







CSSN Research Report 2022:1:

Climate-Washing Litigation: Legal Liability for Misleading Climate Communications

Policy Briefing January 2022



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About CSSN

This report is being released through the Climate Social Science Network (CSSN), a global network of scholars headquartered at the Institute at Brown for Environment and Society, launched in October, 2020. CSSN seeks to coordinate, conduct and support peer-reviewed research into the institutional and cultural dynamics of the political conflict over climate change, and assist scholars in outreach to policymakers and the public.

Suggested citation

Benjamin, Lisa; Bhargava, Akriti; Franta, Benjamin; Martínez Toral, Karla; Setzer, Joana; and Tandon, Aradhna. 2022. "Climate-Washing Litigation: Legal Liability for Misleading Climate Communications." Policy Briefing, The Climate Social Science Network. January 2022.

https://www.cssn.org/

Acknowledgements

We thank Timmons Roberts and Robert Brulle, from the Institute at Brown for Environment and Society, for supporting us publishing this piece. We are grateful for the extremely helpful comments provided by Catherine Higham and editing by Georgina Kyriacou, from the Grantham Research Institute on Climate Change and the Environment; the members of the Accountability CSSN working group (Max Boykoff; Felix De Caluwe; Christian Downie; Chrisa Hoicka; Nathan Lemphers; Ingmar Lippert; Harland Prechel; Sarah Reiter; Geoffrey Supran; Francesco Nicola Tubiello; and, particularly, Karen Sokol), as well as the members of the Spinning Climate Change: The Role of Public Relations and Greenwashing CSSN working group, particularly Doreen Stabinsky.

We acknowledge the financial support of the Climate Social Science Network.

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Introduction

This research report aims to enhance the legal community's understanding of climate-related 'greenwashing' litigation. We analyse this type of litigation, which can also be described as 'climate-washing' litigation, by examining key cases and developments, particularly cases and complaints brought against the largest emitters of greenhouse gases (predominantly non-state actors). The paper is designed to address the lack of examination of this specific type of litigation to date.

Recent context

The need to combat greenwashing - briefly, the use of unsubstantiated or misleading claims about, or selective disclosure of, environmental performance or best practice for commercial or political gain - came under the spotlight at COP26, the United Nations climate conference that took place in Glasgow in November 2021. There, the UN Secretary-General announced a new 'High-Level Expert Group' to establish clear standards to measure and analyse net-zero commitments from non-state actors (Guterres, 2021). An International Sustainability Standards Board was announced too, to develop a global baseline of sustainability disclosure standards to meet investors' information needs (IFRS, 2021). And the UK Financial Conduct Authority published a consultation paper on sustainability disclosure requirements and investment labels to ensure that asset managers do not mislead investors about the 'greenness' of their investment products (FCA, 2021). These moves followed pressure that was already mounting from a wide range of stakeholders who have promised to hold companies, banks, asset managers and insurers to account in relation to their climate change claims and targets.

These developments are likely to motivate a rise in legal and activist action against greenwashing, amplifying an existing trend in climate litigation that is likely to escalate in the near future.

Structure of the paper and data sources

Section 1 defines greenwashing in more detail, plus climate-washing and climate-washing litigation.

Section 2 provides an in-depth review of actual and potential climate-washing cases, classified according to the type of misleading statements upon which such cases are based.

Section 3 offers practical recommendations for various actors in the context of climate-washing.

Throughout the paper, we draw on and highlight cases from the Climate Change Laws of the World database maintained by the Grantham Research Institute on Climate Change and the Environment at the London School of Economics and Political Science, and the Climate Case Chart database maintained by the Sabin Center for Climate Change Law at Columbia Law School.

1. Defining greenwashing, climate-washing and climate-washing litigation

1.1. What is greenwashing?

Greenwashing is generally defined as unsubstantiated or misleading claims regarding an actor's environmental performance (Laufer, 2003; Ramus and Montiel, 2005). Greenwashing can also describe the selective disclosure of positive environmental or social impacts of a company's business practices, without complete disclosure of negative impacts (Lyon and Maxwell, 2011; Mitchell and Ramey, 2011). It is not only companies that are involved in greenwashing. Governments, politicians and other state actors can employ greenwashing to paint their actions or inactions as environmentally-friendly in an attempt to sway public opinion in their favour (Lyon and Montgomery, 2015; Sourcewatch).

The first legal claims of greenwashing responded to the observation that companies were marketing products to appeal to consumer demands for environmentally-friendly products while making misleading environmental claims (Feinstein, 2013).

1.2. What is climate-washing?

More recently, greenwashing complaints have also been brought on climate change grounds, where marketing campaigns have been alleged to mislead and/or overstate advertised performance in the context of climate change. Plaintiffs may seek monetary damages, civil penalties, and/or injunctive relief for the harm done by misleading, greenwashed communications.

This type of climate-related greenwashing may be referred to as 'climate-washing', and litigation brought against it highlights the gap between state and non-state actors' words and actions regarding climate change. It may include claims relating to the environment, human health, economics, or other aspects of climate change.

The terms greenwashing and climate-washing have been used interchangeably (Beder, 2014; Fliegelman, 2010). However, a distinction can be made in that climate-washing may encompass issues that go beyond the natural environment. This is analogous with how climate change concerns might go beyond or be more specific than environmental concerns. This distinction between greenwashing and climate-washing might matter when we consider the legal actions brought against governments and companies by and on behalf of consumers, individuals and groups. The utility of the climate-washing concept compared with greenwashing is likely yet to be determined, but the climate-washing concept reflects the growing trend of recognising and addressing climate change in terms that go beyond traditional environmentalism.

What is climate-washing litigation? 1.3.

The narrow attention given to 'traditional' greenwashing cases, reinforced by literature and research, may represent a serious blind spot (Lane, 2013). Cases involving climate-washing, as defined above, have potentially significant implications due to the impact they can have on climate change.

Climate-washing litigation aims to hold both governmental and non-governmental actors¹ legally accountable for their actions or products that misleadingly claim to address climate change.² At least 20 judicial climate-washing cases have been filed before courts in the US, Australia, France and the Netherlands since 2016.3 There are also several administrative complaints raising issues of climate-washing that have already been filed before oversight bodies. We have identified at least 27 of such complaints filed before non-judicial oversight bodies in the UK, Australia, Italy, New Zealand, Denmark, the US and South Korea since 2008.4 While these complaints could be more accurately described as legal action or interventions, we include them in the concept of climate-washing litigation for now, as they can be viewed as part of a broader litigation strategy.

Climate-washing litigation is part of a wider movement of climate litigation (Setzer and Higham, 2021), that uses consumer protection, civil and/or commercial legislation that exists worldwide (even if not greenwashing-specific) in order to address the issue of climate-washing. These claims often rely on arguments that are relatable, accessible and understandable for the general public, and therefore may attract public attention and support. Climate-washing litigation can and often is used in combination with other approaches, including government regulation and other strategies such as campaigns and watchdog websites from non-governmental organisations (NGOs) and other stakeholders (Cherry and Sneirson, 2012). Even in instances where the results of the litigation are delayed or unfavourable, litigation can help increase consumer awareness (Lane, 2013).

