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Climate Litigation's Pathways to Corporate Accountability

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CLIMATE LITIGATION’S PATHWAYS TO CORPORATE ACCOUNTABILITY

*Mackenzie Kern**

“The climate crisis has already been solved. We already have the facts and solutions. All we have to do is wake up and change.”

– *Greta Thunberg (2018)*

ABSTRACT

Climate change is the largest threat to humanity right now. It is no longer just an environmental problem, as it leaks into all aspects of society. If no action is taken, the combination of scarce resources, loss of biodiversity, rising sea-levels, and the escalation of natural disasters will put many communities around the world at risk. Alongside mitigation and adaptation efforts, people are beginning to turn to the courts to hold those who are contributing to this problem the most accountable. This Note will discuss a new wave of climate litigation that, with the help of attribution science, is seeing more success in holding corporations accountable for the climate damage they are causing.

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I. INTRODUCTION

If not for COVID-19, climate change would likely have been the main topic of 2020: it may have been the worst year ever, in terms of

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climate change.¹ In 2020 alone, natural disasters such as cyclones, wildfires, hurricanes, floods, and droughts rocked the world² and it was the warmest year on record, surpassing 2016.³ The director of NASA's Goddard Institute for Space Studies, Gavin Schmidt, warned that "[t]his isn't the new normal . . . [t]his is a precursor of more to come."⁴ As these climate change events cause harm to countless individuals and wreak havoc on the world, citizens and governments are beginning to seek redress in court from those deemed responsible.⁵

This Note addresses a new wave of climate change litigation that aims to hold corporations accountable for climate change damage. This wave of litigation is likely to succeed due to the development of attribution science and growing global support.⁶ This Note advocates two primary avenues to accountability. First, it argues that plaintiffs, with the help of climate attribution science, can now show that climate change is foreseeable and preventable,⁷ and, therefore, they are able to bring both shareholder lawsuits and climate risk disclosure lawsuits. Second, it argues that plaintiffs, using this attribution science, can give effect to the human rights legislation of various human rights bodies through human rights climate litigation.

Attribution climate science plays a central role in recent climate litigation because of its ability to guide the discussion of climate change responsibility.⁸ This cause is not without obstacles, though, as it is not

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1. Anysuya Datta, *Here's Why 2020 Is the Worst Year so Far in Terms of Climate Change*, GEOSPATIAL WORLD (Oct. 12, 2020), <https://www.geospacialworld.net/blogs/heres-why-2020-is-the-worst-year-so-far-in-terms-of-climate-change/> [https://perma.cc/H2BF-W58Y].
 2. *Id.*; Akshit Sangomla, *Looking Back in 2020: The World in Grip of Extreme Weather Events*, DOWNTOEARTH (Dec. 10, 2020), <https://www.downtoearth.org.in/news/climate-change/looking-back-in-2020-the-world-in-grip-of-extreme-weather-events-74660> [https://perma.cc/KM68-S9F4].
 3. Oliver Milman, *2020 Was Hottest Year on Record by Narrow Margin, NASA Says*, THE GUARDIAN (Jan. 14, 2021, 1:15 PM), <https://www.theguardian.com/environment/2021/jan/14/2020-hottest-year-on-record-nasa> [https://perma.cc/NQ9V-72D8].
 4. *Id.*
 5. KEELY BOOM ET AL., CLIMATE JUSTICE: THE INTERNATIONAL MOMENTUM TOWARDS CLIMATE LITIGATION 2 (2016).
 6. JOANA SETZER & REBECCA BYRNES, GLOBAL TRENDS IN CLIMATE CHANGE LITIGATION: 2020 SNAPSHOT 3, 19 (2020).
 7. Elisa De Wit et al., *Climate Change Litigation Update*, NORTON ROSE FULBRIGHT (Feb. 2020), <https://www.nortonrosefulbright.com/en-au/knowledge/publications/7d58ae66/climate-change-litigation-update#autofootnote1> [https://perma.cc/P5ZU-VMWR].
 8. Michael Burger et al., *The Law and Science of Climate Change Attribution*, 45 COLUM. J. ENV'T L. 57, 62 (2020).

always easy to identify a clear causal chain⁹ and courts might not be willing to take on this issue, deferring instead to legislature or executive.¹⁰ This Note does not cover litigation against governments,¹¹ which is another growing area of climate change litigation, but rather focuses on lawsuits against corporations, which are part of a “second wave” of climate litigation that is seeing more success.¹² Part II examines the causes of climate change, including how attribution science can assist in the search for responsibility. This Section also provides an overview of both the first wave and the beginning of the second wave of climate litigation. Part III analyzes the diverse set of cases that are being brought in the second wave of climate litigation and the different successes or obstacles they are meeting. These cases mostly fall within two categories: corporate climate risk management and human rights.¹³ This Note concludes in Part IV, that, despite the obstacles that cases of the past and present have met, climate litigation can hold corporations accountable for environmental damages with the assistance of the development of attribution science and the growing precedent of climate litigation cases.

II. FACTUAL BACKGROUND

Over the last few decades around the world, climate change from global warming¹⁴ has occurred due to the increase in emissions of greenhouse gases from human activities.¹⁵ The most common impacts include an increase in the average temperature, a proliferation of droughts, the melting of sea ice and glaciers causing sea levels to rise, the endangerment or extinction of a growing number of species, and

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9. *Id.* at 65.
 10. *Juliana v. United States*, 947 F.3d 1159, 1173 (9th Cir. 2020).
 11. *See generally* INT’L BAR ASS’N, MODEL STATUTE FOR PROCEEDINGS CHALLENGING GOVERNMENT FAILURE TO ACT ON CLIMATE CHANGE (Feb. 2020) (proposing a Model Statute with the purpose of suggesting a path forward for individuals and communities to access their courts to challenge government action or inaction on climate change).
 12. Geetanjali Ganguly et al., *If at First You Don’t Succeed: Suing Corporations for Climate Change*, 38 OXFORD J. LEGAL STUD. 841, 867 (2018).
 13. De Wit et al., *supra* note 7.
 14. Global warming is defined as “the unusually rapid increase in Earth’s average surface temperature over the past century.” Holli Riebeek, *Global Warming*, NASA: EARTH OBSERVATORY (June 3, 2010), <https://earthobservatory.nasa.gov/features/GlobalWarming> [<https://perma.cc/M2SY-73VF>].
 15. Muhammad Nda et al., *A Review on the Causes, Effects and Mitigation of Climate Changes on the Environmental Aspects*, 10 INT’L J. INTEGRATED ENG’G 169, 169 (2018).

more frequent and destructive weather events.¹⁶ There is an overall consensus among scientists and researchers that climate change is caused by human activities.¹⁷ Several studies have shown that at least 97% of scientists agree that climate change is happening and the primary cause is human activity.¹⁸ Multiple major scientific assessments also agree.¹⁹ For example, the 2018 U.S. National Climate Assessment, with contributions from authors including 300 leading scientists and thirteen federal government agencies, concludes that “human activities, especially emissions of greenhouse gases, are the dominant cause of the observed warming since the mid-20th century.”²⁰ While there are “natural climate drivers,” such as energy from the sun, aerosols from volcanic eruptions, natural ecological phenomena like methane-emitting termite mounds, or variations in snow and ice cover that change how much of the sun’s energy is reflected back into space, none of these factors sufficiently explain the recent, intense rise in global temperatures.²¹

The effects of human activity include pollution, deforestation, and the depletion of natural resources.²² The main human-caused drivers of climate change are the greenhouse gases—the most dominant being carbon dioxide from industry and transportation emissions.²³ Since the

16. *Id.*

17. Human activities include the rising infrastructural development, industrialization, and urbanization. *Id.* at 169–70.

18. *How Do We Know that Humans Are the Major Cause of Global Warming?*, UNION OF CONCERNED SCIENTISTS (Jan. 21, 2021), <https://www.ucsusa.org/resources/are-humans-major-cause-global-warming> [https://perma.cc/G79N-A6G8].

19. *See, e.g.*, T. Knutson et al., *Detection and Attribution of Climate Change*, in 1 U.S. GLOBAL CHANGE RESEARCH PROGRAM, CLIMATE SCIENCE SPECIAL REPORT: FOURTH NATIONAL CLIMATE ASSESSMENT 116–17 (D.J. Wuebbles et al. eds., 2017); INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2014: SYNTHESIS REPORT 2, 4 (2014).

20. 2 U.S. GLOB. CHANGE RSCH. PROGRAM, IMPACTS, RISKS, AND ADAPTATION IN THE UNITED STATES: FOURTH NATIONAL CLIMATE ASSESSMENT 1453 (D.R. Reidmiller et al. eds., 2018) [hereinafter FOURTH NATIONAL CLIMATE ASSESSMENT].

21. *How Do We Know That Humans Are the Major Cause of Global Warming?*, *supra* note 18. Climate scientists are able to make this conclusion because when they focus only on natural climate drivers, the models cannot reproduce the past half-century’s observed warming accurately. But when the “human-induced climate drivers” are included, they accurately capture the recent temperature increases in the oceans and the atmosphere.

22. Nda et al., *supra* note 15, at 169–70.

23. *Id.* at 170.

