SARAH DOWNS

CIVIL LIABILITY FOR CLIMATE CHANGE? THE PROPOSED TORT IN *SMITH V FONTERRA* WITH REFERENCE TO FRANCE AND THE NETHERLANDS

LLB (HONOURS)

LAWS489: RESEARCH ESSAY

FACULTY OF LAW



2023

Contents

I	Introduction	4
II	Legally disruptive force of climate change	5
A	Prevalence and complexity of climate change	5
В	Polycentricity	6
C	New Zealand's approach	7
III	Climate change litigation as a supplementary route?	9
A	Smith v Fonterra	10
В	Is establishing civil liability worth the struggle?	12
IV	France	16
A	'Le Prejudice Écologique'	16
	1 The "Erika" Case	16
	2 Article 1246	17
В	Interaction with domestic law	19
C	Theory versus practice	20
D	Limited implementation	23
E	Learnings from France	24
V	Netherlands	26
A	Dutch Shell Case	26
	1 Innovative reasoning	28
	2 Departure from traditional civil liability concepts	30
В	Due diligence: bridging the corporate climate accountability gap	32
VI	Relevance for New Zealand	35

Abstract

As we enter into a period of unprecedented climate instability, litigation is becoming an increasingly attractive way to hold private entities accountable for their contribution to global warming. In Smith v Fonterra, New Zealand's Supreme Court is considering whether a common law duty to limit emissions should form part of New Zealand's environmental protection framework. This follows the development of a number of civil liability mechanisms for environmental damage in overseas jurisdictions. This paper examines the implementation of civil liability for climate damage in France and the Netherlands, illustrating the difficulties of effectively dealing with climate change, and its destabilising effect on the law. France implements civil liability mostly on the basis of traditional tort rules, which function to severely restrict its effectiveness. Conversely, the Dutch judiciary introduced a due diligence obligation which requires corporate strategies to be sufficiently in line with international obligations regarding emissions. The latter approach carries more promise, demonstrating that for civil liability to play a meaningful role in the fight against climate change there must be significant departure from traditional legal doctrine, perhaps in the direction of climate due diligence.

Word length

The text of this paper (excluding abstract, table of contents, footnotes and bibliography) comprises approximately 7974 words.

Subjects and Topics

Environmental Law-Climate Change-Torts-Civil Liability-*Smith v Fonterra*-Due Diligence

I Introduction

Climate change is a "wicked" problem with widespread and potentially devastating effects. Despite the clear need for timely action, the issue gives rise to complex difficulties in many respects; scientifically, socially, politically and economically.² As a result, climate change is rarely seen to be adequately addressed by national governments. Public and private litigation has become an increasingly attractive way to pursue actors contributing to global warming.³ However, finding liability has required the 'squeezing' of climate change challenges into traditional legal concepts, destabilising legal doctrine.⁴ Different approaches are developing in other jurisdictions, regarding whether and how traditional mechanisms of civil liability, such as tort law, may be adapted to address the global issue. This essay examines the prospect of civil liability for climate change in New Zealand, with reference to the contrasting approaches of France and the Netherlands. Although each framework is embedded in its own legal and cultural context and cannot merely be implanted into another jurisdiction, they reveal much about the effect of climate change on the law, and whether a similar framework has potential for success in New Zealand. In a world marked by imminent climate catastrophe, what role can civil liability play?⁵

¹ Kelly Levin and others "Overcoming the tragedy of super wicked problems: constraining our future selves to ameliorate global climate change" (2012) 45 Policy Sci 123.

² James Rising and others "The missing risks of climate change" (2022) 610 Nature 643 at 646.

³ Pooja Upadhyay "Climate Claimants: The Prospects of Suing the New Zealand Government for Climate Change Inaction" (2019) 23 NZJEL 187 and Theodore Okonkwo "Protecting the Environment and People from Climate Change through Climate Change Litigation" (2017) 10 JPL 66 at 66.

⁴ Henry Weaver and Douglas Kysar "Courting Disaster. Climate Change and the Adjudication of Catastrophe" (2017) 93 Notre Dame Law Rev 295 at 296.

⁵ Carlo Vittorio Giabardo *Climate Change Litigation and Tort Law: Regulation Through Litigation?* (Diritto & Processo, University of Perugia Law School Yearbook, 2020) at 19.

II Legally disruptive force of climate change

A Prevalence and complexity of climate change

Climate change is one of the greatest challenges of our era and poses a significant risk to life on earth. The International Panel on Climate Change (IPCC) has recognised the increasing level of greenhouse gas (GHG) emissions to be a significant global problem since 1998, warning that global warming must be kept below 1.5 degrees above pre-industrial levels to prevent significant consequences. However, those consequences are already being experienced. Rising sea levels and the increasing number of extreme weather events are driving the displacement of entire communities across the globe. The Ministry for the Environment has reported specific effects of climate change in New Zealand, including extremely high temperatures, increased flooding, and threats to crops and food security. These effects are forecasted to lead to the extinction of species. The IPCC's Sixth Assessment Report projects countries across the globe will continue to suffer from increasing heat waves, longer warm seasons, and shorter cold seasons, even at the rather optimistic 1.5 degree level.

The devastating effects of climate change illustrate the "problem of social cost". ¹¹ Those who produce significant GHG emissions are imposing costs on the world and future

⁶ IPCC Global Warming of 1.5: Special Report: Summary for Policy Makers (Geneva, 2018) at 4.

⁷ Of the 59.1 million people displaced in 2021 across the world, most were displaced by climate related disasters. See United Nations Human Rights Office of the High Commissioner "Intolerable tide of people displaced by climate change: UN expert" (press release, 23 June 2022).

⁸ Ministry for the Environment and Stats NZ New Zealand's Environmental Reporting Series: Environment Aotearoa 2022 (April 2022).

⁹ At 18.

¹⁰ IPCC Climate Change 2023: Synthesis Report (Geneva 2023) at 23.

¹¹ Kevin R Gray, Richard Tarasofsky, and Cinammon P Carlarne (eds) *The Oxford Handbook of International Climate Change Law* (online ed, Oxford Academic, 2016) at 7. See also Navraj Singh Ghaleigh "Two Stories About E.U. Climate Change Law and Policy" (2013) 14 Theoretical Inquiries in Law 43 and Ronald H Coase "The Problem of Social Cost" (1960) 3 Journal of Law and Economics 1 at 3.

generations, but do not directly face the full consequences of their actions. ¹² This imbalance demands the intervention of the law, to hold private entities accountable for their contribution to global warming. However, the law faces significant problems when it comes to combatting climate change. The causes of climate change are multiple, and their consequences can be attributed to society as a whole. It is a collective problem, so complex that it "[renders] both all of us and none of us responsible" at the same time. ¹³ Furthermore, "deep uncertainty abounds" in the field of attribution science, making it difficult for liability to be attributed on a principled basis, if at all. ¹⁴

B Polycentricity

Due to the complexities of climate change, it has been treated predominantly as a public law problem. International climate change policy has become a distinct legal category, whereas the role of the courts has been generally limited to judicial review of such policies.¹⁵

The United Nations Framework Convention on Climate Change (UNFCCC) underpins the global response to climate change. ¹⁶ It established an international goal to reduce global GHG emissions to a level that prevents "dangerous anthropogenic interference"

¹² Nicholas Stern *The Economics of Climate Change: The Stern Review* (Cambridge University Press, 2007) at 27.

¹³ Douglas A Kysar "What Climate Change Can Do About Tort Law" (2011) 41 JEL 1 at 4.

¹⁴ See Stefanie Tye and Juan-Carlos Altamirano *Embracing the Unknown: Understanding Climate Change Uncertainty* (online ed, Word Resource Institute, 2017) and Lindene Patton and Felicia H Barnes "Science and the Law: How Will Developments in Attribution Science Affect How the Law Addresses Compensation for Climate Change Effects?" in Bridget Hutter (ed) *Risk, Resilience, Inequality and Environmental Law* (Edward Elgar, 2017) 147.

¹⁵ Martin Spitzer and Bernhard Burtscher "Liability for Climate Change: Cases, Challenges and Concepts" (2017) 2 JETL 137 at 175. See also the landmark cases *Massachusetts v EPA* in the United States and *Urgenda v The Netherlands* in Europe as impressive examples of this development.

¹⁶ United Nations Framework Convention on Climate Change (opened for signature 9 May 1992, entered into force 21 March 1994).

with the climate system". ¹⁷ The Convention implements a compliance regime which pushes states to adopt conduct consistent with the achievement of this goal. The subsequent Kyoto Protocol and Paris Agreements operationalised the UNFCCC by committing industrialised countries to reduce their emissions in accordance with agreed individual targets, called Nationally Determined Contributions (NDCs). ¹⁸ However, the regime outsources much of the responsibility for determining and adhering to NDCs to national legal systems. ¹⁹ The Paris Agreement Implementation and Compliance Committee possesses at best a facilitative role, relying on voluntary global cooperation. ²⁰ Persuading states to comply with their obligations is a "daunting task", which depends on persuasion and advocacy from foreign governments, civil society organisations and voters. ²¹ Consequently, the regime has sparked the adoption of a range of domestic approaches, with varying levels of compliance.

C New Zealand's approach

As party to the UNFCCC and Paris Agreement, New Zealand's Parliament has introduced various systems to regulate GHG emissions, for compliance with New Zealand's emissions reduction pledge.²² The Climate Change Response Act 2002 (CCRA) underpins New Zealand's approach and implemented the Emissions Trading Scheme

¹⁷ Article 2.

¹⁸ Kyoto Protocol (opened for signature 11 December 1997, entered into force 16 February 2005) and Paris Agreement (opened for signature 22 April 2016, entered into force 4 November 2016).

¹⁹ This is sometimes referred to the "bottom-up approach" of the agreement. See Christina Voigt "The Compliance and Implementation Mechanism of the Paris Agreement" (2016) 25 Rev Eur Comp 161. Specifically, see the Paris Agreement, above n 18, arts 4, 6.4, 15.1 and 15.2.

²⁰ Gu Zihau, Christina Voigt and Jacob Werksman "Facilitating Implementation and Promoting Compliance with the Paris Agreement under Article 15: Conceptual Challenges and Pragmatic Choices" (2019) 9 Climate Law 65 at 100. See also Imad Antoine Ibrahiam, Sandrine Ibrahim and Jessica Owley "The Paris Agreement Compliance Mechanism: Beyond Cop 26" (2021) 11 Wake Forest L Rev 147.

²¹ Benoit Mayer *The International Law on Climate Change* (Cambridge University Press, 2018) at 237.

²² The Climate Change Response (Zero Carbon) Amendment Act 2019 sets a target for all GHGs, except for biogenic methane, to reach net zero by 2050.