Climate-washing strategies include employing false claims, obscuring important information that could help evaluate the meaning, sincerity or context of a claim, and/or using vague or ambiguous

¹ Governmental actors include national and subnational (regional and municipal) governments, as well as state departments and agencies. Non-governmental actors include other entities such as companies and individuals.

² 'Climate [change] litigation', under a broad definition, includes lawsuits brought before administrative, judicial and other investigatory bodies, in domestic and international courts and organisations, that raise issues of law or fact regarding the science of climate change and climate change mitigation and adaptation efforts (Setzer and Higham, 2021; Markell and Ruhl, 2012; Burger et al., 2017; Osofsky and Peel, 2015).

³ This is an indicative number of judicial cases identified globally in the Climate Change Laws of the World and the Climate Case Chart databases. The list of cases, jurisdiction and filing year can be found in Appendix A to this Report.

⁴ This is an indicative list of administrative cases and pre-action cases filed before oversight bodies in different jurisdictions, but not all jurisdictions have been covered and some jurisdictions may be more comprehensive than others. The list of cases, jurisdiction and filing year can be found in Appendix B to this Report.

terms. Through their communication and marketing strategies, major emitting companies often deploy such strategies in a bid to shift public perception regarding their business activities to be viewed as part of the solution to, rather than the primary cause of, climate change.

Claims around climate-washing are likely to increase. In April 2021, ClientEarth launched 'The Greenwashing Files' campaign. Its goal is to expose companies that greenwash (ClientEarth, n.d.). Misleading 'green' advertising can give rise to climate litigation based on fraud, misrepresentation and consumer protection (Setzer and Higham, 2021). Net-zero commitments along with other climate pledges have been accused of giving licence to a 'burn now, pay later' approach to tackling climate change (Dyke et al., 2021). A growing wave of climate litigation that seeks to counteract this is a likely consequence if such pledges are not backed by credible actions.

2. Overview of climate-washing cases

Academic literature on climate litigation that has targeted corporate communications about climate ambitions or targets has primarily been limited to litigation that focuses on the disclosure obligations of companies. However, it is now evident that this focus is missing some of the wider issues at stake. Broadly, climate-washing – and the litigation claims in suits that may follow – can be categorised by the type of misleading information. We review three of these categories below: misleading communications regarding (1) corporate and governmental commitments, (2) product attributes, and (3) disclosure of climate investments, financial risks and harm caused by companies.

2.1. Challenging corporate and governmental commitments

A key conclusion of the last Intergovernmental Panel on Climate Change (IPCC) assessment of the science of climate change is that to meet global climate goals, a worldwide commitment to achieve zero or net-zero emissions (or as close as possible) around 2050 is needed (IPCC, 2021). In the context of scientific consensus on this issue, state and non-state actors are increasingly making climate statements, advertising investments in clean energy and announcing climate pledges or ambitions including emission reduction targets. The reality of the actual emission reductions these commitments will achieve is yet to be seen (Black et al., 2021). The gap between such pledges, the advertising campaigns that are often connected to those pledges, and the reality of the emission reductions that will be realised, as well as the gap between the pledges and the long-term temperature goals in the Paris Agreement itself, might constitute a strong basis for climate-washing litigation. Claims and liability around zero and net-zero pledges will continue to arise until the gap between the pledges and actual action has narrowed or closed.

The concept of climate-washing could be a useful lens through which to scrutinise and enforce climate commitments, including the recent flurry of net-zero pledges. A growing number of countries, cities, businesses, universities and even sports teams have made commitments to net their greenhouse gas emissions to zero in the coming years. The terminology used varies and includes 'climate neutrality', 'race to zero', 'carbon neutrality', and 'zero carbon footprint' (New Climate Institute and Data-Driven EnviroLab, 2020). From countries, states and cities alone, actors representing almost US\$46 trillion aggregated GDP (53% of the global economy) have so far set or stated an intention to set net-zero targets for 2050 (Energy & Climate Intelligence Unit, 2021).

The lack of clarity or certainty over whether these commitments will be achieved is partly because there is no clear methodology applied to the claims. An analysis of over 4,000 significant entities, including all nations and all companies in the Forbes Global 2000 list of the world's largest companies, found that 14% of the entities studied did not specify whether their net-zero targets covered carbon dioxide only or all greenhouse gases, while the remainder of entities were split almost equally between those covering all greenhouse gases versus CO₂ only (Black et al., 2021). The study also found that 124 countries, 73 states and regions, 155 cities and 417 companies from the samples in scope have made some form of commitment to net-zero. These commitments cover at least 61% of global greenhouse gases (ibid.). Plans on how to reach net-zero targets have yet to meet expectations. From the entities studied by the report, only 25 nations, 41 states and regions, 65 cities and 210 companies have a published plan (ibid.).

By the time of COP26 in November 2021, all 194 parties to the Paris Agreement had submitted their Nationally Determined Contributions (NDCs), with 151 parties submitting new or updated first NDCs, and 11 parties submitting their second NDCs (UNFCCC, n.d. b). It remains unclear whether the net-zero commitments made in these documents and other pledges, largely set to be accomplished by 2050, can be honoured, especially considering that most state and non-state actors have not established or published concrete steps that will be taken towards achieving the announced commitments. For instance, fossil fuel companies and many investment banks pledging net-zero continue to invest in new fossil fuel developments (Nature Editorial, 2021), which significantly undermines their commitments. In addition to pressure and criticism from the media and civil society, climate litigation and other legal accountability mechanisms may help to move such pledges closer to achieving the temperature goals set out in the Paris Agreement.

Claims in this category might be filed on the grounds that the way such commitments are presented misrepresents or is in violation of national consumer protection or corporate laws. The case filed by the Australasian Centre for Corporate Responsibility (ACCR) against oil and gas company Santos (Australasian Centre for Corporate Responsibility v. Santos) illustrates this strategy. The lawsuit challenges Santos's claim that it would achieve net-zero emissions by 2040, when the company is relying on projected carbon capture and storage technology that either does not exist or has not been disclosed (ACCR, 2021). ACCR argues the claims - contained in the company's 2020 Annual Report constitute misleading or deceptive conduct under the Corporations Act 2001 and the Australian Consumer Law. This is the first lawsuit in Australia raising the issue of climate greenwashing against the oil and gas industry (Environmental Defenders Office, 2021), and it is likely to be the first of many court cases in the world to challenge the veracity of a company's net-zero emissions target.

2.2. Challenging descriptions of product attributes

Greenwashing 'product attributes' has a long history, and often involves representing individual products as being less environmentally polluting than they really are, using a variety of approaches.⁵ In 2009, TerraChoice, an environmental marketing firm, evaluated thousands of products and the environmental claims about them, and found that over 95% of the samples employed at least one instance of greenwashing (TerraChoice, 2009). More recently, a report by the European Commission showed that 42% of online market websites contain environmental claims that are false, deceptive or exaggerated and could qualify as unfair commercial practice under EU regulations (European Commission, 2021).

