Book 6 Section 162 of the Dutch Civil Code. It rests on an unwritten standard of care by which ‘acting in conflict with what is generally accepted according to unwritten law is unlawful’.89

The court interpreted the unwritten standard by assessing all circumstances of the case at hand.90 In particular, for the purpose of this article, two questions were particularly relevant: What is the widespread international consensus, as anchored in the best available science, on how to prevent dangerous climate change? Secondly, what is the widespread international consensus on corporate duties to protect human rights against the impacts of dangerous climate change?91 When replying to such leading questions, the court resorted to an innovative bundle of legal sources, making the unwritten standard of care a door-opener for the application of international, EU, ECHR, and transnational law.92

In terms of science, the court fleshed out the standard of care with the goals of the Paris Agreement (Article 2), particularly the goal of keeping the global temperature increase limit to well below 2°C above pre-industrial levels, aiming at 1.5°C above pre-industrial levels.93 Such goals were construed as deriving from the IPCC reports and constituting the best available findings in climate science, supported by widespread international consensus.94 In the court’s construction, the IPCC reports seem to constitute transnational soft law that can be hardened by reference to an international treaty.95

Remarking on the application of the IPCC reports, the court considered the global carbon budget, namely the amount of carbon dioxide emissions permitted over a period of time to keep the globe within a determined temperature increase limit. It found that the remaining global carbon budget is less than 30 parts per million (ppm) against the temperature increase limit of 1.5°C above pre-industrial levels, which led to the court’s deployment of the IPCC Special Report on Global Warming of 1.5°C (IPCC SR 1.5) onto RDS.96 This unprecedented application was based on the asserted ‘widely endorsed consensus’ that aiming at 1.5°C above pre-industrial levels equals a reduction in CO₂ emissions by a net 45% in 2030, relative to 2010 levels, and by a net 100% in 2050.97 Overall, the court found these targets to be the best possible chance to prevent the most severe consequences of dangerous climate change.98

In terms of existing duties to protect human rights against the impacts of dangerous climate change, the court established that climate change affects the entire spectrum of human rights.99 It expressly referred to the right to life and the right to respect for private and family life, as enshrined in Articles 2 and 8 of the European Convention on Human Rights and Articles 6 and 17 of the UN International Covenant on Civil and Political Rights. The court also discussed the content of these rights by reference to authoritative opinions by the UN Human Rights Committee and the UN Special Rapporteur on Human Rights and the environment, Prof. David R. Boyd.100

When ascertaining the unwritten standard of due care, the court deployed the UNGPs. It did so by emphasising that the UNGPs can be applied beyond a corporation’s voluntary adoption because they constitute ‘an authoritative and internationally endorsed «soft law» instrument’ that sets out the responsibilities of states and businesses in relation to human rights.101 Here, the court implied a causal relationship between corporate emissions and human rights abuses. In this sense, it mimicked the different levels of responsibility laid out in the UNGPs (supra 3) by shaping a test defined by control and influence: namely, RDS’s control over the Shell Group’s emissions and RDS’s influence over emissions occurring across the Shell Group’s value chain, including business partners

87 Nollkaemper, ‘Shell’s Responsibility’.
88 On this type of litigation, supra 1.
89 Dutch Civil Code, Book 6 Section 162 Dutch Civil Code.
90 Milieudefensie et al. v. Royal Dutch Shell concerns hazardous negligence and is enshrined in Book 6 Section 162 of the Dutch Civil Code. It rests on an unwritten standard of care by which ‘acting in conflict with what is generally accepted according to unwritten law is unlawful’.
92 Nollkaemper, ‘Shell’s Responsibility’.
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98 Milieudefensie et al v Royal Dutch Shell plc, 4.4.29.
99 Ibid., para 4.4.10.
101 Milieudefensie et al v Royal Dutch Shell plc, para 4.4.11.
and end-users.\textsuperscript{102} Value chain emissions, known as Scope 3 emissions, were the most controversial and constituted the bulk of the Shell Group’s emissions (85%).\textsuperscript{103} By citing a report known as the ‘Oxford Report’, the court found it internationally endorsed that companies bear responsibilities for Scope 3 emissions.\textsuperscript{104}