(NZETS) as the main vehicle to drive GHG emissions reductions.²³ Under this regime, emitters are required to surrender one emission unit for every tonne of carbon dioxide emitted.²⁴ The government reduces the number of emissions units available over time, requiring emitters to either reduce their emissions or purchase emissions credits, and creating a strong financial incentive to choose the former.

Another key mechanism is the Resource Management Act 1991 (RMA), which manages Aotearoa's environmental and natural resources. Since 2022, plans developed under the RMA must consider how they can support the reduction of emissions in line with New Zealand's NDC.²⁵ However, the regime is currently under reform and will be entirely replaced with new mechanisms for environmental management.²⁶

Despite direction from the comprehensive legislative regime in place, New Zealand is failing to meet its required emissions reductions. Palmer puts it bluntly; "the weaknesses of the [ETS] are notorious".²⁷ Agricultural actors, who produce nearly half of New Zealand's GHG emissions, are excluded from the scheme, significantly limiting its effect.²⁸ Further, the scheme allows participants to plant trees rather than make real cuts to emissions, "allowing gross emissions to continue largely unabated".²⁹ In a recent

²³ Climate Change Response (Emissions Trading) Amendment Act 2008.

²⁴ See Ministry for the Environment "About the New Zealand Emissions Trading Scheme" <www.mfe.govt.nz>.

²⁵ Resource Management Amendment Act 2020. Sections 17, 18 and 21 are amendments of RMA sections 61(2)(d), 66(2)(f) and 74(2)(d), respectively.

²⁶ Ministry for the Environment "Resource management system reform" (15 November 2022) <www.environment.govt.nz>.

²⁷ Geoffrey Palmer "New Zealand's Defective Law on Climate Change" (2015) 13 NZJPIL 115 at 131.

²⁸ Catherine Leining, Suzi Kerr and Bronwyn Bruce-Brand "The New Zealand Emissions Trading Scheme: Critical Review and Future Outlook for Three Design Innovations" (2020) 20(2) Climate Policy 264 at 248 and Anneke Smith "National wants to keep agriculture off the ETS, give farmers more time before paying for emissions" (12 June 2023) RNZ <www.rnz.co.nz>.

²⁹ He Pou a Rangi Climate Change Commission *2023 Draft advice to inform the strategic direction of the Government's second emissions reduction plan* (April 2023) at 53.

report, the Climate Change Commission highlighted that the current ETS settings are only getting New Zealand halfway to its emissions reduction goals.³⁰ The dominance of the ETS, coupled with its pitfalls, has prompted New Zealanders to seek recourse to other institutions.³¹

III Climate change litigation as a supplementary route?

An additional way of dealing with the issue of GHG emissions is climate change litigation, which is being increasingly utilised around the world.³² When national governments fail to enforce the standards they have agreed to under international law, courts act as a last resort for meaningful steps forward.³³ So far, climate change litigation has been mostly limited to claims against entities under a pre-existing legal obligation to protect individuals from harm caused by climate change.³⁴ However, the application of civil liability only seems to be broadening.

New Zealand courts have recognised that the judiciary may appropriately scrutinise Government decision-making about climate change policy. ³⁵ However, they have expressed reluctance to venture beyond that. ³⁶ The imposition of civil liability for climate

³⁰ He Pou a Rangi Climate Change Commission, above n 29, at 68. See also Hamish Cardwell "What's wrong with the Emissions Trading Scheme?" (29 April 2023) RNZ <www.rnz.co.nz>.

³¹ Maria Hook and others "Tort to the Environment: A Stretch Too Far or a Simple Step Forward? 'Smith v Fonterra Co-Operative Group Ltd and Others [2020] NZHC 419" (2021) 33 JEL 195 at 197.

³² Benoit Mayer, above n 21, at 238 and Joana Setzer and Rebecca Byrnes *Global trends in Climate Change Litigation* (Grantham Research Institute on Climate Change Policy, London, 2019).

³³ Benoit Mayer, above n 21, at 248.

³⁴ Monika Hinteregger "Civil Liability and the Challenges of Climate Change: A Functional Analysis" (2017) 8(2) JETL 238 at 238.

³⁵ Thompson v Minister for Climate Change Issues [2017] NZHC 733 at [133]. See generally Geoffrey Palmer "Can Judges Make a Difference? The Scope for Judicial Decisions on Climate Change in New Zealand Domestic Law" (2018) 49(2) VUWLR 191.

³⁶ See *Smith v Fonterra Co-operative Group Ltd* [2020] NZHC 419 at [5], where the Court said the best avenue to pursue is State liability.

change damage would represent somewhat of a "judicial turn in the complex net of climate governance", and raise larger political questions as to the legitimacy of the courts' intervention in climate change matters.³⁷ Is there sufficient justification for a judicial response in the New Zealand climate? And if yes, will such a response be effective?

A Smith v Fonterra

The Supreme Court is currently grappling with the prospect of judicial regulation of climate change issues. In *Smith v Fonterra*, a novel duty is proposed for various private entities to reduce the damage they are causing to the environment. Mr Smith claims that seven of New Zealand's largest emitters are causing damage to his land and sites of cultural significance through their release of GHG emissions. He seeks an injunction that requires each defendant to reach net zero emissions by 2030. Further, Mr Smith argues that the indigenous customs of tikanga Māori should inform the development of a new climate tort in New Zealand, because they speak to an alternative way of understanding the human relationship with the environment.³⁸

Relief in nuisance and negligence was struck out in the High Court, however the prospect of an inchoate duty which may hold entities accountable for climate damage was left open. Smith claims the defendants are under a duty to:³⁹

"...cease contributing to damage to the climate system, dangerous anthropogenic interference with the climatic system and adverse effects of climate change through their emissions of greenhouse gases."

³⁸ Smith v Fonterra Co-Operative Group Ltd SC149/2021 Appellant's Synopsis of Submissions on Appeal at [49].

³⁷ Giabardo, above n 5, at 6.

³⁹ Smith v Fonterra Co-operative Group Ltd [2020] NZHC 419 at [5].

The Court of Appeal unanimously dismissed this argument, firmly concluding that common law tort claims are an inappropriate vehicle for addressing the problem of climate change. ⁴⁰ The judgment reflects two key reasons. Firstly, the judiciary does not have the institutional standing nor the expertise to intervene, and secondly, adjudicating climate change issues would have a disruptive effect on tort law.

Climate change was described as a "striking example of a polycentric issue that is not amenable to judicial resolution", requiring instead a sophisticated regulatory response at a national level.⁴¹ The Court was concerned that civil liability would give rise to a parallel emissions regime, which the judiciary does not have the expertise to develop.⁴² Further, such a regime would cut across the statutory framework. It would be inappropriate to impose liability given the activities of the defendants were lawful under the standards set by Parliament in the Climate Change Response Act.⁴³ The Court concluded that the role of the judiciary was restricted to supporting and enforcing the current statutory regime.⁴⁴

Furthermore, the novel tort would require a "major departure" from fundamental legal principles to effectively deal with climate change issues. ⁴⁵ The underpinning relational view of tort law operates on an individual scale, requiring clear connection and proximity between plaintiff and defendant. The Court was concerned that there is no such physical or temporal proximity in a claim like Smith's, or in any climate change case lacking a direct relationship between the parties. ⁴⁶ Additionally, none of the defendants alone materially contributed to climate change damage, given their minute percentage of global

⁴⁰ Smith v Fonterra Co-operative Group Ltd [2021] NZCA 552 at [16].

⁴¹ Smith v Fonterra Co-operative Group Ltd, above n 40, at [26] and [16].

⁴² At [24] and [26].

⁴³ At [24].

⁴⁴ At [35].

⁴⁵ At [16] and at [103]; the Court's view was that the novel tort would be "contrary to the common law tradition which is one of incremental development and not one of radical change".

⁴⁶ At [19].

GHG emissions, so the Court would have to overstretch regular standards of imposing liability.⁴⁷ The deeply communal nature of climate change issues has a legally disruptive effect, which threatens the coherence of legal order in New Zealand.⁴⁸

The Court also noted that finding liability in Smith's case would risk a proliferation of claims, requiring the Courts to undertake an "indefinite and inevitably far-reaching process of line drawing". ⁴⁹ Furthermore, bringing proceedings in common law is an inherently inefficient way to deal with climate change. ⁵⁰

B Is establishing civil liability worth the struggle?

Despite the Court of Appeal's strong rejection of judicial intervention in the field of climate change, critics highlight various positive features of tort law which make liability worth considering.

Contrary to the view that courts do not have institutional standing to intervene, some scholars consider that judicial governance of climate change is appropriate when the State is not acting effectively to prevent it.⁵¹ We are living in a time of political inertia, where politics are either unwilling or unable to effectively prevent climate change.⁵² This is largely influenced by the negative impact that emissions reductions have on the productive forces of society, and then on the dynamics of elections.⁵³ However, there is a

⁴⁷ At [19] and [25].

⁴⁸ See Elizabeth Fisher, Eloise Scotford, and Emily Barritt "The Legally Disruptive Nature of Climate Change" (2017) 80(2) MLR 173.

⁴⁹ Smith v Fonterra Co-Operative Group Ltd, above n 40, at [27].

⁵⁰ At [27].

⁵¹ See Giabardo, above n 5, and Laura Burgers "Should Judges Make Climate Change Law?" (2020) 9(1) TEL 55 at 60.

⁵² Giabardo, above n 5, at 8 and Danielle Cooper "Change the system not the climate – a principled look at Smith v Fonterra Co-operative Group Ltd" (2020) 24 NZJEL 187 at 187.

⁵³ Giabardo, above n 5, at 9.

growing recognition that a healthy environment is a constitutional matter and therefore a prerequisite for democracy.⁵⁴ Thus, when political power fails to properly protect such rights, judicial power may take its place, acting as "public law in disguise".⁵⁵ This is the essence of judicial independence.⁵⁶ Under this view, civil liability for climate change damage can function to support the administration of justice, and protect democracy, where domestic laws do not.⁵⁷

In addition, tort law could function to support, rather than undermine the legislative regime. ⁵⁸ Tortious methods already exist and need not be created through the "tedious and time-consuming political procedure" necessary for the establishment or amendment of the current framework. ⁵⁹ More importantly, tort law is malleable, highly contextual and possesses the ability to balance a range of factors to provide justice in the particular case. ⁶⁰ Civil liability could therefore supplement and enhance the operation of the CCRA, by providing an individualised assessment of whether a defendant has caused 'excessive' emissions and should be held responsible. ⁶¹ Such findings would support both the legislature and executive in the demanding task of dealing with climate change, each branch "working together in complementary ways to the same end". ⁶²

⁵⁴ Burgers, above n 51, at 60.

⁵⁵ Giabardo, above n 5, at 10. See also Leon Green "Tort Law Public Law in Disguise" (1959) 38 Texas L Rev 257.