Product liability litigation deals precisely with instances where manufacturers, distributors, suppliers and retailers are held responsible for injuries that their products may cause, and which have been concealed from the public. Product liability litigation, particularly tobacco litigation, has inspired climate litigation against major emitters (Olszynski et al., 2017). In tobacco litigation, plaintiffs began to achieve success once they started focusing on how tobacco companies had concealed the health effects of smoking and misled the public. This led to billions of dollars in damages being awarded against tobacco companies and most countries now require health warnings to be displayed on cigarette packets. Many have already called for, and some countries already have, legislation requiring equivalent warnings to be displayed on gas [petrol] pumps (Brooks and Ebi, 2021).

In the case of the fossil fuel industry, a common misleading approach in the context of climate change claims is to focus on combustion or end-use emissions while ignoring substantial upstream emissions in product extraction, refining, processing or transport.

Gas, for instance, has roughly half the carbon dioxide intensity of coal and three-quarters that of petroleum on a per-energy basis when combusted, but methane emissions during gas production and transportation may significantly or entirely negate this carbon dioxide advantage (Tollefson, 2013). Thus, advertisements that represent gas as "clean/cleaner" or "low/lower emissions/carbon", or that attribute "reductions" in "emissions" or "carbon" to fossil gas can be misleading. Chevron, for example, placed an advertisement in the New York Times claiming that expanded use of fossil gas has produced "unprecedented reductions in U.S. energy-related carbon emissions," and that "[n]atural gas has been the main cause for a 14% reduction in our emissions since 2005" (Chevron, 2019). These statements regarding "carbon emissions" may be false or misleading, because they refer only to carbon dioxide and ignore methane emitted throughout the fossil gas product chain, which is also a 'carbon emission' (being composed of one atom of carbon surrounded by four atoms of hydrogen).⁶ Methane has 56 times the global warming potential of carbon dioxide over a short-term horizon of 20

⁵ These include providing no proof of the green attributes claimed, making vague claims that are poorly defined, making false claims about the product, hiding information about upstream or downstream impacts of a 'green' product, and so on (TerraChoice, 2009).

⁶ To support its claims, Chevron cites studies that examine only carbon dioxide, not all carbon emissions.

years, which, coupled with its lifespan of about 15 years, contributes significantly to global warming when emitted.7

In the Lawyers for Climate Action Complaint to the Advertising Standards Board, the advertising standards authority of New Zealand found utility company FirstGas's claim that it is "ensuring" that its natural gas is going "zero carbon" misleading because it was not substantiated (ASA Complaints Board, 2021). The complainants argued that FirstGas was relying on future technology and industry development that are not yet proven, and the Standards Board agreed. The lawsuit brought by the Australasian Centre for Corporate Responsibility (referred to above) not only challenged Santos's plan to achieve net-zero emissions, but also questioned the properties of its gas per se (i.e. the product), alleging that Santos's claims that natural gas is a "clean fuel" that provides "clean energy" misrepresents the true effect of natural gas on the climate, including the large releases of carbon dioxide and methane that occur during extraction and burning.

Similarly, fossil fuel companies and trade associations often represent hydrogen as a "clean", "renewable" or "zero-/low-carbon" fuel, when hydrogen is often produced from fossil gas (US DOE, 2021). They may also misrepresent the characteristics of biofuels. Advertisements frequently portray biofuels as a ready solution for deep decarbonisation, when in fact biofuels created from bioethanol used in gasoline engines are typically at least 85% fossil fuel (US DOE, n.d.). A series of advertisements placed in The New York Times by ExxonMobil in 2019 portrayed the company's biofuels as "engine ready", "sustainable" and "environmentally friendly" (ExxonMobil 2019a), omitting to mention the fossil fuel component of biofuels and other problematic issues such as scalability. The fossil fuels and fertilizers needed for biofuel production also may mean these fuels are far from being zero- or low-carbon alternatives (Mosnier et al., 2013).

In a similar vein, some of Shell's recent advertisements in *The Washington Post* referred to liquefied natural gas (LNG) as "sustainable", a "lower-carbon fuel" and "part of a mosaic of alternative energy sources" (Shell, 2020a). Another Shell advertisement campaign in the same newspaper called fossil gas a "critical component of a sustainable energy mix" (Shell, 2020b) and "a cleaner-burning fossil fuel", ignoring or omitting mention of the methane emissions caused by fossil gas production and transportation. The latter advertisement also described LNG as part of a "cleaner [...] transportation future". Shell's claims regarding LNG were repeated in an advertisement in The New York Times that claimed LNG will "help prevent climate change from advancing" (Shell, 2020c). These claims are arguably misleading as they omit the climate contributions of methane emissions from LNG, as well as the carbon dioxide emissions produced during use.

More recently, regulators in the UK and Europe have upheld claims against fossil fuel companies for classifying natural gas as a 'clean' fuel and misleading consumers. The Italian Competition and Market Authority imposed a fine of 5 million euros against the fossil fuel company Eni for deceiving

https://unfccc.int/process/transparency-and-reporting/greenhouse-gas-data/greenhouse-gas-data-unfccc/global-warmingpotentials

⁷ See

consumers by labelling biofuels 'green' diesel.8 Similar complaints have been filed against Shell before the Advertising Standards Authority in the UK.9

The meat industry has carried out campaigns that make similarly misleading claims to legitimise the growth in production of livestock. Despite increasing evidence that projected food habits could preclude achieving targets under the Paris Agreement, meat producers have ramped up their efforts to make their products seem climate-friendly (Clark et al., 2020). Danish Crown, for instance, launched an advertising campaign describing pork as "more climate friendly than you think" (Danish Crown, n.d.). The company is also certifying its products as "climate controlled" under a voluntary certification scheme (Christen, 2021). In doing so, it may be attempting to shift consumer perceptions to believe meat can be part of a 'climate-friendly' future. The claims made by Danish Crown have been challenged by three NGOs before the Dutch consumer authority for misleading consumers by classifying pork in this way (Schwartzkopff, 2021).

Greenwashing and climate-washing claims are also being made against vehicle manufacturers and the transport sector. In 2008, the Australian Competition and Consumer Commission brought an action under the Australian Trade Practices Act of 1974 against three automobile companies for falsely advertising the environmental benefits of their products. The companies failed to substantiate the claims made in their advertising campaigns and had to compensate consumers who purchased their products based on the false advertisements (Australian Competition, 2008).

More recently, in 2020, following a series of advertisements from Ryanair in the UK, the Advertising Standards Authority (ASA) concluded that the airline's claims that customers choosing Ryanair over another carrier would have lower personal carbon dioxide emissions were misleading and in violation of the UK Code of Non-broadcast Advertising, Sales Promotion and Direct Marketing (ASA Ruling on Ryanair Ltd t/a Ryanair Ltd). The ASA found that consumers would find insufficient information in the advertisements to substantiate the company's claims and further noted that well-known competitors were absent from the calculation used by Ryanair.

The potential legal liability for this category of climate-washing largely relies on laws and regulations that prohibit false advertising and are designed to protect consumers. Most countries have such laws and regulations, and require companies to substantiate claims made in their advertisements.

Challenging disclosure of investments, financial risks and harm caused 2.3.

