

STATE OF MAINE
CUMBERLAND, ss.

SUPERIOR COURT
CIVIL ACTION
DOCKET NO. _____

STATE OF MAINE,

Plaintiff,

v.

BP P.L.C.;
BP AMERICA INC.;
BP ENERGY COMPANY;
BP ENERGY RETAIL LLC;
BP PRODUCTS NORTH AMERICA INC.;
CHEVRON CORPORATION;
CHEVRON U.S.A. INC.;
EXXON MOBIL CORPORATION;
EXXONMOBIL OIL CORPORATION;
EQUILON ENTERPRISES LLC d/b/a SHELL
OIL PRODUCTS US;
SHELL TRADING (US) COMPANY;
SHELL P.L.C.;
SHELL USA, INC.;
SUNOCO LP; and
AMERICAN PETROLEUM INSTITUTE,

Defendants.

COMPLAINT

JURY TRIAL DEMANDED

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COMPLAINT AND DEMAND FOR JURY TRIAL

The State of Maine (“Plaintiff,” “State,” or “Maine”), by and through the Office of the Attorney General, Aaron M. Frey, on its own behalf, as trustee of State natural resources and property, including that held in trust, as owner, lessor, occupier, and manager of State property, and in its *parens patriae* capacity on behalf of its residents, brings this action against Defendants BP p.l.c.; BP America Inc.; BP Products North America Inc.; BP Energy Company; BP Energy Retail LLC; Chevron Corporation; Chevron U.S.A. Inc.; Exxon Mobil Corporation; ExxonMobil Oil Corporation; Shell p.l.c.; Shell USA, Inc.; Equilon Enterprises LLC d/b/a Shell Oil Products US; Shell Trading (US) Company; and Sunoco LP (the “Fossil Fuel Defendants”); and the American Petroleum Institute (“API”) (collectively, “Defendants”), and alleges as follows:

I. INTRODUCTION

1. The fossil fuel industry has known for decades, based on its own internal research, that fossil fuels produce carbon dioxide (“CO₂”) and other greenhouse gas (“GHG”) pollution that can have catastrophic consequences for the planet and its people. The industry, including Fossil Fuel Defendants, took these internal scientific findings seriously, investing heavily to protect its own assets and infrastructure from rising seas, stronger storms, and other climate change impacts. But rather than warn consumers and the public, fossil fuel companies and their surrogates mounted a disinformation campaign to discredit the scientific consensus on climate change; create doubt in the minds of consumers, the media, business leaders, and the public about the climate change impacts of burning fossil fuels; and delay the energy economy’s transition to a lower-carbon future while maximizing profits.

2. This successful climate deception campaign had, and continues to have, the purpose and effect of inflating and sustaining the market for fossil fuels, which drove up GHG emissions, accelerated global warming, and brought about devastating climate change impacts to Maine,

including to the State's frontline communities¹ in particular. The State has already and is currently enduring the effects of climate change-induced sea level rise, extreme precipitation and heat, and worsening air quality. As a result of the fossil fuel industry's lies and deceit, the State is confronted with the need to protect Maine's people, businesses, and infrastructure from these and other climate change hazards.

3. Despite the clear harm to Maine and other communities across the country, Defendants continue to peddle climate disinformation and attempt to mislead the public about the environmental impacts of Fossil Fuel Defendants' fossil fuel products and derivatives of Fossil Fuel Defendants' fossil fuel products (all together, "fossil fuel products").

4. The State of Maine brings this action against Defendants for creating, contributing to, and/or assisting in the creation of climate change-related harms in Maine by their failure to warn abetted by a multi-decadal sophisticated campaign of disinformation. As more fully alleged below, Defendants created, contributed to, and/or assisted in the creation of public, private, and statutory nuisances; trespassed on State property; failed to adequately warn the State and its residents, who are consumers, of the risks of climate change, climate change-related harms, and other dangers Defendants knew would inevitably follow from the intended or reasonably foreseeable use of fossil fuel products; and violated their duties to exercise due care in the advertising, marketing, selling, distributing, and/or labeling of fossil fuel products, to act reasonably for the protection of Maine and its residents, and to avoid inflicting on Maine and its residents the injuries described herein.

5. The Fossil Fuel Defendants are major, publicly-owned members of the fossil fuel industry—including extractors, producers, refiners, manufacturers, distributors, promoters,

¹ The Maine Governor's Office of Policy Innovation and the Future has defined "frontline communities" to mean "those people and communities that experience the consequences of climate change first and to a greater degree than other communities." Governor's Off. of Pol'y Innovation & the Future ("GOPIF"), *Report on Equity Considerations in Decision Making*, 23 (Feb. 25, 2022) ("Report on Equity"). Maine's most vulnerable people "are expected to be [the] most challenged to prepare for and recover from climate-related hazards." GOPIF, *Assessing the Impacts Climate Change May Have on the State's Economy, Revenues, and Investment Decisions: Summary Report*, 6 (Sept. 1, 2020) ("Governor's Summary Report").

marketers, and/or sellers of raw and refined fossil fuel products. Each Fossil Fuel Defendant funded, staffed, organized, and otherwise supported efforts to deceive the public and consumers—including in Maine—about the role of fossil fuel products in causing the global climate crisis.

6. The rate at which Fossil Fuel Defendants have extracted and sold fossil fuel products has exploded since World War II, which has driven a concurrent increase in CO₂ and other GHG emissions. Fossil fuel emissions—especially CO₂—are the dominant driver of climate change.² The substantial majority of all anthropogenic³ GHG emissions in history have occurred from the 1950s to the present, a period known as the “Great Acceleration.”⁴ About three-quarters of all industrial CO₂ emissions in history have occurred since the 1960s,⁵ and more than half have occurred since the late 1980s.⁶ The annual rate of CO₂ emissions from extraction, production, and consumption of fossil fuels has increased substantially since 1990.⁷

7. Defendants have known for more than 50 years that GHG pollution from fossil fuel products would have significant adverse impacts on the Earth’s climate and sea levels. Armed with that knowledge, Fossil Fuel Defendants privately took steps to protect their own assets from climate change-related harms and risks through immense investments in research, infrastructure improvements, and plans to exploit new business opportunities in a warming world.

8. But instead of warning the public of the known consequences flowing from the intended and foreseeable use of Fossil Fuel Defendants’ fossil fuel products or representing those consequences truthfully, Defendants concealed and misrepresented the dangers of fossil fuels; disseminated false and misleading information about the existence, causes, and dangers of climate

² See Intergovernmental Panel on Climate Change (“IPCC”), *Summary for Policymakers in Climate Change 2021: The Physical Science Basis. Contribution of Working Group I in the Sixth Assessment Report* 4–9 (2021), <https://perma.cc/WQS2-2VRK>.

³ The term “anthropogenic” is defined by the Merriam Webster Dictionary as “of, or relating to, or resulting from the influence of human beings on nature.” *Anthropogenic*, Merriam Webster Dictionary, <https://perma.cc/LV59-6Y62> (last visited Nov. 13, 2024).

⁴ Will Steffen et al., *The Trajectory of the Anthropocene: The Great Acceleration*, 2 *The Anthropocene Review* 81, 81 (2015).

⁵ R. J. Andres et al., *A Synthesis of Carbon Dioxide Emissions from Fossil-Fuel Combustion*, 9 *Biogeosciences* 1845, 1851 (2012).

⁶ *Id.*

⁷ Glob. Carbon Project, *Global Carbon Budget 2021*, <https://perma.cc/2S6Y-NC2A>.

change; and aggressively promoted the profligate use of fossil fuel products at ever-greater volumes knowing the dangers this increased use posed. Since no later than the late 1980s, Defendants have spent millions of dollars orchestrating a massive disinformation campaign to cast doubt on the science of climate change; to shuttle climate denialist theories into mainstream media and science despite the fact that Fossil Fuel Defendants' own scientists had already debunked those theories; and to conceal the role of fossil fuels in driving the climate crisis. More recently, Defendants have pivoted to a new strategy of commercial deception: "greenwashing." Defendants falsely advertise certain fossil fuel products as "green" or "clean," while concealing the fact that those products are leading causes of climate change. Fossil Fuel Defendants also misleadingly exaggerate their investments in wind, solar, and other lower carbon energy resources to exploit and deceive consumers and encourage continued consumption of fossil fuel products. Defendants individually and collectively played leadership roles in all of these campaigns, which were intended to and did target consumers, including those in Maine.

9. Defendants, individually and collectively, have substantially and measurably contributed to Maine's climate change-related injuries. All Defendants' actions in concealing the dangers of, and promoting false and misleading information about, Fossil Fuel Defendants' fossil fuel products have contributed substantially to consumer demand for fossil fuels and the consequent buildup of CO₂ in the atmosphere that drives climate change and its physical, environmental, and socioeconomic consequences, including those in Maine. *See* Section V.I., *infra*. Substantially more anthropogenic GHGs have been emitted into the atmosphere than would have been emitted absent Defendants' tortious and deceptive conduct. If not for Defendants' tortious and deceptive conduct, the damaging consequences of climate change in Maine would have been far less extreme than those currently occurring. Similarly, future harmful effects would also have been far less damaging and costly—or would have been avoided entirely.

10. While Defendants have promoted and profited from the extraction and consumption of fossil fuels, Maine has spent, and will continue to spend, millions of dollars to recover from and adapt to climate change-induced harms. For example, Maine will have to fortify infrastructure

against sea level rise, extreme precipitation, extreme storms, and attendant coastal and inland flooding. Maine will also have to undertake numerous other interventions that have and will become necessary to protect its people and infrastructure from extreme heat, vector-borne illnesses, deteriorating air quality, lost jobs and economic activity, and other climate change hazards.

11. Sea levels in the Gulf of Maine are rising at rates unprecedented in the history of human civilization because of climate change. Sea level rise, astronomical tides, and storm surge are already flooding coastal Maine communities, property, and infrastructure. And this threat grows every day as global warming reaches ever more dangerous levels and sea level rise accelerates. The current amount of sea level rise caused by Defendants' tortious and deceptive conduct is an irreversible condition on any relevant time scale: It will last hundreds or even thousands of years. Defendants' tortious and deceptive conduct thus caused harm that must be abated with costly adaptation infrastructure. Defendants' conduct will cause worsening harm in the form of additional sea level rise in Maine if Defendants' deceptive conduct is not abated.

12. Similarly, climate change causes more frequent and extreme weather events, extreme precipitation, riverine flooding, drought, extreme heat, vector-borne illnesses, and reduced air quality, which damage and strain public infrastructure and create cascading public health problems. Climate change is also threatening many of Maine's legacy and economically significant industries because of sea level rise, ocean warming, ocean acidification, and warmer winters.

13. Defendants' tortious and deceptive conduct was a substantial factor in bringing about all aforementioned climate change impacts in Maine.

14. These consequences have and will continue to disproportionately impact Maine's frontline communities, as climate change exacerbates existing environmental and public health stressors associated with socioeconomic and racial disparities.

15. Fossil Fuel Defendants' individual and collective conduct—including, but not limited to, their introduction of fossil fuel products into the stream of commerce while knowing but failing to warn of the threats those products pose to the world's climate; their wrongful promotion of fossil fuel products, including the misrepresentation and concealment of known

hazards associated with the intended use of those products; and Defendants’ public deception campaigns designed to obscure the connection between fossil fuel products and climate change—was a direct and proximate cause of Maine’s injuries.

16. Accordingly, Maine brings this action against Defendants for negligence, public nuisance, private nuisance, trespass and conspiracy to commit those torts, statutory nuisance, and deceptive trade practices. Maine also alleges strict liability for failure to warn against Fossil Fuel Defendants, and civil aiding and abetting against API. Maine respectfully requests that this Court order Defendants to abate, directly or through an abatement fund, their conduct causing nuisances and trespasses, and that this Court use its equitable powers to order Defendants to mitigate future harm to the environment and people of Maine attributable to Defendants’ unlawful actions, including, but not limited to, by granting preliminary and permanent equitable relief. Maine also respectfully requests that this Court order Defendants to pay damages.

17. Maine does *not* seek relief with respect to any federal property, land or assets.

18. Maine hereby disclaims injuries arising on federal property and those arising from Defendants’ provision of non-commercial, specialized fossil fuel products to the federal government for military and national defense purposes. Maine seeks no recovery or relief attributable to these injuries.

19. Maine does *not* seek to impose liability on Defendants for their direct emissions of GHGs and does *not* seek to restrain Defendants from engaging in their lawful business operations.

20. This case is fundamentally about shifting the costs of climate change-related harms back onto the entities whose deception caused and exacerbated them. Maine seeks to ensure that the parties who have profited from deceiving consumers and the public about climate change bear the costs of that deceptive commercial activity.

II. JURISDICTION AND VENUE

21. Jurisdiction is proper in the Maine Superior Court, Cumberland County, because Defendants have contributed to the creation of a public nuisance throughout Maine, including in Cumberland County, and the Maine Attorney General has the right and authority to seek abatement

of that nuisance on behalf of the People of the State of Maine. Injuries the State has suffered directly have also occurred within Cumberland County.

22. This Court has subject matter jurisdiction pursuant to 4 M.R.S. §§ 105 and 114. This Court has personal jurisdiction over Defendants, pursuant to 14 M.R.S. § 704-A, because each Defendant purposefully availed itself of the Maine market, and thus of the benefits of the laws of the State, during all times relevant to this Complaint, and because Maine has a legitimate interest in the subject matter of the action, and each Defendant by their conduct should have reasonably anticipated litigation in Maine, all of which renders Maine courts' exercise of jurisdiction over each Defendant consistent with traditional notions of fair play and substantial justice. Each Fossil Fuel Defendant researched, developed, manufactured, designed, marketed, distributed, released, promoted, and/or otherwise sold its fossil fuel products in markets around the United States, including within Maine. Each Defendant caused injurious acts to be done, or caused the consequences of those acts to occur, within Maine, as set forth in detail herein.

23. Additionally, jurisdiction is proper over each non-resident Defendant for the following reasons:

a. With respect to its subsidiaries, each non-resident Fossil Fuel Defendant controls and has controlled its direct and indirect subsidiaries' decisions about the quantity and extent of its fossil fuel production and sales; determines whether and to what extent to market, produce, and/or distribute its fossil fuel products; and controls and has controlled its direct and indirect subsidiaries' decisions related to its marketing and advertising, specifically communications strategies concerning climate change and the link between fossil fuel use and impacts on the environment. Each subsidiary Defendant is the agent of its parent Defendant. As agents, the subsidiaries of each non-resident Defendant conducted activities in Maine at the direction and for the benefit of its parent company. Specifically, the subsidiaries furthered each parent company's campaign of deception and denial through misrepresentations, omissions, and affirmative promotion of the company's fossil fuel products as safe with knowledge of the climate change-related harms that would result from the intended use of those products, all of which

resulted in climate change-related injuries in Maine and increased sales to the parent company. The subsidiaries' jurisdictional activities are properly attributed to each parent company and serve as a basis to assert jurisdiction over each of the non-resident Defendant parent companies.

b. Through their various agreements with dealers, franchises, or otherwise, the Fossil Fuel Defendants direct and control the branding, marketing, sales, promotions, image development, signage, and advertising of their branded fossil fuel products at their respective branded gas stations in Maine, including point-of-sale advertising and marketing. The Fossil Fuel Defendants dictate which grades and formulations of their gasoline may be sold at their respective branded stations.

c. Fossil Fuel Defendants, in coordination with trade organizations, including Defendant API, conspired to conceal and misrepresent the known dangers of burning fossil fuels, to knowingly withhold material information regarding the consequences of using fossil fuel products, to spread knowingly false and misleading information to the public regarding the weight of climate science research, and to promote consumer demand for fossil fuel products, which they knew were harmful. Through their own actions and through their membership and/or participation in climate denialist front groups, each Defendant was and is a member of that conspiracy. Defendants committed substantial acts to further the conspiracy in Maine by making misrepresentations and misleading omissions to Maine consumers about the existence, causes, and effects of global warming; by affirmatively promoting Fossil Fuel Defendants' fossil fuel products as safe, with knowledge of the disastrous impacts that would result from the intended use of those products; and by failing to warn Maine consumers about the disastrous impacts of fossil fuel use. A substantial effect of the conspiracy has also occurred and will also occur in Maine, as the State has suffered and will suffer injuries from Defendants' wrongful conduct, including but not limited to the following: sea level rise, extreme storms, coastal and riverine flooding, extreme heat and related illnesses, reduced air quality, vector-borne diseases, and other social and economic consequences of these environmental changes. Defendants knew or should have known, based on information provided to them from their internal research divisions, affiliates, trade associations,

and industry groups, that their actions in Maine and elsewhere would result in these injuries in and to the State of Maine. Finally, the climate effects described herein are direct and foreseeable results of Defendants' conduct in furtherance of the conspiracy.

24. Venue is proper in this Court pursuant to 14 M.R.S. §§ 501, 505, and 507 because this action is brought by the State as Plaintiff on behalf of the State of Maine to recover monies due to the State and public funds and property belonging to the State or the value thereof. State natural resources and property have been damaged statewide, including in Cumberland County.

III. PARTIES

A. Plaintiff

25. Plaintiff State of Maine is a sovereign state bringing this action by and through its Attorney General, which maintains its principal office at 6 State House Station, Augusta, Maine 04333. The State brings this action pursuant to the powers vested in the Attorney General by the common law and by 5 M.R.S. § 191 as the chief legal officer of the State of Maine.

26. The State brings this action in its capacity as sovereign on its own behalf, as trustee of the State's natural resources—which are held in trust for the benefit of Maine's people—as owner of State property or of substantial interests in property, in the public interest, and pursuant to its *parens patriae* capacity on behalf of its residents.

27. The State's natural resources include all natural resources for which the State seeks damages, including without limitation aquatic animals, wildlife, biota, air, surface water, groundwater, wetlands, drinking water supplies, soil, sediment, public lands the State holds in trust, and State-owned lands ("State natural resources").

28. The State owns, leases, occupies, and manages extensive real property, some of which is held in trust, including, but not limited to: trails, roads, bridges and abutments, culverts, dams, harbors, submerged lands, rivers and other bodies of water, beaches, dunes, boardwalks, piers, seawalls, parks, camping areas, picnic areas, historic sites, islands, lands, buildings and appurtenances, and other improvements and infrastructure thereto ("State property").

29. The State also brings this action pursuant to the Attorney General’s common law and constitutional authority, his statutory authority—including pursuant to 5 M.R.S. § 192, 5 M.R.S. § 209, and 38 M.R.S. §§ 341-A and 348—to protect the State’s natural resources and property, including property held in trust, and the State’s common law police powers. Those powers and authority include, but are not limited to, the power and authority to prevent and abate nuisance and to prevent and abate hazards to public health, safety, welfare, and the environment.

B. Defendants

30. Defendants are among the largest oil and gas companies in the world and a national oil and gas industry trade association. The fossil fuel products produced by the Fossil Fuel Defendants (and promoted by all Defendants) are responsible for the emission of billions of tons of GHGs globally.

31. When this complaint references an act or omission of Defendants, unless otherwise stated, such references should be interpreted to mean that the officers, directors, agents, employees, or representatives of Defendants committed or authorized such an act or omission or failed to adequately supervise or properly control or direct their employees while engaged in the management, direction, operation or control of the affairs of Defendants, and did so while acting within the course and scope of their employment or agency.