⁵⁶ Smith v Fonterra Co-Operative Group Ltd SC149/2021 Appellant's Synopsis of Submissions on Appeal at [150].

⁵⁷ Simon Taylor "Extending the Frontiers of Tort Law: Liability for Ecological Harm in the French Civil Code" (2018) 9(1) JETL 81 at 97.

⁵⁸ Hook and others, above n 31, at 209.

⁵⁹ Hinteregger, above n 34, at 245.

⁶⁰ Hook and others, above n 31, at 209.

⁶¹ At 210.

⁶² Caroline E Foster "Novel Climate Tort? The New Zealand Court of Appeal Decision in Smith v Fonterra Co-Operative Group Limited and Others" (2022) 24(3) Env L Rev 224 at 234.

The Court of Appeal's view that tort law cannot adequately address the complexities of climate change is also under debate. The preventative purpose of tort law is highly valuable in the battle against global warming. ⁶³ Threat of litigation will provide a strong incentive for emitters to consider climate concerns in their decision making and minimise the damage they are causing. ⁶⁴ Tort law could function as a market mechanism to decrease GHG emissions, because entities with lower emissions will have lower damage costs. ⁶⁵ Furthermore, determining the wrongfulness of excessive emissions offers inspiration to the legislature and overseas jurisdictions to increase their regulation over large emitters. ⁶⁶

Proponents of a climate tort argue that the traditional barriers of tort law are capable of shifting to prevent infringement on communal rights.⁶⁷ In Foster's view, tortious relationships in the context of climate change should not be disregarded merely because they are widespread.⁶⁸ Climate change damage creates genuine and intimate relationships in a moral sense, "by virtue of the harm that is being inflicted".⁶⁹ Alternative proximity and causation measures can be adopted which focus on the foreseeability of a future harm, and prevent defendants from escaping liability merely because infringement was not done on a "strictly ascertainable scale".⁷⁰ Although departing from traditional

⁶³ Hinteregger, above n 34, at 245 and Hook and others, above n 31, at 204. See also Michael Jones (ed) *Clerk & Lindsell on Torts* (22nd ed, Sweet & Maxwell 2018) at [2.02].

⁶⁴ Mathilde Hautereau-Boutonnet and Laura Canali "Chapter 6. Paving the way for a preventive climate change tort liability regime" (2019) 30(2) JIB 119.

⁶⁵ Hinteregger, above n 34, at 247.

⁶⁶ Foster, above n 62, at 234.

⁶⁷ Hook and others, above n 31, at 205.

⁶⁸ Foster, above n 62, at 229.

⁶⁹ At 229.

⁷⁰ At 225.

methods, these developments may constitute a natural evolution to the law in the context of an unprecedented era of climate instability.⁷¹

Tort law has been forced to adapted before in the face of pressing social problems.⁷² In *Rylands v Fletcher* a new duty of care was created, which recognised that people who keep things on their land that may cause harm to others upon escape, should be required by law to ensure that harm does not occur.⁷³ At the time, private law offered no resolution to the risk to public safety, but it adapted to the changing circumstances, guided by broad policy considerations. Although climate change has a legally disruptive effect, tort law is clearly capable of evolution. The great strength of the common law is that it can adapt to changing circumstances, and in the absence of statutory intervention, it must do so to protect the rights valued by society.⁷⁴ This is true even in the context of a complex issue such as climate change.⁷⁵

The novel duty before the Supreme Court in *Smith v Fonterra* has the potential to represent a significant shift in the New Zealand legal system. Whether or not civil liability will be an effective layer of environmental protection should be determined in light of other jurisdictions which have developed novel duties of care for climate change damage. ⁷⁶ The implementation of civil liability for climate damage in France and the Netherlands offer useful illustrations of its potential and limitations in this context.

⁷¹ Hook and others, above n 31, at 210 and Feroze Duncan Gadekar Brailsford "Foreseeable sea-level rise and climate change causation: A discussion of tort law's role in providing relief and attributing liability for climate change-induced harms" (2022) 26 NZJEL 91 at 113.

⁷² In recent years the common law has developed new torts of invasion of privacy; see *Hosking v Runting* [2004] NZCA 34; and intrusion upon seclusion; see *C v Holland* [2012] NZHC 2155, [2012] 3 NZLR 672.

⁷³ Rylands v Fletcher (1868) LR 3 HL 330 (HL).

⁷⁴ Hook and others, above n 31, at 204 and Brailsford, above n 71, at 113. See also Nicholas McBride, "Rights and the Basis of Tort Law" in Donal Nolan and Andrew Robertson (eds) *Rights and Private Law* (Hart, 2012) 331 at 340.

⁷⁵ Brailsford, above n 71, at 25.

⁷⁶ Foster, above n 62, at 232.

IV France

France has been a trend setter in the field of civil liability for climate change, with a number of judicial actions being brought against the French State and private entities.⁷⁷ Most significantly, the birth of "pure ecological damage" was a landmark development which founded general civil liability for climate damage. The concept attempted to extend the boundaries of tort law to enable it to play a more central role in the fight against climate change.⁷⁸ However, its limited effectiveness illustrates the inutility of "squeezing" climate change issues into traditional legal boxes.

A 'Le Prejudice Écologique'

1 The "Erika" Case

In 1999 the Erika, a large oil tanker, sank off the coast of French Brittany, spilling 30,000 tonnes of fuel oil into the ocean. This severely polluted the shores around Brittany, leading to the death of marine life and amounting to one of France's worst environmental disasters. A case was brought against the shipowner, the company who declared the ship seaworthy, and the oil company chartering the tanker. In 2008 the Paris Criminal Court found each party criminally and civilly liable for the damage which occurred. This was confirmed by France's most superior court, the Court of Cassation, in a landmark judgment on 25th September 2012.

The most significant legal development of the decision was the recognition of "purely ecological" damage in French civil law. The Court of Cassation founded civil liability on the basis of this new head of damage, meaning "direct or indirect damage to the

⁷⁷ See Dentons "Litigating Climate Change in France" (3 November 2022) Dentons <dentons.com> for a summary of these developments.

⁷⁸ Taylor, above n 57, at 101.

⁷⁹ Tribunal Correctionnel de Paris, 16th January 2008, n° 9934895010.

⁸⁰ Cour de Cassation, crim, 25th September 2012, n° 10-82.938.

environment, without repercussion on a particular human interest but affecting a legitimate collective interest". ⁸¹ Endorsing the Court of Appeal's view, the Court found ecological damage includes any significant damage to the natural environment, specifically including the "air, atmosphere, water, soil, land, landscapes, natural sites, biodiversity and the interaction between these elements". ⁸² Ecological damage was subject to compensation on the facts, given the significant negative effects of the oil spill on the coastline and marine life. The defendants were required to pay damages for the repair of the affected ecosystems.

The French Court reasoned that it is unfair to provide immunity to persons who have caused damage to the environment on the basis that nature does not belong to anyone in particular. ⁸³ Furthermore, Article L110-1 of the Environment Code recognises the general interest in protection and rehabilitation of the environment as the "common heritage" of the nation. Accordingly, the decision reflected a strong desire to fully compensate for damage linked to pollution and to uphold the preventative purpose of civil liability.

2 Article 1246

Following the *Erika* judgment, the courts were left with uncertainty as to the scope and application of ecological damage.⁸⁴ The notion became somewhat of a "legal vacuum"

⁸¹ Court of Appeal Paris, 30 March 2010, n° 08/02278. The original wording is "atteinte directe ou indirecte portée à l'environnement, sans répercussion sur un intérêt humain particulier mais affectant un intérêt collectif légitime".

⁸² See Laurent Neyret "L'affaire *Erika*: moteur d'évolution des responsabilités civile et pénale" (2012) Recueil Dalloz 2238 for a summary of the Court of Appeal's decision (in French).

⁸³ At 4.

⁸⁴ Several rulings from 2014 testify to the difficulty of judges in applying the new and independent concept of damage. See Court of Appeal Nouméa, February 25, 2014, No. 11/00187 as an example. See also Avocats Picovschi "Erika case: taking into account ecological damage" (20 September 2021) <avocats-picovschi.com>.

and for several years civil activists fought for the law to be enshrined in legislation.⁸⁵ Eventually, the concept of pure ecological damage was incorporated into the French Civil Code in 2016.⁸⁶ This confirmed a new civil regime for environmental protection in which the State, the French Biodiversity Agency, local authorities and environmental associations could file actions for ecological prejudice.⁸⁷

Article 1246 of the Code requires any person responsible for ecological damage to repair it. Claimants must prove the existence of "non-negligible damage to the elements, the functions of the ecosystem or the collective benefits derived from humans to the environment". 88 This is determined on a case-by-case basis with reference to earth's ecosystem as a whole as well as the directly affected locality. 89 If ecological damage is established and the defendant is responsible, the principal remedy is restoration of the environment to its baseline condition. 90 If restoration is not possible, damages can be awarded to the plaintiff to be used for the restoration of the environment, or to the State. 91

A regime such as Article 1246 has the potential to considerably broaden the scope of liability for environmental harm. ⁹² It demonstrates how the unsatisfactory state of the

⁸⁵ Alexis Deborde "L'apparition de la notion de préjudice écologique en droit français" (23 July 2013) Le Petit Juriste <lepetitjuriste.fr>.

⁸⁶ Loi n° 2016-1087 du 8 août 2016 pour la reconquête de la biodiversité, de la nature et des paysages (the Law n° 2016-1087 for the recapture of nature, biodiversity and landscapes).

⁸⁷ Art 1248 French Civil Code. See also Julie Foulon "Recent developments in French environmental law: Recognition and implementation of ecological damage in French tort law" (2019) 21(4) Environ Law Rev 309 at 312 for a summary of the reform.

⁸⁸ Art 1247 French Civil Code.

⁸⁹ Marie-Pierre Camproux Duffrene "Le préjudice écologique et sa réparabilité en droit civil français de la responsabilité ou les premiers pas dans un sentier menant à un changement des rapports Homme-Nature" (2021) 46(3) Revue Juridique de l'Environnement 457 at 463.

⁹⁰ Art 1249 French Civil Code.

⁹¹ Art 1249.

⁹² Taylor, above n 57, at 97.

law in the presence of a pressing social issue can inspire change; disrupting, but also transforming the law.