Publicly traded companies often have obligations to consumers as well as requirements to disclose material risks to their investors. Since in the past climate change has traditionally been viewed as solely an environmental issue, many companies have not included the financial risks of climate change in their prospectuses or securities filings. As the financial risks of climate change become

⁸ Complaint by Transport and Environment against ENI before the Competition and Market Authority of Italy (2019).

⁹ Advertising Standard Authority UK complaint against Royal Dutch Shell (2020).

clearer, some jurisdictions are recommending or requiring that high emitting companies disclose the risks of climate change to their businesses to investors and the public, particularly where their future profitability may be jeopardised by continued capital investments in fossil fuel-based assets, infrastructure and reserves. Where companies do not disclose these investments or over-emphasise investments in non-fossil-based energy or assets, they may face litigation. While companies attempt to persuade their investors and the public that these transitions are already underway, they may delay actual corporate transitions to clean energy.

2.3.1. Disclosure of investments and climate action

Fossil fuel companies and trade associations regularly portray themselves and fossil fuels as compatible with a low-carbon economy. For instance, companies may advertise their use of renewable energy to power oil and gas production as evidence of environmental sustainability. Similarly, companies may advertise efficiency improvements in fossil fuel production. In other cases, advertisements simply assert that fossil fuels are compatible with a prosperous, sustainable future, while omitting mention of the damage they cause to the climate.

Most fossil fuel companies invest only small amounts in low-carbon energy compared with their investments in fossil fuel production. For example, between 2010 and 2018 BP spent only 2.3% of its capital investments on low-carbon energy sources; Shell 1.2% (0.3% of which was in carbon capture, utilisation, and storage [CCUS], which is not significantly used due to cost and often stimulates further oil production); Chevron 0.2% (0.1% of which was in CCUS); ExxonMobil 0.2%; and ConocoPhillips 0.0% (Raval and Hook, 2019). Despite this reality, fossil fuel companies and trade associations sometimes seek to portray themselves as leaders in developing and providing non-fossil energy systems, such as solar, wind power and biofuels, even where their capital investments in non-fossil energy systems are extremely low and generally much lower than implied or represented in advertisements.

BP recently cancelled its 'Possibilities Everywhere' campaign, which portrayed the company as a leader in clean energy. An example advertisement described BP as "one of the major wind energy businesses in the US" (Blade Runners, 2019), yet BP's installed wind capacity in the US is only about 1% of the market, not reflecting the claim in the advertisement. 10 Similarly, ExxonMobil's advertisements that the company will scale up its biofuel production to 10,000 barrels per day by 2025 may be misleading, given that between 2010 and 2018 the company spent only 0.2% of its capital investments on low-carbon energy sources (Raval and Hook, 2019). And even if ExxonMobil were to reach this target, it would still represent only 0.2% of the company's fossil fuel refining activity, much lower than implied to consumers (InfluenceMap, 2019).

https://www.bp.com/en/global/corporate/news-and-insights/press-releases/bp-restructures-us-wind-energy-business-for-g rowth.html. For total installed wind capacity in the US, see

https://www.renewableenergyworld.com/articles/2019/04/u-s-wind-capacity-grew-8-in-2018-awea-says.html.

¹⁰ For BP's installed wind capacity in the US, see

Shell's 2016 '#MakeTheFuture' advertising campaign targeted young people and portrayed the company as heavily engaged in developing and selling clean energy sources (Readfearn, 2018). In reality, between 2010 and 2018 Shell spent just 1.3% of its capital investments on low-carbon energy systems (Raval and Hook, 2019). A further advertisement from Shell placed in The New York Times (mentioned also in Section 2.2 above) portrayed the company as pushing for a clean energy future against a recalcitrant society, saying Shell "calls for the advancement of emerging technologies" and that "political will and, underlying that, societal will" were the main obstacles to addressing global warming (Shell, 2020c). This message obscures the fact that the company lobbies against clean energy policies: since 2015 Shell and other oil companies have spent an estimated \$200 million per year on anti-climate-policy lobbying and messaging (InfluenceMap, 2019).

Complaints of misleading portrayals of fossil fuel companies' investments in clean energy sources have been brought against companies in the UK, Europe and the USA. For example, in the UK the NGO ClientEarth filed a complaint against BP to the UK National Contact Point (NCP)¹¹ to the OECD, on the grounds that BP had misrepresented the scale of its low-carbon investments. The complaint did not proceed to the stage of being considered by the NCP because BP withdrew the advertisements mentioned in the complaint. However, it is noteworthy that companies might be exposing themselves to liability under existing regulations, even those deemed 'soft law' such as the OECD's Guidelines for Multinational Enterprises.

There have also been several claims filed against carbon majors for omitting, obscuring and failing to disclose material information concerning climate change. In March 2021, three NGOs, Global Witness, Earthworks and Greenpeace USA, jointly filed a complaint to the United States' Federal Trade Commission (FTC) against Chevron. The complaint argued that Chevron has misrepresented the harmful impacts of its business activities through its advertisements, providing consumers with misleading information about the company's efforts to reduce greenhouse gases. Earthworks said that Chevron "is consistently misrepresenting its image to appear climate-friendly and racial justice-oriented, while its business operations overwhelmingly rely on climate-polluting fossil fuels" (Earthworks, 2021). According to the plaintiffs, this contravenes the Green Guide developed to prevent marketing from misleading consumers through environmental claims (Global Witness, 2021; FTC, n.d.). As the first climate-washing complaint submitted to the FTC, this case could set an important precedent, as well as a pathway for new litigation strategies to combat misleading climate claims and net-zero targets (Crowley, 2021).

2.3.2. Disclosure of financial risks caused by climate change

Several cases have been filed against companies alleging that they have failed to provide complete disclosure of climate-related risks impacting their investors and consumers. These claims have been brought using consumer, corporate or security law tools across various jurisdictions (Benjamin, 2020). For example, a derivative suit was filed in the US by ExxonMobil's shareholders against its

¹¹ National Contact Points are responsible for promoting the OECD Guidelines for Multinational Enterprises on responsible business conduct.

directors for a breach of fiduciary duty and failure to disclose the impacts of climate change on the company's business reserves and assets (Ramirez v. ExxonMobil Corp). ExxonMobil is also facing claims in the US for systematic risk misrepresentation, omitting critical information on the impacts of climate change, and employing deceptive and unfair trade practices to influence consumer demands (Commonwealth v. ExxonMobil Corp; People of the State of New York v. ExxonMobil Corp). Shareholders of the Commonwealth Bank of Australia filed a similar complaint against the Bank for investing in coal mines (Abrahams v. Commonwealth Bank of Australia). And ClientEarth has filed several non-compliance complaints before financial regulators in the UK to require companies to provide detailed disclosure of their climate-related risks in compliance with security regulations, which would require companies to disclose any 'material risks' that may influence the decisions of their investors (ClientEarth, 2019, 2021).

In some jurisdictions, failure to disclose the risks of climate change can implicate the corporate duties of directors (Benjamin, 2020; Commonwealth Climate and Law Initiative, 2021). This implication of corporate and securities law obligations may create a pathway to legal liability for directors, and therefore lead to the mainstreaming of climate risk disclosures into financial filings. Several securities regulators around the world are already imposing obligations or recommendations for the disclosure of climate risks in financial filings of public companies (Benjamin, 2022). Mandatory climate disclosure obligations would likely increase legal liability claims in the relevant jurisdictions.