32. **BP entities: BP p.l.c.; BP America Inc.; BP Products North America Inc.; BP Energy Company; and BP Energy Retail LLC**

a. Defendant **BP p.l.c.** is a multinational, vertically integrated energy and petrochemical public limited company registered in England and Wales with its principal office in London, England. BP p.l.c. consists of three main operating segments: (1) exploration and production, (2) refining and marketing, and (3) “gas and low-carbon energy.” BP p.l.c. is the ultimate parent company of numerous subsidiaries, referred to collectively as the “BP Group,” which explore for and extract oil and gas worldwide; refine oil into fossil fuel products such as gasoline; and market and sell oil, gasoline, other refined petroleum products, and natural gas worldwide. BP p.l.c. was formerly known as, did or does business as, and/or is the successor in

liability to British Petroleum Company, British Petroleum Company p.l.c., BP Amoco p.l.c., Amoco Corporation, and Atlantic Richfield Company.

b. BP p.l.c. controls and has controlled group-wide decisions about the quantity and rate of fossil fuel production and sales, including those of its subsidiaries. BP p.l.c. is the ultimate decision-maker on fundamental decisions about the BP Group's core business, i.e., the volume of group-wide fossil fuels to produce and market, including among BP p.l.c.'s subsidiaries. BP p.l.c.'s 2022 Annual Report summarizes the company's "Strategic progress," including on offshore and exploration projects and acquisitions and sales of various oil and gas operations that contributed to a 12% increase in the BP Group's overall fossil fuel product production. These projects were carried out by BP p.l.c.'s subsidiaries.

c. BP p.l.c. controls and has controlled group-wide decisions, including those of its subsidiaries, related to marketing, advertising, climate change, GHG emissions from its fossil fuel products, and communications strategies concerning climate change and the link between fossil fuel use and climate change-related impacts on the environment and humans. BP p.l.c. makes and has made decisions on the production and use of fossil fuel reserves for the entire BP Group based on factors including climate change. BP p.l.c.'s Board of Directors is the company's highest decision-making body, with direct responsibility for the BP Group's policies concerning climate change. BP p.l.c.'s chief executive is responsible for maintaining the BP Group's system of internal control that governs BP Group's business conduct. BP p.l.c.'s senior leadership directly oversees and has overseen a "carbon steering group," which manages climate change-related matters and consists of two committees—both overseen directly by the board—focused on climate change-related investments.

d. BP p.l.c. does, and has done, business in Maine through its wholly-owned subsidiaries as BP Oil Company, BP Energy Company, BP America Inc., and BP Energy Holding Company.

e. Defendant **BP America Inc.** is a wholly owned subsidiary of BP p.l.c. that acts on BP p.l.c.'s behalf and is subject to BP p.l.c.'s control. BP America Inc. is a vertically

integrated energy and petrochemical company incorporated in the state of Delaware with its headquarters and principal office at 501 Westlake Park Blvd., Houston, Texas 77079. BP America Inc. is registered to do business in Maine, where it is and has been engaged in oil and gas business. BP America Inc. consists of numerous divisions and affiliates in all aspects of the fossil fuel industry, including exploration for and production of crude oil and natural gas; manufacture of petroleum products; and transportation, marketing, and sale of crude oil, natural gas, and petroleum products. BP America Inc. was formerly known as, did or does business as, is or was affiliated with, and/or is the successor in liability to Amoco Oil Company; Amoco Production Company; ARCO Products Company; BP Exploration & Oil, Inc.; BP Products North America Inc.; BP Amoco Corporation; BP Oil, Inc.; BP Oil Company; Sohio Oil Company; Standard Oil of Ohio (SOHIO); Standard Oil (Indiana); and Atlantic Richfield Company (a Pennsylvania Corporation) and its division, the Arco Chemical Company.

f. **BP Products North America Inc.** is a subsidiary of BP p.l.c. that acts on BP p.l.c.'s behalf and is subject to BP p.l.c.'s control. BP Products North America Inc. is and has been engaged in fossil fuel exploration, production, refining, and marketing. BP Products North America Inc. is incorporated in Maryland and has its principal office in Naperville, Illinois. BP Products North America Inc. initially registered to do business in Maine in 1933 and remains qualified to do business in Maine today, where it is and has been engaged in oil and gas business in the State. It is a gas distributor in the State of Maine.

g. **BP Energy Company**, formerly known as Amoco Energy Trading Corporation, is a subsidiary of BP p.l.c. that acts on BP p.l.c.'s behalf and is subject to BP p.l.c.'s control. It is a Delaware corporation with its principal office at 501 Westlake Park Blvd., Houston, Texas 77079. It is registered to do business in Maine, and it is and has been engaged in oil and gas business in the State of Maine.

h. **BP Energy Retail LLC** was formerly known as EDF Energy Services LLC, a registered retail natural gas supplier in Maine with over \$32 million in fossil fuel-dominated energy sales into Maine in 2022. BP Energy Retail LLC is a subsidiary of BP p.l.c. that acts on BP

p.l.c.'s behalf and is subject to BP p.l.c.'s control. BP Energy Retail LLC is a Delaware limited liability company with its principal office at 501 Westlake Park Blvd., Houston, Texas 77079. It is registered to do business in Maine, where it is and has been engaged in electricity and natural gas supply to commercial and industrial end users. Its named Manager is BP Energy Holding Company LLC, formerly known as BP Energy Retail LLC, a Delaware limited liability company with its principal office at 501 Westlake Park Blvd., Houston, Texas 77079. BP Energy Holding Company has been, and is now, registered to do business in Maine. It is also a subsidiary of BP p.l.c. that acts on BP p.l.c.'s behalf and subject to BP p.l.c.'s control.

i. Defendants BP p.l.c., BP America, Inc., BP Products North America Inc., BP Energy Company, and BP Energy Retail LLC, together with their predecessors, successors, parents, subsidiaries, affiliates, and divisions, are collectively referred to herein as "BP."

j. Plaintiff's claims against BP arise out of and are related to the acts and omissions of BP in Maine and elsewhere that caused or will cause injuries in Maine.

k. BP has purposefully directed its tortious conduct toward Maine by distributing, marketing, advertising, promoting, and supplying its fossil fuel products in Maine, with knowledge that the intended use of those products for combustion has caused and will continue to cause climate change-related harms in the State, including without limitation injuries to the State and its property, infrastructure, and natural resources. BP's statements in Maine and elsewhere made in furtherance of its campaign of deception about and denial of climate change, and BP's affirmative promotion of its fossil fuel products as safe with knowledge of how the intended use of those products would cause climate change-related harms, were designed to conceal and mislead consumers and the public, including the State and its residents, about the serious adverse consequences that would result from continued use of BP's products. That conduct was purposefully directed to reach and influence Maine and its residents and to obscure the dangers of BP's fossil fuel products from the State and its residents such that use of BP's fossil fuel products in Maine would not decline, thereby resulting in the State's injuries.

1. Over the last several decades and continuing to the present day, BP has advertised on television, online, and social media in the Maine market related to its fossil fuel products. Since no later than 1969 and continuing to the present day, BP has advertised in national and local print publications, including multiple Maine newspapers, circulated widely to Maine consumers.⁸ As further detailed herein, these advertisements contain false or misleading statements, misrepresentations, and/or material omissions obfuscating the connection between the production and use of BP's fossil fuel products and climate change, and/or misrepresenting BP's products or BP itself as environmentally friendly.

m. Significant quantities of BP's fossil fuel products are and have been transported, traded, distributed, promoted, marketed, sold, and/or consumed in Maine, from which activities BP derives and has derived substantial revenue.

n. In the 1980s and 1990s, BP owned a petroleum terminal and dock facility with associated pipeline interests in South Portland, Maine.⁹ BP has been, and continues to be, a registered gas distributor in Maine.¹⁰ Moreover, BP sells Maine electricity that is produced predominantly from the combustion of fossil fuels.¹¹ Additionally, by BP's own description, its "operations in Maine include Air bp and biogas."¹² BP and its affiliates operated gas stations in Maine dating back to at least 1991.

o. BP also markets and sells other fossil fuel products, including engine lubricant and motor oils, to Maine consumers under its Castrol brand name. Castrol products are

⁸ See, e.g., Evening Express (Mar. 11, 1969), <https://perma.cc/3779-FRRL>; Bangor Daily News (June 29, 1970), <https://perma.cc/B2KB-L2U9>; Bangor Daily News (Oct. 26, 1989) <https://perma.cc/86MA-RW2V>; Bangor Daily News (Aug. 17, 1970), <https://perma.cc/D9C2-UFTG>; Bangor Daily News (Oct. 26, 1989), <https://perma.cc/3L9J-3THS>.

⁹ *BP Oil Says It Will Sell Refineries in Northeast*, Morning Sentinel (Nov. 4, 1995), <https://perma.cc/3Y82-388Y>; *Study Hits Upkeep of Oil Tanks, Docks Here*, Evening Express (Apr. 23, 1976), <https://perma.cc/BJP9-89AE>.

¹⁰ *Licensed Gas Distributors*, Me. Dep't of Admin. & Fin. Servs., <https://perma.cc/3H6T-9NTR> (last updated Aug. 26, 2024).

¹¹ *Residential & Small Non Residential Standard Offer Service Consumer Information About Your Electricity Supply*, BP Energy Retail Co. (Mar. 2024), <https://perma.cc/788T-ALTH>.

¹² BP, *States with bp sites*, <https://bpusimpactmaplocator.bp.geoapp.me/#/@37.99503,-95.81325,3z> (enter location, Maine) (last visited Nov. 13, 2024).

available at roughly 170 car service stations, distributors, and retail outlets across Maine.¹³ Castrol products are distributed and advertised throughout Maine.¹⁴

33. **Chevron entities: Chevron Corporation and Chevron U.S.A. Inc.**

a. Defendant **Chevron Corporation** is a multinational, vertically integrated energy and chemicals company incorporated in Delaware, with its global headquarters and principal office in San Ramon, California. Chevron Corporation was formerly known as, did or does business as, and/or is the successor in liability to Standard Oil Company of California, Texaco Inc., and ChevronTexaco Corporation.

b. Chevron Corporation operates through a web of United States and international subsidiaries at all levels of the fossil fuel supply chain. Chevron Corporation and its subsidiaries' operations include, but are not limited to, exploration, development, production, storage, transportation, and marketing of crude oil and natural gas; refining crude oil into petroleum products and marketing those products; and manufacturing and marketing commodity petrochemicals, plastics for industrial uses, and fuel and lubricant additives.

c. Chevron Corporation controls and has controlled group-wide decisions about the quantity and rate of fossil fuel production and sales, including those of its subsidiaries. Chevron Corporation determines whether and to what extent its corporate holdings market, produce, and/or distribute fossil fuel products.

d. Chevron Corporation controls and has controlled group-wide decisions, including those of its subsidiaries, related to marketing, advertising, GHG emissions climate change resulting from the company's fossil fuel products, and communications strategies concerning climate change and the link between fossil fuel use and climate change-related impacts on the environment and humans. Overall accountability for climate change within Chevron Corporation lies with Chevron Corporation's Board of Directors and Executive Committee.

¹³ Castrol, *Where to Buy or Service*, Maine, https://www.castrol.com/en_us/united-states/home/product-finder.html?page=wheretobuy (Search address, Maine) (last visited Nov. 13, 2024).

¹⁴ See Dysart's Serv. Ctr., *Lubricants*, <https://perma.cc/2CKH-M2UU> (last visited Sept. 17, 2024).

e. Defendant **Chevron U.S.A. Inc.** is a wholly owned subsidiary of Chevron Corporation that acts on Chevron Corporation's behalf and is subject to Chevron Corporation's control. Chevron U.S.A. Inc. is a Pennsylvania corporation with its principal office in San Ramon, California. Chevron U.S.A. Inc. is registered to do business in Maine and is and has been engaged in all branches of the petroleum industry in the State of Maine. Through its predecessors, Chevron U.S.A. Inc. has been registered to do business in Maine since 1936. Chevron U.S.A. Inc. was formerly known as, did or does business as, and/or is the successor in liability to Gulf Oil Corporation, Gulf Oil Products Company, Gulf Oil Corporation of Pennsylvania, Chevron Products Company, Chevron Chemical Company, Chevron Texaco Products Company, Chevron U.S.A. Products Company, Chevron U.S.A. Production Company, and Warren Petroleum Company.

f. Defendants Chevron Corporation and Chevron U.S.A. Inc., together with their predecessors, successors, parents, subsidiaries, affiliates, and divisions, are collectively referred to herein as "Chevron."

g. Maine's claims against Chevron arise out of and are related to the acts and omissions of Chevron in Maine and elsewhere that caused and will cause injuries in Maine.

h. Chevron has purposefully directed its tortious conduct toward Maine by distributing, marketing, advertising, promoting, and supplying its fossil fuel products in Maine, with knowledge that the intended use of those products for combustion has caused and will continue to cause climate change-related harms in the State, including Maine's injuries. Chevron's statements in Maine and elsewhere made in furtherance of its campaign of deception about and denial of climate change, and Chevron's affirmative promotion of its fossil fuel products as safe with knowledge of how the intended use of those products would cause climate change-related harms, were designed to conceal and mislead consumers and the public, including the State and its residents, about the serious adverse consequences that would result from continued use of Chevron's products. That conduct was purposefully directed to reach Maine and to obscure the

dangers of Chevron's fossil fuel products from Maine and its residents such that use of Chevron's fossil fuel products in Maine would not decline.

i. Chevron—both directly and through its subsidiaries and/or predecessors-in-interest—has supplied substantial quantities of fossil fuel products to Maine during the period relevant to this Complaint.

j. Chevron started doing business in Maine as early as 1936. As early as 1959, Chevron had at least 66 local dealers and stations in Maine that it promoted and advertised to Maine residents.¹⁵ Texaco, which is a Chevron-owned brand, had multiple other local Maine dealers and stations dating back to at least 1936. Texaco itself incorporated in Maine in 1941 as Texaco Inc. and began maintaining an office in Portland.

k. Over the last several decades and continuing to the present day, Chevron spent millions of dollars on radio, television, online, social media, and outdoor advertisements in the Maine market related to its fossil fuel products. Since no later than 1958, and continuing to the present day, Chevron has advertised in national and local print publications, including multiple Maine newspapers, circulated widely to Maine consumers.¹⁶ As further detailed herein, these advertisements contained false or misleading statements, misrepresentations, and/or material omissions obfuscating the connection between the production and use of Chevron's fossil fuel products and climate change, and/or misrepresenting Chevron's products or Chevron itself as environmentally friendly.

l. Chevron and Texaco each owned and operated marine oil terminals in Hampden, Maine, beginning in the early 1900s. Failures at these terminals caused oil and gas releases in 1973, 1993, 2006, and 2008 that contaminated Maine natural resources. Texaco and

¹⁵ Bangor Daily News (Oct. 13, 1959), <https://perma.cc/LS9U-K6YP>.

¹⁶ *See, e.g.*, Kennebec Journal (June 3, 1958), <https://perma.cc/2RPZ-KH38>; Kennebec Journal (June 3, 1960), <https://perma.cc/C7XM-4HUS>; Lewiston Evening Journal (June 24, 1959), <https://perma.cc/5LXS-QB95>; The Waterville Morning Sentinel (Nov. 11, 1965); <https://perma.cc/HLN2-UWCJ>; Portland Evening Express (Oct. 16, 1979) <https://perma.cc/V524-39L7>; Portland Evening Express (Aug., 11 1981), <https://perma.cc/XXV7-AKYK>; Portland Evening Express (Aug., 18 1981), <https://perma.cc/L7ZZ-59HQ>; Portland Evening Express (Sep. 1, 1981), <https://perma.cc/U7VY-ZC9E/>.

Gulf also operated a bulk petroleum storage terminal at Turner Island in South Portland in the 1960s and 1970s. Multiple underground Texaco retail leaded gasoline tanks and wholesale oil tanks remain in Maine's ground.¹⁷

m. Significant quantities of Chevron's fossil fuel products have been transported, traded, distributed, promoted, marketed, sold, and/or consumed in Maine, from which activities Chevron derived substantial revenue. Chevron conducted and controlled, either directly or through franchise agreements, retail fossil fuel sales at Chevron, Texaco, and Gulf Oil gas station locations throughout Maine, at which locations it promoted, advertised, and sold its fossil fuel products under its various brand names, including Chevron, Texaco, and other brand names.

n. Chevron has been, and continues to be, a registered gas and special fuel distributor in Maine.¹⁸ Chevron and Texaco did further business in Maine from at least 1998 through 2015 concerning their manufacturing and marketing of aviation fuel and related products.

o. Chevron also markets and sells other fossil fuel products, including engine lubricant and motor oils, to Maine consumers under its Starplex/Delo, IsoClean, Techron, and Havoline brand names. These products are sold at auto parts stores across the State.¹⁹ Chevron lubricant products are distributed throughout Maine.²⁰

p. Chevron historically directed its fossil fuel product advertising, marketing, and promotional campaigns at Maine, including through maps that identified the locations of its service stations in Maine. Chevron markets and advertises its fossil fuel products in Maine to Maine residents by maintaining an interactive website, which directs Maine residents to Chevron's nearby retail service stations and/or lubricant distributors.²¹

¹⁷ Me. Dep't of Env't Prot., *Active and Out of Service Registered Underground Storage Tanks Including Tanks That Have Not Been Properly Abandoned* (Nov. 1, 2024), <https://perma.cc/A5DT-3BNL>.

¹⁸ *Licensed Gas Distributors*, *supra* note 10; *Licensed Special Fuel Supplier*, Me. Dep't of Admin. & Fin. Servs., <https://perma.cc/NRF4-T86Z> (last updated Aug. 26, 2024).

¹⁹ O'Reilly Auto Parts, *Chevron*, <https://www.oreillyauto.com/shop/brands/a/chevron/chv> (choose Selected Store; then search address, Maine) (last visited Nov. 13, 2024); Chevron Lubricants, *Find a Retailer*, https://www.chevronlubricants.com/en_us/home/where-to-buy/find-a-retailer.html (Search address, Maine) (last visited Nov. 13, 2024).

²⁰ *See* Dysart's Serv. Ctr., *Lubricants*, <https://perma.cc/2CKH-M2UU> (last visited Sept. 17, 2024).

²¹ Chevron Lubricants, *supra* note 19.