The incorporation of ecological damage into the Civil Code should be seen in light of the "highly progressive approach" taken in French legislation towards environmental harm. ⁹³ Specifically, in 2005 France introduced an Environmental Charter into domestic law and integrated it into the constitution. ⁹⁴ The right to the environment is therefore perceived as a fundamental freedom of constitutional value in France and the recognition of pure ecological damage is a natural evolution from that view. ⁹⁵

B Interaction with domestic law

Civil liability for ecological damage in France is seen to be supplementary to existing regimes. Most European countries accept that compliance with public law standards does not exonerate damaging parties from civil liability. ⁹⁶ The goal of public law regulations is to control the risks of certain activities and prevent harm, however if harm is still suffered, civil liability can intervene to protect private rights. ⁹⁷

A prominent regime is the European Liability Directive (ELD), which established an EU-wide liability system for environmental damage, based on the 'polluter-pays' principle. 98 Damage under the ELD can be the subject of civil liability because the Directive is an

⁹³ Danai Papadopoulou "The Role of French Environmental Associations in Civil Liability for Environmental Harm: Courtesy of "Erika"" (2009) 21 JEL 87 at 89.

⁹⁴ Constitutional Law No 2005-205, 1 March 2005.

⁹⁵ Deborde, above n 85.

⁹⁶ Hinteregger, above n 34, at 253. See also Monika Hinteregger (ed) *Environmental Liability and Ecological Damage in European Law* (Cambridge University Press, 2008).

⁹⁷ Hinteregger, above n 34, at 254.

⁹⁸ Directive 2004/35/CE on environmental liability with regard to the prevention and remedying of environmental damage [2004] OJ L143/56.

administrative policing mechanism, as opposed to a compensatory scheme. ⁹⁹ Similarly, compliance with GHG emission limits under the EU Emissions Trading System will not exonerate a damaging party, because the system is not directed at the protection of private rights of individuals. ¹⁰⁰ This gives rise to 'double faceted environmental liability', in which civil liability adds a layer to existing measures of governance. ¹⁰¹ The concept of ecological damage effectively "plugs the gaps" of the State's inaction, by ensuring defendants are held accountable when their actions are not effectively addressed by other domestic laws. ¹⁰²

C Theory versus practice

Article 1246 was initially appraised for "making a decisive step, which builds on legislative measures, towards protecting the environment". ¹⁰³ It recognises that nature is an interest worthy of protection, departing from the Western perspective of man's dominion over nature, and instead endorsing a relationship of 'responsibility'. ¹⁰⁴ In essence, the French approach utilises the notion of objective damage, with reference to the human collective, as a way to circumvent the need for a victim and "diversify legal solutions". ¹⁰⁵ This overturned traditional civil liability concepts which rely on the requirement that damage is suffered by a person. ¹⁰⁶

⁹⁹ Art L 162-2 of the French Environmental Code explicitly precludes claims for compensation for those affected by the damage. See also Foulon, above n 87, at 310.

¹⁰⁰ Hinteregger, above n 34, at 254.

¹⁰¹ See Tiantian Zhai "Double-Faceted Environmental Civil Liability and the Separate-Regulatory Paradigm: An Inspiration for China" (2022) 14(7) *Sustainability* 4369.

¹⁰² Taylor, above n 57, at 97.

¹⁰³ Papadopoulou, above n 93, at 111.

¹⁰⁴ Sabrina Dupouy "La défense de la nature, sujet de droit ou intérêt à protéger ?" in Mathilde Botonnet and Eve Truilhe (ed) *Procès et environnement : Quelles actions en justice pour l'environnement ?*" (DICE Editions, Aix-enProvence, 2022) 17 at 18.

¹⁰⁵ At 20.

¹⁰⁶ Taylor, above n 57, at 84.

However, the principle of ecological damage has since been criticised for having a lack of effect, and what is described by French scholars as a "true-false recognition". ¹⁰⁷ Although in theory, the principle surpasses traditional legal roadblocks, it "quickly finds impassable limits" when it comes to reasoning in terms of civil liability in the context of pollution. ¹⁰⁸ The structure of tort law simply does not accommodate harms of diffuse and gradual character, and economic interests further obstruct a finding of liability. Article 1246 therefore assumes only a symbolic function in the majority of circumstances. ¹⁰⁹

Kysar describes climate change as the "anti-tort", because the conceptual simplicity of tort law is unsuitable to address the scale and complexities of climate change. ¹¹⁰ Tort law revolves around the idea of harm caused by one person directly to another. It is therefore marked by individualism and a mechanistic image of causation. There is immense difficulty in reshaping tort law to address a deeply communal issue such as climate change, where there are plenty of wrongdoers and no one person or property is directly affected. ¹¹¹ Although Article 1246 extends the categories of damage, the law must depart from traditional private law concepts that rely on individual harm. ¹¹² The major limitation of the French approach is that it fails to do so.

Most significantly, the requirement to establish causation gives rise to major legal difficulties. Establishing a clear connection between emitting activities and environmental damage has been described as the "major stumbling block" of climate

¹⁰⁷ Mathilde Boutonnet "L'*Erika* : une vraie-fausse reconnaissance du prejudice écologique" (2013) 2 Environnement et Developpement.

¹⁰⁸ Matthieu Poumarède "L'accès à la justice et la réparation des atteintes à l'environnement" in Julien Bétaille *Le droit d'accès à la justice en matière d'environnement* (Toulouse University Press, Toulouse, 2016) 247 at [16].

¹⁰⁹ Dupouy, above n 104, at 23.

¹¹⁰ Kysar, above n 13, at 6.

¹¹¹ At 3.

¹¹² Dupouy, above n 104, at 18 and Taylor, above n 57, at 101.

change litigation. ¹¹³ One difficulty is that GHGs do not directly affect plaintiffs or the local environment, rather they cumulate in the atmosphere and gradually cause the earth's temperature to rise. ¹¹⁴ Hence, there is no direct causal connection between any one emitter and the harm sustained. Another challenge is that the causes of climate change events are multiple, and harm caused by emitters is often impossible to distinguish from harm caused by natural events. ¹¹⁵ It is only the increasing frequency and intensity of such events which points toward the fault of emitters, and these can even less be attributed to a particular defendant. ¹¹⁶ As described by Spitzer, "the uncertainties in the chain of causation are simply overwhelming", and the market of CO₂ emissions is an unsuitable basis for the attribution of damage. ¹¹⁷ Despite the development of alternative methods of finding causation, such as proportional liability, the present state of science simply does not enable the required degree of certainty to be established. ¹¹⁸

Furthermore, establishing sufficiently severe damage in the context of emissions is limited by economic considerations. Sabrina Dupouy notes that the law accommodates, to some extent, a right to pollute, which recognises the social utility in emitting activities. Courts are careful to interfere with such utility, and the prioritisation of economic interests over environmental concerns raises the standard of "non negligible" in Article 1246. 120

113 Spitzer and Burtscher, above n 15, at 166.

¹¹⁴ Hinteregger, above n 34, at 240.

¹¹⁵ Hinteregger, above n 34, at 240.

¹¹⁶ At 240.

¹¹⁷ Spitzer and Burtscher, above n 15, at 174.

¹¹⁸ At 170.

¹¹⁹ Dupouy, above n 104, at 22.

¹²⁰ Flore Jean-François *Responsabilité civile et dommage à l'environnement* (Universite des Antilles, 2018) at 528.

The upshot of all of this is that liability can be established in the case of an environmental disaster clearly attributed to one defendant, such as the Erika oil spill, however traditional tort law is unlikely to have any meaningful effect beyond that. ¹²¹ For Article 1246 to be an effective instrument for climate protection it must be adjusted to the characteristics of climate change damage. ¹²² Bold judicial activism would be required, to implement a comprehensive recognition of proportional liability, and determine limitations on the right to pollute. ¹²³ Such activism is in conflict with the desire to maintain consistency in tort law. ¹²⁴

Jean Francois describes Article 1246 as an "ill adapted law", which is ineffective in the fight against climate change. 125 It exacerbates the incompatibility of traditional tort methods with climate change matters and demonstrates the need for civil liability rules to adapt, to accommodate broader situations of environmental harm.

D Limited implementation

As a result, Article 1246 has not been effectively enforced against private entities. Its most significant contribution has been in holding the state accountable for its failure to take action to reduce emissions. ¹²⁶ However, the concept of ecological damage proves ineffective against private entities who emit at a smaller scale and are not bound to international obligations. ¹²⁷ In 2019 there had been few cases involving private entities

¹²¹ Jean-François, above n 120, at 528.

¹²² Hinteregger, above n 34, at 238.

¹²³ At 260. See also Jaap Spier "The Need for Judicial Activism in a Wicked World" in Peter Apathy and others (eds) *Festschrift für Helmut Koziol* (Jan Sramek Verlag KG, 2010) 1481.

¹²⁴ Spitzer and Burtscher, above n 15, at 165.

¹²⁵ Jean-Francois, above n 120, at 529.

¹²⁶ In two landmark cases, *Commune de Grande-Synthe* and *Notre affaire à tous*, the French State was found liable for not taking sufficient action to reduce GHG emissions.

¹²⁷ Duffrene, above n 89, at 463.

decided on the basis of the provision (despite it being in place for three years), and since then there has been significant reliance on other measures. 128

Specifically, in 2017 a duty of vigilance law was introduced into the French Commercial Code, which requires large companies to put in place a due diligence plan to protect human rights the environment in the course of their activities. ¹²⁹ Various proceedings under the provision are ongoing, including a case against France's largest oil company. In *Notre Affair a Tous and Others v. Total*, the plaintiffs allege that Total's vigilance plan will not lead to the emissions reductions required to reach 1.5 degree levels under the Paris Agreement. ¹³⁰ This approach appears to be a more promising route for nature protection because it does not rely on proof of damage. ¹³¹ The provision has already inspired wide changes to corporate policies, regardless of whether a breach has been found. ¹³²

E Learnings from France

At best, France's implementation of civil liability for ecological damage recognises that nature is an interest worthy of protection. ¹³³ The expansion of the concept of damage is admirable, but only an incremental departure from the reliance of civil liability law on the protection of private interests. Holding private entities to account for a global phenomenon is not so easily resolved.

¹²⁸ Cour de Cassation, Crim, 22 March 2016, n° 13-87.650; Cour de Cassation, Crim, 6 December 2016, n° 16-84.350 and Cour de Cassation, Crim, 28 May 2019, n° 18-83290. See Julie Foulon, above n 87, at 317. ¹²⁹ Art L225-102-4 French Commercial Code.

¹³⁰ Nanterre District Court, *Notre Affaire à Tous and Others v. Total SA*, complaint of 28 January 2020.

¹³¹ Mustapha Mekki "Responsabilité civile et droit de l'environnement. – vers un droit spécial de la responsabilité civile environnementale?" (2017) 5 Responsabilité civile et Assurances 17 at 24.

¹³² Zérah Brémond "Corporate Duty of Vigilance and Environment: Some Lessons Drawn from the EDF and the TotalEnergies Cases" (4 June 2023) VerfBlog <verfassungsblog.de>.

¹³³ Mathilde Hautereau-Boutonnet "Faut-il accorder la personnalité juridique à la nature ?" (2017) Recueil Dalloz 1040 at 1040.