Eventually, the court bridged its considerations on climate science and human rights by specifying the required standard of care to which RDS is bound. To this end, the court imposed on RDS an obligation to set a corporate policy targeting a reduction in net emissions by 45% relative to 2019 across all types of emissions (Scope 1, Scope 2, and Scope 3). In addition, the court modulated RDS’s obligation regarding the emissions attributable to the Shell Group (Scope 1 and Scope 2 emissions) as an obligation of results.\textsuperscript{105} Conversely, Scope 2 emissions not attributable to the Shell Group and Scope 3 emissions were to be reduced as a best-efforts obligation with regard to the business relations of the Shell Group, including end-users.\textsuperscript{106} Additionally, the court applied a less stringent base year for Shell, 2019, instead of the base year that science recommended (i.e. 2010). It did so by attributing the choice of the base year to plaintiffs.\textsuperscript{107} Overall, the court clarified that RDS was granted discretion to choose the reduction pathway to attain such goals, including by compensating CO\textsubscript{2} emissions through negative emissions technologies. At the same time, the plaintiffs had excluded such a pathway component based on several reports (e.g. by the influential Science-Based Targets initiative).\textsuperscript{108}

As the last step in its line of reasoning, the court carried out a proportionality test that seems moulded on the test used by the District Court of The Hague in Urgenda and initially coined by the Dutch Supreme Court in 1965 in the landmark Cellar Hatch case, known in Dutch as Kelderluik.\textsuperscript{109} The latter established a rule of thumb for determining the conduct required of non-state actors in tort cases. Applied to Milieudefensie v Shell in climate change matters, it went as follows: (i) given the degree of probability of corporate activities as the cause of climate change\textsuperscript{110} and (ii) the degree of likelihood that massive and irreversible disruptions of global ecosystems would ensue,\textsuperscript{111} the sole element left to consider was (iii) whether the mandated emissions reduction policy target would disproportionately burden RDS.\textsuperscript{112} Eventually, the court found that the mandated target for the Shell Group was proportional because any adverse consequences of the court decision would be outweighed by the effective abatement of emissions across the Shell Group to counter dangerous climate change.\textsuperscript{113}

Ultimately, the canon of due diligence derived by The Hague District Court in Milieudefensie v Shell implies more than a basic duty to assess and disclose potential risks and uncertainties of carbon-intensive emissions, which RDS has already started carrying out. It also includes a duty to prevent and manage risks and uncertainties against global standards of expected conduct,\textsuperscript{114} namely a benchmark that the court derived from transnational law, including the operationalization of IPCC reports through the UNGPs.

Conclusively, the court in Milieudefensie v Shell applied transnational soft law as an interpretative parameter to establish due care in corporate climate mitigation policy. Known for the indirect application of international law in domestic courts, this mechanism eschews the need for the applicable norms to have a direct horizontal effect on corporations.\textsuperscript{115} However, the overall result is staggering if we consider that many of the sources applied in the decision to derive the existence of an international consensus were not meant to be binding (infra 4.2).