34. **Exxon entities: Exxon Mobil Corporation and ExxonMobil Oil Corporation**

a. Defendant **Exxon Mobil Corporation** is a New Jersey corporation headquartered in Spring, Texas, that has been registered to do business in Maine since 1972 and remains so today. Exxon Mobil Corporation is a multinational, vertically integrated energy and chemical company and one of the largest publicly traded international oil and gas companies in the world. Exxon Mobil Corporation was formerly known as, did or does business as, and/or is the successor in liability to Exxon Corporation; ExxonMobil Refining and Supply Company; Exxon Chemical U.S.A.; ExxonMobil Chemical Corporation; ExxonMobil Chemical U.S.A.; ExxonMobil Refining & Supply Corporation; Exxon Company, U.S.A.; Standard Oil Company of New Jersey; and Mobil Corporation.

b. Defendant **ExxonMobil Oil Corporation** is a wholly owned subsidiary of Exxon Mobil Corporation, acts on Exxon Mobil Corporation's behalf, and is subject to Exxon Mobil Corporation's control. ExxonMobil Oil Corporation is a New York corporation headquartered in Spring, Texas, has been registered to do business in Maine since 1909, and today engages in business in Maine involving the production, transportation, refining, and marketing of petroleum and natural gas. ExxonMobil Oil Corporation was formerly known as, did or does business as, and/or is the successor in liability to Standard Oil Company of New York and Mobil Oil Corporation.

c. Exxon Mobil Corporation controls and has controlled group-wide decisions about the quantity and rate of fossil fuel production and sales, including those of its subsidiaries. Exxon Mobil Corporation's 2022 Form 10-K filed with the SEC represents that its success, including its "ability to mitigate risk and provide attractive returns to shareholders, depends on [its] ability to successfully manage [its] overall portfolio." Exxon Mobil Corporation determines whether and to what extent its subsidiaries market, produce, and/or distribute fossil fuel products. For example, on October 11, 2023, Exxon Mobil Corporation announced its acquisition of Pioneer Natural Resources in a press release that referred to the corporate family generally as "ExxonMobil."

d. Exxon Mobil Corporation controls and has controlled group-wide decisions, including those of its subsidiaries, related to marketing, advertising, GHG emissions and climate change resulting from the company's fossil fuel products, and communications strategies concerning climate change and the link between fossil fuel use and climate change-related impacts on the environment and humans. Exxon Mobil Corporation's Board of Directors holds the highest level of direct responsibility for climate change policy. Exxon Mobil Corporation's Chairman of the Board and Chief Executive Officer, its President, and the other members of its Management Committee have been actively engaged in discussions relating to GHG emissions and the risks of climate change on an ongoing basis. Exxon Mobil Corporation requires its subsidiaries, when seeking funding for capital investments, to provide estimates of project costs related to GHG emissions.

e. Defendants Exxon Mobil Corporation, ExxonMobil Oil Corporation, and their predecessors, successors, parents, subsidiaries, affiliates, and divisions, are collectively referred to herein as "Exxon."

f. The State's claims against Exxon arise out of and are related to the acts and omissions of Exxon in Maine and elsewhere that caused and will cause injuries in Maine.

g. Exxon consists of numerous divisions and affiliates in all areas of the fossil fuel industry, including exploration for and production of crude oil and natural gas; manufacture of petroleum products; and transportation, promotion, marketing, and sale of crude oil, natural gas, and petroleum products. Exxon is also a major manufacturer and marketer of commodity petrochemical products.

h. Exxon has purposefully directed its tortious conduct toward Maine by distributing, marketing, advertising, promoting, and supplying its fossil fuel products in Maine. It did so knowing that the intended use of those products for combustion has caused and will continue to cause climate change-related harms in Maine, including the State's injuries. Exxon's statements in Maine and elsewhere, made in furtherance of its campaign of deception about and denial of climate change, and Exxon's affirmative promotion of its fossil fuel products as safe with

knowledge of how the intended use of those products would cause climate change-related harms, were designed to conceal and mislead consumers and the public, including the State and its residents, about the serious adverse consequences that would result from continued use of Exxon's products. That conduct was purposefully directed to reach Maine and obscure the dangers of Exxon's fossil fuel products from Maine and its residents such that use of Exxon's fossil fuel products in Maine would not decline.

i. Over the past several decades and continuing to the present day, Exxon spent millions of dollars on radio, television, online, social media, and outdoor advertisements in the Maine market related to its fossil fuel products. Since no later than 1955, and continuing to the present day, Exxon and its predecessors have advertised their fossil fuel products in national and local print publications, including multiple Maine newspapers, circulated widely to Maine consumers.²² For example, Exxon ran a series of full-page advertisements in *The Portland Press Herald* in 2009 falsely touting Exxon as “looking for new ways to reduce greenhouse gas emissions”²³ and stating that Exxon has developed lightweight automobile plastics that reduce GHG emissions.²⁴ As further detailed herein, these include advertisements containing false or misleading statements, misrepresentations, and/or material omissions designed to hide the connection between the production and use of Exxon's fossil fuel products and climate change, and/or misrepresenting Exxon's products or Exxon itself as environmentally friendly.

j. Significant quantities of Exxon's fossil fuel products are or have been transported, traded, distributed, promoted, marketed, manufactured, sold, and/or consumed in Maine, from which activities Exxon derives and has derived substantial revenue.

²² See, e.g., Portland Press Herald (June 5, 1955), <https://perma.cc/LZU9-DMKU>; The Lewiston Evening Journal (June 14, 1955), <https://perma.cc/7FDR-JDC5>; Portland Evening Express (Apr. 6, 1962), <https://perma.cc/EA6A-ED77>; The Waterville Morning Sentinel (Apr. 11, 1962), <https://perma.cc/2QZZ-RYQQ>; Bangor Daily News (Dec. 8, 1989), <https://perma.cc/V4ND-ED42>; Bangor Daily News (Dec. 24–25, 1987), <https://perma.cc/MPC6-6PGM>; Bangor Daily News (July 16, 1986), <https://perma.cc/MX29-VVZN>; Bangor Daily News (Mar. 26, 1976), <https://perma.cc/2L9Y-DXPG>; Bangor Daily News (Aug. 23, 1973), <https://perma.cc/3FKT-UKNA>.

²³ Portland Press Herald (Mar. 16, 2009), <https://perma.cc/96BP-HSW8>; see also Portland Press Herald (Mar. 2, 2009), <https://perma.cc/B68M-CPUA>.

²⁴ Portland Press Herald (Mar. 9, 2009), <https://perma.cc/ZXE8-HKP9>.

k. Exxon also—both directly and through its subsidiaries and/or predecessors-in-interest—has supplied substantial quantities of fossil fuel products to Maine during the period relevant to this Complaint. Currently, Exxon promotes, markets, and sells gasoline and other fossil fuel products to Maine consumers in multiple Maine towns through approximately 76 Exxon- and Mobil-branded petroleum service stations. During the period relevant to this Complaint, Exxon sold a substantial amount of retail gasoline in Maine.

l. Exxon also markets and sells petroleum products, including engine lubricants and motor oils sold under the “Mobil 1” brand name, to Maine customers through local retailers.

m. Exxon itself supplied aviation fuel to the Bangor International Airport until 2008. Then, in 2009, Exxon aviation fuels were sold by a nationwide Exxon marketer to multiple Maine aviation centers, including the Portland International Jetport (PWM), the Bangor International Airport (BGR), Presque Isle General Aviation (PQI), Downeast Air of Owls Head in Rockland (RKD), and Maine Instruments in Augusta (AUG).

n. Exxon has been, and continues to be, a registered gas distributor and special fuel supplier in Maine.²⁵

o. Exxon maintained a bulk petroleum tank farm in South Portland for more than 50 years, from 1937 until 1988, where it stored three kinds of gasoline, heating oil, and kerosene in 12 large tanks, maintained a loading dock, two buildings, and a phone house.²⁶

p. Multiple underground and now defunct Exxon and Mobil retail diesel and gasoline tanks remain in Maine’s ground.²⁷

q. Exxon historically directed its fossil fuel product advertising, marketing, and promotional campaigns at Maine and its residents, including through maps that identify the

²⁵ *Licensed Gas Distributors*, *supra* note 10; *Licensed Special Fuel Supplier*, Me. Dep’t of Admin. & Fin. Servs., <https://perma.cc/NRF4-T86Z> (last updated Aug. 26, 2024).

²⁶ Karin Ronnow, *Exxon dismantling S.P. tanks*, Portland Evening Express (Nov. 18, 1988), <https://perma.cc/U5PG-PJFK>.

²⁷ Me. Dep’t of Env’t Prot., *supra* note 17.

locations of its service stations across Maine. To this day, Exxon continues to market and advertise its fossil fuel products in Maine to Maine residents by maintaining an interactive website that directs Maine residents to Exxon's nearby retail service stations and lubricant distributors. Further, Exxon promotes its products in Maine by regularly updating and actively promoting its mobile device application, "Exxon Mobil Rewards+," throughout Maine, which encourages Maine users to consume fuel at Exxon stations in Maine in exchange for rewards on every fuel purchase.

35. **Shell entities: Shell p.l.c.; Shell USA, Inc.; Equilon Enterprises LLC d/b/a Shell Oil Products US; and Shell Trading (US) Company**

a. Defendant **Shell p.l.c.** (formerly Royal Dutch Shell P.L.C.) is a vertically integrated multinational energy and petrochemical company. Shell p.l.c. is incorporated in England and Wales, with its headquarters and principal office in The Hague, Netherlands. Shell p.l.c. is the ultimate parent company of numerous divisions, subsidiaries, and affiliates, referred to collectively as the "Shell Group," that engage in all aspects of fossil fuel production, including exploration, development, extraction, manufacturing and energy production, transport, trading, marketing, and sales.

b. Shell p.l.c. controls and has controlled group-wide decisions about the quantity and extent of fossil fuel production and sales, including those of its subsidiaries. Shell p.l.c.'s Board of Directors determines whether and to what extent Shell subsidiary holdings around the globe produce Shell-branded fossil fuel products.

c. Shell p.l.c. controls and has controlled group-wide decisions, including those of its subsidiaries, related to marketing, advertising, GHG emissions and climate change resulting from the company's fossil fuel products, and communications strategies concerning climate change and the link between fossil fuel use and climate change-related impacts on the environment and humans. Overall accountability for climate change within the Shell Group lies with Shell p.l.c.'s Chief Executive Officer and Executive Committee. For instance, at least as early as 1988, Shell p.l.c., through its predecessors and subsidiaries, was researching company-wide CO₂ emissions and concluded that the Shell Group accounted for 4% of the CO₂ emitted worldwide

from combustion and that climatic changes could compel the Shell Group, as controlled by Shell p.l.c., to examine the possibilities of expanding and contracting its business accordingly.

d. Defendant **Shell USA, Inc.** (formerly Shell Oil Company) is a wholly owned subsidiary of Shell p.l.c. that acts on Shell p.l.c.'s behalf and is subject to Shell p.l.c.'s control. Shell USA, Inc. is incorporated in Delaware, with its principal office in Houston, Texas. Shell USA, Inc. has been registered to do business in Maine since 1949. Shell USA, Inc. was formerly known as, did or does business as, and/or is the successor in liability to Shell Oil Company; Shell Oil; Deer Park Refining LP; Shell Oil Products US; Shell Chemical LP; Shell Trading (US) Company; Shell Energy Resources Company; Shell Energy Services Company, L.L.C.; The Pennzoil Company; and Pennzoil-Quaker State Company.

e. Defendant **Equilon Enterprises LLC d/b/a Shell Oil Products US (“Shell Oil Products US”)** is a wholly owned subsidiary of Shell USA, Inc., that acts on Shell USA, Inc.'s behalf and is subject to Shell USA, Inc.'s control. It is a Delaware limited liability corporation with its principal office in Houston, Texas. In 1998, Shell Oil Products US registered in Maine to trade and supply transportation fuels and lubricants and to provide related services. It remains registered in Maine today. Shell Oil Products US is a registered special fuel supplier in Maine.²⁸

f. **Shell Trading (US) Company** is a wholly owned subsidiary of Shell USA, Inc., that acts on Shell USA, Inc.'s behalf and is subject to Shell USA, Inc.'s control. It is a Delaware corporation with its principal office in Houston, Texas. In 1999, it registered in Maine to engage in the trading of crude oil and petroleum products. It remains registered in Maine today. Shell Trading (US) Company is now, and has been, a gas distributor in Maine.²⁹

g. Defendants Shell p.l.c., Shell USA, Inc., Shell Trading (US) Company and Shell Oil Products US, and their predecessors, successors, parents, subsidiaries, affiliates, and divisions, are collectively referred to herein as “Shell.”

²⁸ *Licensed Special Fuel Supplier*, Me. Dep't of Admin. & Fin. Servs., <https://perma.cc/NRF4-T86Z> (last updated Aug. 26, 2024).

²⁹ *Licensed Gas Distributors*, *supra* note 10.

h. Maine's claims against Shell arise out of and are related to the acts and omissions of Shell in Maine and elsewhere that caused and will cause injuries in Maine.

i. Shell has purposefully directed its tortious conduct toward Maine by distributing, marketing, advertising, promoting, and supplying its fossil fuel products in Maine, with knowledge that the intended use of those products for combustion has caused and will continue to cause climate change-related harms in Maine, including the State's injuries. Shell's statements in Maine and elsewhere made in furtherance of its campaign of deception about and denial of climate change, and Shell's affirmative promotion of its fossil fuel products as safe with knowledge of how the intended use of those products would cause climate change-related harms, were designed to conceal these harms and mislead consumers and the public, including Maine and its residents, about the serious adverse consequences that would result from continued use of Shell's products. That conduct was purposefully directed to reach Maine and obscure the dangers of Shell's fossil fuel products from Maine and its residents such that use of Shell's fossil fuel products in Maine would not decline.

j. Over the last several decades and continuing to the present day, Shell spent millions of dollars on radio, television, online, social media, and outdoor advertisements in the Maine market related to its fossil fuel products. Since no later than 1927, and continuing to the present day, Shell has advertised its fossil fuel products in national and local print publications, including multiple Maine newspapers, circulated widely to Maine consumers.³⁰ As further detailed herein, these include advertisements containing false or misleading statements, misrepresentations,

³⁰ *See, e.g.*, The Brunswick Times Record (Aug. 18, 2023), <https://perma.cc/HW5M-CDHE>; Portland Evening Express (Sept. 25, 1961), <https://perma.cc/7GUQ-PBMZ>; Portland Evening Express (Oct. 27, 1927), <https://perma.cc/2A27-E9YU>; Sun-Journal (June 23, 2013), <https://perma.cc/6JVM-J5MQ>; Portland Press Herald (Sept. 26, 1961), <https://perma.cc/3VDV-8MNY>; The Portland Forecaster (Feb. 11, 2009), <https://perma.cc/EA3Q-B94Q>; Kennebec Journal (Jan. 18, 1974), <https://perma.cc/74ZB-X9KU>; Waterville Morning Sentinel (Sept. 6, 1940), <https://perma.cc/RPA8-EQN7>; The Lewiston Evening Journal (Sept. 6, 1940), <https://perma.cc/K6BD-NUUB>; The Lewiston Daily Sun (Sept. 14, 1972), <https://perma.cc/BR44-2YRL>; The Sanford Tribune and Advocate (Aug. 23, 1934), <https://perma.cc/9K3U-8MHQ>; Bangor Daily News (May 26, 2002), <https://perma.cc/KC3P-E7M3>; Bangor Daily News (Mar. 12, 1951), <https://perma.cc/WC2L-5FSG>; The Ellsworth American (Nov. 17, 1977), <https://perma.cc/K7LS-L9ST>.

and/or material omissions obfuscating the connection between the production and use of Shell's fossil fuel products and climate change and/or misrepresenting Shell's products or Shell itself as environmentally friendly.

k. Multiple underground and now defunct Shell retail diesel, gasoline, and kerosene storage tanks remain in Maine's ground.³¹

l. Significant quantities of Shell's fossil fuel products are or have been transported, traded, distributed, promoted, marketed, manufactured, sold, and/or consumed in Maine, from which activities Shell derives and has derived substantial revenue. Shell conducts and controls, either directly or through franchise agreements, retail fossil fuel sales at gas station locations throughout Maine, at which locations it promotes, advertises, and sells its fossil fuel products under its Shell brand name. Shell operates approximately 58 Shell-branded petroleum service stations in Maine.³² During the period relevant to this Complaint, Shell sold a substantial percentage of all retail gasoline in Maine. Shell also supplies, markets, and promotes its Pennzoil line of lubricants at retail and service stations throughout Maine.

m. Shell historically directed its fossil fuel product advertising, marketing, and promotional campaigns to Maine, including through maps that identified the locations of its service stations in Maine. Shell markets and advertises its fossil fuel products in Maine to the State's residents by maintaining an interactive website available to prospective customers, by which it directs Maine residents to Shell's nearby retail service stations. Shell offers a proprietary credit card known as the "Shell Fuel Rewards Card," which allows consumers in Maine to pay for gasoline and other products at Shell-branded service stations and encourages consumers to use Shell-branded gas stations by offering various rewards, including discounts on gasoline purchases. Shell further maintains a smartphone application known as the "Shell US App" that offers Maine consumers a cashless payment method for gasoline and other products as well as rewards, including gasoline discounts at Shell-branded service stations.

³¹ Me. Dep't of Env't Prot., *supra* note 17.

³² Shell, *Shell Stations in Maine*, <https://perma.cc/D2KD-Z5LX> (last visited Nov. 13, 2024).

36. **Sunoco LP:**

a. Defendant **Sunoco LP** is a fossil fuel product distributor, marketer, and promoter. Sunoco LP is registered in Delaware and has its headquarters in Dallas, Texas. Sunoco LP was formerly known as, did or does business as, and/or is the successor in liability to Sunoco, Inc., Sun Company, Inc., Optima, and Sun Oil Company. Sunoco LP is one of the largest independent fuel distributors in the US, and describes itself as a “reliable fuel supplier in South Portland, Maine.”³³ Sunoco LP consists of numerous divisions, subsidiaries, and affiliates engaged in all aspects of the fossil fuel industry, including exploration, development, extraction, and manufacturing; and energy production, transport, trading, marketing, distribution, and/or sales.

b. Sunoco LP controls wholly-owned subsidiaries registered to do business in Maine, including **Sunoco LLC**, **Sunoco Retail LLC**, and **Sunoco Midstream LLC**. Sunoco LLC and Sunoco Midstream LLC are registered gas distributors and special fuel suppliers in Maine.³⁴

c. Through its ownership of Sunoco LLC, Sunoco LP supplies Sunoco-branded motor fuel wholesale in the United States, including to Sunoco-branded gas stations in Maine.

d. On June 28, 2024, Sunoco LP entered into a definitive agreement to acquire a liquid fuels terminal in South Portland, Maine. According to Sunoco, the terminal can store 695,000 barrels of fuel, which includes gasoline, diesel, ethanol, heating oil, and jet fuels.³⁵ Sunoco LP directs potential customers of the terminal to Sunoco Midstream LLC, which is a licensed gas and special fuel distributor in Maine.³⁶

e. Sunoco LP controls and has controlled company-wide decisions, including those of its subsidiaries, related to marketing, advertising, GHG emissions and climate change resulting from the company’s fossil fuel products, and related to communications strategies

³³ Sunoco LP, *South Portland, Maine, Fuel Supply Terminal*, <https://perma.cc/W7D4-W4KY> (last visited Nov. 13, 2024).

³⁴ *Licensed Gas Distributors*, *supra* note 10.

³⁵ Sunoco LP, *South Portland, ME Terminal*, <https://perma.cc/7TL8-EHF8> (last visited Nov. 13, 2024).