Industrial Revolution,²⁴ there has been a significant increase in the concentration of carbon dioxide in the Earth's atmosphere.²⁵ Atmospheric carbon dioxide levels have increased from a pre-industrial era concentration of approximately 270 parts per million (ppm) to more than 410 ppm in 2018.²⁶ These levels exceed anything observed over the past 800,000 years.²⁷

Additionally, there has been an increase in other greenhouse gases, such as methane and nitrous oxide.²⁸ As greenhouse gas concentrations have risen, so too have global temperatures.²⁹ While there is still skepticism regarding the connection between rising temperatures and human behavior, the carbon dioxide produced as a byproduct of burning fossil fuels carries a unique signature that distinguishes it from carbon dioxide produced from other sources.³⁰ Simply put, the carbon produced carries a specific ration of carbon isotopes, found only in the atmosphere after fossil fuels are burned, which tells scientists that "human-caused fossil fuel emissions have been the main contributor to the rise in CO₂ concentrations since the pre-industrial era."³¹

There are a variety of different entities that contribute to climate change and are causing this ever-increasingly dire situation. According to the 2017 Carbon Majors Report by the Carbon Disclosure Project

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24. Beginning in the mid-1800s, machinery began to replace manual labor in the Industrial Revolution. This change was fueled by new sources of energy such as coal instead of wood or water power. The first example of this was the mechanization of England's textile mills and later the internal combustion engine which used oil. As new inventions spread throughout the world, society and commerce changed forever. While the world advanced, it also became dependent on these fossil fuels, which brought us to where we are today. *The Warming Effects of the Industrial Revolution*, CLIMATE POL'Y WATCHER (Aug. 30, 2021), <https://www.climate-policy-watcher.org/global-temperatures/the-warming-effects-of-the-industrial-revolution.html> [<https://perma.cc/3RAP-WVfJ>].
 25. FOURTH NATIONAL CLIMATE ASSESSMENT, *supra* note 20, at 39.
 26. *Id.* at 1453.
 27. *Id.* Climate scientists are able to determine the level of greenhouse gases from hundreds of thousands of years ago from natural climate archives. Scientists such as coral skeletons, ice cores, cave deposits, tree rings, and ocean and lake sediment layers, all of which, as they grow or accumulate, to record the climate. Henry Gastineau, *The Industrial Revolution Kick-Started Global Warming Much Earlier than We Realised*, THE CONVERSATION (Aug. 24, 2016, 4:27 PM), <https://theconversation.com/the-industrial-revolution-kick-started-global-warming-much-earlier-than-we-realised-64301> [<https://perma.cc/7GW7-MP93>].
 28. FOURTH NATIONAL CLIMATE ASSESSMENT, *supra* note 20, at 1453.
 29. *Id.*
 30. *How Do We Know that Humans Are the Major Cause of Global Warming?*, *supra* note 18.
 31. *Id.*

(“CDP”) in partnership with the Climate Accountability Institute, since 1988, just 100 companies have been the source of more than 70% of the world’s greenhouse gas emissions.³² According to Pedro Faria, technical director at the CDP, this report “pinpoints how a relatively small set of fossil fuel producers may hold the key to systemic change on carbon emissions.”³³ Underlying the problem that the world is currently facing in climate change is the tension between short-term profitability and the imperative need to reduce emissions in the long term.³⁴

Traditionally, determining causation has been the greatest obstacle to holding the major producers of greenhouse gas emissions accountable for the damage they are causing.³⁵ Recent developments in attribution science, however, have made it possible for researchers to connect deaths from a single extreme weather event to climate change and then connect that to so-called “Carbon Major” corporations.³⁶ These scientific advancements have allowed significant progress in accountability and have helped to answer the question of how to allocate responsibility for climate change.³⁷

Generally speaking, climate scientists use a two-step process for detection and attribution.³⁸ The first step is to detect the change that is occurring by “demonstrating that a particular variable has changed in a statistically significant way without assigning cause” using observational data and historical records.³⁹ The second step is to determine the climate drivers’ role with respect to the detected change

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32. PAUL GRIFFIN, *THE CARBON MAJORS DATABASE: CDP CARBON MAJORS REPORT 2017*, at 14 (2017).
 33. Tess Riley, *Just 100 Companies Responsible for 71% of Global Emissions, Study Says*, *THE GUARDIAN* (July 10, 2017, 1:26 AM), <https://www.theguardian.com/sustainable-business/2017/jul/10/100-fossil-fuel-companies-investors-responsible-71-global-emissions-cdp-study-climate-change> [<https://perma.cc/3X3M-6TUN>].
 34. *Id.*
 35. Ganguly et al., *supra* note 12, at 847, 849.
 36. The term “Carbon Majors” is in relation to the 100 companies that are the source of 70% of the world’s greenhouse gas emissions from the 2017 Carbon Majors Report by the CDP. GRIFFIN, *supra* note 32, at 2; Brenda Ekwurzel et al., *The Rise in Global Atmospheric CO₂, Surface Temperature, and Sea Level from Emissions Traced to Major Carbon Producers*, 144 *CLIMATIC CHANGE* 579, 579–80 (2017); *see also* Burger et al., *supra* note 8, at 62 (defining attribution science as “the branch of science which seeks to isolate the effect of human influence on the climate and related earth systems.”).
 37. Burger et al., *supra* note 8, at 62–63.
 38. *Id.* at 63.
 39. *Id.*

by sifting through a range of possible causative factors.⁴⁰ Typically, this is accomplished using physical understanding, models, or statistical analyses in order to “compare how the variable responds when certain drivers are changed or eliminated entirely.”⁴¹ These areas of research in detection and attribution include climate change attribution, impact attribution, source attribution, and extreme event attribution, but these different research avenues have begun to converge in recent years.⁴² For example, scientists have developed global climate computer models that are capable of replicating physical processes in the atmosphere, cryosphere, land surface, and ocean.⁴³ In 1995, the World Climate Research Programme⁴⁴ launched one of the most important modeling initiatives, the Coupled Model Intercomparison Project (“CMIP”), which is used to provide a standard set of model simulations in order to make comparison across models easier.⁴⁵

It is important to note that there are some limitations in the attribution science research, such as uncertainty about model projections and data gaps, which might make it difficult to identify a clear causal chain.⁴⁶ Also, there are challenges in “downscaling” from a global focus to a regional or local focus.⁴⁷ For example, finding climate change indications in tropical storms is tough because tropical storms are relatively infrequent events and need the right mix of ingredients for the storm to form.⁴⁸ But with rising temperatures overall, oceans are warming, which means that when hurricanes do form, they can be stronger, which can be attributed to climate change.⁴⁹ This can also be seen with wildfires, floods, and droughts.⁵⁰

40. *Id.*

41. *Id.*

42. *Id.* at 67–68.

43. *Id.* at 78.

44. *Id.* at 79.

45. *WCRP Coupled Model Intercomparison Project (CMIP)*, WORLD CLIMATE RSCH. PROGRAMME, <https://www.wcrp-climate.org/wgcm-cmip> [<https://perma.cc/637V-BZLJ>].

46. Burger et al., *supra* note 8, at 65.

47. *Id.* at 79.

48. Umair Irfan, *Why We're More Confident than Ever that Climate Change Is Driving Disasters*, VOX (Sept. 30, 2020, 8:30 AM), <https://www.vox.com/21452781/zogg-fire-glass-wildfire-california-climate-change-hurricanes-attribution-2020-debate> [<https://perma.cc/56YK-G4WX>].

49. *Id.*

50. *Id.*; Roz Pidcock et al., *Mapped: How Climate Change Affects Extreme Weather Around the World*, CARBON BRIEF (Apr. 15, 2020, 4:30 PM), <https://www.carbonbrief.org/mapped-how-climate-change-affects-extreme-weather-around-the-world> [<https://perma.cc/3YGJ-Q9J4>].

Regardless, scientists are still able to discover ways to find strong evidence that human activity is contributing to changes in essential climate variables, including sea level rise and loss of sea ice.⁵¹ Through source attribution efforts, scientists are able to identify and attribute climate change to specific sources ranging from a particular actor, sector, or activity.⁵² As of now, most of the existing research focuses on “quantifying emissions from sources and determining the proportional contribution to increases in atmospheric greenhouse gases.”⁵³ But as methods improve, there is hope that scientists will be able to accurately attribute climate change damage to specific actors.⁵⁴

Continuing off of the research of the previously mentioned Carbon Majors report,⁵⁵ the Union of Concerned Scientists⁵⁶ have been using climate models to apply the data on the emissions of the Carbon Majors to assess the impacts of the emission contributions on the sea level rise and the global temperature change.⁵⁷ They have found that the emissions traced to the ninety main carbon producers “contributed ~57% of the observed rise in atmospheric CO₂, ~42–50% of the rise in global mean surface temperature (GMST), and ~26–32% of global sea level (GSL) rise over the historical period and ~43% (atmospheric CO₂), ~29–35% (GMST), and ~11–14% (GSL) since 1980.”⁵⁸ These kinds of reports and research have led to the ability to bring different law and policy applications as discussed further in this Note.

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51. INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, *supra* note 19, at 5.
 52. Burger et al., *supra* note 8, at 128. Interestingly, there is a split in the philosophy of source attribution in answering who is responsible for emissions because it can be split in two different ways: assigning responsibility to national governments or to private actors. The former has predominantly been followed by international climate negotiations. Examples of this policy can be seen in the United Nations Framework Convention on Climate Change and the Paris Agreement. See United Nations Framework Convention on Climate Change, May 9, 1992, S. TREATY DOC. No. 102-38, 1771 U.N.T.S. 107; Paris Agreement on the United Nations Framework Convention on Climate Change, Dec. 12, 2015, T.I.A.S. No. 16-1104 [hereinafter Paris Agreement].
 53. Burger et al., *supra* note 8, at 129.
 54. Ganguly et al., *supra* note 12, at 854–55.
 55. GRIFFIN, *supra* note 32.
 56. UNION OF CONCERNED SCIENTISTS, <https://www.ucsusa.org/> [<https://perma.cc/54Q3-B68A>].
 57. Ekwurzel et al., *supra* note 36, at 579.
 58. *Id.* The authors note that there is uncertainty regarding the allocation of responsibility among nations for emissions and the policy relevance of different time periods of historical carbon emissions. Many researchers consider cumulative emissions since 1880, even though GMST data are plentiful and biases in the early records are understood and it is possible to rectify them.