\textsuperscript{102} Ibid., 4.4.17 ff. and 4.4.37 ff.
\textsuperscript{103} Ibid., 2.5.5, referring to 2018.
\textsuperscript{104} Ibid., paras 4.2 and 4.4.18.
\textsuperscript{105} The court only mentions Scope 1 emissions, but see similarly Macchi and von Zeben, ‘Business and human rights implications of climate change litigation,’ p. 5.
\textsuperscript{106} Milieudefensie et al v Royal Dutch Shell plc, paras 4.4.23, 4.4.24 and 4.4.39. Cf 4.4.37 where the court bundles together all types of emissions, see also Hösl, ‘Milieudefensie et al. v Shell’, p. 203.
\textsuperscript{107} Milieudefensie et al v Royal Dutch Shell plc, paras 4.1.1 and 4.4.38.
\textsuperscript{108} Ibid., paras 4.4.29-4.4.30. Milieudefensie et al v Royal Dutch Shell plc (summons), paras 756 f.
\textsuperscript{110} Urgenda v The Netherlands (first instance), para 4.19. Milieudefensie et al v Royal Dutch Shell plc, paras 4.4.54 ff.
\textsuperscript{111} Urgenda v The Netherlands (first instance), para 4.63. Milieudefensie et al v Royal Dutch Shell plc, paras 4.4.54 ff.
\textsuperscript{112} Urgenda v The Netherlands (first instance), para 4.19. Milieudefensie et al v Royal Dutch Shell plc, paras 4.4.54 ff.
\textsuperscript{113} Milieudefensie et al v Royal Dutch Shell plc, para 4.4.54.
\textsuperscript{114} Ibid., para 4.1.4. Supra 2.
B. Problems and Process in Climate Due Diligence

As previously explained, *Milieudefensie v Shell* is a revolutionary decision. It obliged a global energy company, RDS, to carry out mandatory due diligence across its value chain and shaped the relevant benchmark of due care by referencing transnational soft law. As such, *Milieudefensie v Shell* pertains to what I previously termed transnational private law litigation (*supra* 1), epitomising the ‘next generation’ of climate litigation, which seeks systemic impact through the establishment of duties of protection.  

This section clarifies the court’s use of transnational soft law in shaping mandatory due diligence over climate change, discussing the problems and process entailed in this use with respect to the two leading questions the court tried to answer (*supra* 4.1) on (i) the scientific basis for preventing dangerous climate change and (ii) corporate duties to protect human rights against the impacts of dangerous climate change.

In terms of climate science, to better operationalise the IPCC reports, the court deployed the Oxford Report on mapping current practices around net-zero targets to establish the existence of an international consensus regarding the corporate responsibility to reduce Scope 3 emissions (*supra* 4.1). However, the Oxford Report mentions varied, rather than consensual, practice on the coverage of Scope 3 emissions by net-zero targets.  

Conversely, important takeaways that reveal an international consensus – for instance, the Oxford Report’s coverage of all greenhouse gases (GHGs) in net-zero targets – did not influence the court’s adjudication of CO₂ reductions alone across the Shell Group’s value chain. More generally, based on a questionnaire and online discussions, the Oxford Report does not explain its methodology, for instance, how the questionnaire participants were selected, and the conclusions reached.

Further, the court found that the goals of the Paris Agreement represent the best available scientific findings in climate science, but it incorrectly qualified the Paris Agreement as ‘non-binding on the signatories,’ namely states, which makes it problematic for the court to derive an indirect effect from the Paris Agreement vis-à-vis an actor like RDS.  

Further problem concerns the determination of the emissions reduction target of a net 45% by 2030 (*supra* 4.1). As reported by the court, the target is anchored in the IPCC SR 1.5 report and the IEA’s Net-Zero emissions by 2050 scenario.  

However, the content and function of the two reports are markedly different, and only the IEA referred to sectoral emissions reduction targets for the energy industry.

In terms of corporate duties to protect human rights, the court did not clarify the mechanics of translating provisions pertaining to international law (the Paris Agreement), regional law (the ECHR) or transnational law (the UNGPs) into corporate obligations. Instead, it mentioned the overall indirectness of human rights obligations for a corporation such as RDS, deeming human rights law nonetheless indirectly relevant for corporations to shape the unwritten standard of care in Dutch law.

The court cannot be blamed for dodging the indirectness of human rights obligations for non-state actors, which is a minefield in international law. Traditional approaches to international law – especially the positivist school – have deployed the terms ‘subjects,’ which designate states as the makers of international law, and ‘objects,’ which designate the receivers of international law.  

Further, when all actors of international law are classified as ‘subjects,’ the underlining notion remains the same: in traditional approaches to international law, states are the primary subjects.  