³⁶ *Licensed Gas Distributors*, *supra* note 10.

concerning climate change and the link between fossil fuel use and climate-related impacts on the environment and humans. Sunoco LP's managing partners determine whether and to what extent Sunoco subsidiary holdings around the globe—including in Maine—market, produce, and/or distribute fossil fuel products.

f. Defendant Sunoco LP and its predecessors, successors, parents, subsidiaries, affiliates, and divisions, including but not limited to Sunoco LLC, Sunoco Retail LLC, Sunoco Midstream LLC, Sunoco, Inc., Sun Company, Inc., Sun Oil Company, Optima, and Sunoco Logistics Partners LP, are collectively referred to herein as “Sunoco.”

g. Sunoco has purposefully directed its tortious conduct toward Maine by distributing, marketing, advertising, promoting, and supplying its fossil fuel products in Maine, with knowledge that the intended use of those products for combustion has caused and will continue to cause climate change-related harms in Maine, including without limitation injuries to the State's property, infrastructure, and natural resources. Sunoco's statements in Maine and elsewhere made in furtherance of its campaign of deception about and denial of climate change, and Sunoco's affirmative promotion of its fossil fuel products as safe with knowledge of how the intended use of those products would cause climate change-related harms, were designed to conceal these harms and mislead consumers and the public, including the State and its residents, about the serious adverse consequences that would result from continued use of Sunoco's products. That conduct was purposefully directed to reach and influence the State and its residents to continue the unabated use of Sunoco's fossil fuel products in Maine, thereby resulting in Maine's injuries.

h. Over the last several decades and continuing to the present day, Sunoco spent millions of dollars on radio, television, online, social media, and outdoor advertisements in the Maine market related to its fossil fuel products. Since no later than 1954, and continuing to the present day, Sunoco has advertised its fossil fuel products in national and local print publications,

including multiple Maine newspapers, circulated widely to Maine consumers.³⁷ Sunoco has also advertised its fossil fuel products through hosting and sponsoring racing events at the Oxford Plains Speedway in Oxford, Maine. As further detailed herein, Sunoco’s advertisements contain false or misleading statements, misrepresentations, and/or material omissions obfuscating the connection between the production and use of Sunoco’s fossil fuel products and climate change, and/or misrepresenting Sunoco’s products or Sunoco itself as environmentally friendly.

i. Significant quantities of Sunoco’s fossil fuel products are or have been transported, traded, distributed, promoted, marketed, manufactured, sold, and/or consumed in Maine, from which activities Sunoco derives and has derived substantial revenue.

j. Sunoco conducts and controls, either directly or through franchise agreements, retail fossil fuel sales at gas stations throughout Maine, at which it promotes, advertises, and sells its fossil fuel products. There are at least 38 Sunoco branded gas stations throughout Maine.

k. Sunoco also markets and sells other fossil fuel products, including engine lubricants and motor oils, to Maine customers under its Sunoco brand name.

l. Sunoco markets and advertises its fossil fuel products in Maine by maintaining an interactive website available to prospective Maine customers that directs the State’s residents to Sunoco’s retail gas stations and/or lubricant distributors.³⁸ Sunoco also promotes its products in Maine by regularly updating and actively promoting its “Sunoco Go Rewards Gas Program,” which encourages customers to buy fuel at its Maine stations in exchange for rewards. Sunoco offers a proprietary credit card known as the “Sunoco Rewards Credit Card,” which allows consumers in Maine to pay for gasoline and other products at Sunoco-branded service stations, and which encourages consumers to use Sunoco gas stations by offering various rewards, including

³⁷ See, e.g., Evening Express (Mar. 29, 1962), <https://perma.cc/WW9B-TPQG>; Portland Press Herald (July 1, 1965), <https://perma.cc/Z7GZ-VG7D>; Bangor Daily News (June 12, 1970), <https://perma.cc/3P7Q-J3KQ>; The Lewiston Daily Sun (June 29, 1971), <https://perma.cc/B79W-UX3G>.

³⁸ *Find a Gas Station Near Me*, Sunoco, <https://www.sunoco.com/find-a-station> (last visited Nov. 13, 2024).

discounts on gasoline purchases. Sunoco further maintains a smartphone application known as the “Sunoco App” that offers Maine consumers a cashless payment method for gasoline and other products at Sunoco gas stations. Maine consumers can also receive rewards, including discounts on gasoline purchases, by registering their personal identifying information in the Sunoco App and using the app to identify and activate gas pumps at Sunoco gas stations during a purchase.

37. BP, Chevron, Exxon, Shell, and Sunoco are collectively referred to as the “Fossil Fuel Defendants.”

38. **American Petroleum Institute (“API”)**

a. API is a national trade association representing the oil and gas industry, created in 1919. It is a nonprofit corporation based in the District of Columbia that was itself registered to operate in Maine from 1998 until 2021, and that also operated in Maine through wholly controlled Maine- and New England-based API branches from at least the early 1940s until at least 2020. API is a registered member of the Maine State Chamber of Commerce. With more than 600 members, API is the country’s largest petroleum trade association. Its purpose is to advance its members’ collective business interests, which include increasing the sale and consumer consumption of fossil fuels in Maine and elsewhere for the financial profit of API’s members, including Fossil Fuel Defendants and other fossil fuel companies. API coordinates members of the petroleum industry, gathers information of interest to the industry, and disseminates that information to its members. API acts and has acted as an advertising and marketing arm for its member companies’ fossil fuel products, including Fossil Fuel Defendants, in Maine and elsewhere.³⁹

b. API was registered to operate in Maine pursuant to Maine law for the purposes of, *inter alia*, fostering “domestic trade in American petroleum products; . . . promot[ing] in general the interests of the petroleum industry . . . and promot[ing] the mutual improvement of

³⁹ Through this Complaint, the State is not challenging API’s lobbying efforts but is rather upholding and enforcing Maine law against API for API’s illegal acts and omissions in Maine, which have caused injuries in Maine. Any API lobbying effort that may incidentally be connected to API’s illegal conduct merely exemplifies API’s significant contacts with Maine.

its members and the study of the arts and sciences” until API’s registration was revoked by the State in 2021. API registered that same year as a Maine State Chamber of Commerce Member, which it remains today.

c. API’s acts and omissions in Maine have been done by API under its own name before and after its registration with the State, and through the **Maine Petroleum Association** and the **New England Coalition for Affordable Energy**, two wholly controlled branches of API, for more than sixty years.

d. The Maine Petroleum Association was not an independent entity. Rather, it was API’s longstanding Maine-based branch that conducted API’s work in Maine under API’s complete control and direction from at least 1942 through at least 2004.⁴⁰ The Maine Petroleum Association was continuously staffed by multiple Maine-based API employees who actively conducted API’s work in Maine.⁴¹ It operated out of its office at 283 Water Street, Augusta, Maine,⁴² and promoted itself and its Maine office in numerous advertisements and solicitations directed at Maine residents. It maintained, listed, and advertised to the public its post office box mailing address at Water St. P.O. Box 2739, Augusta, Maine. It promoted and listed to Maine residents its (207) 622-5881 office telephone number from which it made and received calls about its Maine-based conduct. API maintained constant activity in Maine through the Maine Petroleum

⁴⁰ See, e.g., *Fuel*, Kennebec Journal (Mar. 6, 2004), <https://perma.cc/5YDZ-4F56>; Bonnie Washuk, *Nutting Seeks Limits on Sulfur in Gasoline*, Lewiston Sun-Journal (Feb. 22, 2001), <https://perma.cc/SWL4-SK5Z>; *Fuel Tanks*, Lewiston Daily Sun (June 19, 1984), <https://perma.cc/QL59-Z8CT>; Milton F. Huntington, *Maine Petroleum Association, Dealing with Leaking Oil Tanks*, Bangor Daily News (Oct. 21, 1986), <https://perma.cc/9H45-7QFV>; *Petroleum Group Names New Director*, Kennebec Journal (Nov. 21–22, 1992), <https://perma.cc/ABW2-UF7S>; *Obituaries, Ruth V. (McPherson) Bradley*, Kennebec Journal (Feb. 21, 2024), <https://perma.cc/U288-V4YN>; *Patricia Aho, Employment History*, LegiStorm (last visited Nov. 13, 2024), https://www.legistorm.com/person/bio/140012/Patricia_W_Aho.html.

⁴¹ See, e.g., Colin Woodard, *From Lobbyist to Leader of the Maine DEP*, Maine Sunday Telegram (June 16, 2013), at A9, <https://perma.cc/LLE9-PWNH>; *Petroleum Group Names New Director*, Kennebec Journal (Nov. 21, 1992), at 9, <https://perma.cc/EUK9-NUD8>; *In the State*, Sun-Journal (Feb. 16, 1984), at 1, <https://perma.cc/7J69-2D28>.

⁴² As fate would have it, the Maine Petroleum Association’s former office building was flooded by the climate change-driven “Grinch Storm” in December 2023. See Aryan Rai, *Augusta, Hallowell Businesses Tallying Losses as Floodwaters Recede*, Kennebec Journal (Dec. 21, 2023), <https://perma.cc/98EK-TK76>.

Association by targeting advertising campaigns at Maine residents in Maine newspapers, disseminating pro-fossil fuel “educational” materials in more than 300 Maine middle and high schools, promoting the expansion of fossil fuel extraction and consumption in Maine and to Maine residents, and engaging in innumerable other Maine-based activities that promoted fossil fuel products for the financial benefit of API’s members, including the Fossil Fuel Defendants, while misleading Maine consumers about the environmental and climate impacts of those products.

e. The New England Coalition for Affordable Energy was not an independent entity. It was a branch of API operating under API’s complete control and direction in Maine and other New England states from at least 2015 until at least 2020. It maintained an active .org website stating that the New England Coalition for Affordable Energy was “SPONSORED BY THE AMERICAN PETROLEUM INSTITUTE.” The website listed New England Coalition for Affordable Energy telephone numbers and a post office box mailing address, and it employed spokespeople who used “@NEaffordableenergy.org” email addresses to engage in conduct with and impacting the State and its residents. Acting under API’s direction and total control, the New England Coalition for Affordable Energy directed at Maine residents and consumers false and misleading information about fossil fuels’ role in climate change, while simultaneously promoting the expansion of fossil fuel consumption and infrastructure in Maine and New England.

f. All Fossil Fuel Defendants and/or their predecessors-in-interest are or have been key API members during times relevant to this Complaint. All Fossil Fuel Defendants except Sunoco are currently API members. API corporate filings in Maine show multiple Fossil Fuel Defendants held key API leadership roles when API was registered in Maine between 1998 and 2021, including BP, Shell, Exxon, Chevron, and Sunoco. Fossil Fuel Defendants also held key API leadership roles during the periods when API acted in Maine through the Maine Petroleum Association and the New England Coalition for Affordable Energy, which were wholly controlled by API as branches of API itself.

g. Executives from Exxon, BP, Chevron, Shell, and Sunoco have served on the API Executive Committee and/or as API Chairman, essentially serving as corporate officers.

For example, Exxon’s CEO served on API’s Executive Committee, including as President and Chairman, for 21 of the 29 years between 1991 and 2020. Multiple high-level executives from Exxon, such as Presidents, Vice Presidents, CEOs, COOs, and Chairmen, served on API’s Board in each year between 1994–2002. BP’s CEO served as API’s Chairman in 1988, 1989, and 1998. Multiple high-level executives from BP served on API’s Board of Directors between 1994 and 2002. The Chairman and CEO of BP’s predecessor ARCO served as API Treasurer in 1998 and Chairman in 1999. Chevron’s CEO served as API Chairman in 1994, 1995, 1997, 1998, 2003, and 2012. In 2002, Chevron’s CEO served as API Treasurer. Chairman and CEO of Chevron’s predecessor Texaco served as API Board Chairman in 2001, and as Treasurer in 1999. Multiple high-level executives from Chevron served on API’s Board of Directors in each year between 1994 and 2002. Shell’s President served as API Treasurer in 1997 and sat on the Board’s Executive Committee from at least 2005–2006. Multiple high-level Shell executives served on API’s Board of Directors between 1994 and 2002. Sunoco’s President served as API Board Chairman between 1965 and 1967.

h. Member companies participate in API strategy, governance, and operation through their membership dues and by contributing company officers and other personnel to API boards, committees, and task forces. Fossil Fuel Defendants have collectively steered the policies and trade practices of API through membership, Executive Committee roles, and/or providing budgetary funding for API. Fossil Fuel Defendants have used their control over and involvement in API to develop and execute a long-term advertising and communications campaign centered on climate change denialism. The goal of the campaign was to influence consumer demand for Fossil Fuel Defendants’ fossil fuel products. Fossil Fuel Defendants directly controlled, supervised, and participated in API’s misleading messaging regarding climate change. That conduct directly impacted Maine, as Fossil Fuel Defendants worked with API to create and disseminate misleading advertisements that distinctly promote consumption of fossil fuel products throughout Maine.

i. Relevant information was shared among API and Fossil Fuel Defendants and Fossil Fuel Defendants’ predecessors-in-interest through the following: (1) API’s distribution

of information to its members, and/or (2) participation of Fossil Fuel Defendants’ officers and other personnel, and those of Fossil Fuel Defendants’ predecessors-in-interest, on API boards, committees, and task forces. This includes representatives of Exxon, Chevron, BP, Shell, and Sunoco sitting on both API’s Committee for Air and Water Conservation and a special advisory group to API’s Committee for Public Affairs, which worked together to develop research reports on air emissions and other environmental topics. In addition, representatives from Chevron and Exxon chaired API’s Engineering and Technical Research Committee, and representatives from BP and Exxon chaired API’s Health and Biological Research Committee, also developing research documents. Different representatives of Exxon, Chevron, BP, Shell, and Sunoco rotated in and out of these positions throughout the time periods discussed in this Complaint.⁴³

j. API does act and has acted on behalf of and under the supervision and control of Fossil Fuel Defendants. Under this control and supervision, API has, since no later than 1988, participated in and led several coalitions, front groups, and organizations that have promoted disinformation about the climate impacts of fossil fuel products to consumers—including, but not limited to, the Global Climate Coalition, Partnership for a Better Energy Future, Coalition for American Jobs, Alliance for Energy and Economic Growth, Alliance for Climate Strategies, Maine Petroleum Association, and the New England Coalition for Affordable Energy. These front groups were formed to promote climate disinformation and advocacy from a purportedly objective source, when in fact these groups were financed and controlled by Fossil Fuel Defendants and other oil and gas companies. Defendants have benefited from the spread of this disinformation because, among other things, it has ensured a thriving consumer market for oil and gas, resulting in substantial profits for Fossil Fuel Defendants.

k. API admitted its role in promoting Fossil Fuel Defendants’ fossil fuel products. For example, in 1964, API President Frank Ikard stated that “API also works hard to

⁴³ Am. Petroleum Inst., Comm. for Air and Water Conservation & Comm. on Pub. Affs., *Environmental Research: A Status Report* (Jan. 1972) (listing members of relevant committees and their fossil fuel company affiliations), <https://perma.cc/X4S8-TGR3>.

promote the use of petroleum products [W]e cannot, of course, engage directly in selling gasoline to customers. But if we can't sell the steak, we can sell the sizzle.” Ikard continued, “[w]e can contribute to gasoline sales, for example, by telling as many motorists as possible about the wonderful places to go in this country and about some of the historic trails that connect them. This we are doing by means of a national campaign of localized newspaper ads carrying the theme: ‘See America Best By Car.’”⁴⁴ Hundreds of these “See America Best By Car” newspaper ads from API and Shell appeared in Maine throughout the 1960s,⁴⁵ along with road maps of Maine directed at Maine drivers that were created and promoted by Fossil Fuel Defendants in furtherance of this API campaign. API also admitted its role in promoting Fossil Fuel Defendants’ fossil fuel products in Maine in its Application For Authority to Carry on Activities in the State of Maine, which states that API’s purposes were to promote its members’ interests and betterment, and to foster trade of petroleum products. Through its repeated and ongoing contacts in Maine, API did just that. Over the last several decades, API has spent millions of dollars on television, newspaper, radio, social media, and internet advertisements in the Maine market—including in national and local publications—which promote, *inter alia*, expansion of fossil fuel product sale and consumption, expansion of commercial fossil fuel infrastructure, false claims that oil derricks save trees, misleading and repeated assertions that combusting natural gas is a climate change solution and that natural gas is “clean” and good for the environment, and misleading advertisements about how API and the fossil fuel industry are protecting the environment by, among other things, working to get the “least pollution” from “every drop of oil.”⁴⁶

⁴⁴ Address by Frank N. Ikard, President, American Petroleum Institute, at the Annual Meeting of the Interstate Oil Compact Commission, Broadwater Beach Hotel, Biloxi, Mississippi, Dec. 11, 1964 (Bernard Majewski Papers, Box 59, American Heritage Center, University of Wyoming).

⁴⁵ *See, e.g.*, Portland Evening Express (Apr. 25, 1967), <https://perma.cc/96MJ-TZTL>; Portland Press Herald (Aug. 26, 1964), <https://perma.cc/4YNN-VCND>; Evening Express (May 11, 1965), <https://perma.cc/N5WL-V3JA>.

⁴⁶ *See, e.g.*, Portland Press Herald (Apr. 27, 1971), at 3, <https://perma.cc/PA82-7WEW>; Bangor Daily News (May 10, 1971), at 17, <https://perma.cc/7J5Q-8T5C>; Robin Rorick, Am. Petroleum Inst., Opinion, *New England and Other Cold Weather Areas Need More Energy Pipelines*, Bangor Daily News (Nov. 12, 2017), <https://perma.cc/X5HW-YBU2>.

l. Maine’s claims against API arise out of and are related to API’s tortious and deceptive acts and omissions in Maine and elsewhere that caused and will cause injuries in Maine. For over 60 years, API employees acted in Maine through API’s in-state branch, the Maine Petroleum Association, which regularly featured national API executives at Maine-based meetings and conventions; discussed, planned, and executed API’s advertising campaigns in Maine; presented “American Petroleum Institute” service awards to Maine residents; and conducted multifarious other Maine-based activities, several examples of which are described below.⁴⁷

m. Through the Maine Petroleum Association, API misled Maine residents about the environmental consequences of fossil fuels by, among other things, downplaying potential harms to Maine waters from oil spills and touting misleading statements about the fossil fuel industry’s contributions to environmental conservation in the wake of spills.⁴⁸

n. Through the Maine Petroleum Association, API ran a series of twelve advertisements in multiple Maine newspapers in 1964 specifically tailored to encourage Maine residents to consume more fossil fuel products by driving more.⁴⁹ The ads were part of the “See America Best by Car” campaign, consisting of 165 total ads designed by fossil fuel executives and disseminated by API. Maine Petroleum Association Chairman Russel Bonney, API executive Jack H. Picou, and fossil fuel company executives met in Maine to plan the Maine-specific ad campaign, then targeted those ads at Maine residents to promote increased fossil fuel consumption in Maine.⁵⁰

o. API used the Maine Petroleum Association to funnel misleading API and fossil fuel industry materials into more than 300 of Maine’s middle and high schools, where Maine students were exposed to pro-fossil fuel materials under the guise of educational films that were

⁴⁷ *Flynn Gets Service Award*, The Times Record (Sep. 24, 1974), at 6, <https://perma.cc/H7P8-P8H5>; *Guest Speaker*, Bangor Daily News (Sep. 20, 1966), at 5, <https://perma.cc/SB8T-6M87>; *Oil Industry to Launch Drive to Enlarge Market*, Bangor Daily News (Sep. 8, 1960), at 36, <https://perma.cc/L4SJ-3E9C?type=standard>.

⁴⁸ *See, e.g., Oilman Says Industry is Fighting Water Pollution*, Bangor Daily News (Mar. 22, 1969), at 4, <https://perma.cc/YP7Y-HS87>; *Fuel Tanks*, Lewiston Daily Sun (June 19, 1984), at 14, <https://perma.cc/QL59-Z8CT>.

⁴⁹ *Maine Auto Travel Theme of Session Here Tuesday*, Portland Press Herald (Apr. 29, 1964), at 17, <https://perma.cc/W7B2-KRA9>.