There have been a growing number of lawsuits where climate change and its effects play a large role in the claims brought by plaintiffs.⁵⁹ These have become widely known under the broad label of climate litigation.⁶⁰ In the face of roadblocks and lagging international cooperation, there has been significant interest in turning to courts to hold governments or corporate entities liable for causing or failing to mitigate climate change.⁶¹

So far, the plaintiffs in many of these cases have not prevailed.⁶² However, in the landmark 2015 decision *Urgenda Foundation v. Government of the Netherlands (Ministry of Infrastructure and the Environment)*,⁶³ the plaintiff succeeded in holding the Dutch government accountable in a Dutch court for not having sufficiently ambitious climate policies to fulfill its duty of care to the Dutch society.⁶⁴ The court considered multiple scientific reports that were submitted by the parties to quantify the Netherlands' greenhouse gas emissions, the impact of the emissions, and the failure of the Netherlands to enforce the required emissions reductions to meet the Netherlands' commitments.⁶⁵ Building on the precedent set by *Urgenda*,⁶⁶ the court in *Leghari v. Federation of Pakistan* (2015) determined that the Pakistani government's delay in implementing its climate policy was a breach of the country's human rights obligations.⁶⁷

It has not been all wins though. The next year in the United States, plaintiffs in *Juliana v. United States* (2016)⁶⁸ were ultimately

59. Ganguly et al., *supra* note 12, at 843.

60. *Id.*

61. Josephine Van Zeven, *Establishing a Governmental Duty of Care for Climate Change Mitigation: Will Urgenda Turn the Tide?*, 4 TRANSNAT'L ENV'T L. 339, 339 (2015).

62. *Id.*

63. Rb.'s-Gravenhage 24 juni 2015, AB 2015, 336 m.nt. Ch.W. Backes (Stichting Urgenda/Staat der Nederlanden) [hereinafter *Urgenda*].

64. *Id.*

65. De Wit et al., *supra* note 7. The existing Dutch commitments were based on its European Union obligations, which are based on international commitments under the systems that were established by the United Nations Framework Convention on Climate Change. These commitments were to reduce greenhouse gas emissions at least 17 to 20 percent. Instead, the court ordered the Dutch government to create policies that will reduce emissions by at least 25 percent. *See* Van Zeven, *supra* note 61, at 344.

66. *Urgenda*, *supra* note 63.

67. Ashgar Leghari v. Federation of Pakistan, (2015) 25501 PLD 1 (Pak).

68. *Juliana v. United States*, 217 F. Supp. 3d 1224 (D. Or. 2016), *rev'd*, 947 F.3d 1159 (9th Cir. 2020).

unsuccessful.⁶⁹ In that case, twenty-one young people filed a lawsuit seeking to force the U.S. government to reduce greenhouse gas emissions.⁷⁰ The action was founded on the plaintiffs' explicit and implicit constitutional rights and the public trust doctrine.⁷¹ In January 2020, the Ninth Circuit Court of Appeals dismissed the case citing the political question doctrine⁷² and lack of standing,⁷³ and held that the court had insufficient power to order the U.S. government to prepare and implement an enforceable national remedial plan to reduce fossil fuel emissions.⁷⁴ The court reasoned that this was an issue that should be addressed by the executive or legislative branch.⁷⁵ In dicta, the Court acknowledged that fossil fuel combustion will wreak havoc on the earth's climate if unchecked.⁷⁶ The contrast of these decisions reminds us that success in claims against the government is jurisdictionally specific and depends on the willingness of the judiciary to bind the executive and legislative arms of the government to commit to climate change.⁷⁷

Faced with varied success with claims brought against state actors, climate change plaintiffs have moved into a "second wave" of climate

69. *Id.* at 1165.

70. *Id.*

71. *Id.*

72. The Court here defines the "political question doctrine" as when courts must refrain from answering questions that are reserved for the political branches. This deference is governed by a multifactor test that counsels judicial deference when there is "(1) a textually demonstrable constitutional commitment of the issue to a coordinate political department; or (2) a lack of judicially discoverable and manageable standards for resolving it; or (3) the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion; or (4) the impossibility of a court's undertaking independent resolution without expressing lack of the respect due coordinate branches of government; or (5) an unusual need for unquestioning adherence to a political decision already made; or (6) the potentiality of embarrassment from multifarious pronouncements by various departments on one question." *Juliana v. United States*, 947 F.3d 1159, 1175 (9th Cir. 2020). See *Baker v. Carr*, 369 U.S. 186, 217 (1962).

73. The Court here defined "standing" under Article III of the Constitution. It outlined three requirements a plaintiff must have to pursue their constitutional claims: (1) a concrete and particular injury that (2) is caused by the challenged conduct and (3) is likely redressable by a favorable judicial decision. *Juliana*, 947 F.3d at 1168–69. See *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 560 (1992).

74. *Juliana*, 947 F.3d at 1168–69.

75. *Id.*

76. *Id.* at 1175.

77. De Wit et al., *supra* note 7.

change litigation, which targets private entities.⁷⁸ This follows the “first wave” of climate change litigation from 2005 to 2015 that largely consisted of unsuccessful public nuisance and tort claims which mostly failed on causation grounds.⁷⁹ According to many non-governmental organizations and climate activists, corporations in energy, transport, agriculture, and other manufacturing sectors all bear a collective, legal responsibility for climate change due to their carbon-emitting activities.⁸⁰ For that reason, many upcoming efforts target corporations as defendants.⁸¹ According to a report published by the Climate Justice Programme, a group of the world’s largest producers of oil, coal, and gas called the “Carbon Majors” are responsible for two thirds of the human-made carbon emissions and “these corporations have made outrageous profits while outsourcing the true cost of their product upon the poor who are paying with their homes, ability to grow food and with their lives.”⁸²

The number of claims that are seeking to influence corporate behavior in relation to climate change is increasing.⁸³ Most claims focus on fossil fuel corporations and the associated entities.⁸⁴ Not only are external plaintiffs and regulatory bodies from outside corporations bringing lawsuits, but also shareholders and individuals from inside of corporations are now willing to bring proceedings where corporations have allegedly failed to take meaningful climate change action or might have misrepresented their actions.⁸⁵ These corporations are viewed as pivotal actors in the global effort to transition to low-carbon economies, and because of their large contribution to the generation of greenhouse gases, corporations play a vital role in achieving climate change mitigation.⁸⁶ Moreover, because corporations might want to avoid the spotlight that comes with lawsuits, private climate litigation targeted at the “Carbon Majors” may be more effective than public litigation against governments.⁸⁷

78. *Id.*

79. *Id.*

80. Ganguly et al., *supra* note 12, at 845–45.

81. *Id.*

82. BOOM ET AL., *supra* note 5, at 2.

83. De Wit et al., *supra* note 7.

84. *Id.*

85. Elisa De Wit, *Climate Change Litigation Update*, NORTON ROSE FULBRIGHT (Dec. 2020), <https://www.nortonrosefulbright.com/en/knowledge/publications/0c9b154a/climate-change-litigation-update> [<https://perma.cc/6Q86-VNYH>].

86. Ganguly et al., *supra* note 12, at 841, 845.

87. *Id.* at 845.

Due to the appropriateness and effectiveness of private climate litigation found in this “second wave,” this Note focuses on this burgeoning litigation, the ways future litigators may find success in this field, and the different avenues that may be taken to find this success.

III. ANALYSIS

This Section will analyze two new avenues that plaintiffs are taking to hold corporations accountable for climate change. The first avenue, corporate climate risk management, stems from investors’ and consumers’ demand for full disclosure on climate related risks and allowing investors to ensure the corporation is making the best choices with their investments. The second avenue focuses on human rights following the *Urgenda* case.⁸⁸

A. Corporate Climate Risk Management

1. Corporations and Investors’ Money

As the world moves toward a lower-carbon economy, many companies encounter the issue of carbon-based projects that face the potential of losing money. In 2015, the Carbon Tracker study⁸⁹ found that fossil fuel companies risk wasting more than \$2 trillion over the next decade by pursuing coal, oil, and gas projects that would be worthless in the face of international action on climate.⁹⁰ This would pose a substantial threat to investor returns.⁹¹ In 2018 alone, oil and gas companies invested \$50 billion in projects that are incompatible with the Paris Agreement⁹² and its goals.⁹³ Legally, when making

88. Rb.’s-Gravenhage 24 juni 2015, AB 2015, 336 m.nt. Ch.W. Backes (Stichting Urgenda/Staat der Nederlanden).

89. *The \$2 Trillion Stranded Assets Danger Zone: How Fossil Fuel Firms Risk Destroying Investor Returns*, CARBON TRACKER (Nov. 24, 2015), <https://carbontracker.org/reports/stranded-assets-danger-zone/> [<https://perma.cc/Q98A-22UD>].