Accordingly, human rights are limitations on state power only and do not apply when companies’ conduct interferes with the climate system and thus adversely affects human rights via climate change.

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119 Milieudefensie et al v Royal Dutch Shell plc, para 3.2.


121 Milieudefensie et al v Royal Dutch Shell plc, paras 4.4.9ff and 4.5.4.


124 On this assumption, see Reinisch, ‘The Changing International Legal Framework’; p. 38. But see the prosecution of German industrialists by the Nuremberg Tribunal, as reported by H.H. Koh, ‘Separating Myth from Reality about Corporate Respon-
ing for it, is a different – pluralist – approach to transnational norms and standards, where the regulatory architecture is markedly fluid and horizontal. Following this approach, the regulatory architecture comprises binding and non-binding norms where companies are already acknowledged as both ‘makers’ and ‘takers’ of international law.\textsuperscript{125} Such a conclusion conforms with recent developments in international law, which I briefly illustrate below.

For the most part, the argument that businesses can be held liable for human rights abuses in domestic courts across the globe is no longer subject to debate.\textsuperscript{126} This liability is the flip side of these actors’ ‘bearing […] of substantive international law rights’.\textsuperscript{127} According to this line of reasoning, if businesses hold rights, they also have duties. Accordingly, courts routinely award remedies for human rights violations perpetrated by business and financial entities based on domestic and international law.\textsuperscript{128} However, this avenue of corporate accountability has been traditionally countered by international law doctrine as it would imply businesses’ legal duties,\textsuperscript{129} with some exceptions.

Nevertheless, avenues of responsibility exist: states have sometimes incorporated entities’ self-regulation in court-enforceable legislation,\textsuperscript{130} and domestic courts have recently applied international law\textsuperscript{131} and the UNGPs\textsuperscript{132} directly upon entities. In addition, international bodies have also relied on the UNGPs.\textsuperscript{133} A notable example is the Office of the High Commissioner for Human Rights’ (OHCHR) endorsement of the UNGPs in climate change matters.\textsuperscript{134} Accordingly, the Special Rapporteur for Human Rights and the Environment, Prof. Boyd, argued that, as a first step, businesses should comply with the UNGPs and apply them in climate change matters.\textsuperscript{135}

Importantly, the extant regulatory architecture embodies the growing privatisation of rights, or Driftwirkung (i.e. third-party effect).\textsuperscript{136} In relation to transnational law provisions. This shift can explain why businesses and financial entities are increasingly included in expectations of climate change litigation applying transnational law.\textsuperscript{137} Against this backdrop, Milieudefensie v Shell – for the first time – explicates the third-party effects of transnational soft law provisions, notably the UNGPs, in climate change matters. Such effects unfolded due to a court decision concerning both international human rights and international climate law. More concretely, to establish RDS’s responsibility, the court fashioned a test based on RDS’s influence or control (supra 4.1). This test rests on corporate value chain liability models that have emerged through a transjudicial dialogue among domestic courts adjudicating the violation of human rights in environmental matters, including by subsidiaries of RDS.\textsuperscript{138}

The current privatisation of rights, as examined above, substantially decreases the juggernaut caused by Milieudefensie v Shell, where the court applied a pluralist approach to transnational soft law. Within such an approach, transnational soft law may in practice take on a binding effect, which goes beyond the canon of formal law and lays bare the crucial role of informal law at the transnational level (supra 4.1). Informal law rests with ‘those normative global processes that prima facie fall outside the traditional scope of «law» but may nevertheless be seen as


\textsuperscript{127} Higgins, Problems and Process: International Law and How We Use It, p. 55.


\textsuperscript{129} This doctrinal stance is described by Ratner, ‘Business’, p. 811. See also Ruggie, ‘Guiding Principles on Business and Human Rights’, para 55, on the corporate responsibility to respect as ‘a standard of expected conduct’.