⁵⁰ *Id.*

“[m]ade in Hollywood” and “dramatize[d] the birth of the American petroleum industry,” depicted “three young veterans” taking jobs in the fossil fuel industry, “dramatiz[ed] petroleum’s key role in our way of life,” and told the “story of man’s conquest of the soil through the ages.”⁵¹ More than 150 such pro-fossil fuel films were advertised across Maine. They were also advertised as free to any Maine teacher or Maine school that sent a letter requesting films to the Maine Petroleum Association’s 283 Water Street, August, Maine office.⁵² Through the Maine Petroleum Association, API also disseminated to hundreds of Maine schools “student booklets,” “classroom aids,” and “teachers’ guides” and “handbooks” promoting the fossil fuel industry and its products.⁵³

p. Among other activities in Maine during the 1970s, API ran ads on network television stations that aired in Maine and directed the Maine Petroleum Association to run more than 70 ads in Maine newspapers under API’s nationwide advertisement campaign themed, “a country that runs on oil can’t afford to run short.”⁵⁴ Those ads promoted the expanded use of and exploration for fossil fuel products, and were specifically targeted at Maine residents by provocatively stating, “Oil Makes News in Maine,” and being published in Maine newspapers read by Maine residents.⁵⁵ According to API’s ad campaign manager, James C. Shelby, there was nothing political about the \$4 million nation-wide API campaign, which featured full-page ads in at least 160 newspapers and commercials that ran across all major television networks.⁵⁶

q. Among other activities in Maine during the 1980s, API promoted fossil fuel extraction in the Gulf of Maine and—over opposition from Maine lobstermen, clambers, worm diggers, and longtime Maine residents—financed the intentional dumping of 250 gallons of crude

⁵¹ *Petroleum Groups Furnish Schools With Industry Educational Aids*, Bangor Daily News (Oct. 11, 1960), at 24, <https://perma.cc/5W58-N2W7>.

⁵² *Id.*

⁵³ *Id.*

⁵⁴ *See, e.g.*, The New Observer (Dec. 9, 1971), <https://perma.cc/G8KE-86TW>; Ellsworth American (Sep. 7, 1972), <https://perma.cc/G9UU-CAB8>.

⁵⁵ *See supra* note 40.

⁵⁶ Philip H. Dougherty, *Advertising: Oil Prepares a Counterattack*, N.Y. Times (Apr. 23, 1971), <https://perma.cc/P4BG-W93T>.

oil and chemical dispersants into Long Cove in Searsport, Maine.⁵⁷ The experiment “[was] of interest to the American Petroleum Institute” because its members wanted to test oil dispersants in Maine waters near the Georges Bank, “where significant offshore drilling activity could begin in the near future.”⁵⁸ API, through the Maine Petroleum Association, also opposed the use of renewable fuels in Maine, and directed communications at Maine residents about the impact of fossil fuel contamination in Maine’s freshwater supplies.⁵⁹

r. Among other activities in Maine during the 1990s, API targeted at Maine residents communications that defended the fossil fuel industry’s stated need for high oil prices in Maine, appointed a new Maine-based executive director for API’s Maine Petroleum Association who then acted under API’s direction and control to advance API’s interests in Maine from 1992 until 2003, and promoted used motor oil deposit centers that were created by API and fossil fuel companies that then profited from those Maine-based centers by reselling the used motor oil as lubricants and as fuel combusted in electricity generation facilities,⁶⁰ multiple of which were and are located across Maine. API has also acted in Maine through its former New England-based branch known as the New England Coalition for Affordable Energy—a division of API itself that was misleadingly portrayed as a separate entity. The New England Coalition for Affordable Energy was expressly dedicated to promoting the expansion of natural gas infrastructure and increasing consumer use of natural gas in Maine and New England. It did so on behalf of API and at API’s total direction from at least 2015 until at least 2020.

⁵⁷ David Platt, *BEP to Reconsider Oil-Spill Experiment at Searsport*, Bangor Daily News (Feb. 12, 1981), <https://perma.cc/E2HU-J8TQ>.

⁵⁸ *Id.*; Edward S. Gilfillan et al., *Tidal Area Dispersant Experiment, Searsport, Maine: An Overview*, 1985 International Oil Spill Conference Proceedings 553 (1985), <https://doi.org/10.7901/2169-3358-1985-1-553> (confirming the intentional crude oil spill ultimately occurred in Long Cove and that API funded it).

⁵⁹ *In the State*, Sun-Journal (Feb. 16, 1984), at 1, <https://perma.cc/G5KL-5766>.

⁶⁰ *Why heating oil prices climbed*, Bangor Daily News (Feb. 1, 1990), <https://perma.cc/T2ST-4S3S>; *Petroleum group names new director*, The Kennebec Journal (Nov. 21, 1992), <https://perma.cc/ABW2-UF7S>; *Put Used Oil In Its Place*, Journal Tribune (Oct. 10, 1994), <https://perma.cc/84P3-ZRNN>; *Put Used Oil In Its Place*, Ellsworth American (Jan. 5, 1995), <https://perma.cc/2VRT-F7NA>; Woodard, *supra* note 41.

s. Although the New England Coalition for Affordable Energy operated in each of New England’s states, including Maine, no entity by or doing business as that name appears to have been registered in Maine or any New England state. It rather acted as an organization “sponsored by” API and subject to API’s complete control.

t. API intentionally directed misleading information at Maine residents by stating in the *Bangor Daily News* in 2017 that natural gas commercial infrastructure, such as natural gas pipelines, have caused a “reduction of greenhouse gas emissions” by delivering natural gas, which API falsely called a “clean fuel” that is “prized” for its “environmental benefits.”⁶¹ API also described to Maine residents a study done by API but that API misleadingly said was done by the New England Coalition for Affordable Energy without disclosing that the New England Coalition for Affordable Energy is in fact API. The study promoted Fossil Fuel Defendants’ interests in constructing new natural gas commercial infrastructure to deliver additional fossil fuel products to be consumed in Maine by Maine residents, and elsewhere in New England.⁶²

u. API falsely stated in 2015 that fossil fuels offer “the hope of prosperity to individual Mainers and their families.”⁶³ And API directed additional online publications at Maine residents promoting the construction of new commercial fossil fuel infrastructure, particularly natural gas infrastructure. One such API article expressly tagged Maine as an intended audience and misleadingly stated that new fossil fuel infrastructure will “continue progress in reducing emissions,”⁶⁴ and linked to another API article falsely claiming that “it might be time for some to take ‘yes’ for an answer – that yes, on reducing carbon emissions, the United States is showing the way for the rest of the world with abundant, clean-burning natural gas” and that “[f]racking is facilitating America’s climate success.”⁶⁵

⁶¹ Robin Rorick, Am. Petroleum Inst., Opinion, *New England and Other Cold Weather Areas Need More Energy Pipelines*, *Bangor Daily News* (Nov. 12, 2017), <https://perma.cc/X5HW-YBU2>.

⁶² *Id.*

⁶³ Reid Porter, *Energizing Maine*, Am. Petroleum Inst. (July 20, 2015), <https://perma.cc/R8ZS-CA59>.

⁶⁴ Sabrina Fang, *Strong Public Support for New England Infrastructure*, Am. Petroleum Inst. (June 1, 2016), <https://perma.cc/H9HR-4638>.

⁶⁵ Mark Green, *Natural Gas = a ‘Yes’ on Emissions Reductions*, Am. Petroleum Inst. (May 9, 2016), <https://perma.cc/2QYU-NNSX>.

v. In API articles targeting Maine residents, API also promoted an API public opinion survey that API claimed was done by the New England Coalition for Affordable Energy while misleadingly failing to disclose that the New England Coalition for Affordable Energy is in fact API.⁶⁶ The purported public opinion survey claims to have polled 300 Maine residents about natural gas and natural gas commercial infrastructure in Maine and New England.⁶⁷ API also promoted a New England Coalition for Affordable Energy report, again failing to disclose that that entity is API, which supported new natural gas pipeline construction and additional combustion of natural gas for electricity generation in Maine and New England.⁶⁸

w. API, through the New England Coalition for Affordable Energy, further promoted the purported survey of Maine residents by creating and disseminating a press release that was then posted to the New England Coalition for Affordable Energy's website in 2016.

x. API, through the New England Coalition for Affordable Energy, promoted the expansion of natural gas infrastructure in Maine and other New England states by retaining the communications firm that wrote and disseminated another press release that described in detail the New England Coalition for Affordable Energy survey of Maine residents, again failing to disclose that the New England Coalition for Affordable Energy is actually API.⁶⁹ That press release was also posted to the New England Coalition for Affordable Energy's website and disseminated. It stated that Maine and New England should balance the commercial goals of building new fossil fuel product infrastructure and combusting more fossil fuels against "environmental goals," which was intended to mislead Maine residents and consumers about the climate change impacts caused by fossil fuel products.

⁶⁶ Fang, *supra* note 64; Mark Green, *The Pipeline Solution to High New England Energy Costs*, Am. Petroleum Inst. (Mar. 15, 2017), <https://perma.cc/M76Y-H3XX>.

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ Joyce McMahon, McMahon Commc'ns, *Survey Finds New England Consumers Concerned About Energy Affordability; Majority Support Energy Infrastructure Development*, PR Web (May 24, 2016), <https://perma.cc/3JM9-4E59>.

y. A Maine resident whose employer was a founding member of the New England Coalition for Affordable Energy published an op-ed in the *Bangor Daily News* promoting new construction of natural gas pipeline and stating that a delay in construction “hurts us here in Maine.”⁷⁰ API promoted that op-ed by posting it on the New England Coalition for Affordable Energy’s website and stating that the op-ed described the need to expand New England’s fossil fuel infrastructure.

z. API posted dozens of other op-eds, articles, press releases, and blogs on the New England Coalition for Affordable Energy’s website beginning in 2016, each of which promoted the expansion of natural gas commercial infrastructure and expanded consumer use of natural gas across New England, including in Maine, and many of which falsely described fossil fuels as providing environmental and climate benefits. API targeted Maine residents and tourists visiting Maine by publishing an online article in 2017 misleadingly stating that petroleum-based products and fossil fuel energy are necessary to camping in Maine’s Baxter wilderness, summitting Maine’s highest peaks, and hiking Maine’s iconic stretch of the Appalachian Trail.⁷¹

IV. AGENTS AND CO-CONSPIRATORS

39. As detailed below, each Fossil Fuel Defendant had actual knowledge, or should have known, that its fossil fuel products were hazardous in that the intended use of those products for combustion would substantially contribute to climate change and result in harms to Maine. The Fossil Fuel Defendants obtained knowledge of the hazards of their products independently and through their membership and involvement in trade associations like Defendant API, and in other entities described herein.

⁷⁰ Dana Connors, President of the Me. Chamber of Commerce, Opinion, *Maine Needs New Natural Gas Capacity to Control Our Energy Costs*, *Bangor Daily News* (Mar. 13, 2018), <https://perma.cc/F7XB-G3MC>. The Maine State Chamber of Commerce was a founding member of API’s New England Coalition for Affordable Energy. The Maine State Chamber of Commerce’s General Counsel then became a formal advisor to API’s New England Coalition for Affordable Energy.

⁷¹ Mark Green, *Maine: Energy is Up for a Long Walk*, *Am. Petroleum Inst.* (Oct. 17, 2017), <https://perma.cc/CG7C-639S>.

40. Fossil Fuel Defendants and/or API employed, financed, and participated in several industry-created front groups to serve their mission of flooding the markets with climate change disinformation and denialism. These organizations, acting under Fossil Fuel Defendants' and/or API's supervision and control, assisted the deception campaign by implementing public advertising and outreach campaigns to discredit climate science and by funding scientists to cast doubt upon climate science and upon the extent to which climate change is caused by human activity. In sum, Fossil Fuel Defendants and/or API, through front groups, engaged in a significant marketing campaign that misrepresented and concealed the dangers of fossil fuel products with the aim of protecting or enhancing sales of those products to consumers, including consumers in Maine. Fossil Fuel Defendants and/or API actively supervised, facilitated, consented to, and/or directly participated in the misleading messaging of these front groups, from which Fossil Fuel Defendants profited significantly, including in the form of increased sales in Maine.

41. **The Information Council for the Environment (“ICE”)** was formed by coal companies and their allies, including Western Fuels Association and the National Coal Association. Associated companies included Pittsburg and Midway Coal Mining (Chevron).

42. **The Global Climate Coalition (“GCC”)** was an industry group formed to preserve and expand consumer demand for fossil fuel products by publicly casting doubt on climate science and opposing GHG emission reduction initiatives. The GCC was founded in 1989 in reaction to the first meeting of the Intergovernmental Panel on Climate Change (“IPCC”), the United Nations body for assessing the science related to climate change, and to NASA scientist James Hansen's presentation to the Senate Committee on Energy and Natural Resources, in which Hansen emphasized that climate change was already happening and would lead to dire consequences if left unaddressed. The GCC disbanded in or around 2001. Founding members included API, Shell Oil Company (currently, Shell); Texaco, Inc. (currently, Chevron); Amoco (currently, BP); and ARCO (owned by BP at the time). GCC board membership during its existence included high-level executives from the founding members and Chevron, Exxon, and Mobil (Exxon). Exxon was also a corporate member of the GCC over the course of the GCC's

existence. The GCC Board of Directors was comprised of high-level executives from the fossil fuel industry: in 1994, for instance, the GCC Board was comprised of executives from API, Exxon, Phillips Petroleum Company (ConocoPhillips), and Texaco (Chevron).⁷² In 1995, GCC's Board of Directors included high-level executives from Texaco (Chevron), API, and ARCO.⁷³

V. FACTUAL BACKGROUND

A. Defendants Are Responsible for Causing and Accelerating Climate Change.

43. The atmosphere and oceans are warming, sea levels are rising, snow and ice cover is diminishing, oceans are acidifying, and hydrogeologic systems have been altered, among other environmental changes.⁷⁴ These changes are directly harming people's health, lives, lifestyles, livelihoods, and property, including in Maine. According to the IPCC, the evidence that humans are causing this warming of the Earth is unequivocal.⁷⁵

44. The mechanism by which human activity causes global warming and climate change is equally well-established: ocean and atmospheric warming is overwhelmingly caused by anthropogenic GHG emissions.⁷⁶ Over the past few decades, actual GHG emission rates have exceeded the rates previously predicted under "worst case" global emissions scenarios.

45. When used as intended to produce energy and create petrochemical products, fossil fuels release GHGs, including CO₂ and methane, which trap atmospheric heat and increase global temperatures. CO₂ is by far the most important GHG because combustion of massive amounts of fossil fuels has released hundreds of billions of tons of CO₂ into the atmosphere.

⁷² *1994 GCC Board Member List and Background Information*, Climate Investigations Ctr. <https://www.documentcloud.org/documents/5628903-GCC-1994-2-1-Background-Information-Packet-Board.html>.

⁷³ *1995 GCC IRS 1024 and Attachments*, Climate Investigations Ctr., <https://perma.cc/TE7R-4D3A>.

⁷⁴ IPCC, *Global Carbon and Other Biogeochemical Cycles and Feedbacks*, in *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I in the Sixth Assessment Report* 676–79 (2021).

⁷⁵ IPCC, *Climate Change 2021: The Physical Science Basis* v, 4, 41, 63, 150, 425, 506 (2021), https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_FullReport_small.pdf

⁷⁶ *Id.* at 41.

46. Prior to World War II, most anthropogenic CO₂ emissions were caused by land-use practices, such as forestry and agriculture, which altered the capacity of the land and global biosphere to absorb and sequester CO₂ from the atmosphere. Those activities did not significantly alter atmospheric CO₂ concentrations, and their impacts on Earth’s climate were relatively minor. Since that time, however, both the annual rate and total volume of anthropogenic CO₂ emissions have increased enormously following the dramatic rise in the combustion of oil, gas, and coal. Figure 1 below shows that while CO₂ emissions attributable to forestry and other land-use changes have remained relatively constant, total emissions attributable to fossil fuels have increased dramatically since the 1950s.⁷⁷

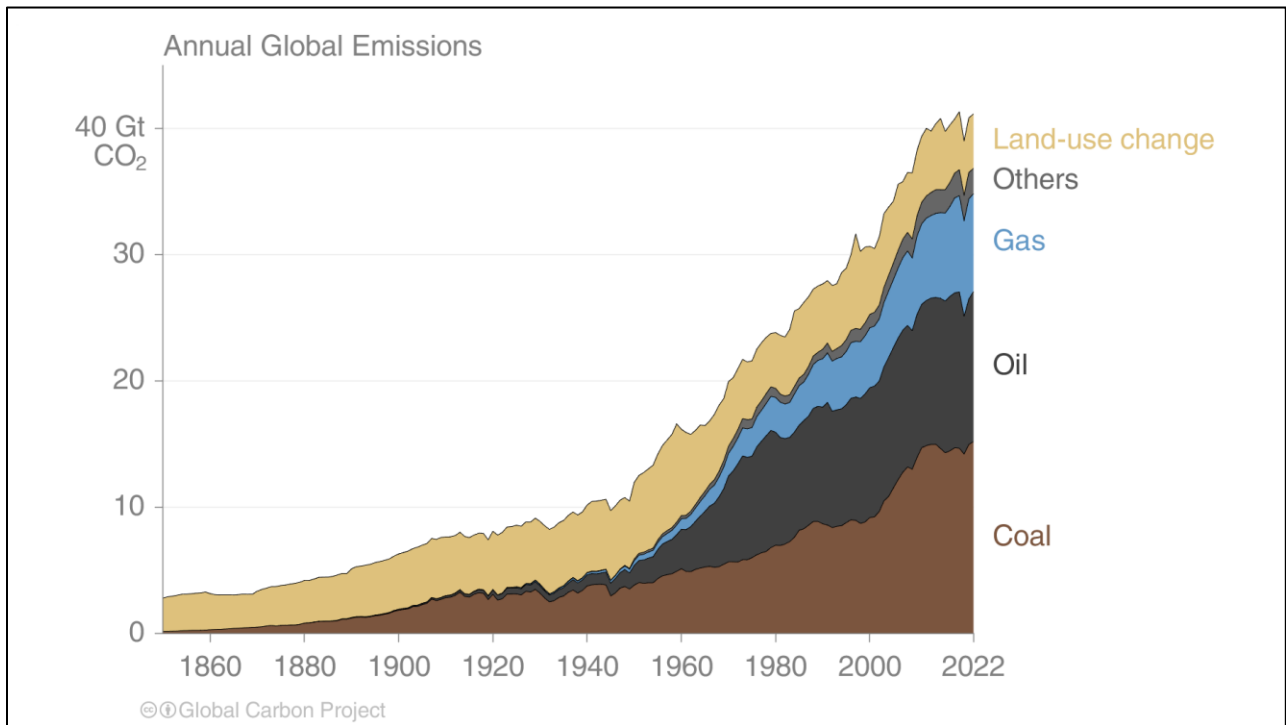


Figure 1: Total Annual Carbon Dioxide Emissions by Source, 1860-2022

47. This acceleration of fossil fuel emissions has led to a correspondingly sharp rise in atmospheric concentration of CO₂. Since 1960, the concentration of CO₂ in the atmosphere has

⁷⁷ Glob. Carbon Project, *Global Carbon Budget 2023* 85 (Dec. 5, 2023), <https://perma.cc/LE9K-AMBB>.

spiked from under 320 parts per million (ppm) to approximately 427 ppm.⁷⁸ The concentration of atmospheric CO₂ has also been accelerating. From 1960 to 1970, atmospheric CO₂ increased by an average of approximately 0.9 ppm per year.⁷⁹

48. The graph below (Figure 2) indicates the tight nexus between the sharp increase in emissions from the combustion of fossil fuels and the steep rise of atmospheric concentrations of CO₂.