90. In particular, the United States would be at the most risk, with \$412 billion of potential stranded projects, followed by Canada at \$220 billion, China at \$179 billion, and Australia at \$103 billion. As for corporations, Shell, Pemex, and ExxonMobil have the greatest risk exposure with over \$70 billion each. Damian Carrington, *Fossil Fuel Companies Risk Wasting \$2tn of Investors’ Money, Study Says*, THE GUARDIAN (Nov. 24, 2015, 7:01 PM), <https://www.theguardian.com/environment/2015/nov/25/fossil-fuel-companies-risk-wasting-2tn-paris-climate-deal> [<https://perma.cc/95HR-K39E>].

91. Riley, *supra* note 33.

92. Paris Agreement, *supra* note 52.

93. Dana Drugmand, *As Big Oil Digs for More Despite Climate Risks, Investor Lawsuits May Grow*, THE CLIMATE DOCKET (Sept. 12, 2019), <https://www>

investment decisions, company directors are obligated to consider climate-related financial risks, including stranded asset risk.⁹⁴ Stranded assets are certain assets, such as equipment or input to production, which had or created value but do not anymore because of some kind of external change.⁹⁵ There are two different avenues plaintiffs might take regarding corporations' business decisions. The first is through corporate climate risk management.⁹⁶

Corporations will need to make company-changing decisions regarding their carbon-based projects because the international regulatory regime will end up making investments in carbon-based projects high risk because of carbon taxes, quotas, and competition with subsidized green technologies.⁹⁷ Also, due to climate attribution science, plaintiffs can now show that climate change is not only preventable, but also that the associated extreme weather events are reasonably foreseeable.⁹⁸ This is crucial evidence in arguing that corporations are failing to act in their shareholders' best interests.⁹⁹

There have been proposals to introduce a corporate duty of environmental care that would resemble "the norm of malfeasance and the common law tort of negligence (the duty to avoid harm to others), and would render corporate disclosure and reporting requirements mandatory."¹⁰⁰ This would require a shift to focusing the modern corporation on a "broader stakeholder-oriented model" where corporations are required to act in the public interest and in a socially and environmentally responsible way.¹⁰¹ The corporation therefore is internalizing the climate change risk as a corporate risk that has to be adequately managed.¹⁰² Corporations would then have to include

.climatedocket.com/2019/09/12/investor-lawsuits-climate-risks-exxon/
[https://perma.cc/4AMF-RTLX].

94. *Id.*

95. Today this term is mostly used to describe oil and gas resources that are still in the ground but still appear as assets for a company. Joel Makower, *The Growing Concern Over Stranded Assets*, GREENBIZ (Sept. 10, 2019), <https://www.greenbiz.com/article/growing-concern-over-stranded-assets> [https://perma.cc/25UP-JQSV].

96. Ganguly et al., *supra* note 12, at 858.

97. Jeremy Freeman, *Efficacy of Carbon Taxes and Recommendations for Cutting Carbon Emissions*, 15 HOUS. BUS. & TAX 268, 289 (2015).

98. De Wit et al., *supra* note 7.

99. *Id.*

100. Ganguly et al., *supra* note 12, at 860; *see also* Beate Sjafell & Benjamin J. Richardson, *The Future of Company Law and Sustainability*, in COMPANY LAW AND SUSTAINABILITY: LEGAL BARRIERS AND OPPORTUNITIES, 312, 312 (Beate Sjafell & Benjamin J. Richardson eds., 2015).

101. Ganguly et al., *supra* note 12, at 860

102. *Id.*

climate change as an agenda point that “needs to be addressed through policies ranging from investment in technological innovation to the development of disclosure strategies, contingency planning and insurance.”¹⁰³

This process is exemplified in *Milieudefensie v. Royal Dutch Shell plc.*,¹⁰⁴ in which the environmental group Milieudefensie/Friends of the Earth Netherlands alleged Shell’s climate change contributions violated (1) its duty of care under Dutch law and (2) its human rights obligations.¹⁰⁵ The duty of care, in this case, is being extended to the Dutch citizens, but the plaintiffs seek to extend the principles of *Urgenda* to private companies as well.¹⁰⁶

Another case of corporate climate risk management is *ClientEarth v. Polska Grupa Energetyczna*,¹⁰⁷ heard by the Polish District Court of Lodz, in which the Polska’s board’s investment decision to invest in the construction of a coal-fired power plant was successfully challenged.¹⁰⁸ ClientEarth argued that “the investment plan was flawed and that shareholders of the company would be subject to intolerable [sic] investment risks.”¹⁰⁹ The plant faced the risks of the plummeting cost of renewables and the rising carbon prices.¹¹⁰ From late 2016 to 2019, when this case arose, the price of carbon in the European Union soared from below €6 to nearly €30/t.¹¹¹ This is the first time a Polish Court has required a coal plant to participate in negotiations such as these to reduce climate emissions.¹¹²

103. *Id.* at 861.

104. Rechtbank Den Haag, 26 mei 2021 (*Milieudefensie/Royal Dutch Shell plc.*) (Neth.).

105. *Id.*

106. De Wit et al., *supra* note 7; De Wit, *supra* note 85. See *infra*, note 261, for a greater discussion of the *Milieudefensie* ruling, which was handed down shortly after this Note was initially drafted.

107. *ClientEarth v. Polska Grupa Energetyczna*, SABIN CTR. FOR CLIMATE CHANGE L. (2021), <http://climatecasechart.com/climate-change-litigation/non-us-case/clientearth-v-polska-grupa-energetyczna/> [<https://perma.cc/G3ME-Z8GG>] (case pending in the Regional Court in Łódź).

108. Ruven Fleming, *Poland: The New Battleground for Climate Litigation*, ENERGY & CLIMATE L. BLOG (Oct. 7, 2019), <http://energyandclimatelaw.blogspot.com/2019/10/poland-new-battleground-for-climate.html> [<https://perma.cc/XG53-3YN2>].

109. *Id.*

110. Stephanie Roker, *Ostroleka C Future Hangs in the Balance Following Court Ruling*, WORLD COAL (Aug. 2, 2019, 10:22 AM), <https://www.worldcoal.com/power/02082019/ostroka-c-future-hangs-in-the-balance-following-court-ruling/> [<https://perma.cc/EJ7W-DJZX>].

111. *Id.*

112. SABIN CTR. FOR CLIMATE CHANGE L., *supra* note 107.

Another, more recent case is *Smith v. Fonterra Co-Operative Group Limited*¹¹³ in which a New Zealand court rejected two claims but not the third claim brought against major greenhouse gas emitters on March 6, 2020.¹¹⁴ The two claims that failed were the plaintiff's public nuisance and negligence claims.¹¹⁵ However, the court did not strike down the cause of action that alleged the defendants have a new duty of care to cease contributing to climate change.¹¹⁶ The court noted, though, that there are "significant hurdles in persuading the Court that the duty should be recognized."¹¹⁷ While this case may not ultimately be successful on the duty of care cause of action, it shows courts' increasing receptiveness to holding corporations accountable for their climate change harms.¹¹⁸

This receptiveness by courts can be seen in the current wave of climate litigation; however, so far it is centered in a few countries where courts are showing openness to entertain climate change lawsuits of various kinds.¹¹⁹ This brings up the question of whether there is transnational judicial dialogue concerning the variety of climate litigation cases.¹²⁰ Within the concept of transnational judicial dialogue, both domestic and international courts and tribunals play an important role in giving effect to international law.¹²¹ For example, national courts look to how international courts, international quasi-judicial bodies, or their domestic counterparts have construed international law.¹²² Specifically, transnational judicial dialogue has had a substantial influence on domestic courts' work by enabling and empowering them to have a role in shaping international human rights.¹²³ Most of the

113. *Smith v. Fonterra Co-Operative Group Limited* [2020] NZHC 419 (N.Z.).

114. *See generally id.*

115. De Wit, *supra* note 85.

116. *Smith*, NZHC 419 at 109.

117. De Wit, *supra* note 85.

118. *Id.*

119. *Id.*

120. See Amrei Muller & Hege Elisabeth Kjos, *Introduction, in* JUDICIAL DIALOGUE AND HUMAN RIGHTS 1, 2 (Amrei Muller ed., 2017), for a definition of transnational judicial dialogue as the practice of "national and international judges construing and giving effect to a particular norm . . . how their colleagues in other states or international courts have construed the same or a similar norm."

121. *Id.*

122. *Id.* at 536.

123. Usually, scholarship on transnational judicial dialogue focuses on the impact on the domestic internalization of international law. *See, e.g.*, Melissa A. Waters, *The Future of Transnational Judicial Dialogue*, 104 AM. SOC'Y INT'L L. 465 (2010).

work on this subject has been focused on the impact it has on domestic internalization of international law, instead of the “impact of dialogue on international norm creation . . . in shaping the content of international human rights norms and the process by which those norms are created.”¹²⁴ Further, there is also the view of domestic courts participating in dialogue as internalizations of international norms and the creators of international law.¹²⁵

An example of domestic courts becoming active participants in shaping international legal norms in the past is courts’ imposition of the death penalty.¹²⁶ It began with the watershed European Court of Human Rights case, *Soering v. United Kingdom*,¹²⁷ which held that the “death row phenomenon” violated the European Convention’s prohibition of cruel or inhuman punishment.¹²⁸ Following *Soering*, courts in Jamaica,¹²⁹ Zimbabwe,¹³⁰ and South Africa¹³¹ followed in holding that the death penalty amounts to cruel and inhuman punishment.¹³² While the European Court of Human Rights began the dialogue, domestic courts interpreting their own domestic constitutional law expanded the content of this norm over time.¹³³ As the dialogue around the death penalty has developed, courts seem to be relying on earlier decisions not just for comparative purpose, but “as evidence of concrete international legal obligations.”¹³⁴

There has not been much scholarship regarding transnational judicial dialogue regarding climate litigation; however, there is some evidence that judges are engaged in a transnational regulatory dialogue

124. *Id.* at 465.