While focused on an open standard of care, the recent ruling by the District Court of The Hague ordered Shell to reduce its greenhouse gas emissions by 45% by 2030 from 2019 levels on the grounds that Shell's existing carbon mitigation strategy was not concrete and is full of conditions and disclaimers (Milieudefensie et al. v. Royal Dutch Shell plc). 12 Although not strictly a climate-washing case, this case suggests the potential for corporate liability resulting from vague wording in corporate statements and climate policies. The Court also concluded that Shell falsely claimed that its plans were aligned with the Paris Agreement. This case raises a litigation strategy that may become more popular in the future: seeking to obtain declaratory judgements from a court about inadequate actions before asking for damages or injunctive relief in order to improve the likelihood of success for those filing the case. This strategy is a departure from other kinds of cases seeking damages for actions that had not previously been declared unlawful (Ganguly et al., 2018).

2.3.3. Disclosure of harm caused and societal risks

Fossil fuel companies such as ExxonMobil and Chevron have faced a flurry of climate liability lawsuits in recent years, especially in the US. In 2017, California cities including San Francisco and

¹² See paragraph 4.5.2., which states: "In the court's view, RDS' policy, policy intentions and ambitions for the Shell group largely amount to rather intangible, undefined and non-binding plans for the long-term (2050). These plans ('ambitions' and 'intentions') are furthermore not unconditional but - as can be read in the disclaimer and cautionary notes to the Shell documents - dependent on the pace at which global society moves towards the climate goals of the Paris Agreement ('in step with society and its customers'). Emissions reduction targets for 2030 are lacking completely [...]" (The Hague District Court, 2021; emphasis added).

Oakland sued Chevron, ConocoPhillips, ExxonMobil, BP and Royal Dutch Shell - the five biggest investor-owned fossil fuel producers in the world (City of San Francisco, 2018). This suit brought nuisance and trespass claims under state law and aimed to recover the present and future costs of infrastructure investments (e.g. sea walls) necessary to protect the cities from the ongoing and future impacts of climate change and sea level rise. Similar claims under tort law were made in the same year by three local governments in California against leading fossil fuel companies for causing sea level rise and severe flooding (Sokol, 2020). 13

In more recent cases, claimants have relied on state-based laws to avoid federal pre-emption, and have focused on product liability, claims of failure to warn, and state consumer protection statutes (Benjamin, 2020). For example, in 2020 the State of Connecticut sued ExxonMobil to hold the company accountable for deceiving the public about the role of fossil fuels in global warming, using state-level consumer protection and unfair trade practice laws (State of Connecticut, 2021; Hijazi, 2021).

Within climate-washing litigation cases, there is a growing trend to introduce allegations related to the climate change impacts of climate-washing practices, as is seen in the sample of cases cited here. A lawsuit filed by New York City against ExxonMobil, Shell, BP and the American Petroleum Institute was brought under the city's consumer protection laws (City of New York, 2021a). New York City argues that the companies have engaged in deceptive trade practices by misrepresenting their fossil fuel products to consumers, thereby misleading consumers about the impact of fossil fuels (ibid., 2021b). The City further argues that there is a sufficient causal tie between the deceptive marketing and climate impacts to provide a basis for liability under various state laws.

¹³ City of Imperial Beach v. Chevron Corp., No. C17-01227 (Cal. Super Ct. July 17, 2017); County of Marin v. Chevron Corp., No. CIV1702586 (Cal. Super Ct. July 17, 2017); County of San Mateo v. Chevron Corp., No. 17CIV03222 (Cal. Super Ct. July 17, 2017).

3. Recommendations

This research report illustrates that there are a variety of laws and legal principles that already exist that can be a source of potential liability for companies engaging in climate-washing. In fact, soft and hard laws related to 'climate-washing' have been brought in courts in several different jurisdictions, and the frequency of cases being filed is increasing (Setzer and Higham, 2021). Climate-washing claims use arguments that are relatable, accessible and understandable by a public that is increasingly experiencing climate extremes and demanding climate action. These types of claims will likely be diverse and increase over time.

The following recommendations arise from this analysis, tailored to specific actors:

Companies:

- i. Make every attempt to not over-claim climate actions the company is taking towards net-zero (or other) commitments.
- ii. Review advertisements with marketing, scientific and legal teams that take into consideration net-zero commitments or other climate pledges made by the company, as well as the negative impacts on climate that the company causes, to avoid publishing potentially misleading information and, thus, reduce the climate litigation risk from potential climate-washing claims.

Policymakers:

Review the legal mechanisms available in your jurisdiction, including soft and hard law mechanisms, to enhance transparency and compliance of companies to existing climate commitments, whether they are voluntarily adopted or mandated by regulation.

NGOs, private plaintiffs and public officials:

Serve as climate-washing watchdogs, highlighting climate-washing through available legal and policy avenues, and bring social awareness campaigns, investigations and litigation to remedy and deter climate-washing and other misleading communications related to climate change. These can include consumer protection and advertising laws, which have become a vibrant area of legal activity in some jurisdictions.

Lawyers:

- i. Advise care to companies in their preparation of advertisements, to avoid disinformation regarding climate change and action.
- ii. For litigants bringing cases, focus on climate commitments and claims as a basis for potential climate-washing to procure corporate and state actor accountability. Existing soft and hard law can be the basis of litigation.

Legal enforcers:

Take into consideration different types or remedies that have been or can be brought in climate litigation cases, to deter and combat instances of climate-washing (e.g. putting disclaimers on advertisements from fossil fuel-derived products about their climate impact, in a similar way to the tobacco industry).

References

Abrahams (2017) Guy Abrahams v. Commonwealth Bank of Australia VID879/2017 (Fed. Ct. Aus. 2017) [withdrawn].

ASA Complaints Board (2021) Lawyers for Climate Action v. FirstGas Group, Complaint Number 21/194. Advertising Standards Authority, 6 July.

Australasian Centre for Corporate Responsibility [ACCR] (2021) Australasian Centre for Corporate Responsibility Files Landmark Case against Santos in Federal Court, ACCR, 26 August.

https://www.accr.org.au/news/australasian-centre-for-corporate-responsibility-files-landmark-case-against-sant os-in-federal-court/.

Australian Competition (2008) Australian Competition and Consumer Commission v. Goodyear Tyres, D08/65865 (Fed. Ct. Aus. 2008).

Beder, S. (2014) Lobbying, Greenwash and Deliberate Confusion: How Vested Interests Undermine Climate Change Regulation, Conference for Green Thought and Environmental Politics. https://www.researchgate.net/publication/275276392_Lobbying_Greenwash_and_Deliberate_Confusion_How_V ested_Interests_Undermine_Climate_Change_Regulation.

Benjamin, L. (2020) The Road to Paris Runs Through Delaware: Climate Litigation and Directors' Duties, Utah Law Review, 313.

Benjamin, L. (forthcoming, 2022) The SEC and Climate Risk. UCLA Journal of Environmental Law and Policy.