The French approach broadly illustrates two points. Firstly, it is considerably difficult to effectively enforce liability for climate change without legislative intervention. ¹³⁴ Ecological damage was not defined in sufficient detail by the Court, and it was only following engagement between interdisciplinary teams of experts and specific legislative recognition that it could be recognised as a distinct concept. ¹³⁵

Secondly, considerable judicial activism is required to enable tort law to effectively deal with climate change issues. Without adaptation, traditional tort rules function to restrict the scope of liability for ecological damage to only the most serious damage. The legal and scientific tools required to establish specific causation and damage in the context of climate change remain to be invented. ¹³⁶ Further, without comprehensive direction from the State, the social utility behind emitting activities will restrict the application of civil liability. The benefit of leaving environmental liability regimes to the State is that it is equipped with the political legitimacy and expertise to determine where the balance between economic and environmental interests should be struck. In the words of Kysar, "courts are not agencies and the common law of tort is designed to address discrete harms by discrete actors, rather than to 'whittle away' at the margins of a comprehensive problem". ¹³⁷

Civil liability is not the universal answer to all kinds of damage. ¹³⁸ Article 1246 demonstrates that perhaps this is true for climate change.

¹³⁴ Taylor, above n 57, at 92.

¹³⁵ At 89.

¹³⁶ Poumarède, above n 108, at 247.

¹³⁷ Kysar, above n 13, at 29.

¹³⁸ Poumarède, above n 108, at [8].

V Netherlands

The contrasting approach of the Netherlands judiciary in *Milieudefensie et al v Royal Dutch Shell* reveals a more promising method of imposing civil liability for climate change. ¹³⁹ The decision is the first time a company has been held directly responsible for its excessive emissions.

A Dutch Shell Case

In 2019 several environmental organisations bought a class action against Royal Dutch Shell (Shell), claiming the company owed a duty of care towards current and future Dutch residents to protect them from the adverse effects of climate change. ¹⁴⁰ The proposed duty was based on the general tort provision contained in Article 6:612 of the Dutch Civil Code, which provides for a private law cause of action should a defendant breach an "unwritten standard of care" it owes to another. ¹⁴¹

The Hague District Court affirmed that Shell is under a duty to contribute to the prevention of climate change, by implementing corporate policies which sufficiently commit to reducing Shell's emissions. ¹⁴² Shell is subject to this duty of care because of the large scale of its emissions and influence on the policy setting of its subsidiaries. The Court ordered Shell to ensure its subsidiaries' corporate strategy and policies regarding climate change are concrete and targeted enough to achieve the emissions reduction goals under the Paris Agreement. ¹⁴³ Importantly, the Court held the duty exists independently

¹³⁹ Milieudefensie and Others v Royal Dutch Shell PLC and Others (26 May 2021) Hague District Court NL:RBDHA:2021:5339 (hereafter Milieudefensie v RDS).

¹⁴⁰Milieudefensie v RDS.

¹⁴¹ This is comparable to the common law tort of negligence.

 $^{^{142}}$ Milieudefensie v RDS at [3.2] and [3.1].

¹⁴³ At [3.2].

of the actions of the State on climate change, and it is not sufficient for Shell to demonstrate compliance with statutory regimes on emissions. 144

This landmark development emerged in the context of the highly progressive approach of the Netherlands judiciary to climate change. In 2019 a ground-breaking decision was made in *State of the Netherlands v Urgenda Foundation*, where the Dutch Supreme Court ordered the Dutch Government to reduce its GHG emissions targets in line with its international obligations. ¹⁴⁵ The Shell decision extended this finding to private companies.

The scope of the duty was heavily informed by sources of soft law. Various normative standards were considered, including international norms, human rights, and the Paris Agreement, as well as scientific consensus on the action required to curb dangerous climate change. These factors were found to illustrate a "broad international consensus about the need for non-state action". 147

The Court found that although Shell was not currently in breach of the duty, its existing policies were "intangible, undefined and non-binding", and emissions targets were not adequately aligned with the 1.5 degree pathway within the Paris Agreement. ¹⁴⁸ Shell therefore owed a "significant best-efforts obligation" to reduce its emissions. ¹⁴⁹ Specifically, the Court ordered Shell to achieve a forty-five percent reduction before the end of 2030. ¹⁵⁰ This order applied to all of Shell's energy portfolio, including scope three

¹⁴⁴ Milieudefensie v RDS at [4.4.1].

¹⁴⁵ State of the Netherlands v Urgenda Foundation (20 December 2019) Netherlands Supreme Court NL:HR:2019:2007.

¹⁴⁶ *Milieudefensie v RDS* at [4.4.13] and [4.4.14].

¹⁴⁷ At [4.4.26].

¹⁴⁸ At [4.5.2].

¹⁴⁹ At [4.1.4].

¹⁵⁰ At [4.4.55].

(indirect) emissions which result from activities by third parties throughout the production chain.¹⁵¹

1 Innovative reasoning

In finding a duty of care, the Court rejected many common arguments against liability. Shell raised the separation of powers principle, to argue that climate change matters belong to the political domain and should not be interfered with by the judiciary. However, the Court strongly refuted that the imposition of a duty went beyond the law-making function of the court. It emphasised that governments should not bear the sole responsibility for addressing climate change and companies have an individual obligation to aid the transition to a low carbon economy. This responsibility "applies everywhere, regardless of the local legal context, and is not passive". It is therefore appropriate to deem Shell's actions unlawful if they breach this obligation, despite being in compliance with Dutch domestic law.

The Court was also hostile to arguments regarding the dissatisfaction of traditional law tort law requirements. Shell's defence largely rested on the lack of direct causation between their actions and the resulting climate impacts. ¹⁵⁵ In light of the scientific uncertainty in climate change matters, the Court approached causation holistically. It found that the overall impact of Shell's activities and the consequences of its business model have a sufficiently foreseeable impact on global emissions to constitute a real risk

¹⁵¹ Milieudefensie v RDS at [4.1.4].

¹⁵² Shell first raised this point in the media, see Paul Luttikhuis, "Milieudefensie begint zaak tegen Shell om milieuschade" (4 April 2018) NRC Handelsblad <nrc.nl>. On 28 May 2018 Shell repeated this response in an official letter, saying, inter alia, that courts are not the right forum to advance the global energy transition, available at <https://milieudefensie.nl/actueel/reactie-shell>.

¹⁵³ Milieudefensie v RDS at [4.4.18].

¹⁵⁴ At [4.4.15].

¹⁵⁵ Milieudefensie v RDS, Shell Statement of Defence, 13 November 2019 at [6] and [7.4].

to the lives of Dutch citizens and therefore to justify a duty of care. ¹⁵⁶ This 'causation-friendly' reasoning allows the law to accommodate a situation where the harm lies in the future, relying on a causative link to *projected* harm.

Regarding the attribution of damage, the common fatality is that there are multiple contributors to climate change, and no set of emissions can be directly attributed to a single company. ¹⁵⁷ The Court rejected this concern, highlighting that every partial contribution to climate change is of importance. ¹⁵⁸ Large entities, including Shell, are aware of the combined effect of their actions with other corporations, and must all play their part in the globally shared responsibility to prevent climate change. ¹⁵⁹

The Court adopted an innovative approach to relief, by ordering a minimum acceptable level of emissions reductions. Shell's 45% reduction obligation was decided in reliance on IPCC calculations made in light of the objectives of the Paris Agreement. Such a reduction obligation is not so much remedial as it is forward looking. It also enables the latest climate science to be integrated into legal solutions.

As a whole, the judgment is striking. The Court effectively constructed a domestic law obligation, relying on soft law and scientific consensus, to bind private actors to the goals

¹⁵⁶ Milieudefensie v RDS at [2.5.9].

¹⁵⁷ Otto Spijkers "Friends of the Earth Netherlands (Milieudefensie v Royal Dutch Shell" (2021) 5 CJEL 237 at 248.

¹⁵⁸ *Milieudefensie v RDS* at [4.3.5]. See also [4.4.16], [4.4.37], and [4.4.54].

¹⁵⁹ At [4.3.5], [4.4.16], [4.4.37] and [4.4.54].

¹⁶⁰ At [2.3.7] and [2.3.9].

¹⁶¹ Andrew Sanger "From Ambition to Obligation: Royal Dutch Shell Ordered to Reduce CO2 Emissions in Line with Paris Agreement" (2021) 80(3) CLJ 425 at 427.

¹⁶² Jacqueline Peel and Rebekkah Markey-Towler "Recipe for Success?: Lessons for Strategic Climate Litigation from the Sharma, Neubauer, and Shell Cases" (2021) 22(8) Cambridge University Press 1484 at 1492.

set out by the Paris Agreement. ¹⁶³ The duty is undeniably policy like. While some suggest the Netherlands has become a dikastocracy, the Shell decision is better interpreted as indicative of a legal transition. ¹⁶⁴ Climate change has traditionally been perceived as a political issue. ¹⁶⁵ However, the global climate change litigation trend evidences an increasing realisation that a sound environment is a constitutional matter, increasing the democratic legitimacy of judicial law making on the subject. ¹⁶⁶

2 Departure from traditional civil liability concepts

Although the true effect of the decision will be determined on appeal, the innovative arguments of the Hague District Court are broadly seen to be part of the "recipe for success" for climate accountability.¹⁶⁷ Much of the approach's potential for success comes down to its ability to circumvent the traditional barriers of tort law.

Of upmost importance is the Court's causation friendly reasoning. The holistic approach of the court requires a mere general link between the defendant's emissions and damage to the climate. It shifts the focus from past harm to future harm, with reference to the company's present actions, significantly loosening the evidentiary burden. This is in contrast to Article 1246 of the French Civil Code and other traditional mechanisms for finding liability, which are fettered by the requirement to establish specific causation. A forward-looking approach to causality promotes long-term sustainability efforts from large entities and therefore better nature protection. ¹⁶⁸

¹⁶³ Sanger, above n 161, at 427.

¹⁶⁴ Spijkers, above n 156, at 237 and Burgers, above n 51, at 71.

¹⁶⁵ Burgers, above n 51, at 58.

¹⁶⁶ At 60.

¹⁶⁷ Peel and Markey-Towler, above n 162.

¹⁶⁸ At 1494.

The remedies adopted by the Court are also forward looking. Rather than compensating for discrete incidents, the reduction obligations align with intended policy impacts derived from the Paris Agreement. ¹⁶⁹ This enables civil liability to operate as a vehicle of enforcement of international obligations and pursue more broadly framed social change. ¹⁷⁰ In this way, the judiciary can be seen to support other branches of government in the demanding task of achieving emissions reductions, rather than cutting across that attempt. ¹⁷¹

This approach may appear to be of questionable democratic legitimacy, in the absence of a majority decision to incorporate international obligations into domestic law. However, climate change is of such a magnitude that it is threatening democracy, calling for the intervention of judicial activism. ¹⁷² It is the departure from traditional civil liability concepts that allows judge made law to effectively intervene, and plug the gaps of the State's inaction.