125. *Id.*

126. *Id.*

127. *Soering v. United Kingdom*, 161 Eur. Ct. H.R. 439 (1989).

128. The term “death row phenomenon” is referencing the lengthy period of time prisoners spend on death row in combination with various other factors, focusing on the conditions of imprisonment. *Id.* at 32; see also Patrick Hudson, *Does the Death Row Phenomenon Violate a Prisoner’s Human Rights Under International Law?*, 11 EJIL 833 (2000).

129. *E.g.*, The Commonwealth: Privy Council Judgment in *Pratt and Morgan v. Att’y Gen. for Jam. and the Superintendent of Prisons, St. Catherine’s Jam.*, 33 I.L.M. 364, 387 (Mar. 1994).

130. *E.g.*, John Hatchard, *Capital Punishment in Southern Africa: Some Recent Developments*, 43 INT’L & COMP. L. Q. 923, 924, 927 (1994).

131. *State v. Makwanyane* 1995 (3) SA 391 (CC) at para. 392 (S. Afr.).

132. Waters, *supra* note 123, at 465–66.

133. *Id.* at 466.

134. *Id.*; see also *Roper v. Simmons*, 543 U.S. 551, 578 (2005) (emphasizing the importance of an “overwhelming weight of international opinion” in American judicial rulings).

when deciding cases.¹³⁵ For instance, in *Gloucester Resources Limited v. Minister for Planning* in Australia, Chief Justice Preston wrote comprehensively about the influence of the Paris Agreement¹³⁶ and other climate litigation from other jurisdictions¹³⁷ when he held that now is the “wrong time” for approving a new coal mine.¹³⁸ Further, in *Thomson v. Minister for Climate Change Issues*,¹³⁹ the High Court of New Zealand found that there was widespread transnational support for a judicial role “in Government decision making about climate change policy.”¹⁴⁰ Two scholars, Jaqueline Peel and Jolene Lin, when looking at the Global South’s contribution to transnational climate litigation, spoke with Global South advocates and judges, along with the networking activities they are engaged in, who indicated “an openness to shaping the emerging climate case law as part of a transnational dialogue.”¹⁴¹

2. Climate Risk Disclosure

The second avenue for holding corporations accountable in this area is the new concept of climate risk disclosure, through which claims are brought against companies for misleading consumers or investors regarding the impact of the fossil fuel products they market and sell or the risks posed to their business because of climate change.¹⁴² The need for disclosure is closely linked to shareholder interests in business decisions that create losses in investment, discussed above, but adds the possible claims of deception, dishonesty, or mismanagement.¹⁴³ In response to these concerns, in 2017, a Taskforce on Climate-Related Financial Disclosures was established by the Financial Stability Board at the request of the G20 finance ministers and central bank

135. Jacqueline Peel & Jolene Lin, *Transnational Climate Litigation: The Contribution of the Global South*, 113 AM. J. INT’L L. 679, 723 (2019).

136. *Gloucester Resources Limited v. Minister for Planning* [2019] NSWLEC 7, ¶¶ 439–40 (Austl).

137. *See id.* ¶¶ 439–85.

138. In this case, Gloucester Resources Limited sued the Minister of Planning appealing the denial of its application to build an open cut coal mine. The court held that the project was not in the public’s interest by weighing the costs and benefits, which included the climate change impacts. *Id.* ¶¶ 526–27, 699.

139. *Thomson v. Minister for Climate Change Issues* [2017] NZHC 733 per Mallon J. (N.Z.).

140. *Id.* ¶ 133. This case involved Sarah Thomson, a law student, who challenged the adequacy of New Zealand’s 2030 emissions reduction target.

141. Peel & Lin, *supra* note 135, at 724.

142. De Wit, *supra* note 85.

143. *Id.*

governors.¹⁴⁴ The goal was to review how the financial sector could take climate-related financial disclosures into account and develop “voluntary, consistent climate-related financial disclosures that would be useful to investors, lenders, and insurance underwriters in understanding material risks.”¹⁴⁵

ExxonMobil has been a frequent target over the years regarding climate risk disclosure.¹⁴⁶ In August 2019, a Texas judge ordered that two separate cases, *Von Colditz v. Woods*,¹⁴⁷ and *Montini v. Woods*,¹⁴⁸ be consolidated into a single action.¹⁴⁹ Both cases accuse current and former Exxon executives and board members of breaching their fiduciary duties, wasting corporate assets, and violating federal securities law.¹⁵⁰ Around the same time, Exxon was named in similar lawsuit in New Jersey where investors alleged the company’s officials, directors, and board members “knew, were reckless, or were grossly negligent in not knowing” that Exxon was misleading investors

144. The Financial Stability Board is an international body that monitors and gives recommendations about the global financial system. *See generally Recommendations of the Task Force on Climate-Related Financial Disclosures*, TASKFORCE ON CLIMATE-RELATED FIN. DISCLOSURES (2017), <https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017-TCFD-Report-11052018.pdf> [<https://perma.cc/7252-V2DG>].

145. The Task Force created recommendations to apply to financial organizations, such as banks, asset managers, asset owners, and insurance companies. The four recommendations given were (1) disclose the organization’s governance around climate-related risks and opportunities; (2) disclose the actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning where such information is material; (3) disclose how the organization identifies, assesses, and manages climate-related risks; and (4) disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material. *Id.* at 14, fig. 4.

146. Kathy Hipple & Tom Sanzillo, *ExxonMobil’s Climate Risk Report: Defective and Unresponsive*, INST. ENERGY ECON. & FIN. ANALYSIS 1, 1–3 (2018), <http://ieefa.org/wp-content/uploads/2018/03/ExxonMobils-Climate-Risk-Report-Defective-and-Unresponsive-March-2018.pdf> [<https://perma.cc/XH57-PH63>]; Kevin M. LaCroix, *NYAG Files Climate Change Disclosure Lawsuit Against Exxon Mobil*, THE D&O DIARY (Oct. 25, 2018), <https://www.dandodiary.com/2018/10/articles/climate-change/nyag-files-climate-change-disclosure-lawsuit-exxon-mobil/> [<https://perma.cc/V36Z-PAWP>].

147. *Von Colditz v. Woods*, No. 3:19-cv-01067-K (N.D. Tex. May 2, 2019).

148. *Montini v. Woods*, No. 3:20-cv-02302-K (N.D. Tex. Aug. 28, 2020).

149. Karen Savage, *Two Shareholder Climate Suits Against Exxon in Texas Get Consolidated*, CLIMATE DOCKET (Aug. 8, 2019), <https://www.climate-docket.com/2019/08/08/exxon-shareholder-climate-suits-texas/> [<https://perma.cc/AKD8-Z63M>].

150. *Id.*

regarding the risks of climate change to its business.¹⁵¹ While these lawsuits are similar to the previous claims, in which the corporation is accused of making bad business judgments regarding projects and climate change, these lawsuits are different because the investors are claiming that Exxon did not protect their investments and misled investors through its failure to disclose the climate change costs and risks.¹⁵²

Another similar case brought against Exxon is *The People of the State of New York v. Exxon Mobil Corporation*.¹⁵³ In December 2019, the Supreme Court of New York found that the New York Office of the Attorney General failed to establish by a preponderance of the evidence¹⁵⁴ that Exxon perpetuated a longstanding fraudulent scheme concerning the management of business risks relating to climate change.¹⁵⁵ The core allegation in the case was that Exxon's publicly-disclosed projections for climate change costs were different from than the firm's internal projections, thereby misleading investors.¹⁵⁶ The Court found that these changes were not "material" misrepresentations, but it did note that the decision was not intended to absolve Exxon from responsibility for contributing to climate change through greenhouse gas emissions.¹⁵⁷ These kinds of investigations of fossil fuel companies could be initiated by governments around the world and used to prosecute alleged fraud and deception by fossil fuel corporations.¹⁵⁸ This could be an effective deterrent to future deception by such corporations, especially in cases involving corporate assessments of climate change risks.¹⁵⁹

Similar to product liability claims that were used in tobacco and asbestos litigation, there have also been new lawsuits involving "False

151. *Id.*

152. *Id.*

153. *People v. Exxon Mobil Corp.*, No. 452044, 2019 N.Y. Misc. LEXIS 6544 (N.Y. App. Div. Dec. 19, 2019).

154. *Id.* ¶ 1.

155. *Id.*

156. *Id.* ¶ 4.

157. *Id.* ¶ 2.

158. BOOM ET AL., *supra* note 5, at 27.

159. The landscape of these types of cases might shift as reasonable investors begin to view more climate-related information as material to their decision-making. Hana Vizcarra, *Understanding the New York v. Exxon Decision*, ENV'T & ENERGY L. PROGRAM (Dec. 12, 2019), <https://eelp.law.harvard.edu/2019/12/understanding-the-new-york-v-exxon-decision/> [<https://perma.cc/WF6S-5RP9>].