Black, R., Cullen, K., Fay, B., Hale, T., Lang, J., Mahmood, S., and Smith, S.M. (2021) Taking stock: A global assessment of net zero targets, Energy and Climate Intelligence Unit and Oxford Net Zero. https://ca1-eci.edcdn.com/reports/ECIU-Oxford_Taking_Stock.pdf?mtime=20210323005817&focal=none.

BP (2019) Blade Runners,

https://web.archive.org/web/20191130192545/https://www.bp.com/en/global/corporate/who-we-are/possibilit ies-everywhere/wind-and-natural-gas.html.

Brooks, J. R., Ebi, K. L. (2021) Climate Change Warning Labels on Gas Pumps: The Role of Public Opinion Formation in Climate Change Mitigation Policies. Global Challenges, 5, 2000086. https://doi.org/10.1002/gch2.202000086.

Burger, M., Gundlach, J., Kreilhuber, A., Ognibene, L., Kariuki, A. and Gachie, A. (2017) The status of climate change litigation: A global review, New York: United Nations Environment Programme.

Cherry, M. A., Sneirson, J. F. (2012) Chevron, Greenwashing and the Myth of 'Green Oil Companies'. Journal of Energy, Climate, and the Environment, 3.

Chevron (2019) How Abundant Energy Is Fueling U.S. Growth (Paid for and posted by Chevron), The New York Times.

https://www.nytimes.com/paidpost/chevron/how-abundant-energy-is-fuelingus-growth.html?section=header&s ubsection=1.

Christen, C. (2021) Investigation: How the Meat Industry is Climate-Washing its Polluting Business Model, DeSmog. https://www.desmog.com/2021/07/18/investigation-meat-industry-greenwash-climatewash/.

City of New York (2021a) New York City Sues ExxonMobil, Shell, BP, and The American Petroleum Institute for Systematically and Intentionally Deceiving New Yorkers, NYC City Hall, 22 April.

City of New York (2021b) The City of New York v. ExxonMobil Corp., ExxonMobil Oil Corporation, Royal Dutch Shell plc, Shell Oil Company, BP p.l.c., and BP America Inc., and the American Petroleum Institute.

City of San Francisco (2018) City and County of San Francisco, et al., v. BP P.L.C et al., Case No. 18-16663 (9th Cir. 2018).

Clark, M., Dominigo, N., Colgan, K., Thakrar, S., Tilman, D., Lynch, J., Azervedo, I., Hill, J. (2020) Global food system emissions could preclude achieving the 1.5 and 2 C climate change targets, Science, 370(6517), pp. 705-708. https://science.sciencemag.org/content/370/6517/705.

ClientEarth (2019) Intervention Update UK financial regulators are missing in action on company failures to disclose material climate-related information.

https://www.documents.clientearth.org/wp-content/uploads/library/2019-12-19-uk-financial-regulators-are-mis sing-in-action-on-company-failures-to-disclose-material-climate-related-information-ce-en.pdf.

ClientEarth (2021) ClientEarth files complaints against Just Eat and Carnival over climate failings. https://www.clientearth.org/latest/press-office/press/clientearth-files-complaints-against-just-eat-and-carnivalover-climate-failings/.

ClientEarth (n.d.) The Greenwashing Files. https://www.clientearth.org/the-greenwashing-files/.

Commonwealth Climate and Law Initiative (2021) Fiduciary Duties and Climate Change in the United States, 1.

Commonwealth v Exxon (2019) Commonwealth v. ExxonMobil Corp. 19:84-cv-03333 (Mass. Super. Ct. 2019).

Crowley, K. (2021) Chevron 'Greenwashing' Targeted in Complaint Filed With FTC, Bloomberg, 16 March.

Danish Crown (n.d.) Our Abattoirs Are Very Energy-Efficient and Make Optimum Use of the Pig. https://www.danishcrown.com/en-gb/about-us/themes/climate/our-abattoirs-are-very-energy-efficient-and-ma ke-optimum-use-of-the-pig/.

Dyke, J., Watson, R. and Knorr, W. (2021) Climate scientists: concept of net zero is a dangerous trap, The Conversation. https://theconversation.com/climate-scientists-concept-of-net-zero-is-a-dangerous-trap-157368.

Earthworks (2021) Accountability groups file first of its kind FTC complaint against Chevron for misleading consumers on climate action, media release, 16 March.

https://www.earthworks.org/media-releases/accountability-groups-file-first-of-its-kind-ftc-complaint-against-ch evron-for-misleading-consumers-on-climate-action/.

Energy and Climate Intelligence Unit (n.d.) Net zero: the scorecard. https://eciu.net/analysis/briefings/net-zero/net-zero-the-scorecard.

Environmental Defenders Office (2021) World-first Federal Court case over Santos' 'clean energy' & net zero claims. 26 August.

https://www.edo.org.au/2021/08/26/world-first-federal-court-case-over-santos-clean-energy-net-zero-claims/.

European Commission (2016) Guidance On The Implementation/Application Of Directive 2005/29/Ec On Unfair Commercial Practices.

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016SC0163&from=EN.

European Commission (2021) Screening of websites for 'greenwashing': half of claims lack evidence. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_269.

ExxonMobil (2019a) The Future of Energy? It May Come From Where You Least Expect (Paid for and posted by ExxonMobil), The New York Times.

https://www.nytimes.com/paidpost/exxonmobil/thefuture-of-energy-it-may-come-from-where-you-least-expect. html.

ExxonMobil (2019b) From Farm Waste to Fuel Tank (Paid for and posted by ExxonMobil), The New York Times. https://www.nytimes.com/paidpost/exxonmobil/algae-may-be-small-but-its-impactcould-be-big.html#1000000 06080624.

FCA (2021). Sustainability Disclosure Requirements (SDR) and investment labels, Discussion Paper DP21/4, November. https://www.fca.org.uk/publication/discussion/dp21-4.pdf.

Federal Trade Commission (FTC) (n.d.) Green Guides.

https://www.ftc.gov/news-events/media-resources/truth-advertising/green-guides.

Feinstein, N. (2013) Learning from Past Mistakes: Future Regulation to Prevent Greenwashing, Boston College Environmental Affairs Law Review, 40 (1).

Fliegelman, J. (2010) The Next Generation of Greenwash: Diminishing Consumer Confusion through a National Eco-Labeling Program, Fordham Urban Law Journal, 37(4): 1001-1056.

Fuglestvedt, J., Rogelj, J., Millar, R.J., Allen, M., Boucher, O., Cain, M., Forster, P.M., Kriegler, E., Shindell, D. (2018) Implications of possible interpretations of 'greenhouse gas balance' in the Paris Agreement, Philosophical Transactions Royal Society, A 376: 20160445: 1-17.

Ganguly, G., Setzer, J., Heyvaert, V. (2018) If at First You Don't Succeed: Suing Corporations for Climate Change, Oxford Journal of Legal Studies, 38(4): 841–868.

Gilmer, E.M. (2021) Supreme Court Denies Chevron Request to Review Climate Case, Bloomberg Law, 14 June. https://www.bloomberglaw.com/bloomberglawnews/us-law-week/X1VC6NTG000000?bna_news_filter=us-lawweek#jcite.