\textsuperscript{132} See, e.g. Choc v Hudbay Minerals Inc, 2013 ONSC 1414 (Ontario), para 34; University of Stellenbosch Legal Aid Clinic and others v Minister of Justice and Correctional Services and others (16703/14) [2015] ZAWCHC 99; 2015 (5) SA 221 (WCC); [2015] 3 All SA 644 (WCC); (2015) 36 ILJ 2558 (WCC) (8 July 2015) (South Africa), paras 71–74, see in particular ibid., para 73.

\textsuperscript{133} CESCR, General Comment No 24 on State Obligations under the International Covenant on Economic, Social and Cultural Rights in the Context of Business Activities, UN Doc. E/C.12/GC/24 (10 August 2017), para 2.

\textsuperscript{134} OHCHR, Understanding Human Rights and Climate Change (OHCHR Submission to the 21st Conference of the Parties to the UNFCCC, 2015), p. 4.

\textsuperscript{135} Boyd, ‘Safe climate’, para 71. See similarly Milieudefensie et al v Royal Dutch Shell plc, 90046903 (The Hague District Court, 5 April 2019, complaint), paras 710 ff.


\textsuperscript{138} Supra. 4.
forming part of a lawmaking process. Informal law, in particular, captures the law-making role of non-state actors and can explain the entwinements of social norms and legal rules, infusing law with a flexible, Janus-faced character. In brief, informal law represents social and legal norms simultaneously. Although the court did not seem aware of the pluralist approach to transnational soft law it adopted in practice, Milieudefensie v Shell constitutes an important decision for the theory on legal sources as it helps moderate the binary thinking between binding and non-binding legal sources. It may also elucidate the premises for turning non-binding instruments into instruments with a de facto binding effect. Such premises seemingly rest with the consensual nature of informal law instruments that cover social expectations over companies (e.g. UNGPs) and the authoritative character of the epistemic instruments deployed (e.g. the Oxford Report and IPCC reports).

Overall, the District Court of The Hague is to be commended for deepening climate due diligence’s science and human rights profiles by considering complex climate data and human rights sources. After analysing Milieudefensie v Shell, however, it is difficult to pin down which legal sources are currently shaping climate due diligence. In fact, the analysis above has displayed some outstanding problems in the use of sources that could hamper the ‘snowballing’ effect this decision has rightly been deemed to have on companies. Further, some more clarity is necessary for at least two reasons. First, the doctrine of applicable legal sources should be clarified because corporate accountability over climate change has been historically challenging to establish vis-à-vis corporations and requires methodological care. Second, further instances in the case may helpfully illuminate the sources shaping climate due diligence in light of the grandness of RDS’s obligations arising from the decision. Recent commentaries suggest that Milieudefensie v Shell implies emissions reductions by 740 million tonnes of CO₂ a year by 2030, which exceeds the total yearly emissions of Germany.

Conclusively, notwithstanding its ground-breaking argumentation and deployment of transnational law, some methodological aspects highlighted by the previous discussion may limit the transnational application of Milieudefensie v Shell. Overall, a novel planetary perspective can better anchor Milieudefensie v Shell in the doctrine of legal sources, with ramifications for climate litigation more broadly (infra 5).

V. A Planetary Perspective in Climate Due Diligence

A. Operationalising Climate Science

To determine the science for preventing dangerous climate change, the court in Milieudefensie v Shell deployed soft law, notably the Oxford, IEA, and IPCC reports, to derive the climate due diligence benchmark RDS needs to attain across the Shell Group’s value chain. In this respect, a novel, planetary perspective can better anchor the decision in the doctrine of legal sources by operationalising science for mandatory climate due diligence. Here, I refer to planetary boundaries theory. First proposed in 2009, the planetary boundaries theory has led to an increasingly influential approach to studying the limits of the Earth’s system within which global society can develop without substantially altering its ability to function. More specifically, climate change and biospheric integrity are the sole ‘core boundaries’, and the persistent transgression of each of these boundaries can, on its own, drive the Earth system into a new and unsafe state.