Green Advertising”¹⁶⁰ or “Greenwashing Campaigns.”¹⁶¹ This cause of action involves the manufacturers of products that are initially thought to be harmless but later are understood to have severe health and environmental risks.¹⁶² Scholars have speculated that the looming threat of climate change will lead to a similar wave of climate litigation that will mirror the waves of tobacco litigation and the struggles those plaintiffs faced.¹⁶³

In the United States, tobacco litigation took place in three waves which then led to increased regulation.¹⁶⁴ The first wave was from 1954 to 1962 and began after several publications revealed a link between smoking cigarettes and cancer, but the plaintiffs were met with an aggressive, and successful, defense from Big Tobacco companies.¹⁶⁵ The plaintiffs struggled to show causation between lung cancer and cigarettes because there was not a consensus about the health effects of smoking.¹⁶⁶ Another reason for the lack of success was due to the tobacco industry’s use of the “scorched earth” litigation tactic where they would prolong litigation and, as a result, exhaust the plaintiffs’ resources.¹⁶⁷

160. See generally Devika Kewalramani & Richard J. Sobelsohn, “Greenwashing”: Deceptive Business Claims of “Eco-Friendliness”, FORBES (Mar. 20, 2012, 12:15 PM), <https://www.forbes.com/sites/realspin/2012/03/20/greenwashing-deceptive-business-claims-of-eco-friendliness/?sh=7f7275383d9a> [<https://perma.cc/G852-MWFP>].

161. *Id.*; De Wit et al., *supra* note 7.

162. *Greenwashing: Do You Know What You’re Buying?*, 118 ENV’T HEALTH PERSP. A 246, A 250 (2010).

163. Kimberly Barnes, *Democratizing Climate Change: Litigation for the Era of Extreme Weather*, 50 U. PAC. L. REV. 651, 664 (2019); see also Martin Olszynski et al., *From Smokes to Smokestacks: Lessons from Tobacco for the Future of Climate Change Liability*, 30 GEO. ENV’T L. REV. 1 (2017); Daniel Farber, *The Climate Change Lawsuits Against Big Oil, Explained*, THE APPEAL (Jan. 29, 2021), <https://theappeal.org/the-lab/explainers/the-climate-change-lawsuits-against-big-oil-explained/> [<https://perma.cc/C53E-5W5T>].

164. Barnes, *supra* note 163, at 665; Olszynski et al., *supra* note 163, at 9.

165. Stephen E. Smith, “Counterblast” to Tobacco: Five Decades of North American Tobacco Litigation, 14 WINDSOR REV. LEGAL & SOC. ISSUES 1, 8 (2002); see also Barnes, *supra* note 163, at 665 (estimating that about 95 percent of all of the lawsuits against Big Tobacco were dropped).

166. Barnes, *supra* note 163, at 665; see also *Lartigue v. R.J. Reynolds Tobacco Co.*, 317 F.2d 19, 23, 39 (1963) (where the Fifth Circuit Court of Appeals rejected a plaintiff widow’s claims because she failed to establish a causal connection between her late husband’s cancer and cigarettes, by saying: “[T]he manufacturer ‘had no opportunity to gain knowledge, or to form a judgment as to the dangerous qualities of the product.’ The manufacturer was in no better position than the consumer.”).

167. Olszynski et al., *supra* note 163, at 10.

The second wave was just as unsuccessful because of Big Tobacco's argument that "smokers assumed the risk of smoking with full knowledge of its danger."¹⁶⁸ As a result, courts found that the Cigarette Acts, a requirement for tobacco products to have labels and warnings, prevented claims against the manufacturers.¹⁶⁹ This shift to the personal responsibility of consumers created a considerable barrier to success in these cases.¹⁷⁰

In the third wave, however, plaintiffs began organizing and, because of more conclusive evidence of causation and knowledge of intentional industry misconduct, found success.¹⁷¹ This was also due to a unified approach by forty-six states to sue Big Tobacco for the reimbursement of public healthcare costs associated with tobacco-related diseases, resulting in what is known as the 1998 Master Settlement Agreement.¹⁷²

A similar trend is emerging in climate litigation. In the "first wave" of climate litigation, these claims were thwarted because of the challenge in establishing a causal chain, whereas, in tobacco and asbestos cases, the victims could pinpoint the group of potential culprits.¹⁷³ In current cases and the "second wave," the causal chain is much easier to identify because of developments in attribution science, which points the finger toward the Carbon Majors.¹⁷⁴ In a stream of cases in 2020, including *State of Minnesota v. American Petroleum Institute* (June 2020),¹⁷⁵ *District of Columbia v. Exxon Mobil Corporation* (June 2020),¹⁷⁶ and *State of Delaware v. BP America Inc.* (September 2020),¹⁷⁷ the Attorneys General of several states brought claims against Carbon Majors for fraud, failure to warn, deceptive trade practices, and false statements in advertising regarding their products

168. Barnes, *supra* note 163, at 666.

169. *Id.*

170. *Id.*

171. *Id.*

172. *Id.*; Olszynski et al., *supra* note 163, at 11. *Master Settlement Agreement*, PUB. HEALTH L. CTR. MITCHELL HAMLINE SCH. OF L. (2021), <https://www.publichealthlawcenter.org/topics/commercial-tobacco-control/commercial-tobacco-control-litigation/master-settlement-agreement> [https://perma.cc/M3GQ-EF7P] (requiring the tobacco industry to pay the settling states billions of dollars annually, forever, but also imposing restrictions on the marketing and sale of cigarettes by participating cigarette manufacturers).

173. Ganguly et al., *supra* note 12, at 857.

174. *Id.* at 857.

175. *See* Notice of Removal, *Minnesota v. American Petroleum Institute*, No. 20-CV-01636 (D. Minn. July 27, 2020).

176. *See* Notice of Removal, *District of Columbia v. Exxon Mobil Corp.*, No. 20-CV-01932 (D.C. Cir. July 17, 2020).

177. *See* Complaint, *State of Delaware v. BP America Inc.*, No. 20-CV-01429 (D. Del. Sept. 10, 2020).

and the devastating effects they would have on the climate.¹⁷⁸ In the latter two cases, the claims also argued that the defendants breached the Consumer Protection Procedures Act¹⁷⁹ and the Consumer Fraud Act,¹⁸⁰ respectively. These new cases show that claims are moving away from alleging that corporations misled investors and are instead moving toward alleging that corporations colluded to violate consumer fraud legislation.¹⁸¹

This trend can also be seen in foreign countries. For example, three Australian citizens impacted by the recent Australian brushfire crisis brought the *Complaint Against Australia and New Zealand Banking Group Limited (ANZ) in Respect of the Organization for Economic and Development (OECD) Guidelines*,¹⁸² in January 2020. They alleged that ANZ failed to adhere to the standards of the OECD Guidelines in relation to due diligence, environment, disclosure, and consumer interests.¹⁸³ Therefore, ANZ is allegedly breaching “its greenhouse gas reporting requirements, is failing to conduct adequate due diligence regarding climate risks and is failing to prevent or mitigate environmental impacts as a major financier of fossil fuel energy.”¹⁸⁴

In November 2020, the ANZ published an updated climate change policy statement supporting the goals of the Paris Agreement to transition to net-zero carbon emissions by 2050 and acknowledging that some of its stakeholders view financing fossil fuel industries as a conflict with ANZ’s stated position of the need to reduce emissions.¹⁸⁵ The statement also included commitments to improve transparency in ANZ’s financing decisions and to further reduce carbon intensity¹⁸⁶ of their electricity generation lending portfolio by “only directly financing low carbon gas and renewable projects by 2030.”¹⁸⁷ Additionally, in

178. De Wit, *supra* note 85.

179. *Exxon Mobil Co.*, No. 20-CV-01932, ¶ 115.

180. *Compare Exxon Mobil Co.*, No. 20-CV-01932, ¶ 127 (alleging the defendants violated Sections 28-3904(a), (e), & (f) of the Consumer Protection Procedures Act) *with BP America*, No. 20-CV-01429, ¶ 267 (alleging the defendants violated Section 2513(a) of the Delaware Consumer Fraud Act).

181. De Wit, *supra* note 85.

182. *See, e.g.*, De Wit et al., *supra* note 7.

183. *Id.*

184. De Wit et al., *supra* note 7.

185. De Wit, *supra* note 85.

186. *Id.*; *see also Carbon Intensity (CI)*, OPIS (2020), <https://www.opisnet.com/glossary-term/carbon-intensity-ci/> [<https://perma.cc/V4VR-2NYJ>] (defining Carbon Intensity as “the amount of carbon by weight emitted per unit of energy consumed”).

187. De Wit, *supra* note 85.

November, the Australian National Contact Point (“ANCP”)¹⁸⁸ of the OECD published its initial assessment, which accepted that the issues in the complaint regarding disclosure, target-setting, and scenario analysis merit further assessment.¹⁸⁹ The next steps in the process include consultation with the parties, which may take up to a year.¹⁹⁰ This process will most likely be closely watched by financial and investment communities around the world, in addition to those within Australia.¹⁹¹

Lastly, in a case that settled in November 2020, *Mark McVeigh v. Retail Employees Superannuation Pty Ltd.* (“REST”),¹⁹² Mark McVeigh brought proceedings against one of Australia’s biggest pension funds.¹⁹³ McVeigh claimed REST failed to adequately disclose its strategy to manage climate change risks, which prevented him from making any informed judgments about the fund’s performance and management, breached REST’s statutory disclosure requirements, and breached its fiduciary duties by failing to adequately consider the risks of climate change in managing investments.¹⁹⁴ Along with publicly announcing commitments to handle climate change risk, REST settled the case with McVeigh in November 2020.¹⁹⁵ Although this settlement means that this case is not enforceable in court and non-precedential, corporations around the world and the members of the public are likely to watch and see if REST follows through with its commitments.¹⁹⁶ These kinds of cases show that it is possible to have positive outcomes, even against one of a country’s largest super-funds, and will, most likely, cause funds around the world to review their process for handling climate change risk.¹⁹⁷

These cases involving a multitude of a corporations’ climate change risk disclosures exemplify a growing trend.¹⁹⁸ While there have been limited positive outcomes, the wave of cases in 2020 alone shows that

188. AUSTRALIAN NATIONAL CONTACT POINT, <https://ausncp.gov.au/au> (last visited Sept. 14, 2021).

189. De Wit, *supra* note 85.

190. *Id.*

191. *Id.*

192. *Id.*

193. *Id.*

194. *See Mark McVeigh v Retail Emps. Superannuation Pty Ltd.* [2019] FCA 14 (17 January 2019) (Austl.).