Global Witness (2021) Chevron faces unprecedented complaint over misleading consumers on climate action. https://www.globalwitness.org/en/campaigns/fossil-gas/chevron-faces-unprecedented-complaint-over-mislead ing-consumers-climate-action/.

Guterres, A. (2021) Secretary-General's statement on the conclusion of the UN Climate Change Conference COP26, Glasgow, 13 November 2021. https://www.un.org/sg/en/node/260645.

Hijazi, J. (2021) Connecticut Climate 'Deception' Case Punted Back to State Court, Bloomberg Law, 2 June. https://www.bloomberglaw.com/bloomberglawnews/environment-and-energy/X5R7E0Q4000000?bna_news_fil ter=environment-and-energy#jcite.

In Re: ExxonMobil (2020) In Re: ExxonMobil Corporation Derivative Litigation, 2:19-cv-16380 (D. N. J. 2020).

IFRS (2021) IFRS Foundation announces International Sustainability Standards Board, 3 November. https://www.ifrs.org/news-and-events/news/2021/11/ifrs-foundation-announces-issb-consolidation-with-cdsbvrf-publication-of-prototypes/.

InfluenceMap (2019) Big Oil's Real Agenda on Climate Change: How the oil majors have spent \$1Bn since Paris on narrative capture and lobbying on climate.

Intergovernmental Panel on Climate Change [IPCC] (2021) Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change, Cambridge University Press.

Lane, E.L. (2013) Greenwashing 2.0, Columbia Journal of Environmental Law, 38(2): 279-331.

Laufer, W.S. (2003) Social Accountability and Corporate Greenwashing, Journal of Business Ethics, 43 (1): 253-261.

Lyon, T. P., Maxwell, J. W. (2011) Greenwash: Corporate Environmental Disclosure under Threat of Audit, Journal of Economics & Management Strategy, 20(1), 3-41.

Lyon, T. P., Montgomery, A. W. (2015) The Means and End of Greenwash, Organization & Environment, 28 (2): 223-249.

Markell, D.L., Ruhl, J.B. (2012) An Empirical Assessment of Climate Change in the Courts: A New Jurisprudence or Business as Usual?, Florida Law Review, 64 (1): 15-86.

Mitchell, L., Ramey, W. (2011) Look How Green I Am! An Individual-Level Explanation of Greenwashing, Journal of Applied Business and Economics, 12 (6) 40-45.

Mosnier, A., Havlik, P., Valin, H., Baker, J., Murray, B., Feng, S., Obersteiner, M., McCarl, B.A., Rose, S.K., Schneider, U.A. (2013) The Net Global Effects of Alternative U.S. Biofuel Mandates: Fossil Fuel Displacement, Indirect Land Use Change, and the Role of Agricultural Productivity Growth, Energy Policy 57 (June): 602-614.

Nature (2021) Net-zero carbon pledges must be meaningful, Nature Editorial, Nature, 592 (1): 8.

New Climate Institute and Data-Driven EnviroLab (2020) Navigating the Nuances of Net Zero Targets, Project No. 219051. https://newclimate.org/2020/10/22/navigating-the-nuances-of-net-zero-targets/.

Olszynski, M., Mascher, S., and Doelle, M. (2017) From Smokes to Smokestacks: Lessons from Tobacco for the Future of Climate Change Liability. Georgetown Environmental Law Review, 30(1). https://www.law.georgetown.edu/environmental-law-review/in-print/volume30-issue-1-fall-2017/from-smokes-t o-smokestacks-lessons-from-tobacco-for-thefuture-of-climate-change-liability/.

Osofsky, H.M., Peel, J. (2015) Climate Change Litigation: Regulatory Pathways to Cleaner Energy, Cambridge University Press, 4.

Ramus, C. A., Montiel, I. (2005) When are corporate environmental policies a form of greenwashing?, Business and Society, 44 (4): 377-414.

Raval, A., Hook, L. (2019) Oil and Gas Advertising Spree Signals Industry's Dilemma, Financial Times, March 6. https://www.ft.com/content/5ab7edb2-3366-11e9-bd3a-8b2a211d90d5.

Readfearn, G. (2018) Hey Millennials, Don't Fall for Shell's Pop Star PR, The Guardian, 25 April. https://www.theguardian.com/environment/planet-oz/2018/apr/25/hey-millennials-dont-fall-for-shells-pop-starpr.

Rogers, J. L., Buskirk, A. V. (2009) Shareholder litigation and changes in disclosure behavior, Journal of Accounting and Economics, 47(1-2): 136-156.

Sabin Center for Climate Change Law (n.d.) Climate Change Litigation Database, http://climatecasechart.com/.

Sabin Center for Climate Change Law (2019a) ASA Ruling on Ryanair Ltd t/a Ryanair Ltd, Climate Change Litigation Database,

http://climatecasechart.com/climate-change-litigation/non-us-case/asa-ruling-on-ryanair-ltd-t-a-ryanair-ltd/.

Sabin Center for Climate Change Law (2019b) Commonwealth v. ExxonMobil Corp., Climate Change Litigation Database, http://climatecasechart.com/climate-change-litigation/case/commonwealth-v-exxon-mobil-corp/.

Schwartzkopff, F. (2021) First Danish Climate Lawsuit Targets EU's Biggest Pork Producer, Bloomberg Green, 4

https://www.bloomberg.com/news/articles/2021-06-04/first-danish-climate-lawsuit-targets-eu-s-biggest-pork-p roducer.

Setzer, J., Byrnes, R. (2020) Global trends in climate change litigation: 2020 snapshot, London: Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science.

https://www.lse.ac.uk/granthaminstitute/publication/global-trends-in-climate-change-litigation-2020-snapshot/.

Setzer, J., Higham, C. (2021) Global trends in climate change litigation: 2021 snapshot, London: Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy, London School of Economics and Political Science.

https://www.lse.ac.uk/granthaminstitute/publication/global-trends-in-climate-litigation-2021-snapshot/.

Shell (2020a) The Making of Sustainable Mobility (Content from Shell), The Washington Post. https://www.washingtonpost.com/brand-studio/shell/the-making-of-sustainable-mobility.

Shell (2020b) The Mobility Quandary (Content from Shell), The Washington Post. https://www.washingtonpost.com/brand-studio/shell/the-mobility-quandary/.

Shell (2020c) Moving Forward: A Path to Net-Zero Emissions by 2070 (Content from Shell), The New York Times. https://www.nytimes.com/paidpost/shell/ul/moving-forward-a-path-to-net-zero-emissions-by-2070.html.

Shell (n.d.) Shell response to climate case verdict.

https://www.shell.nl/media/persberichten/media-releases-2021/reactie-shell-op-uitspraak-klimaatzaak.html#en alish.

Sokol, K. (2020) Seeking (Some) Climate Justice in State Tort Law, Washington Law Review, 1383.

Sourcewatch (n.d.) Greenwashing. https://www.sourcewatch.org/index.php/Greenwashing.

State of Connecticut (2021) Connecticut v. ExxonMobil Corporation, No. 3:20-cv-01555-JCH (D. Conn. 2021).