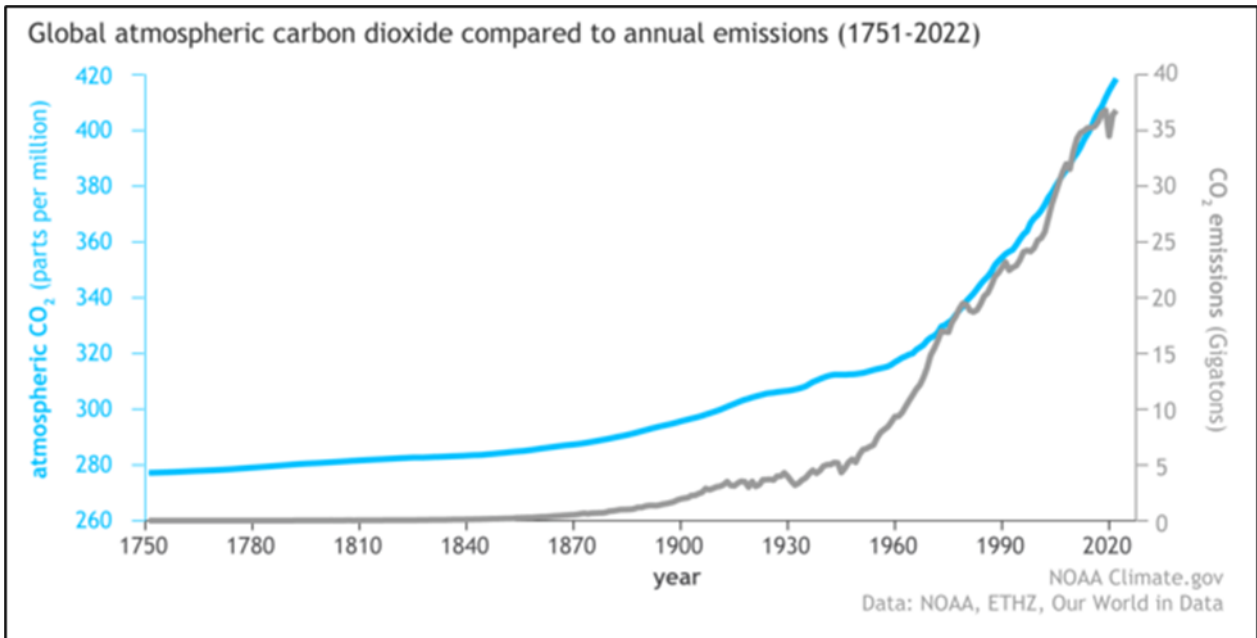


Figure 2: Atmospheric CO₂ Concentration and Annual Emissions⁸⁰

49. The increase in atmospheric CO₂ caused by fossil fuel combustion has been clearly documented and measured, and the ratio of different carbon isotopes in the atmosphere indicates that fossil fuel combustion is the overwhelming source of the increased concentration.⁸¹

⁷⁸ *Trends in Atmospheric Carbon Dioxide (CO₂): Full Record*, Glob. Monitoring Lab'y, <https://perma.cc/5AWZ-ZWXF> (last visited Nov. 13, 2024).

⁷⁹ *Trends in Atmospheric Carbon Dioxide (CO₂): Growth Rate*, Glob. Monitoring Lab'y, <https://perma.cc/YBQ8-FGLR> (last visited Nov. 13, 2024).

⁸⁰ Rebecca Lindsey, *Climate Change: Atmospheric Carbon Dioxide*, Climate.gov (Apr. 9, 2024), <https://perma.cc/6MPK-6FE7>.

⁸¹ *The Data: What Carbon-14 Tells Us*, Glob. Monitoring Lab'y, <https://perma.cc/83JP-P9AG> (last visited Nov. 13, 2024).

50. The burning of fossil fuel products has caused concentrations of GHGs in the atmosphere to rise to levels not seen in at least three million years.⁸²

51. As GHGs accumulate in the atmosphere, the Earth radiates less energy back to space. The result has been dramatic planetary warming. Ocean and land surface temperatures have increased at a rapid pace during the late 20th and early 21st centuries:

a. 2023 was the hottest year on record by globally averaged surface temperatures, exceeding the mid-20th century mean ocean and land surface temperatures by approximately 2.12°F. Each month in 2023 was one of the seven hottest by globally averaged surface temperatures of those respective months in any previous year. June, July, August, September, October, November, and December 2023 were all the hottest average surface temperatures for those months.⁸³

b. 2024 is virtually certain to be the warmest year on record and the first year with annual global average surface temperatures more than 1.5°C (2.7°F) above pre-industrial levels.⁸⁴

c. The second hottest year on record by globally averaged surface temperatures was 2016, and the third hottest was 2020.⁸⁵

d. The ten hottest years on record by globally averaged surface temperature have all occurred since 2014.⁸⁶

⁸² *More CO₂ Than Ever Before in 3 Million Years, Shows Unprecedented Computer Simulation*, Sci. Daily (Apr. 3, 2019), <https://perma.cc/4XZB-7BLD>.

⁸³ NOAA Nat'l Ctr. for Env't Info., Annual 2023 Global Climate Report (Jan. 2024), <https://perma.cc/8DUB-TEZ8>.

⁸⁴ Copernicus, *2024 Virtually Certain to be the Warmest Year and First Year Above 1.5°C* (Nov. 7, 2024), <https://perma.cc/ALB2-6844>.

⁸⁵ *Id.*

⁸⁶ *Id.*

52. The average global surface and ocean temperature in 2023 was approximately 2.12°F warmer than the 20th century baseline, which is the greatest positive anomaly observed since no later than 1850.⁸⁷ The increase in hotter temperatures and more frequent positive anomalies during the Great Acceleration are occurring both globally and locally, including in Maine. The graph below (Figure 3) shows the increase in global land and ocean temperature anomalies since 1850, as measured against the 1901–2000 global average temperature.⁸⁸

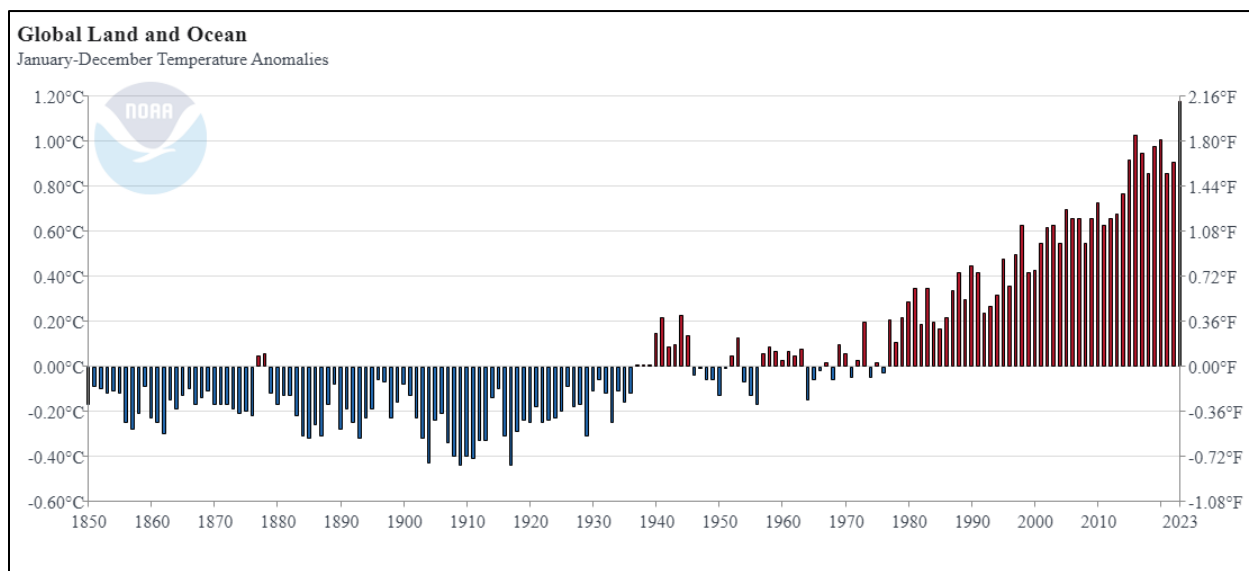


Figure 3: Global Land and Ocean Temperature Anomalies, January – December

53. Warming in Maine is occurring faster than the global average.⁸⁹

54. Increasing surface temperatures, both locally and globally, are disrupting the Earth’s energy balance and leading to myriad environmental and physical consequences, including, but not limited to, the following:

- a. Increased frequency and intensity of heat waves;
- b. Sea level rise, due to the thermal expansion of warming ocean waters and

runoff from melting glaciers and ice sheets;

⁸⁷ NOAA Nat’l Ctr. for Env’t Info., *supra* note 83.

⁸⁸ *See id.*

⁸⁹ Stephen S. Young & Joshua S. Young, *Overall Warming with Reduced Seasonality: Temperature Change in New England, USA, 1900-2020*, 9 *Climate* 176 (2021), <https://perma.cc/2PPE-G6Y8>.

- c. Changes to the global climate generally, bringing about longer droughts and dry periods interspersed with fewer and more severe periods of precipitation, and associated impacts to the quantity and quality of water resources available to both human and ecological systems;
- d. Increased frequency and intensity of extreme weather events due to increases in evaporation, evapotranspiration, and precipitation, a consequence of the warming atmosphere's increased ability to hold moisture;
- e. Adverse impacts on human health associated with extreme weather, extreme heat, wildfires, worsening air quality, and vector-borne illnesses;
- f. Flooding and inundation of land and infrastructure, increased erosion, higher wave run-up and tides, increased frequency and severity of storm surges, saltwater intrusion, and other impacts of higher sea levels;
- g. Ocean acidification, primarily due to the increased uptake of atmospheric carbon dioxide by the oceans; and
- h. Changes to terrestrial and marine ecosystems, and consequent impacts on the populations and ranges of flora and fauna.

B. Defendants Knew or Should Have Known the Dangers Associated with Fossil Fuel Products.

55. For decades, Fossil Fuel Defendants have known that their fossil fuel products posed and continue to pose risks of “severe” and even “catastrophic” impacts on the global climate through the work and warnings of their own scientists and/or through trade associations such as API. Defendants consistently researched or funded research into significant issues relevant to fossil fuels and were aware of significant scientific reports on climate change science and impacts at the time the reports were issued. Thus, Defendants developed a sophisticated understanding of climate change that far exceeded the knowledge of the public, ordinary consumers, and the State. Yet each Fossil Fuel Defendant decided to continue its conduct and commit itself to massive fossil fuel production. This was a deliberate and malicious decision to place company profits ahead of human

safety and well-being and to foist onto the public the costs of abating and adapting to the harms, public nuisance, and trespass of climate change.

56. This industry knowledge was concealed at the time, only recently began to trickle to light outside of Defendants' spheres, and Defendants are still concealing their full knowledge.⁹⁰

57. In 1954, geochemist Harrison Brown and his colleagues at the California Institute of Technology wrote to API, informing the trade association that preliminary measurements of natural archives of carbon in tree rings indicated that fossil fuels had caused atmospheric carbon dioxide levels to increase by about 5% since 1840.⁹¹ API provided those scientists funding for various research projects, and measurements of carbon dioxide continued for at least one year, if not longer, although the results were never published or otherwise made available to the public.⁹² In 1957, H.R. Brannon of Humble Oil Company (predecessor-in-interest to Exxon) measured an increase in atmospheric carbon dioxide attributable to fossil fuels, similar to—and in agreement with—that measured by Harrison Brown.⁹³

58. In 1959, API organized a centennial celebration of the American oil industry at Columbia University in New York City.⁹⁴ High-level representatives of Defendants were in attendance. One of the keynote speakers was nuclear physicist Edward Teller. Teller warned the industry that “a temperature rise corresponding to a 10[0%] increase in carbon dioxide will be sufficient to melt the icecap and submerge . . . [a]ll the coastal cities.” Teller added that since “a considerable percentage of the human race lives in coastal regions, I think that this chemical contamination is more serious than most people tend to believe.”⁹⁵ Following his speech, Teller was asked to “summarize briefly the danger from increased carbon dioxide content in the

⁹⁰ See discussion *infra* ¶¶ 233–36.

⁹¹ See Benjamin Franta, *Early Oil Industry Knowledge of CO₂ and Global Warming*, 8 *Nature Climate Change* 1024, 1024–25 (2018).

⁹² *Id.*

⁹³ *Id.*; H.R. Brannon, Jr. et al., *Radiocarbon Evidence on the Dilution of Atmospheric and Oceanic Carbon by Carbon from Fossil Fuels*, 38 *Am. Geophysical Union Transactions* 643, 644–46 (1957).

⁹⁴ See Allan Nevins & Robert G. Dunlop, *Energy and Man: A Symposium* (Appleton-Century-Crofts, Inc. 1960); see also Franta, *supra* note 91, at 1024–25.

⁹⁵ Edward Teller, *Energy Patterns of the Future*, in *Energy and Man: A Symposium* 58 (Appleton-Century-Crofts, Inc. 1960).

atmosphere in this century.” He responded that “there is a possibility the icecaps will start melting and the level of the oceans will begin to rise.”⁹⁶

59. By 1965, concern over the potential for fossil fuel products to cause disastrous global warming reached the highest levels of the United States’ scientific community. In that year, President Lyndon B. Johnson’s Science Advisory Committee’s Environmental Pollution Panel reported that a 25% increase in carbon dioxide concentrations could occur by the year 2000, that such an increase could cause significant global warming, that melting of the Antarctic ice cap and rapid sea-level rise could result, and that fossil fuels were the clearest source of the carbon dioxide pollution.⁹⁷

60. Three days after President Johnson’s Science Advisory Committee report was published, the president of API, Frank Ikard, addressed leaders of the petroleum industry in Chicago at the trade association’s annual meeting. Ikard relayed the report to industry leaders, saying, “[o]ne of the most important predictions of the report is that carbon dioxide is being added to the earth’s atmosphere by the burning of coal, oil, and natural gas at such a rate that by the year 2000 the heat balance will be so modified as possibly to cause marked changes in climate beyond local or even national efforts,” and quoting the report’s finding that “the pollution from internal combustion engines is so serious, and is growing so fast, that an alternative nonpolluting means of powering automobiles, buses, and trucks is likely to become a national necessity.”⁹⁸ Mr. Ikard summarized the report by saying, “[t]he substance of the report is that there is still time to save the world’s peoples from the catastrophic consequences of pollution, but time is running out.”⁹⁹

61. Thus, by 1965, Defendants and their predecessors-in-interest were aware that the scientific community had found that the unrestrained use of fossil fuel products would cause global

⁹⁶ *Id.* at 70.

⁹⁷ President’s Sci. Advisory Comm., *Restoring the Quality of Our Environment: Report of the Environmental Pollution Panel 9*, 119–24 (Nov. 1965), <https://perma.cc/998L-PNQV>.

⁹⁸ Frank N. Ikard, *Meeting the Challenges of 1966*, in *Proceedings of the Am. Petroleum Inst.* (1965) at 13, <https://perma.cc/CHQ7-HXGA>.

⁹⁹ *Id.*

warming by the end of the century, and that such global warming would have wide-ranging and costly consequences.

62. In 1968, API received a report from the Stanford Research Institute, which it had hired to assess the state of research on environmental pollutants, including carbon dioxide.¹⁰⁰ The assessment endorsed the findings of President Johnson’s Scientific Advisory Council from three years prior, stating that carbon dioxide emissions were “almost certain” to produce “significant” temperature increases by 2000, and that these emissions were almost certainly attributable to fossil fuels. The report warned of “major changes in the earth’s environment” and a “rise in sea levels,” and concluded: “there seems to be no doubt that the potential damage to our environment could be severe.” The scientists warned of “melting of the Antarctic ice cap” and informed API that “[p]ast and present studies of CO₂ are detailed and seem to explain adequately the present state of CO₂ in the atmosphere.” What was missing, the scientists said, was work on “air pollution technology and . . . systems in which CO₂ emissions would be brought under control.”¹⁰¹

63. In 1969, the Stanford Research Institute delivered a supplemental report on air pollution to API, projecting with alarming particularity that atmospheric CO₂ concentrations would reach 370 parts per million (ppm) by 2000.¹⁰² This projection turned out to almost exactly match the actual CO₂ concentrations measured in 2000 of 369.64 ppm.¹⁰³ The report explicitly connected the rise in CO₂ levels to the combustion of fossil fuels, finding it “unlikely that the observed rise in atmospheric CO₂ has been due to changes in the biosphere.”

64. By virtue of their membership and participation in API at that time, Fossil Fuel Defendants received or should have received the Stanford Research Institute reports and were on notice of their conclusions.

¹⁰⁰ Elmer Robinson & R.C. Robbins, *Sources, Abundance, and Fate of Gaseous Atmospheric Pollutants*, Stanford Rsch. Inst. (Feb. 1968), <https://perma.cc/A58L-QVPK>.

¹⁰¹ *Id.* at 108, 112.

¹⁰² Elmer Robinson & R.C. Robbins, *Sources, Abundance, and Fate of Gaseous Atmospheric Pollutants, Supplement*, Stanford Rsch. Inst. 3 (June 1969).

¹⁰³ NASA Goddard Inst. for Space Stud., *Global Mean CO₂ Mixing Ratios (ppm): Observations*, <https://perma.cc/QE9P-PNYY> (last visited Nov. 13, 2024).

65. In 1972, API members—including Fossil Fuel Defendants—received a status report on all environmental research projects funded by API. The report summarized the 1968 SRI report describing the impact of fossil fuel products—including Fossil Fuel Defendants’—on the environment, including global warming and its attendant consequences. Fossil Fuel Defendants and/or their predecessors-in-interest that received this report included but were not limited to: American Standard of Indiana (BP), Asiatic (Shell), Atlantic Richfield (BP), British Petroleum (BP), Chevron Standard of California (Chevron), Esso Research (Exxon), Ethyl (formerly affiliated with Esso, which was subsumed by Exxon), Getty (Exxon), Gulf (Chevron, among others), Humble Standard of New Jersey (Exxon, Chevron, BP), Mobil (Exxon), Pan American (BP), Shell, Standard of Ohio (BP), Sun (Sunoco), Texaco (Chevron), Union (Chevron), Skelly (Exxon), Colonial Pipeline (ownership has included BP, ExxonMobil, and Chevron entities, among others), and Caltex (Chevron).¹⁰⁴

66. Among other Defendants, “Shell was actively supporting research that clearly underscored the dangers posed by burning its fossil fuel products from the mid-1970s.”¹⁰⁵

67. In 1977, James Black of Exxon gave a presentation to Exxon executives on the “greenhouse effect,” which was summarized in an internal memo the following year. Black reported that “[t]here is general scientific agreement that the most likely manner in which mankind is influencing the global climate is through carbon dioxide release from the burning of fossil fuels.” He noted that “current scientific opinion overwhelmingly favors attributing atmospheric carbon dioxide increase to fossil fuel consumption,” and relayed that doubling atmospheric carbon dioxide would, according to the best climate model available, “produce a mean temperature increase of about 2°C to 3°C [3.6°F to 5.4°F] over most of the earth,” with two to three times as much warming at the poles.¹⁰⁶ Black also reported that “[p]resent thinking holds that man has a time window of

¹⁰⁴ Am. Petroleum Inst., *supra* note 43.

¹⁰⁵ Matthew Green, *Lost Decade: How Shell Downplayed Early Warnings Over Climate Change*, Desmog (Mar. 31, 2023), <https://perma.cc/VBU3-YYPT>.

¹⁰⁶ Memorandum from J.F. Black, Exxon Rsch. and Eng’g Co., to F.G. Turpin, Exxon Rsch. & Eng’g Co., *The Greenhouse Effect*, at 2, 14, 23, 26 (June 6, 1978), <https://perma.cc/9KUU-XUPH>.

five to ten years before the need for hard decisions regarding changes in energy strategies might become critical.”¹⁰⁷ Figure 4 below, reproduced from Black’s memo, illustrates Exxon’s understanding of the timescale and magnitude of global warming that its products would cause.