The obligation fashioned by the District Court in *Milieudefensie* has been described as a clear example of a "gap-filler" in mandatory due diligence laws. ¹⁷³ Requiring private entities to attend to the emissions reductions required in the Paris Agreement acts as an interim method to address the risk of climate change, "pending the adoption of more specific dedicated legislation". ¹⁷⁴ Although the decision may be "sporadic and

¹⁶⁹ Paris Agreement, arts 2, 3 and 4.

¹⁷⁰ Chiara Macchi and Josephine van Zeben "Business and human rights implications of climate change litigation: *Milieudefensie et al. v Royal Dutch Shell*" (2021) 30(3) RECIEL 409 at 414.

¹⁷¹ Foster, above n 62, at 234.

¹⁷² Burgers, above n 51, at 60.

¹⁷³ Mikko Rajavouri, Annalisa Savaresi and Harro van Asselt "Mandatory due diligence laws and climate change litigation: Bridging the corporate climate accountability gap?" (2023) Regulation & Governance at 5.

¹⁷⁴ At 6.

jurisdiction dependent", and whether or not it is overturned on appeal, it acts as a driver for legislation relating to climate due diligence. 175

Fittingly, in 2022 Dutch legislators submitted a Bill on Responsible and Sustainable International Business to the House of Representatives. The amended Bill imposes a general duty of care to prevent impacts to human rights and the environment, and specifically includes the obligation to develop a climate plan which includes objectives to reduce emissions by at least 55% in 2030. To Civil liability is explicitly presented as a remedy for non-compliance. In effect, this legislation would formalise and clarify the boundaries of the duty imposed by the Hague District Court, as well as impose additional due diligence requirements. The Bill has been followed by an EU wide agreement on a Directive on Corporate Sustainability Due Diligence in 2023.

B Due diligence: bridging the corporate climate accountability gap 180

Due diligence obligations are recognised as critical for strengthening corporate climate accountability. While they are an already established feature of international environmental law, the approach of both the Netherlands in *Milieudefensie*, and France in

¹⁷⁵ Rajavouri, Savaresi and van Asselt, above n 173, at 6.

¹⁷⁶ Dutch Responsible and Sustainable International Business Conduct Bill 2022.

¹⁷⁷ At 7.

¹⁷⁸ At 12.

¹⁷⁹ Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022 amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive 2013/34/EU, as regards corporate sustainability reporting, OJ L322/15. The CSDDD requires in-scope companies to conduct due diligence on, and take responsibility for, human rights abuses and environmental harm throughout their global value chains.

¹⁸⁰ Rajavuori, Savaresi and van Asselt, above n 173.

¹⁸¹ At 3.

the Commercial Code, demonstrate the increasing role of due diligence in the regulation of private entities. ¹⁸²

Due diligence obligations possess many benefits as a regulatory tool. Firstly, they are by nature flexible and allow ongoing adaptation of the assessment of risks. ¹⁸³ The vigilance required of private entities is "contextually determined" in light of the level of risk involved in their activities, their capacity to reduce them, and emerging scientific or technical knowledge. ¹⁸⁴ Such flexibility is attractive in the fast-evolving area of environmental law and in light of the variety of private entities involved. ¹⁸⁵

Due diligence obligations also function to manage risk and expand climate accountability. ¹⁸⁶ What matters is not direct causality between a defendant's actions and damage, but the proximity of an actor to a risk. ¹⁸⁷ Regulation can therefore be imposed over any activity or corporate policy which has a foreseeable impact on climate change. ¹⁸⁸ The broader reach of a risk-based regime upholds the concept of shared responsibility, by acknowledging that collaborative efforts are required to effectively

The concept's significance in international law is reflected in the ILA Study Group documents: *Due Diligence in International Law (2012 - 2016)* https://www.ila-hq.org/index.php/study-groups. See also Caroline E Foster "Due Regard and Due Diligence" in *Global Regulatory Standards in Environmental and Health Disputes: Regulatory Coherence, Due Regard, and Due Diligence* (Oxford Academic, 2021) 89.

¹⁸³ Caroline E Foster "Due Diligence and Compliance with the Protocol on Environmental Protection to the Antarctic Treaty" (2021) 13(1) The Yearbook of Polar Law 154 at 158; Pierre-Marie Dupuy "Reviewing the Difficulties of Codification: On Ago's Classification of Obligations of Means and Obligations of Result in relation to State Responsibility" (1999) 10(2) EJIL 371 at 375; and Anne Peters, Heike Krieger and Leonhard Kreuzer "Due diligence: the risky risk management tool in international law" (2020) 9(2) CILJ 121 at 126.

¹⁸⁴ Foster, above n 181, at 11 and Peters, Krieger and Kreuzer, above n 182, at 126.

¹⁸⁵ See Claire Bright and Karin Buhmann "Risk-Based Due Diligence, Climate Change, Human Rights and the Just Transition" (2021) 13(18) *Sustainability* 10454.

¹⁸⁶ Peters, Krieger and Kreuzer, above n 182, at 127 and 130.

¹⁸⁷ At 125.

¹⁸⁸ At 125.

battle the global and ubiquitous problem caused by emissions.¹⁸⁹ This is a significant benefit in comparison to traditional civil liability mechanisms, because it promotes long term sustainability efforts, rather than addressing discrete incidents. Due diligence thus expands climate accountability, and fills gaps where other legal avenues have failed, or do not yet exist.¹⁹⁰

From a critical perspective, due diligence obligations imposed by the courts introduce certain risks, particularly by contributing to the rise of 'informal' law making, raising questions of judicial legitimacy. ¹⁹¹ However, as emphasised throughout this paper, the judiciary may legitimately intervene to protect the environment, which is increasingly understood to be a prerequisite for democracy. ¹⁹² Furthermore, intervention in the form of due diligence obligations is arguably justified on the basis that they are an emanation of well-established principles such as good faith, and accompany clear primary rules. ¹⁹³ In the context of climate change, the Paris Agreement and individualised NDCs clearly define what is 'due', decreasing the informality or illegitimacy of court-made due diligence obligations, and allowing them to act as a vehicle to enforce States' primary obligations.

The rise of due diligence indicates a structural change in and of the environmental law order. ¹⁹⁴ Traditional civil liability methods are clearly insufficient to deal with climate change issues. The risk-based approach of due diligence enables environmental harm to be prevented, rather than redressed, and overcomes the causative uncertainty which

¹⁸⁹ See Jacqueline Peel "Climate Change" in Andre Nollkaemper and Ilias Plakokefalos (eds) *The Practice of Shared Responsibility in International Law* (Cambridge University Press, Cambridge, 2017) 1009.

¹⁹⁰ Peters, Krieger and Kreuzer, above n 182, at 131.

¹⁹¹ At 135.

¹⁹² Burgers, above n 51, at 60.

¹⁹³ Peters, Krieger and Kreuzer, above n 182, at 134.

¹⁹⁴ At 135.

undermines a harm focused regime. ¹⁹⁵ Thus, due diligence has the potential to be a guarantor of environmental justice in the context of significant environmental insecurity and the rise of private actors. ¹⁹⁶ Civil liability has a crucial role to play in filling gaps where mandatory due diligence legislation does not yet exist or is weakly enforced, and may also act as a driver for new legislation. ¹⁹⁷

VI Relevance for New Zealand

France and the Netherlands have implemented contrasting forms of civil liability for climate change damage, which reveal its potential to be an appropriate development in New Zealand law.

The French approach is highly illustrative of the limitations of traditional tort law in dealing with climate change matters. The *Erika* case and Article 1246 implemented a civil liability regime to repair ecological damage, but on the basis of traditional tort principles. Recognition of a new category of "ecological damage" and the collective interest of humans in preserving the environment is certainty enticing. However, a claim such as Smith's, where there are multiple contributors to the harm and multiple people affected, reaches impassable limits beside the relational framework of traditional tort law, including the requirements of specific harm and direct causation. As identified by the Court of Appeal, what would be required is a "major departure from fundamental principles" to enable civil liability to have any meaningful effect. ¹⁹⁸ If a novel tort is implemented, care must be taken to ensure that tort law is sufficiently adapted to the characteristics of climate change damage. ¹⁹⁹

¹⁹⁵ Peters, Krieger and Kreuzer, above n 182, at 135.

¹⁹⁶ At 136.

¹⁹⁷ Rajavouri, Savaresi and van Asselt, above n 173, at 12.

¹⁹⁸ Smith v Fonterra, above n 40, at [15].

¹⁹⁹ Foster, above n 62, at 227.

Even if alternative causation approaches were adopted, courts would face the issue of balancing the economic interest behind emitting activities and the environmental interest in reducing them. Just as French law recognises the right of pollution, New Zealand courts have recognised that emitting is not unlawful in itself and possesses social utility. These considerations would restrict the scope of civil liability and generate significant uncertainty in the law. As stated by the Court of Appeal, courts do not have the expertise to adequately strike this balance. ²⁰¹

New Zealand should instead draw inspiration from the approach of the Netherlands in the Dutch Shell case. Due diligence obligations can be used as a tool to impose liability, requiring corporate strategy to give effect to the targets set out in the Paris Agreement. This approach is forward-looking and far less reliant on restrictive tort law principles, absolving plaintiffs of the need to establish a particular victim or direct causation. The Dutch approach appropriately adapts tort law, generating a vehicle to implement the goals of the Paris Agreement and to hold companies to account for their climate impacts. ²⁰² Although the courts will still be required to balance economic and environmental interests, the risk-based nature of due diligence enables a stronger approach to be taken, which centres on future harm and applies to a wider range of private entities. The firm guidance of New Zealand's NDC and accompanying IPCC science will assist the courts in this regard. ²⁰³ Although this approach does not provide individual victims such as Smith with redress, it is a far more wide-reaching tool to prevent the damaging context of defendants in the long term.

However, if such an innovation were to succeed in *Smith v Fonterra*, it would require New Zealand courts to "push the boundaries of established legal principles to their limits,

²⁰⁰ Smith v Fonterra, above n 40, at [20].

²⁰¹ At [26].

²⁰² Rajavouri, Savaresi and van Asselt, above n 173, at 13.

²⁰³ See New Zealand "Submission under the Paris Agreement: New Zealand's first Nationally Determined Contribution" (4 November 2021) <unfccc.int>.

if not expand them". ²⁰⁴ So far, the judgments of New Zealand courts have been an instructive opposition to the expansive approach seen in *Milieudefensie*. ²⁰⁵ The judiciary has been expressly unwilling to create a new private law duty, and make an order with global consequences, both which the Court in *Milieudefensie* was very comfortable with. Further, political sensitivity associated with climate change has led New Zealand courts to abstain from making an order to reduce emissions where the activity was not in breach of domestic law. This is entirely the opposite approach to *Milieudefensie*, where the Court was happy to impose a duty, despite the emissions being otherwise permitted by the majority.