195. Media Release, Settlement Agreement, REST (Nov. 2, 2020) (on file with Rest) [hereinafter “REST Settlement Agreement”].

196. De Wit, *supra* note 85.

197. *Id.*

198. *Id.*

there are more to come that can build on the insights learned from the previous cases. The tobacco and fossil fuel industries had similar knowledge of the dangers of their products, yet they still pushed their products on the public using disinformation campaigns and political engineering.¹⁹⁹ This leads to the conclusion that there might be success in the future for climate litigation.²⁰⁰ Due to new technology and attribution science, more approaches will succeed as corporations are more easily linked to climate change events around the world.

B. Human Rights

Recently, there has also been a move to prosecute human rights violations in climate litigation. The challenge in bringing human rights-based litigation is not about whether climate change is an important issue that needs to be addressed, but instead about whether the courts are the appropriate place to address the human rights effects of climate change.²⁰¹ However, these difficulties have not stopped the litigation.²⁰²

As previously discussed above, *Urgenda Foundation v. Kingdom of the Netherlands*²⁰³ was a landmark ruling that provides a clear path forward for concerned individuals around the world to protect human rights by pursuing climate litigation.²⁰⁴ The court cited the Dutch Constitution,²⁰⁵ EU emissions reduction targets, the principle of a high protection level,²⁰⁶ the precautionary principle,²⁰⁷ the prevention principle in the European climate policy,²⁰⁸ principles under the European Convention on Human Rights,²⁰⁹ the “no harm” principle of

199. Barnes, *supra* note 163, at 669.

200. *E.g.*, REST Settlement Agreement, *supra* note 195.

201. De Wit et al., *supra* note 7.

202. *Id.*

203. *Urgenda*, *supra* note 63.

204. *Id.* ¶ 4.48; *see also* De Wit et al., *supra* note 7.

205. *Urgenda*, *supra* note 63, ¶ 2.69.

206. This level means that the EU expresses that “its environmental policy has high priority and that it has to be implemented strictly, with account taken of regional differences.” *Id.* ¶ 4.61.

207. This means that the Community “should not postpone taking measures to protect the environment until full scientific certainty has been achieved.” *Id.* ¶ 4.61.

208. This means that “‘prevention is better than cure’; it is better to prevent climate problems (pollution, nuisance, in this case: climate change) than combating the consequences later on.” *Id.*

209. These principles include the right to life and environment and, the respect for private and family life and the home and the environment. *Id.* ¶¶ 4.49–4.50. *See also* European Convention for the Protection of Human Rights and Fundamental Freedoms, Nov. 4, 1950, 213 U.N.T.S. 221.

international law,²¹⁰ the doctrine of hazardous negligence,²¹¹ the principle of fairness,²¹² the precautionary principle,²¹³ and the sustainability principle in the United Nations Framework Convention on Climate Change.²¹⁴ Following this 2015 decision of the District Court of The Hague,²¹⁵ and the later 2019 upholding of the decision by the

210. This means that “no state has the right to use its territory, or have it used, to cause significant damage to other states.” *Urgenda*, *supra* note 63, ¶ 4.61.

211. This means the requirement of acting with due care toward society. *Id.* ¶ 4.54.

212. This means that “the policy should not only start from what is most beneficial to the current generation at this moment, but also what this means for future generations, so that future generations are not exclusively and disproportionately burdened with the consequences of climate change.” *Id.* ¶ 4.57.

213. This means that “taking measures cannot be delayed to await full scientific certainty . . . [t]he signatories should anticipate the prevention or limitation of the causes of climate change or the prevention or limitation of the negative consequences of climate change, regardless of a certain level of scientific uncertainty.” *Id.* ¶ 4.58.

214. This means that the signatories to the Convention “will promote sustainability and that economic development is vital for taking measures to combat climate change.” *Id.* ¶ 4.59. *See also What Is the United Nations Framework Convention on Climate Change?*, U.N. CLIMATE CHANGE (2021), <https://unfccc.int/process-and-meetings/the-convention/what-is-the-united-nations-framework-convention-on-climate-change> [perma.cc/38HD-VNU7].

215. *Urgenda*, *supra* note 63.

Supreme Court of the Netherlands,²¹⁶ many individuals and entities have brought suits against governments²¹⁷ and corporations, alike.²¹⁸

It has become generally agreed upon that States not only have to respect human rights, but also that States must protect and fulfill them. The U.N.'s Guiding Principles on Business and Human Rights confirms that states have a duty to "protect human rights abuse within their territory and/or jurisdiction by third parties, including business enterprises."²¹⁹

These principles were put to the test when, in 2015, typhoon survivors, advocates, non-governmental organizations ("NGOs"), and thousands of online supporters filed a petition with the Commission on Human Rights of the Philippines.²²⁰ The petitioners requested an investigation of the alleged responsibility of certain "Carbon Majors"

216. *Urgenda Foundation v. State of the Netherlands*, No. 19/00135, Judgment (Neth. Dec. 20, 2019).

217. *See, e.g.,* Committee on the Rights of the Child, Dec. No. 104/2019, U.N. Doc. CRC/C/88/D/104/2019 (Sept. 22, 2021) (dismissing the complaint of sixteen youth activists who sued their home states, all states party to the Optional Protocol of the Convention on the Rights of the Child, for failure to prevent and mitigate the consequences of climate change. The Committee found they could not proceed because they had not exhausted domestic remedies); Anthony Galloway, *United Nations Set to Decide Climate Claims by Torres Strait Islanders Against Australia*, SYDNEY MORNING HERALD (June 14, 2021, 7:30 AM), <https://www.smh.com.au/politics/federal/united-nations-set-to-decide-climate-claims-by-torres-strait-islanders-against-australia-20210614-p580sj.html> [<https://perma.cc/937V-GR7U>] (detailing the still-pending claims brought by eight indigenous Australians native to the Torres Strait against the government of Australia in a complaint before the United Nations Human Rights Committee); Verwaltungsgericht [VG] Berlin [Administrative Trial Court of Berlin], Oct. 31, 2019, 10 K 412.18, <https://gesetze.berlin.de/bsbe/document/JURE190015283>, ¶ 51 (Ger.) (dismissing the complaint of German individuals against the German government for inaction in the face of climate change because there was no public German law on which to base the claim); De Wit, *supra* note 85 (highlighting the pending case of *Do-Hyun Kim v. South Korea*, a case in which thirty South Korean youths brought against the government of South Korea due to its alleged failure to keep global warming below the levels proposed by the Paris Agreement).

218. *See* De Wit, *supra* note 85.

219. *Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework*, U.N. Doc. A/HRC/17/31 (Mar. 21, 2011).

220. Petition, from Greenpeace Se. Asia and Philippine Rural Reconstruction Movement to the Comm'n on Hum. Rts. of the Philippines Requesting for Investigation of the Resp. of the Carbon Majors for Hum. Rts. Violations or Threats of Violations Resulting from the Impacts of Climate Change (filed on Sept. 22, 2015) (on file with author at <https://www.greenpeace.org/philippines/the-climate-change-human-rights-inquiry-archive/> [<https://perma.cc/THF8-BFWV>]).

for the impacts of climate change that violate human rights protected under the Philippines Constitution and various international human rights treaties.²²¹ The respondents include investor-owned oil, natural gas, and coal producers and cement manufacturers, who are part of a group of ninety investor-owned, state-owned, or government-run entities that are the biggest producers of greenhouse gas.²²² The central issue in this case was “whether or not the Respondent Carbon Majors must be held accountable . . . for the human rights implications of climate change and ocean acidification.”²²³ The petitioners were successful when, in December 2019, the Commission on Human Rights of the Philippines announced the Carbon Majors in the suit could be held liable for their role in contributing to climate change.²²⁴ The Commission on Human Rights is an independent National Human Rights Institution created under the Philippine Constitution that conducts investigations on human rights violations involving political and civil rights against marginalized and vulnerable parts of the Philippine society.²²⁵ The Commission ruled that, even though legal responsibility for climate change is not found in current international human rights law, these Carbon Majors are morally obligated to respect human rights.²²⁶ The basis for this ruling is laid out in the U.N. Guiding Principles on Business and Human Rights, and therefore, these companies are obligated to invest in clean energy.²²⁷

This petition is important because it is a highly replicable legal initiative.²²⁸ According to a report by Heinrich Boll Stiftung, a German non-profit organization that is part of the global green movement, the petition provides an “innovative approach to climate litigation through asserting responsibility for climate change to carbon producers, and by basing its legal claims upon human rights principles.”²²⁹

221. Wendy J. Miles & Nicola K. Swan, *Climate Change and Dispute Resolution*, 11 DISP. RESOL. INT’L 117, 127 (2017).

222. *Id.*

223. Ganguly et al., *supra* note 12, at 853.

224. Isabella Kaminski, *Carbon Majors Can Be Held Liable for Human Rights Violations, Philippines Commission Rules*, BUS. & HUM. RTS. RES. CTR. (Dec. 9, 2019), <https://www.business-humanrights.org/en/latest-news/carbon-majors-can-be-held-liable-for-human-rights-violations-philippines-commission-rules/> [https://perma.cc/XV86-QHXB].