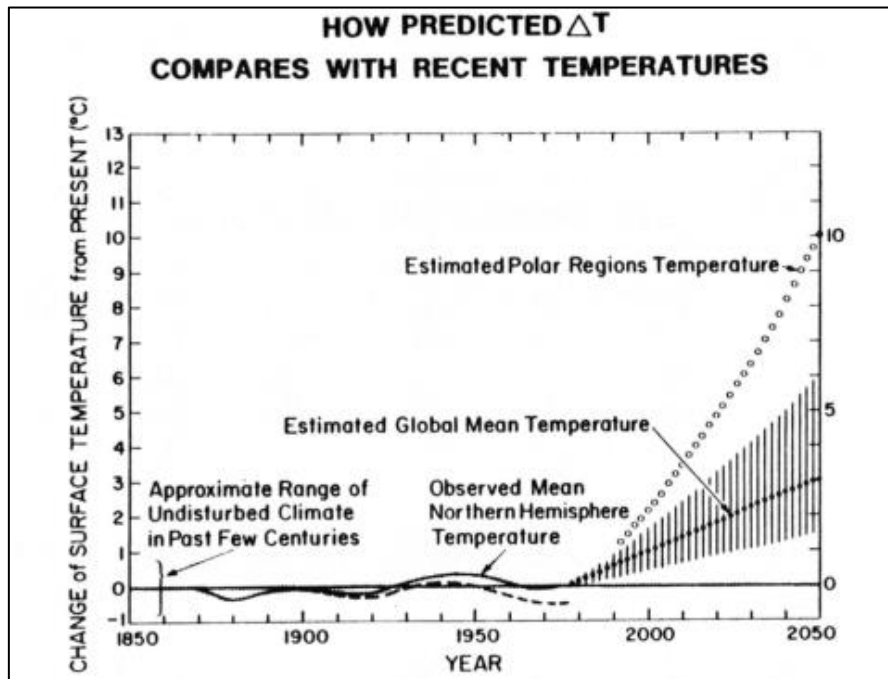


Figure 4: Future Global Warming Predicted Internally by Exxon in 1977¹⁰⁸

68. Also in 1977, Henry Shaw of the Exxon Research and Engineering Technology Feasibility Center attended a meeting of scientists and governmental officials in Atlanta, Georgia, on developing research programs to study carbon dioxide and global warming. Shaw’s internal memo to Exxon’s John W. Harrison reported that “[t]he climatic effects of carbon dioxide release may be the primary limiting factor on energy production from fossil fuels[.]”¹⁰⁹

69. In 1979, an internal Exxon memorandum stated, “The most widely held theory [about the increase in CO₂ concentration in the atmosphere] is that: The increase is due to fossil fuel combustion; [i]ncreasing CO₂ concentration will cause a warming of the earth’s surface; [and

¹⁰⁷ *Id.* at 2.

¹⁰⁸ *Id.* at 26. The company predicted global warming of 1°C to 3°C (1.8°F to 5.4°F) by 2050, with 10°C (18°F) warming in polar regions. The difference between the lower dashed and solid curves prior to 1977 represents global warming that Exxon believed may already have been occurring. *Id.*

¹⁰⁹ Memorandum from Henry Shaw to John W. Harrison, *Environmental Effects of Carbon Dioxide*, Climate Investigations Ctr. (Oct. 31, 1977), <https://perma.cc/7TZD-N5XP>.

t]he present trend of fossil fuel consumption will cause dramatic environmental effects before the year 2050. . . . The potential problem is great and urgent.” The memo added that, if limits were not placed on fossil fuel production,

Noticeable temperature changes would occur around 2010 as the [CO₂] concentration reaches 400 ppm. Significant climatic changes occur around 2035 when the concentration approaches 500 ppm. A doubling of the pre-industrial concentration [i.e., 580 ppm] occurs around 2050. The doubling would bring about dramatic changes in the world’s environment[.]¹¹⁰

Those projections proved remarkably accurate. Annual average atmospheric CO₂ concentrations surpassed 400 ppm in 2015 for the first time in millions of years.¹¹¹ And due to “committed warming”—the reality that future increases in global temperatures are caused by GHGs that have *already* been emitted—future warming is certain to occur even if all greenhouse gas emissions ceased today. Put differently, because GHGs can linger in the atmosphere for hundreds of years, there is a lag time between emissions on the one hand, and atmospheric GHG concentrations that lead to warming, on the other. Given this lag time, limiting the CO₂ concentration in the atmosphere to 440 ppm, or a 50% increase over preindustrial levels, which the Exxon memo said was “assumed to be a relatively safe level for the environment,” would require fossil fuel emissions to peak in the 1990s and non-fossil energy systems to be rapidly deployed. Eighty percent of fossil fuel resources, the memo calculated, would have to be left in the ground to avoid doubling atmospheric carbon dioxide concentrations. Certain fossil fuels, such as shale oil, could not be substantially exploited at all.¹¹²

70. But instead of disclosing to consumers any aspects of these research findings, in November 1979, according to internal correspondence, Exxon urged “a very aggressive defensive program in . . . atmospheric science and climate” to “anticipate the strong intervention of

¹¹⁰ Memorandum from W.L. Ferrall, Exxon Rsch. and Eng’g Co. to Dr. R.L. Hirsch, *Controlling Atmospheric CO₂*, at 1–2, 5 (Oct. 16, 1979), <https://perma.cc/B4F3-NYTH>.

¹¹¹ Nicola Jones, *How the World Passed a Carbon Threshold and Why It Matters*, Yale Env’t 360 (Jan. 26, 2017), <https://perma.cc/5WWJ-ZF3F>.

¹¹² Ferrall, *supra* note 110, at 3, 6–7.

environmental groups.”¹¹³ It urged an expanded research effort to “prepare[] for, and [get] ahead of the government in making the public aware of pollution problems.”¹¹⁴

71. In 1979, API and its members, including Fossil Fuel Defendants, convened a task force to monitor and share cutting edge climate research among the oil industry. The group was initially called the CO₂ and Climate Task Force, but changed its name to the Climate and Energy Task Force in 1980 (hereinafter referred to as “Task Force”). API kept and distributed meeting minutes to Task Force members. Membership included senior scientists and engineers from nearly every major U.S. and multinational oil and gas company, including Exxon, Mobil (Exxon), Amoco (BP), Phillips (ConocoPhillips), Texaco (Chevron), Shell, Sunoco, Sohio (BP), as well as Standard Oil of California (Chevron) and Gulf Oil (Chevron, among others). The Task Force was charged with assessing the implications of emerging science on the petroleum and gas industries and identifying where reductions in GHG emissions from fossil fuel products could be made.¹¹⁵

72. In 1979, a paper prepared by API for the Task Force asserted that CO₂ concentrations were rising, and predicted that, although global warming would occur, it would likely go undetected until approximately the year 2000 because its effects were being temporarily masked by a natural cooling trend.¹¹⁶

73. In 1980, the Task Force invited Dr. J.A. Laurman, a “recognized expert in the field of CO₂ and climate,” to make a presentation to its members.¹¹⁷ The meeting lasted for seven hours and included a “complete technical discussion” of global warming caused by fossil fuels, including “the scientific basis and technical evidence of CO₂ buildup, impact on society, methods of modeling and their consequences, uncertainties, policy implications, and conclusions that can be

¹¹³ Memorandum from H. Shaw to H.N. Weinberg, *Research in Atmospheric Science*, at 1–2 (Nov. 19, 1979), <https://perma.cc/G7GX-QECB>.

¹¹⁴ *Id.*

¹¹⁵ Am. Petroleum Inst., *AQ-9 Task Force Meeting Minutes* (March 18, 1980), <https://perma.cc/36C9-DM7P>.

¹¹⁶ Memorandum from R. J. Champion to J. T. Burgess, *Comments on The API's Background Paper on CO₂ Effects* (Sept. 6, 1979), <https://www.industrydocuments.ucsf.edu/docs/lqwl0228>.

¹¹⁷ Letter from J. J. Nelson, Am. Petroleum Inst. to AQ-9 Task Force re The CO₂ Problem; Addressing Research Agenda Development, at 1–2 (Mar. 18, 1980), <https://perma.cc/2SV2-T7R6>.

drawn from present knowledge.”¹¹⁸ Attendees to the presentation included scientists and executives from API, Texaco (a predecessor to Chevron), Exxon, and SOHIO (a predecessor to BP), and the minutes of the meeting were distributed to the entire Task Force. Dr. Laurman’s written presentation informed the Task Force that there was a “Scientific Consensus on the Potential for Large Future Climatic Response to Increased CO₂ Levels.” He further informed the Task Force in his presentation that, though the exact temperature increases were difficult to predict, the “physical facts agree on the probability of large effects 50 years away.” He warned the Task Force of a 2.5°C (4.5°F) global temperature rise by 2038, which would likely have “MAJOR ECONOMIC CONSEQUENCES,” and a 5°C (9°F) rise by 2067, which would likely produce “GLOBALLY CATASTROPHIC EFFECTS.” He also suggested that, despite uncertainty in climate modeling, “THERE IS NO LEEWAY” in the time for acting.

74. At this presentation, API minutes show that the Task Force discussed topics including “the technical implications of energy source changeover” and “ground rules for energy release of fuels and the cleanup of fuels as they relate to CO₂ creation.” The Task Force also discussed a potential area for investigation: alternative energy sources as a means of mitigating CO₂ emissions from fossil fuel products. These efforts called for research and development to “Investigate the Market Penetration Requirements of Introducing a New Energy Source into World Wide Use,” including the technical implications of energy source changeover.¹¹⁹ The Task Force even asked the question “what is the 50 year future of fossil fuels?”¹²⁰

75. In 1980, a Canadian Esso (Exxon) company report sent to managers and staff at affiliated Esso and Exxon companies stated that there was “no doubt” that fossil fuels were aggravating the build-up of CO₂ in the atmosphere, and that “[t]echnology exists to remove CO₂

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ *Id.* at 3.

from stack gases but removal of only 50% of the CO₂ would double the cost of power generation.”¹²¹

76. In December 1980, an Exxon manager distributed a memorandum on the “CO₂ Greenhouse Effect” attributing future buildup of carbon dioxide to fossil fuel use, and explaining that internal calculations indicated that atmospheric carbon dioxide could double by around 2060, “most likely” resulting in global warming of approximately 3.0 ± 1.5°C (2.7 to 8.1°F).¹²² Calculations predicting a lower temperature increase, such as 0.25°C (0.45°F), were “not held in high regard by the scientific community[.]” The memo also reported that such global warming would cause “increased rainfall[] and increased evaporation,” which would have a “dramatic impact on soil moisture, and in turn, on agriculture” and other “serious global problems[.]” The memo called for “society” to pay the bill, estimating that some adaptive measures would cost no more than “a few percent” of gross national product.¹²³ Shaw also reported that Exxon had studied various responses for avoiding or reducing a carbon dioxide build-up, including “stopping all fossil fuel combustion at the 1980 rate” and “investigat[ing] the market penetration of non-fossil fuel technologies.” The memo estimated that such non-fossil energy technologies “would need about 50 years to penetrate and achieve roughly half of the total [energy] market.”¹²⁴ The memo included Figure 5 below, which illustrates global warming anticipated by Exxon as well as the company’s understanding that significant global warming would occur before exceeding the range of natural variability.

¹²¹ Imperial Oil Ltd., *Review of Environmental Protection Activities for 1978–1979* (Aug. 6, 1980) at 2, <https://perma.cc/AK7D-BEBL>.

¹²² Memorandum from Henry Shaw to T.K. Kett, *Exxon Research and Engineering Company’s Technological Forecast: CO₂ Greenhouse Effect*, at 3 (Dec. 18, 1980), <https://perma.cc/22P8-W4V3>.

¹²³ *Id.* at 3–5.

¹²⁴ *Id.* at 5–6.

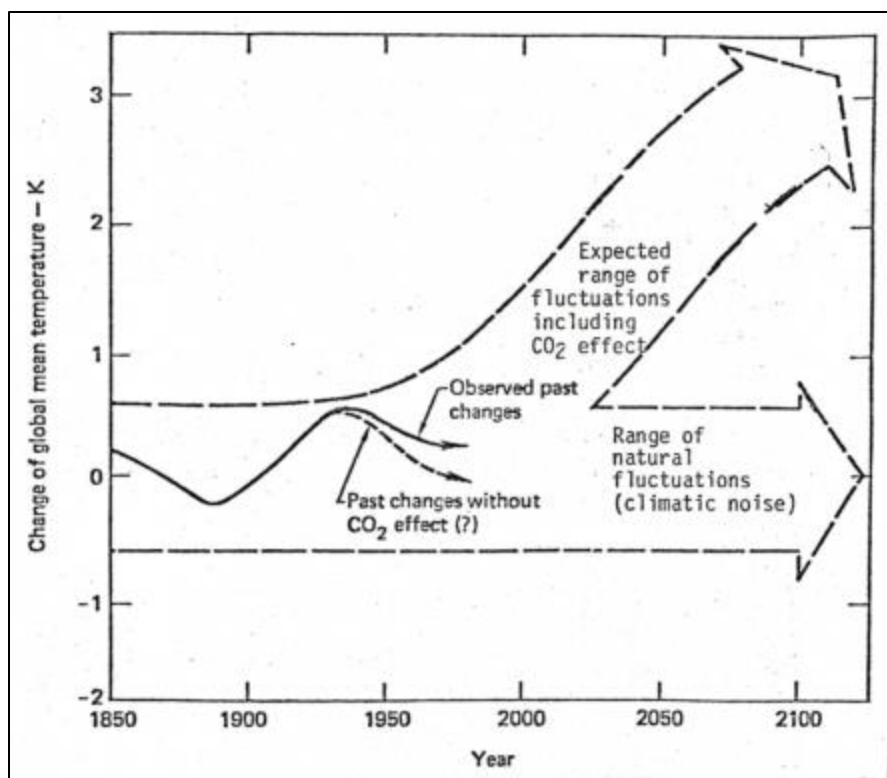


Figure 5: Future Global Warming Predicted Internally by Exxon in 1980¹²⁵

77. In February 1981, Exxon’s Contract Research Office prepared and distributed a “Scoping Study on CO₂” to the leadership of Exxon Research and Engineering Company.¹²⁶ The study reviewed Exxon’s carbon dioxide research and considered whether to expand its research on carbon dioxide or global warming further. It recommended against expanding those research areas because Exxon’s current research programs were sufficient for achieving the company’s goals of closely monitoring federal research, building credibility and public relations value, and developing in-house expertise regarding CO₂ and global warming, and noted that Exxon employees were actively monitoring and keeping the company apprised of outside research developments, including those on climate modeling and “CO₂-induced effects.” In discussing “options for reducing CO₂ build-up in the atmosphere,” the study noted that although capturing CO₂ from flue

¹²⁵ *Id.* at 12. The company anticipated a doubling of carbon dioxide by around 2060 and that the oceans would delay the warming effect by a few decades, leading to approximately 3°C (5.4°F) warming by the end of the century.

¹²⁶ Letter from G.H. Long, Exxon Rsch. & Eng’g Co., to P.J. Lucchesi et al. re Atmospheric CO₂ Scoping Study (Feb. 5, 1981), <https://perma.cc/Y79X-CWAL>.

gases (i.e., exhaust gas produced by combustion) was technologically possible, the cost was high, and “energy conservation or shifting to renewable energy sources[] represent the only options that might make sense.”¹²⁷

78. Exxon scientist Roger Cohen warned his colleagues in a 1981 internal memorandum that “future developments in global data gathering and analysis, along with advances in climate modeling, may provide strong evidence for a delayed CO₂ effect of a truly substantial magnitude,” and that under certain circumstances it would be “very likely that we will unambiguously recognize the threat by the year 2000.”¹²⁸ Cohen had expressed concern that the memorandum understated the potential effects of reckless CO₂ emissions from fossil fuel products, saying, “it is distinctly possible” that CO₂ emissions “will later produce effects which will indeed be catastrophic (at least for a substantial fraction of the earth’s population).”¹²⁹

79. Also in 1981, Exxon’s Henry Shaw, the company’s lead climate researcher at the time, prepared a summary of Exxon’s current position on the greenhouse effect for Edward David Jr., president of Exxon Research and Engineering Company, stating in relevant part:

- “Atmospheric CO₂ will double in 100 years if fossil fuels grow at 1.4% [per year].
- 3°C global average temperature rise and 10°C at poles if CO₂ doubles.
 - Major shifts in rainfall/agriculture
 - Polar ice may melt”¹³⁰

80. Thus, by 1981, Exxon and other fossil fuel companies knew CO₂ accumulation in the atmosphere from fossil fuel consumption would lead to global warming, were actively monitoring all aspects of CO₂ and global warming research, and recognized that a shift away from fossil fuels and towards renewable energy sources would be necessary to avoid a large CO₂ buildup in the atmosphere and resultant global warming.

¹²⁷ *Id.* at 13.

¹²⁸ Memorandum from R.W. Cohen to W. Glass (Aug. 18, 1981), <https://perma.cc/SR32-7UB6>.

¹²⁹ *Id.*

¹³⁰ Memorandum from Henry Shaw to Dr. E. E. David, Jr., *CO₂ Position Statement* (May 15, 1981), <https://perma.cc/U7A5-YTLG>.

81. In 1982, another API-commissioned report showed the average increase in global temperature from a doubling of atmospheric concentrations of CO₂ and projected, based upon computer modeling, global warming of between 2°C and 3.5°C [3.6°F to 6.3°F]. The report projected potentially “serious consequences for man’s comfort and survival,” and noted that “the height of the sea level can increase considerably.”¹³¹ Exxon’s own modeling research confirmed this.¹³² In a 1982 internal memorandum, Exxon’s Corporate Research and Science Laboratories acknowledged a “clear scientific consensus,” based on computer modeling, that “a doubling of atmospheric CO₂ from its pre-industrial revolution value would result in an average global temperature rise of (3.0 ± 1.5)°C [2.7°F to 8.1°F].”¹³³ The memo continued: “There is unanimous agreement in the scientific community that a temperature increase of this magnitude would bring about significant changes in the earth’s climate, including rainfall distribution and alterations in the biosphere.”

82. Also in 1982, Exxon’s Environmental Affairs Manager distributed a primer on climate change to a “wide circulation [of] Exxon management . . . intended to familiarize Exxon personnel with the subject.”¹³⁴ The primer also was “restricted to Exxon personnel and not to be distributed externally.”¹³⁵ The primer compiled science on climate change available at the time, and confirmed fossil fuel combustion as a primary anthropogenic contributor to global warming. The primer included the original version of Figure 6 below, which estimated a CO₂ doubling around 2090 based on Exxon’s long-range modeled outlook. The primer warned that the melting of the Antarctic ice sheet could result in global sea level rise of five feet which would “cause flooding on much of the U.S. East Coast, including the State of Florida and Washington, D.C.”¹³⁶

¹³¹ Am. Petroleum Inst., *Climate Models and CO₂ Warming: A Selective Review and Summary*, at 5 (Mar. 1982), <https://perma.cc/2ZDX-QMTX>.

¹³² See Memorandum from Roger W. Cohen, Exxon Rsch. & Eng’g Co., to A.M. Natkin, Off. of Sci. & Tech., Exxon Corp. (Sept. 2, 1982), <https://perma.cc/5JSE-GBNS>

¹³³ *Id.* at 1.