Planetary boundaries theory is a relevant approach for Milieudefensie v Shell. In particular, it helps operationalise climate science to derive legal boundaries limiting corporate conduct affecting the climate system. For the purposes of this article, it is worth considering that

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141 On both points, see also ibid., p. 1458.

142 On binary thinking modes, see Bianchi, International Law Theories, p. 25.

143 Peel and Markey-Towler, ‘Recipe for Success’, p. 1498.


145 Peel and Markey-Towler, ‘Recipe for Success’, p. 1497. Consider the data that the court had at hand, namely Germany’s yearly CO₂ emissions in 2020. Data available at https://www.bmw.de/Redaktion/EN/Pressemitteilungen/2022/20220120-final-climate-action-status-of-2020-emissions-fell-by-41-compared-to-1990.html#text=In%202020%20%C2%B0er

146 many%20emitted%20a,to%20the%20figure%20for%201990.0.


planetary boundaries theory can assist courts in deriving specific standards that can reconcile precaution with the demands of sustainable development. In the summons of *Milieudefensie v Shell*, the plaintiffs argued their claims for corporate precautionary measures by citing authoritative sources of planetary boundaries theory. In particular, the theory enabled the plaintiffs to reiterate the need for legal boundaries to constrain corporate growth. Even if the global temperature increase could be kept well below 2°C or 1.5°C, which is the central objective of the Paris Agreement, planetary boundaries theory covers the implications of the temperature increase for all planetary boundaries and specifies the risk of cascading tipping points, after which the climate system can hardly be kept within the limits that the Earth has known over the past million years. At a general level, planetary boundaries theory can thus reveal the interconnectedness within the Earth system and the insufficiency of the international climate regime as it now stands, including the Paris Agreement, spurring novel ways of identifying and entwining applicable legal sources.

Following this line of reasoning, at a more specific level, planetary boundaries theory can provide companies with a method for establishing corporate policies, for instance, in mitigation and adaptation matters. Notably, recent benchmarks are tying target ambition levels to Earth’s limits with measurable, actionable, and time-bound objectives for specific sectors. In addition, to ensure planetary health, planetary boundaries theory and ensuing literature may provide courts with more scientific, comparable, and institutionalised tools for scrutinising climate commitments and holding companies to account, either directly or through court experts.

Among the issues that the court adjudicated in *Milieudefensie v Shell*, the carbon budget approach and the inclusion of Scope 3 emissions can be better anchored in legal sources that have already operationalised planetary boundaries theory. For example, the landmark climate case *Gloucester* was the first to deem the carbon budget approach appropriate for preventing dangerous anthropogenic interference in the climate system. Deciding *Gloucester* in the New South Wales (NSW) Land and Environment Court in February 2019, Judge Preston agreed with the expert opinion of a planetary boundaries specialist, late Prof. Will Steffen, on the incompatibility of a projected open-cut coal mine with the global and Australia’s carbon budgets. Regarding the inclusion of Scope 3 emissions, after considering data on the project’s GHG emissions, present and future likely climate change impacts in Australia, and IPCC science, the court concluded that the project’s impacts and the public interest justified adjudicating all emissions.

The inclusion of Scope 3 emissions in the legal adjudication of the case was due to the principles of ecologically sustainable development, the UNFCCC, and Articles 2 and 4 of the Paris Agreement. Whereas Judge Preston did not deploy specific UNFCCC provisions, he extensively applied the Paris Agreement regarding its specification on how to prevent unbridled climate change and how to share the burdens from such preventive action fairly. To keep the temperature increase to well below 2°C (Article 2(1)(a) of the Paris Agreement), the international objective is for emissions to peak as soon as possible in order to achieve net-zero emissions in the second half of the century (Article 4(1) of the Paris Agreement). Judge Preston referred to US federal courts to support the inclusion of Scope 3 emissions in impact assessments and the US Supreme Court in *Massachusetts v EPA* and *Urgenda* to portray the causal nexus between cumulative emissions and climate change. Moreover, he referred to *Urgenda* and a US federal court decision regarding the lack of proof...
on carbon leakage and market substitution arguments, which also constituted an essential consideration for the District Court of The Hague in Milieudefensie v Shell.