The reluctance of New Zealand courts in respect of these issues is not surprising insofar as New Zealand adheres to a common law tradition of incremental development. This tradition has not been characterised by a progressive approach or much departure from traditional tort doctrine. Conversely, the Dutch Shell judgment was a natural extension from the prior *Urgenda* case.²⁰⁶ What is required from the New Zealand judiciary is a significant change in perspective, to accept that a healthy environment is a constitutional matter and allow the magnitude of climate change to disrupt civil liability doctrine.

Regardless, it is evident that civil liability has an important role to play in plugging the gaps of the state inaction and prompting future legislative measures.²⁰⁷ Achieving New Zealand's emissions reductions pledge will require huge political investment and it does not appear that this will be done without stimulus. The State could do with "hard legal cues" from the judiciary to prompt greater action.²⁰⁸ *Milieudefensie v Royal Dutch Shell*

²⁰⁴ Travers Smith "Beyond the headlines: recent trends in global climate change litigation" (13 July 2021) <traverssmith.com>.

²⁰⁵ Travers Smith "Divergent global approaches to climate change litigation: New Zealand Court of Appeal provides an alternative to Dutch Milieudefensie case" (14 February 2022) <traverssmith.com>.

²⁰⁶ State of the Netherlands v Urgenda Foundation, above n 144.

²⁰⁷ Foster, above n 62, at 231 and Rajavouri, Savaresi and van Asselt, above n 173, at 14.

²⁰⁸ Foster, above n 62, at 231.

inspired mandatory climate due diligence legislation in and beyond the Netherlands.²⁰⁹ Undoubtedly, activism of New Zealand courts also has the potential to prompt greater political activity in the battle against climate change. This will ensure our legal systems "contribute as far as possible to an improved global future".²¹⁰

However, New Zealand's legislative measures are already increasing in response to climate change issues. Significantly, New Zealand is one of the first countries to implement a regime making climate-related disclosures mandatory for some organisations. The mandatory climate-related disclosure (CRD) regime implements a new reporting framework for financial institutions and listed companies in New Zealand from 2023. Organisations covered (known as Climate Reporting Entities) are required to analyse and publicly disclose their climate impacts and emissions, as well as how the entity plans to transition towards a low emissions future. Plans to transition towards a low emissions future. The regime was implemented specifically with reference to the Paris Agreement, to provide reference points for investors to examine whether a company's portfolio is aligned with the reduction goals. Although the regime does not impose a hard obligation to reduce emissions, companies are incentivised to do so, in order to attract investments.

Another development is the reform of the Emissions Trading Scheme in 2020 by the Climate Change Response (Emissions Trading Reform) Amendment Act, to improve its

²⁰⁹ See the German Supply Chain Due Diligence Act 2023; the Dutch Responsible and Sustainable International Business Conduct Bill 2022; and the European Corporate Sustainability Due Diligence Directive.

²¹⁰ Foster, above n 62, at 234.

²¹¹ Financial Sector (Climate-related Disclosures and Other Matters) Amendment Act 2021.

²¹² See Ministry of Business, Innovation & Employment *Implementing the Financial Sector (Climate-related Disclosures and Other Matters) Amendment Act 2021* (27 February 2023).

²¹³ At 8.

²¹⁴ At 8.

effectiveness. The changes included a cap on total emissions that declines in line with the 2050 reductions targets, as well as establishment of controls of prices. ²¹⁵ This indicates increasing direction from the State to bring emissions in line with New Zealand's NDC. Additionally, the RMA is in the process of being completely reformed to provide better protection of the environment. ²¹⁶

New Zealand Courts will be reluctant to impose a duty to reduce emissions in the presence of such measures. Parliament is increasingly regulating GHG emissions, and particularly with the new CRD regime, the corporate climate accountability gap is already closing.

However, the imposition of civil liability would still be of value. In Simon Taylor's view, the acceptance of a novel tort as proposed in *Smith v Fonterra* will be seen as worthwhile if it adds an effective layer to existing measures of environmental governance. New Zealand's existing measures are not meeting the required reductions. The developing environmental law landscape still lacks due diligence legislation which specifically obliges entities to plan to reduce their emissions in line with the Paris Agreement. Moreover, the CRD regime does not cover all major emitters. Civil liability provides a clear entry point to fill the corporate climate accountability gaps which exist beyond reporting obligations. Entities that are not targeted by existing regimes can be held accountable for their contribution to climate change, preventative relief can be acquired which provides genuine protection for the environment, and further legislative measures could follow.

²¹⁵ Environmental Protection Authority "Changes to the Emissions Trading Scheme since 2020" <epa.govt.nz>.

²¹⁶ Resource Management Amendment Act 2020. See also the Natural and Built Environment Bill and Spatial Planning Bill which will be the main replacement of the RMA.

²¹⁷ Taylor, above n 57, at 98.

VII Concluding remarks

Addressing the complexity of climate change using tort law is no easy feat. France and the Netherlands illustrate two contrasting approaches to the issue, the latter more promising than the former. It is clear that, pending the development of climate science, effective civil liability for climate change damage must be forward-looking, holistic, and depart from restrictive tort requirements. Although this would disrupt traditional legal doctrine, we are entering an unprecedented era of climate instability, in a time of political inertia, and judicial activism is needed to respond to the pressing need for climate protection. If tort law is to form part of the solution to the problem of climate change, it must adapt, "much like life itself in a warming world".

²¹⁸ Foster, above n 62, at 234.

²¹⁹ Hook and others, above n 31, at 210.

²²⁰ Kysar, above n 13, at 7.

BIBLIOGRAPHY

PRIMARY SOURCES

1 Cases

C v Holland [2012] NZHC 2155, [2012] 3 NZLR 672.

Cour de Cassation, crim, 25 September 2012, n° 10-82.938.

Cour de Cassation, Crim, 22 March 2016, n° 13-87.650

Cour de Cassation, Crim, 6 December 2016, n° 16-84.350

Cour de Cassation, Crim, 28 May 2019, n° 18-83290.

Court of Appeal Nouméa, 25 February 2014, n° 11/00187.

Court of Appeal Paris, 30 March 2010, n° 08/02278.

Hosking v Runting [2004] NZCA 34.

Milieudefensie and Others v Royal Dutch Shell PLC and Others (26 May 2021), Hague District Court, NL:RBDHA:2021:5339 (hereafter Milieudefensie v RDS).

Nanterre District Court, *Notre Affaire à Tous and Others v. Total SA*, complaint of 28 January 2020.

Rylands v Fletcher (1868) LR 3 HL 330 (HL).

Smith v Fonterra Co-operative Group Ltd [2020] NZHC 419.

Smith v Fonterra Co-operative Group Ltd [2021] NZCA 552.

Smith v Fonterra Co-Operative Group Ltd SC149/2021 Appellant's Synopsis of Submissions on Appeal.

State of the Netherlands v Urgenda Foundation (20 December 2019) Netherlands Supreme Court NL:HR:2019:2007.

Thompson v Minister for Climate Change Issues [2017] NZHC 733.

Tribunal Correctionnel de Paris, 16 January 2008, n° 9934895010.

2 Legislation

Climate Change Response (Emissions Trading) Amendment Act 2008.

Climate Change Response (Zero Carbon) Amendment Act 2019.

French Constitutional Law No 2005-205, 1 March 2005.

Dutch Bill on Responsible and Sustainable International Business Conduct 2022

Financial Sector (Climate-related Disclosures and Other Matters) Amendment Act 2021.

French Civil Code.

French Commercial Code.

French Environmental Code.

German Supply Chain Due Diligence Act 2023.

Loi n° 2016-1087 du 8 août 2016 pour la reconquête de la biodiversité, de la nature et des paysages.

Natural and Built Environment Bill and Spatial Planning Bill 2023 (186-1).

Resource Management Amendment Act 2020.

3 Treaties

Directive 2004/35/CE on environmental liability with regard to the prevention and remedying of environmental damage [2004] OJ L143/56.

Directive (EU) 2022/2464 of the European Parliament and of the Council of 14 December 2022.

Kyoto Protocol (opened for signature 11 December 1997, entered into force 16 February 2005)

Paris Agreement (opened for signature 22 April 2016, entered into force 4 November 2016).

United Nations Framework Convention on Climate Change (opened for signature 9 May 1992, entered into force 21 March 1994).

SECONDARY SOURCES

1 Books and chapters in books

Benoit Mayer *The International Law on Climate Change* (Cambridge University Press, 2018).

Carlo Vittorio Giabardo *Climate Change Litigation and Tort Law: Regulation Through Litigation?* (Diritto & Processo, University of Perugia Law School Yearbook, 2020).

Caroline E Foster "Due Regard and Due Diligence" in *Global Regulatory Standards in Environmental and Health Disputes: Regulatory Coherence, Due Regard, and Due Diligence* (Oxford Academic, 2021) 89.

Flore Jean-François *Responsabilité civile et dommage à l'environnement* (Universite des Antilles, 2018).

Jaap Spier "The Need for Judicial Activism in a Wicked World" in Peter Apathy and others (eds) *Festschrift für Helmut Koziol* (Jan Sramek Verlag KG, 2010) 1481.

Jacqueline Peel "Climate Change" in Andre Nollkaemper and Ilias Plakokefalos (eds) The Practice of Shared Responsibility in International Law (Cambridge University Press, Cambridge, 2017) 1009. Joana Setzer and Rebecca Byrnes *Global trends in Climate Change Litigation* (Grantham Research Institute on Climate Change Policy, London, 2019).

Kevin R Gray, Richard Tarasofsky, and Cinammon P Carlarne (eds) *The Oxford Handbook of International Climate Change Law* (online ed, Oxford Academic, 2016).

Lindene Patton and Felicia H Barnes "Science and the Law: How Will Developments in Attribution Science Affect How the Law Addresses Compensation for Climate Change Effects?" in Bridget Hutter (ed) *Risk, Resilience, Inequality and Environmental Law* (Edward Elgar, 2017) 147.

Matthieu Poumarède "L'accès à la justice et la réparation des atteintes à l'environnement" in Julien Bétaille *Le droit d'accès à la justice en matière d'environnement* (Toulouse University Press, Toulouse, 2016) 247.

Michael Jones (ed) Clerk & Lindsell on Torts (22nd ed, Sweet & Maxwell 2018).

Monika Hinteregger (ed) *Environmental Liability and Ecological Damage in European Law* (Cambridge University Press, 2008).

Nicholas McBride, "Rights and the Basis of Tort Law" in Donal Nolan and Andrew Robertson (eds) *Rights and Private Law* (Hart, 2012) 331.

Nicholas Stern *The Economics of Climate Change: The Stern Review* (Cambridge University Press, 2007).