225. *About the Commission*, REPUBLIC OF THE PHILIPPINES: COMM’N ON HUM. RTS., <http://chr.gov.ph/about-us/> [https://perma.cc/Y7RR-LN76].

226. De Wit, *supra* note 7.

227. *See generally Guiding Principles on Business and Human Rights: Implementing the United Nations “Protect, Respect and Remedy” Framework*, *supra* note 219, at 3.

228. BOOM ET AL., *supra* note 5, at 19.

229. *Id.*

Because the petition utilized international law, this raises the applicability to alternative jurisdictions as well.²³⁰ One avenue for further litigation might, therefore, arise if a jurisdiction provides for the application of international law through its constitution.²³¹ Another avenue is if an alternative jurisdiction has a human rights body with the comparable power of investigation like the Philippines Commission.²³² Human rights bodies that might be suited to hear such litigation are regional networks within the International Criminal Court (“ICC”), which includes the Network of African National Human Rights Institutions, the European Network of National Human Rights, the Asia Pacific Forum of National Human Rights Institutions, and the Network of National Institutions in the Americas.²³³ Similarly, those national human rights bodies are compliant with the Paris Principles.²³⁴

Similarly, in a more recent case in May 2020, *Waratah Coal Pty. Ltd. v. Youth Verdict Ltd.*,²³⁵ was commenced in which Australian indigenous and non-indigenous young people brought a suit challenging the approval granted for Waratah Coals’ Galilee Coal Project.²³⁶ The plaintiffs alleged that, because the mine is contributing to climate change, this infringes on their right to life, the protection of children, and the right to culture as protected by the Queensland Human Rights Act.²³⁷ As of August 28, 2020, the Court denied the defendant’s motion to dismiss the case for lack of standing, because they were corporate entities and only individuals possess human rights.²³⁸ If this case were to succeed, it could give rise to similar cases to be brought under other State-based human rights legislation like the Charter of Human Rights Act 2006 and the Human Rights Act 2004.²³⁹

Marking another avenue a human rights body could take, *Saul Luciano Lliuya v. RWE*²⁴⁰ raised the issue of responsibility of large greenhouse gas emitters for climate change under the liability for

230. *Id.*

231. *Id.*

232. *Id.*

233. *Id.* at 18–19 (listing the regional networks within the ICC including the International Covenant on Civil and Political Rights (“ICCPR”).)

234. *Id.* The Paris Principles provide “standards for the status and functioning of national human rights institutions.”

235. *Waratah Coal Pty Ltd v Youth Verdict Ltd* [2020] QLC 33 (Austl.).

236. *Id.* ¶ 1.

237. *Id.* ¶ 2.

238. *Id.* ¶ 4; *see also* De Wit, *supra* note 85.

239. *See* De Wit, *supra* note 85.

240. Landgericht Essen [LG] [Regional Court] [*Luciano Lliuya v. RWE AG*] Dec. 15, 2016, 2-O-285/15 (2016) (Ger.).

nuisance caused to private property.²⁴¹ In this case, a Peruvian farmer issued a letter of demand to the German utility company RWE seeking \$21,000 financial contribution related to the costs of building defenses against glacial lake flooding, landslides, likely inundation to the village, and destruction of property.²⁴² The monetary demand of \$21,000 was determined by calculating 0.47% of the cost of the engineering projects required to protect from the flooding caused by the carbon dioxide-induced global warming and sea level rise, which was the proportion of carbon dioxide emissions that could be traced to RWE.²⁴³ In 2018, the Hamm Court provisionally accepted the plaintiff's causation arguments subject to requests for further evidence and expert opinions.²⁴⁴ The Court declared that “while RWE’s emissions are not wholly responsible for the flood risk to Huaraz, it is enough that its emissions are partially responsible for the actual, present risk.”²⁴⁵

Even though the damage in this case occurred outside of the borders of the country and was brought by a foreign national, this sort of case could influence other jurisdictions to follow in the German court's footsteps and act as a model for lawsuits in other countries.²⁴⁶ These cases would allow people from developing countries around the world to seek compensation for climate damage from Carbon Majors in jurisdictions in which the corporations are domiciled.²⁴⁷ Especially with the flourishing field of climate attribution science, it is much easier to pinpoint the amount of climate change that fossil fuel producers have contributed.²⁴⁸ Issues such as *forum non conveniens*, where local courts might provide a “more appropriate forum” for the matter, might still arise, though.²⁴⁹

While these cases are difficult for claimants to bring due to the challenge in establishing causation, the pressure they put on corporations and the fossil fuel industry is very significant and will continue as similar cases are brought around the world.²⁵⁰ The new

241. *Id.* at 7.

242. *Id.*

243. *Id.*

244. Oberlandesgericht Hamm [OLGZ] [Higher Regional Court] [Luciano Lliuya v. RWE AG] Feb. 1, 2018 (Ger.), http://climatecasechart.com/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2018/20180207_Case-No.-2-O-28515-Essen-Regional-Court_order.pdf [<https://perma.cc/R7ZF-LTKW>].

245. *E.g.*, Ganguly et al., *supra* note 12, at 855.

246. BOOM ET AL., *supra* note 5, at 23.

247. *Id.*

248. Ganguly et al., *supra* note 12, at 855.

249. BOOM ET AL., *supra* note 5, at 24.

250. Miles & Swan, *supra* note 221, at 127.

developments in climate science and research have led to a plethora of new evidence that can strengthen claims of a causal link between the behavior of private companies and climate change-related harm, which alleviates that problem.²⁵¹

IV. CONCLUSION

Many of the cases in the “second wave” of climate change litigation are still pending, but they demonstrate that there are new avenues to pursue corporate accountability that might lead to success or, at least, serve as a deterrent to the undesirable corporate behavior. As climate change worsens and as a society we move toward net-zero carbon emissions, cases like these are important to reach these goals.

Two different pathways to hold corporations accountable for the damage that they are causing to the environment have emerged. The first pathway is through cases where plaintiffs, with climate attribution science, show that climate change is foreseeable and preventable²⁵² and, therefore, both shareholder lawsuits and climate risk disclosure lawsuits can be brought to bar. In these cases, plaintiffs, which include shareholders and regulatory bodies, are suing corporations where the corporation is perceived to have failed to take meaningful climate change action or it misrepresented its actions.²⁵³ Similar to litigation against Big Tobacco, consumers are seeking accountability because fossil fuel companies are aware of the damage they are causing but are not disclosing this knowledge to their consumers.

The second pathway is through cases where plaintiffs, also with the assistance of attribution science, are bringing cases stemming from human rights violations. These cases are facing the same obstacles as other climate litigation in establishing causation and answering the question of whether courts are the appropriate forum to address the human rights effects of climate change.²⁵⁴ However, these cases continue to apply pressure to corporations and the fossil fuel industry, which will continue to grow as more comparable cases are brought in the future.²⁵⁵

These two pathways of climate litigation and the ever-developing field of climate attribution science suggest that there will be corporate accountability for climate change in the future. Despite the present obstacles this litigation is facing, the growing number of cases and the increasing amount of dialogue between individuals, governments, and organizations around the world, who are working to solve this issue,

251. Ganguly et al., *supra* note 12, at 850.

252. De Wit et al., *supra* note 7.

253. De Wit, *supra* note 85; Ganguly et al., *supra* note 12, at 845.

254. De Wit, *supra* note 7.

255. Miles & Swan, *supra* note 221, at 127.

show that there is a promising future ahead. In a landmark decision in May 2021, the Hague District Court in the Netherlands ordered that Shell must reduce its carbon dioxide emissions by 45% by 2030, relative to 2019.²⁵⁶ The court reasoned that through this standard of care, Shell had an obligation to prevent dangerous climate change through its policies. Further, the court applied the standard of care to the company's policies, emissions, consequences of its emissions, possible reduction pathways, the United Nations Guiding Principles on Business and Human Rights, the responsibilities of States and society, and its human rights and international regional legal obligations.²⁵⁷ This holding is significant because it is not only specific to the Dutch legal system, but it also incorporates international human rights law, such as the European Convention on Human Rights ("ECHR"), in the court's interpretation of the standard of duty of care.²⁵⁸ It also shows how domestic litigation can contribute to—and is contributing to—the 'hardening' of international soft law when it comes to standards of corporate conduct.²⁵⁹ With the combination of these factors, there is hope that accountability will force the Carbon Majors to change their ways and stop climate change in its tracks or, at the very least, slow its approach.

256. Rechtbank Den Haag, 26 mei 2021 (Milieudefensie/Royal Dutch Shell plc.) (Neth.).

257. *Id.*

258. Chiara Macchi & Josephine van Zeben, *Business and Human Rights Implications of Climate Change Litigation: Milieudefensie et al. v Royal Dutch Shell*, 30 REV. EUROPEAN, COMPAR. & INT'L ENV'L L. 409, 409 (2021).

259. *Id.*