TerraChoice (2009) TerraChoice Environmental Marketing, Greenwashing Report 2009. http://web.archive.org/web/20160307092700/http://sinsofgreenwashing.com/index35c6.pdf.

The Hague District Court (2021) Judgement of 26 May 2021, case number: C/09/571932 / HA ZA 19-379, Vereniging Milieudefensie (and others) v. Royal Dutch Shell Plc. https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2021:5339.

Tollefson, J. (2013) Methane Leaks Erode Green Credentials of Natural Gas, Nature 493: 12.

United Nations (n.d.) Net-zero carbon pledges must be meaningful. https://www.un.org/en/climatechange/net-zero-pledges-grow.

United Nations Framework Convention on Climate Change [UNFCCC] (2015) Paris Agreement. https://unfccc.int/sites/default/files/english_paris_agreement.pdf.

UNFCCC (n.d. a) Global Warming Potentials (IPCC Second Assessment Report). https://unfccc.int/process/transparency-and-reporting/greenhouse-gas-data/greenhouse-gas-data-unfccc/glob al-warming-potentials.

UNFCCC (n.d. b) Nationally Determined Contributions (NDCs). https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs/nation ally-determined-contributions-ndcs.

U.S. Department of Energy [US DOE] (2021) Hydrogen Production: Natural Gas Reforming. https://www.energy.gov/eere/fuelcells/hydrogen-production-natural-gas-reforming.

US DOE (n.d.) Biofuel Basics. https://www.energy.gov/eere/bioenergy/biofuel-basics, accessed 3 October, 2021.

Appendices

Appendix A: Climate-washing judicial cases

No	Case Name	Jurisdiction	Year	Citation
1	<u>Fentress v. Exxon Mobil Corp.</u>	U.S.A.	2016	Case No.4:16-cv-03484 (S.D.Tex, 2016)
2	Ramirez v Exxon Mobil Corp	U.S.A.	2016	Case No.3:16-cv-3111 (N.D. Tex, 2016)
3	Abrahams v. Commonwealth Bank of Australia	Australia	2017	
4	City and County of San Francisco, et al., v. BP P.L.C et al.,	U.S.A.	2017	Case No. 18-16663 (9th Cir. 2017)
5	City of Oakland v. BP plc.	U.S.A.	2017	Case No. 3:17-cv-06011 (N.D. Cal., 2017)
6	People of the State of New York v. Exxon Mobil Corp.	U.S.A.	2018	Case No.452044 (N.Y. Sup. Ct. 2018)
7	Mayor & City Council of Baltimore v. BP p.l.c.	U.S.A.	2018	Case No.19-1644 (4th Cir. 2018)
8	Commonwealth of Massachusetts v. Exxon Mobil Corp.	U.S.A.	2019	Case No.19:84-cv-03333 (Mass. Super. Ct. 2019)
9	Milieudefensie et al. v Royal Dutch Shell Plc	Netherlands	2019	Case number: C/09/571932 / HA ZA 19-379
10	In re Exxon Mobil Corp. Derivative Litigation	U.S.A.	2019	<u>Case No.3:19-cv-01067</u> (<u>N.D.Tex 2019</u>)
11	Notre Affaire a Tous and Others v. Total	France	2019	

12	District of Columbia v. Exxon Mobil Corp. et.al.	U.S.A.	2020	Case No.1:20-cv-01932 (DDC, 2020)
13	State of Minnesota v. American Petroleum Institute	U.S.A.	2020	Case No.62-CV-20-3837 (Minn.Dist. Ct. 2020)
14	Beyond Pesticides v. Exxon Mobil Corp.	U.S.A.	2020	Case No.21-8001 (D.C.Cir. 2020)
15	Connecticut v. Exxon Mobil Corp.	U.S.A.	2020	Case No.21-1446 (2nd Cr. 2020)
16	State v. American Petroleum Institute	U.S.A.	2020	Case No. 21-1752 (8th Cir. 2020)
17	Australian Centre for Corporate Responsibility v. Santos	Australia	2021	
18	Bentley v. Oatly Group AB	U.S.A.	2021	Case No.1:21-cv-06485 (S.D.N.Y. 2021)
19	The City of New York v. Exxon Mobil Corp., ExxonMobil Oil Corporation, Royal Dutch Shell plc, Shell Oil Company, BP p.l.c., and BP America Inc., and the American Petroleum Institute	U.S.A.	2021	Case No.1:21-cv-04807 (S.D.N.Y. 2021)
20	Connecticut v. Exxon Mobil Corporation,	U.S.A.	2021	Case No.3:20-cv-01555-JCH (D. Conn. 2021)

Appendix B: Climate-washing complaints to non-judicial oversight bodies

No	Case Name	Jurisdiction	Year
1	Australian Competition and Consumer Commission v. Goodyear Tyres	Australia	2008
2	Australian Competition and Consumer Commission v. V8 Supercars Australia Pty. Ltd.	Australia	2008
3	Australian Competition and Consumer Commission v. GM Holden Ltd.	Australia	2008
4	ASA UK complaint against Royal Dutch Shell	U.K.	2008
5	ASA Ruling on INEOS Upstream Limited.	U.K.	2018
6	Complaint by Transport and Environment against ENI before the Competition and Market Authority of Italy	Italy	2019
7	Complaint against BP in respect of violations of the OECD Guidelines	U.K.	2019
8	ASA Ruling on Ryanair Ltd. t/a Ryanair Ltd	U.K.	2019
9	ASA UK complaint against Equinor	U.K.	2019
10	ASA Ruling on Marlow Foods Ltd.	U.K.	2019
11	ASA Ruling on Good Energy Ltd.	U.K.	2019
12	ASA Ruling on BP Oil UK Ltd.	U.K.	2019
13	ASA Ruling on Fischer Future Heat UK Ltd.	U.K.	2019
14	ASA UK complaint against Royal Dutch Shell	U.K.	2020
15	ASA UK complaint against Saudi Aramco	U.K.	2020
16	ASA Ruling on Esso Petroleum Company, Limited t/a Esso Petroleum Company, Limited	U.K.	2020
17	ASA Ruling on Marlow Foods Ltd. t/a Quorn Foods	U.K.	2020

18	Lawyers for Climate Action Complaint to the Advertising Standards Board	New Zealand	2021
19	Complaint to Ad Standards on HSBC's Great Barrier Reef ad	Australia	2021
20	Complaint by Greenpeace Denmark and ors. to the Danish Consumer Protection Agency against Danish Crown	Denmark	2021
21	Complaint by Global Witness, Earthworks and Greenpeace USA to the Federal Trade Commission against Chevron	U.S.A.	2021
22	ASA Ruling on Dalradian Gold Ltd.	U.K.	2021
23	ASA Ruling on Haven Power Ltd.	U.K.	2021
24	ASA Ruling on Magnatech Technology Ltd	U.K.	2021
25	Complaint by ClientEarth to the UK's Financial Services Regulator against Carnival	U.K.	2021
26	Complaint by ClientEarth to the UK's Financial Services Regulator against Just Eat	U.K.	2021
27	Complaint by Solutions for Our Climate before the Korea Fair Trade Commission against SK E&S.	Korea	2021