Overall, the carbon budget approach has led to a snowball effect in climate change litigation, increasing court engagement with the legal operationalisation of climate science in general and the planetary boundaries theory in particular. Moreover, planetary boundaries theory constitutes a fundamental roadblock for operationalising limit-compliant Scope 3 targets for businesses under different mitigation scenarios, showing the magnitude and the rate of Scope 3 mitigation efforts required by each sector in each country. Importantly, it was shown that under an ambitious carbon mitigation scenario for 2035 following a trajectory of 1.75°C total warming by 2100 – global upstream Scope 3 emissions intensities need to be reduced by 58–67% in the energy sector. The reduction is set against a baseline scenario where the average temperature is assumed to increase by 2.7°C by 2100, following current Nationally Determined Contribution pledges based on the Paris Agreement and energy efficiency improvements.

More broadly, it seems clear that climate litigation can provide science-based governance mechanisms, align legal interpretation with climate science, and supplement other regulatory efforts by filling gaps.

### B. Operationalising the UNGPs

To the safety dimension of the planetary boundaries theory, social and climate scientists added a justice dimension in which planetary boundaries and social boundaries align. Within the essentials of the social boundaries lies energy, thus displacing the dichotomy between development and sustainability in matters such as those adjudicated by the District Court of The Hague in Milieudefensie v Shell.

Applications of the planetary boundaries theory can, in principle, operationalise the UNGPs to derive legal boundaries that limit corporate conduct affecting the climate system. Although the field of research is still nascent, the following sketches three critical steps for the passage from an extractive to a regenerative economy according to a planetary perspective. First, limits to corporate activities can and should be embedded in the state-centred enforcement apparatus, allowing, for instance, for the adjudication of such a case as Milieudefensie v Shell. For a long time, the economic mantra of shareholder primacy has shielded the corporate board from scrutiny over its risk assessment and management of what was considered stakeholders’ interests, including in the natural environment. However, with the growing realisation that corporations wield power to make or break the safe and just operating space where humanity can thrive, the tide seems to be changing, making the shareholder versus stakeholder discussion misleading and dangerous. In this regard, climate litigation has already started showing that shareholder and stakeholder interests often align.

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159 Milieudefensie v Shell, 4.4:50.


162 See e.g. Li, Wiedmann and Hadjikakou, ‘Enabling Full Supply Chain Corporate Responsibility’, pp. 401 ff and 407 ff.

163 Ibid, pp. 403 ff.

164 Ibid. Emission intensity is the volume of emissions per unit of GDP.


and that due diligence is emerging versus society and shareholders in climate matters.\textsuperscript{170}

Second, a focus on corporate investment strategies for climate due diligence, as the court discussed in \textit{Milieudefensie v Shell},\textsuperscript{171} can provide a bridge to planetary boundaries–informed due diligence that is forward-looking for all companies, including financial entities.\textsuperscript{172} Currently, almost none of the extant sustainability rating methodologies adequately rate absolute corporate sustainability performance in terms of sustainable investment.\textsuperscript{173} Most worrisome is that all nine prevailing sustainability rating schemes fail to assess the gap between current performance and the temperature increase limit of 2°C.\textsuperscript{174} According to planetary boundaries–informed due diligence in the investment field, planetary boundaries theory can be increasingly applied to an investment portfolio to establish whether the company’s investment activities lie in a safe and just operating space.\textsuperscript{175}

Third, in lieu of the narrow understanding of climate due diligence (\textit{supra} 3), a regenerative economic business can ensue from sustainability due diligence, a research-based concept for sustainable value creation within planetary boundaries theory.\textsuperscript{176} While climate due diligence risks a fragmented approach to the current sustainability challenges facing companies, research has shown that sustainability due diligence should entail limits to the use of planetary resources, as well as social issues (i.e. the protection of human rights and the integrity of economic and governance issues), with recurring assessments at an interval of at least three years, or more in case of business changes, across the global value chain.\textsuperscript{177}