Sabrina Dupouy "La défense de la nature, sujet de droit ou intérêt à protéger ?" in Mathilde Botonnet and Eve Truilhe (ed) *Procès et environnement : Quelles actions en justice pour l'environnement ?"* (DICE Editions, Aix-enProvence, 2022) 17.

2 Journal articles

Andrew Sanger "From Ambition to Obligation: Royal Dutch Shell Ordered to Reduce CO2 Emissions in Line with Paris Agreement" (2021) 80(3) CLJ 425.

Anne Peters, Heike Krieger and Leonhard Kreuzer "Due diligence: the risky risk management tool in international law" (2020) 9(2) CILJ 121 at 126.

Aude-Solveig Epstein "La réparation du préjudice écologique en droit commun de la responsabilité civile" (2016) 21 Recueil Dalloz 1236.

Benoit Mayer "The Duty of Care of Fossil-Fuel Producers for Climate Change Mitigation: Milieudefensie v. Royal Dutch Shell District Court of The Hague (The Netherlands)" (2022) 11(2) TEL 407.

Caroline E Foster "Due Diligence and Compliance with the Protocol on Environmental Protection to the Antarctic Treaty" (2021) 13(1) The Yearbook of Polar Law Online 154.

Caroline E Foster "Novel Climate Tort? The New Zealand Court of Appeal Decision in Smith v Fonterra Co-Operative Group Limited and Others" (2022) 24(3) Env L Rev 224.

Catherine Leining, Suzi Kerr and Bronwyn Bruce-Brand "The New Zealand Emissions Trading Scheme: Critical Review and Future Outlook for Three Design Innovations" (2020) 20(2) Climate Policy 264.

Chiara Macchi and Josephine van Zeben "Business and human rights implications of climate change litigation: Milieudefensie et al. v Royal Dutch Shell" (2021) 30(3) RECIEL 409.

Christina Voigt "The Compliance and Implementation Mechanism of the Paris Agreement" (2016) 25 Rev Eur Comp 161.

Claire Bright and Karin Buhmann "Risk-Based Due Diligence, Climate Change, Human Rights and the Just Transition" (2021) 13(18) Sustainability 10454.

Danai Papadopoulou "The Role of French Environmental Associations in Civil Liability for Environmental Harm: Courtesy of "Erika"" (2009) 21 JEL 87.

Danielle Cooper "Change the system not the climate – a principled look at Smith v Fonterra Co-operative Group Ltd" (2020) 24 NZJEL 187.

Douglas A Kysar "What Climate Change Can Do About Tort Law" (2011) 41 JEL 1.

Elizabeth Fisher, Eloise Scotford, and Emily Barritt "The Legally Disruptive Nature of Climate Change" (2017) 80(2) MLR 173.

Feroze Duncan Gadekar Brailsford "Foreseeable sea-level rise and climate change causation: A discussion of tort law's role in providing relief and attributing liability for climate change-induced harms" (2022) 26 NZJEL 91.

Geoffrey Palmer "New Zealand's Defective Law on Climate Change" (2015) 13 NZJPIL 115.

Gu Zihau, Christina Voigt and Jacob Werksman "Facilitating Implementation and Promoting Compliance with the Paris Agreement under Article 15: Conceptual Challenges and Pragmatic Choices" (2019) 9 Climate Law 65.

Henry Weaver and Douglas Kysar "Courting Disaster. Climate Change and the Adjudication of Catastrophe" (2017) 93 Notre Dame Law Rev 295.

Imad Antoine Ibrahiam, Sandrine Ibrahim and Jessica Owley "The Paris Agreement Compliance Mechanism: Beyond Cop 26" (2021) 11 Wake Forest L Rev 147.

Jacqueline Peel and Rebekkah Markey-Towler "Recipe for Success?: Lessons for Strategic Climate Litigation from the Sharma, Neubauer, and Shell Cases" (2021) 22(8) Cambridge University Press 1484.

James Rising and others "The missing risks of climate change" (2022) 610 Nature 643.

Julie Foulon "Recent developments in French environmental law: Recognition and implementation of ecological damage in French tort law" (2019) 21(4) Environ Law Rev 309.

Kelly Levin and others "Overcoming the tragedy of super wicked problems: constraining our future selves to ameliorate global climate change" (2012) 45 Policy Sci 123.

Laura Burgers "Should Judges Make Climate Change Law?" (2020) 9(1) TEL 55.

Laurent Neyret "L'affaire Erika : moteur d'évolution des responsabilités civile et pénale" (2012) Recueil Dalloz 2238.

Leon Green "Tort Law Public Law in Disguise" (1959) 38 Texas L Rev 257.

Maria Hook and others "Tort to the Environment: A Stretch Too Far or a Simple Step Forward? 'Smith v Fonterra Co-Operative Group Ltd and Others [2020] NZHC 419" (2021) 33 JEL 195.

Marie-Pierre Camproux Duffrene "Le préjudice écologique et sa réparabilité en droit civil français de la responsabilité ou les premiers pas dans un sentier menant à un changement des rapports Homme-Nature" (2021) 46(3) Revue Juridique de l'Environnement 457.

Martin Spitzer and Bernhard Burtscher "Liability for Climate Change: Cases, Challenges and Concepts" (2017) 2 JETL 137.

Mathilde Boutonnet "L'Erika : une vraie-fausse reconnaissance du prejudice écologique" (2013) 2 Environnement et Developpement 23.

Mathilde Hautereau-Boutonnet and Laura Canali "Chapter 6. Paving the way for a preventive climate change tort liability regime" (2019) 30(2) JIB 119.

Mathilde Hautereau-Boutonnet "Faut-il accorder la personnalité juridique à la nature ?" (2017) Recueil Dalloz 1040.

Mikko Rajavuori, Annalisa Savaresi and Harro van Asselt "Mandatory due diligence laws and climate change litigation: Bridging the corporate climate accountability gap?" (2023) Regulation & Governance (Early View).

Monika Hinteregger "Civil Liability and the Challenges of Climate Change: A Functional Analysis" (2017) 8(2) JETL 238.

Mustapha Mekki "Responsabilité civile et droit de l'environnement. – vers un droit spécial de la responsabilité civile environnementale ?" (2017) 5 Responsabilité civile et Assurances 17.

Navraj Singh Ghaleigh "Two Stories About E.U. Climate Change Law and Policy" (2013) 14 Theoretical Inquiries in Law 43.

Otto Spijkers "Friends of the Earth Netherlands (Milieudefensie v Royal Dutch Shell" (2021) 5 CJEL 237.

Pierre-Marie Dupuy "Reviewing the Difficulties of Codification: On Ago's Classification of Obligations of Means and Obligations of Result in relation to State Responsibility" (1999) 10(2) EJIL 371.

Pooja Upadhyay "Climate Claimants: The Prospects of Suing the New Zealand Government for Climate Change Inaction" (2019) 23 NZJEL 187.

Ronald H Coase "The Problem of Social Cost" (1960) 3 Journal of Law and Economics 1.

Simon Taylor "Extending the Frontiers of Tort Law: Liability for Ecological Harm in the French Civil Code" (2018) 9(1) JETL 81.

Theodore Okonkwo "Protecting the Environment and People from Climate Change through Climate Change Litigation" (2017) 10 JPL 66.

Thomas Burman "A new causal pathway for recovery in climate change litigation?" (2022) 52 ELR 10038.

Tiantian Zhai "Double-Faceted Environmental Civil Liability and the Separate-Regulatory Paradigm: An Inspiration for China" (2022) 14(7) Sustainability 4369.

3 Reports

IPCC Climate Change 2023: Synthesis Report (Geneva 2023).

IPCC Global Warming of 1.5: Special Report: Summary for Policy Makers (Geneva, 2018).

Joana Setzer and Rebecca Byrnes *Global trends in Climate Change Litigation* (Grantham Research Institute on Climate Change Policy, London, 2019).

Ministry for the Environment and Stats NZ New Zealand's Environmental Reporting Series: Environment Aotearoa 2022 (April 2022).

Ministry of Business, Innovation & Employment *Implementing the Financial Sector* (Climate-related Disclosures and Other Matters) Amendment Act 2021 (27 February 2023).

4 Internet resources

Alexis Deborde "L'apparition de la notion de préjudice écologique en droit français" (23 July 2013) Le Petit Juriste < lepetitjuriste.fr>.

Anneke Smith "National wants to keep agriculture off the ETS, give farmers more time before paying for emissions" (12 June 2023) RNZ <www.rnz.co.nz>.

Avocats Picovschi "Erika case: taking into account ecological damage" (20 September 2021) <avocats-picovschi.com>.

Dentons "Litigating Climate Change in France" (3 November 2022) Dentons dentons.com>.

Due Diligence in International Law (2012 - 2016) https://www.ila-hq.org/index.php/study-groups>.

Environmental Protection Authority "Changes to the Emissions Trading Scheme since 2020" <epa.govt.nz>.

Hamish Cardwell "What's wrong with the Emissions Trading Scheme?" (29 April 2023) RNZ <www.rnz.co.nz>.

Ministry for the Environment "Resource management system reform" (15 November 2022) <www.environment.govt.nz>.

Ministry for the Environment "About the New Zealand Emissions Trading Scheme" www.mfe.govt.nz>.

New Zealand "Submission under the Paris Agreement: New Zealand's first Nationally Determined Contribution" (4 November 2021) <unfccc.int>.

Paul Luttikhuis, "Milieudefensie begint zaak tegen Shell om milieuschade" (4 April 2018) NRC Handelsblad <nrc.nl>.

Travers Smith "Beyond the headlines: recent trends in global climate change litigation" (13 July 2021) <traverssmith.com>.

Travers Smith "Divergent global approaches to climate change litigation: New Zealand Court of Appeal provides an alternative to Dutch Milieudefensie case" (14 February 2022) <traverssmith.com>.

Zérah Brémond "Corporate Duty of Vigilance and Environment: Some Lessons Drawn from the EDF and the TotalEnergies Cases" (4 June 2023) VerfBlog tel:Yerfassungsblog.de.

5 Other resources

David Messner *The Foundations of Civil Liability for Industrial Pollution* (Graz Law Working Paper, December 2021).

Milieudefensie v RDS, Shell Statement of Defence, 13 November 2019.

Stefanie Tye and Juan-Carlos Altamirano Embracing the Unknown: Understanding Climate Change Uncertainty (online ed, Word Resource Institute, 2017).

Technical Paper from the CPMR General Secretariat – Following the 'Erika' ruling by the French Court of Cassation, what steps should be taken at European and international level? (Conference of Peripheral Maritime Regions, CRPMNTP130019, 16 May 2013).

United Nations Human Rights Office of the High Commissioner "Intolerable tide of people displaced by climate change: UN expert" (press release, 23 June 2022).