This system-thinking, precautionary, and full value chain approach to sustainability, rather than climate, due diligence conforms with the social norm underlying the UNGPs and was recently endorsed by the Shift Project, a leading centre of expertise on the UNGPs founded by the late UNGPs author, late Prof. John G. Ruggie.\textsuperscript{178} Conclusively, the above has revealed how an interdisciplinary approach to due diligence over climate matters can progressively unfold as the derivation of ‘legal boundaries’ to stay within ‘planetary boundaries,’ namely ‘acceptable levels of human activity.’\textsuperscript{179}

VI. Conclusions

\textit{Milieudefensie v Shell} has applied the revolution ‘justified’ in the landmark \textit{Urgenda} case to business matters.\textsuperscript{180} This paper has only begun unpacking the implications of applying transnational soft law (notably, the IPCC reports and UNGPs) to flesh out due care for companies in climate change matters. Construing the duty of care in terms of positive obligations, as specified by scientific reports and the UNGPs, endows transnational soft law with a possible renewed role, one of spelling out science-based benchmarks for companies to stay within ‘legal boundaries’ (\textit{supra} 5).

As a case belonging to the ‘next generation’ of climate litigation (\textit{supra} 4.2), \textit{Milieudefensie v Shell} sought and achieved a systemic impact through the establishment of duties of protection. Such duties exceeded the voluntary corporate benchmarks endorsed by traditional approaches to international law (\textit{supra} 2 and 3) and rested on corporate value chain liability models that have emerged through transjudicial dialogue (\textit{supra} 2). Overall, the emerging level of responsibility hinges on the extent to which companies control and influence the causes of harm,\textsuperscript{181} but more research and practice is needed to fully hammer out the sources and processes of due care in corporate sustainability matters. In particular, the above has revealed that climate due diligence is emerging versus

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\textsuperscript{170} Macchi, ‘The Climate Change Dimension of Business and Human Rights’.
\textsuperscript{171} \textit{Milieudefensie v Shell}, para. 4.4.25
\textsuperscript{172} A. Ding, D. Daugaard and M.K. Linnenluecke, ‘The future trajectory for environmental finance: planetary boundaries and environmental, social and governance analysis’ (2020) 60 Accounting & Finance 3.
\textsuperscript{173} C. Butz et al., ‘Towards defining an environmental investment universe within planetary boundaries’ (2018) 13 Sustainability 1031. See also Li and others, ‘The role of planetary boundaries in assessing absolute environmental sustainability across scales.’
\textsuperscript{175} See early examples by a mainstream financial services company, L. Diana and G. Micheli, ‘Planetary Boundaries: measuring the business world’s environmental footprint’, \textit{JHInvestments}, 22 July 2021.
\textsuperscript{176} Sjäfjell and Måhönen, ‘Corporate purpose’, p. 2.
\textsuperscript{177} B. Sjäfjell, ‘The Financial Risks of Unsustainability: A Research Agenda’, University of Oslo Faculty of Law Legal Studies Re-
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both stakeholders and shareholders and is buttressed by the privatisation of human rights through transnational law. Nevertheless, the greater potential of this privatisation lies in addressing the synergies of climate due diligence with other types of required due diligence through the more encompassing concept of sustainability due diligence.

This paper has offered but a glimpse of how climate change litigation is distributing the adverse effects of emissions. In *Milieudefensie v Shell*, the brunt of such distribution was for the first time borne by the emitter, a corporation. However, climate change litigation is also distributing ‘knowledge, meaning particular understandings of the world and how it works,’ providing practitioners, policymakers and academics with the opportunity to harness such knowledge for planetary health.\(^{182}\)

\(^{182}\) On the distributing character of law, D. Kennedy, ‘The stakes of law, or Hale and Foucault!’ (1991) 15 The Legal studies forum 327 p. 361.