¹³⁴ Memorandum from M. B. Glaser to R.W. Cohen et al., *CO₂ “Greenhouse” Effect*, Exxon Rsch. & Eng’g Co. (Nov. 12, 1982), <https://perma.cc/3FRQ-5WX9>.

¹³⁵ *Id.*

¹³⁶ *Id.* at 13.

Indeed, it warned that “there are some potentially catastrophic events that must be considered,” including sea level rise from melting polar ice sheets. It noted that some scientific groups were concerned “that once the effects are measurable, they might not be reversible.”¹³⁷

¹³⁷ *Id.* at 2.

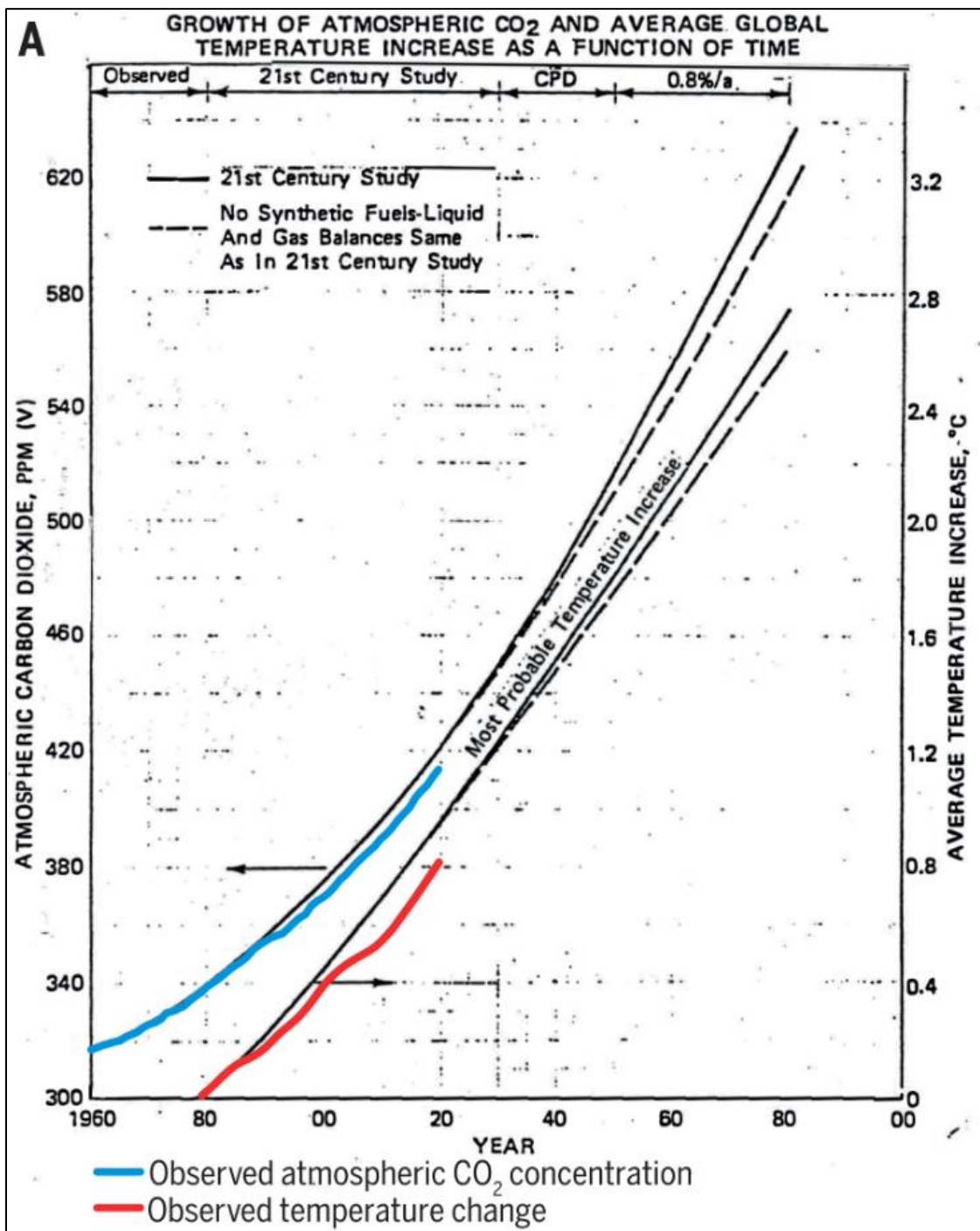


Figure 6: Exxon's Internal Prediction of Future CO₂ Increase and Global Warming from 1982¹³⁸

¹³⁸ G. Supran et al., *Assessing ExxonMobil's Global Warming Projections*, Sci. (Jan. 13, 2023), <https://perma.cc/ZB6B-8KVU>. Exxon predicted a doubling of atmospheric carbon dioxide concentrations above preindustrial levels by around 2090 (left curve), with a temperature increase of more than 2°C (3.6°F) over the 1979 level (right curve).

The primer recommended studying “soil erosion, salinization, or the collapse of irrigation systems” in order to understand how society might be affected and might respond to global warming, as well as “[h]ealth effects” and “stress associated with climate related famine or migration[.]”¹³⁹ The primer again estimated that undertaking “[s]ome adaptive measures” (not all of them) would cost “a few percent of the gross national product estimated in the middle of the next century” (gross national product was \$27.820 trillion in 2023).¹⁴⁰ To avoid such impacts, the primer discussed a scientific analysis which studied energy alternatives and requirements for introducing them into widespread use, and which recommended that “vigorous development of non-fossil energy sources be initiated as soon as possible.”¹⁴¹ The primer also noted that the analysis indicated that other GHGs related to fossil fuel production, such as methane (which is a more powerful GHG than CO₂), “may significantly contribute to a global warming,” and that concerns over CO₂ would be reduced if fossil fuel use were decreased due to “high price, scarcity, [or] unavailability.”¹⁴² “Mitigation of the ‘greenhouse effect’ would require major reductions in fossil fuel combustion,” the primer stated.¹⁴³ The primer was widely distributed to Exxon leadership.

83. In September 1982, the Director of Exxon’s Theoretical and Mathematical Sciences Laboratory, Roger Cohen, wrote Alvin Natkin of Exxon’s Office of Science and Technology to summarize Exxon’s internal research on climate modeling.¹⁴⁴ Cohen reported:

[O]ver the past several years a clear scientific consensus has emerged regarding the expected climatic effects of increased atmospheric CO₂. The consensus is that a doubling of atmospheric CO₂ from its pre-industrial revolution value would result in an average global temperature rise of (3.0 ± 1.5)°C [(2.7 to 8.1)°F]. . . . The temperature rise is predicted to be distributed nonuniformly over the earth, with above-average temperature elevations in the polar regions and relatively small increases near the equator. There is unanimous agreement in the scientific community that a

¹³⁹ Glaser, *supra* note 134, at 14.

¹⁴⁰ *Id.*; see Fed. Reserve Bank of St. Louis, Gross National Product (updated Mar. 30, 2023), <https://perma.cc/A8VK-MED9>.

¹⁴¹ Glaser, *supra* note 134, at 18.

¹⁴² *Id.* at 18, 29.

¹⁴³ *Id.* at 2.

¹⁴⁴ Cohen, *supra* note 132.

temperature increase of this magnitude would bring about significant changes in the earth's climate, including rainfall distribution and alterations of the biosphere. The time required for doubling of atmospheric CO₂ depends on future world consumption of fossil fuels.

Cohen described Exxon's own climate modeling experiments, reporting that they produced "a global averaged temperature increase that falls well within the range of the scientific consensus," were "consistent with the published predictions of more complex climate models," and were "also in agreement with estimates of the global temperature distribution during a certain prehistoric period when the earth was much warmer than today." "In summary," Cohen wrote, "the results of our research are in accord with the scientific consensus on the effect of increased atmospheric CO₂ on climate."

84. In October 1982, at the fourth biennial Maurice Ewing Symposium at the Lamont-Doherty Geophysical Observatory, Exxon Research and Engineering Company's President E.E. David, Jr. delivered a speech titled, "Inventing the Future: Energy and the CO₂ 'Greenhouse Effect.'"¹⁴⁵ His remarks included the following statement: "[i]t is ironic that the biggest uncertainties about the CO₂ buildup are not in predicting what the climate will do, but in predicting what people will do."¹⁴⁶

85. Throughout the early 1980s, at Exxon's direction, Exxon climate scientist Henry Shaw forecasted emissions of CO₂ from fossil fuel use. Those estimates were incorporated into Exxon's twenty-first century energy projections and were distributed among Exxon's various divisions. Shaw's conclusions included an expectation that atmospheric CO₂ concentrations would double in 2090 per the Exxon model, with an attendant 2.3°C to 5.6°C (4.1°F to 10.1°F) average global temperature increase.¹⁴⁷

¹⁴⁵ Dr. E.E. David, Jr., President, Exxon Rsch. & Eng'g Co., Remarks at the Fourth Annual Ewing Symposium, Tenafly, NJ, ClimateFiles (Oct. 26, 1982), <https://perma.cc/46A6-5524>.

¹⁴⁶ *Id.* at 4.

¹⁴⁷ Neela Banerjee, *More Exxon Documents Show How Much It Knew About Climate 35 Years Ago*, Inside Climate News (Dec. 1, 2015), <https://perma.cc/W25H-KNS8>.

86. During the 1980s, many Fossil Fuel Defendants formed their own research units focused on climate modeling. API, including the Task Force, provided a forum for Fossil Fuel Defendants to share their research efforts and corroborate their findings related to anthropogenic GHG emissions.¹⁴⁸

87. During this time, Fossil Fuel Defendants' statements expressed an understanding of their obligation to consider and mitigate the externalities of reckless promotion, marketing, and consumption of their fossil fuel products. For example, in 1988, Richard Tucker, the president of Mobil Oil, a predecessor of Exxon, presented at the American Institute of Chemical Engineers National Meeting, the premier educational forum for chemical engineers, where he stated:

[H]umanity, which has created the industrial system that has transformed civilization, is also responsible for the environment, which sometimes is at risk because of unintended consequences of industrialization. . . . Maintaining the health of this life-support system is emerging as one of the highest priorities. . . . [W]e must all be environmentalists.

The environmental covenant requires action on many fronts . . . the low-atmosphere ozone problem, the upper-atmosphere ozone problem and the greenhouse effect, to name a few. . . . Our strategy must be to reduce pollution before it is ever generated—to prevent problems at the source.

Prevention means engineering a new generation of fuels, lubricants and chemical products. . . . Prevention means designing catalysts and processes that minimize or eliminate the production of unwanted byproducts. . . . Prevention on a global scale may even require a dramatic reduction in our dependence on fossil fuels—and a shift towards solar, hydrogen, and safe nuclear power. It may be possible that—just possible—that the energy industry will transform itself so completely that observers will declare it a new industry. . . . Brute force, low-tech responses and money alone won't meet the challenges we face in the energy industry.¹⁴⁹

88. In 1987, Shell published an internal “brief for companies of the Royal Dutch/Shell Group” titled “Air pollution: an oil industry perspective.” In this report, the company described the greenhouse effect as occurring “largely as a result of burning fossil fuels and deforestation.”¹⁵⁰

¹⁴⁸ Neela Banerjee, *Exxon's Oil Industry Peers Knew About Climate Dangers in the 1970s, Too*, Inside Climate News (Dec. 22, 2015), <https://perma.cc/BZQ8-8KG7>.

¹⁴⁹ Richard E. Tucker, *High Tech Frontiers in the Energy Industry: The Challenge Ahead*, AICHE National Meeting 523 (Nov. 30, 1988), <https://perma.cc/LA2Z-BH3V>.

¹⁵⁰ Shell Briefing Serv., *Air pollution: An Oil Industry Perspective*, 1 SBS 4 (1987), <https://perma.cc/9T2N-Q6DS>.

Shell further acknowledged the “concern that further increases in carbon dioxide levels could cause climatic changes, notably a rise in overall temperature, having major environmental, social and economic consequences.”¹⁵¹

89. In 1988, the Shell Greenhouse Effect Working Group issued a confidential internal report, “The Greenhouse Effect,” which acknowledged global warming’s anthropogenic nature: “Man-made carbon dioxide, released into and accumulated in the atmosphere, is believed to warm the earth through the so-called greenhouse effect.” The authors also noted the burning of fossil fuels as a primary driver of CO₂ buildup and warned that warming could “create significant changes in sea level, ocean currents, precipitation patterns, regional temperature and weather.” They further pointed to the potential for “direct operational consequences” of sea level rise on “offshore installations, coastal facilities and operations (e.g., platforms, harbors, refineries, depots).”¹⁵²

90. Similar to early warnings by Exxon scientists, the 1988 Shell report noted that “by the time the global warming becomes detectable it could be too late to take effective countermeasures to reduce the effects or even to stabilise the situation.” The authors mentioned the need to consider policy changes on multiple occasions, noting that “the potential implications for the world are . . . so large that policy options need to be considered much earlier” and that research should be “directed more to the analysis of policy and energy options than to studies of what we will be facing exactly.”¹⁵³

91. Fossil Fuel Defendants also meticulously examined plausible scenarios if they failed to act in the face of their internal knowledge. For instance, Shell evaluated in a 1989 internal confidential planning document the issue of “climate change – the greenhouse effect, global

¹⁵¹ *Id.* at 5.

¹⁵² Shell Internationale Petroleum, Greenhouse Effect Working Group, *The Greenhouse Effect*, at 1, 27 (May 1988), <https://www.documentcloud.org/documents/4411090-Document3.html#document/p9/a411239>.

¹⁵³ *Id.* at 1, 6.

warming,” which the document identified as “the most important issue for the energy industry.”¹⁵⁴ The document compared a scenario in which society “addresses the potential problem” with one in which it does not. Acknowledging that “[c]hanging emission levels . . . and changing atmospheric CO₂ concentration has been likened to turning around a VLCC [very large crude carrier],” even “substantial efforts” by 2010 would have “hardly any impact on CO₂ concentration.” In later years, however, the impacts are “strikingly different;” early efforts “will not prevent the problem arising, but . . . could mitigate the problem.” The document described the consequences of failing to address the problem right away:

These seem small changes but they mask more dramatic temperature changes which would take place at temperate latitudes. There would be more violent weather – more storms, more droughts, more deluges. Mean sea level would rise at least 30 cm. Agricultural patterns would be most dramatically changed. Something as simple as a moderate change in rainfall pattern disrupts eco-systems, and many species of trees, plants, animals and insects would not be able to move and adapt.

The changes would, however, most impact on humans [sic]. In earlier times, man was able to respond with his feet. Today, there is no place to go because people already stand there. Perhaps those in industrial countries could cope with a rise in sea level (the Dutch examples) but for poor countries such defences are not possible. The potential refugee problem . . . could be unprecedented. Africans would push into Europe, Chinese into the Soviet Union, Latins into the United States, Indonesians into Australia. Boundaries would count for little – overwhelmed by the numbers. Conflicts would abound. Civilization could prove a fragile thing. The logic of [reducing emissions] is a society choosing to channel some investments into environmental maintenance against this contingency¹⁵⁵

92. In another 1989 confidential internal planning document, Shell anticipated that “public/media pressures” to “adopt[] environmental programmes” such as “much tighter targets for CO₂ emissions” could prompt “effective consumer responses” that “will lead to intense and unpredictable pressures on business.”¹⁵⁶ The scenario envisioned that “[c]oncerns about global

¹⁵⁴ Shell, *Scenarios 1989–2010: Challenge and Response*, at 33 (Oct. 1989), <https://perma.cc/Y8WA-Y28C>.

¹⁵⁵ *Id.* at 36.

¹⁵⁶ See Shell UK, *UK Scenarios 1989*, at 31, 34 (Nov. 1989), <https://perma.cc/6BZP-YEK7>.

warming and depletion will depress production of fossil fuels, their market share declining as renewables are actively promoted,” given that “[w]here there can be real consumer choice it will be a dominant force, especially where interest is heightened by obvious environmental impact.”¹⁵⁷

93. In yet another scenario published in a 1998 internal report, Shell paints an eerily prescient scene:

In 2010, a series of violent storms causes extensive damage to the eastern coast of the U.S. Although it is not clear whether the storms are caused by climate change, people are not willing to take further chances. The insurance industry refuses to accept liability, setting off a fierce debate over who is liable: the insurance industry or the government. After all, two successive IPCC reports since 1993 have reinforced the human connection to climate change . . . Following the storms, a coalition of environmental NGOs brings a class-action suit against the US government and fossil-fuel companies on the grounds of neglecting what scientists (including their own) have been saying for years: that something must be done. A social reaction to the use of fossil fuels grows, and individuals become ‘vigilante environmentalists’ in the same way, a generation earlier, they had become fiercely anti-tobacco. Direct-action campaigns against companies escalate. Young consumers, especially, demand action.¹⁵⁸

94. In a 1997 speech at Stanford University, John Browne, Group Executive for BP America, noted that “there is now an effective consensus among the world’s leading scientists and serious and well informed people outside the scientific community that there is a discernible human influence on the climate, and a link between the concentration of carbon dioxide and the increase in temperature.”¹⁵⁹

95. Climate change research conducted by Fossil Fuel Defendants and their industry associations frequently acknowledged uncertainties in their climate modeling. Those uncertainties, however, were largely with respect to the magnitude and timing of climate impacts resulting from fossil fuel consumption, not with respect to whether significant changes would eventually occur. Fossil Fuel Defendants’ researchers and the researchers at their industry associations harbored

¹⁵⁷ *Id.* at 34.

¹⁵⁸ Royal Dutch/Shell Group, *The Group of the Future and the Group Scenarios 1998–2020 Report*, at 115, 122 (1998), <https://perma.cc/6C6L-EA7J>.

¹⁵⁹ John Browne, *BP Climate Change Speech to Stanford*, ClimateFiles (May 19, 1997), <https://perma.cc/6D53-KQT2>.

little doubt that climate change was occurring and that fossil fuel products were, and are, the primary cause. As Ken Croasdale, a senior researcher for Exxon’s subsidiary Imperial Oil, stated to an audience of engineers in 1991, GHGs are rising “due to the burning of fossil fuels. Nobody disputes this fact.”¹⁶⁰

C. Despite Their Early Knowledge of Real and Severe Harm Posed by the Consumption of Fossil Fuel Products, Defendants Affirmatively Acted to Obscure Those Harms and Engaged in a Campaign to Deceptively Protect and Expand the Use of Fossil Fuel Defendants’ Fossil Fuel Products.

96. Despite the overwhelming evidence about the threats to people and the planet posed by continued use of fossil fuel products amassed leading up to and throughout the 1980s, Defendants failed to act reasonably to mitigate or avoid those dire adverse impacts. Defendants instead dismissed and devalued the safety of the public and the planet, including the State and its residents, and continued their unfettered pursuit of profits from Fossil Fuel Defendants’ fossil fuel products—including by intentionally misleading and deceiving the public regarding these threats.

97. Exxon has all but admitted to these decisions. In a secretly recorded video from 2021, an Exxon executive stated:

Did we aggressively fight against some of the science? Yes.
Did we join some of these shadow groups to work against some of the early efforts? Yes, that’s true. There’s nothing illegal about that.
We were looking out for our investments. We were looking out for our shareholders.¹⁶¹

98. On notice that fossil fuel products were causing global climate change and dire effects on the planet, Defendants could and should have issued reasonable warnings to consumers and the public of the known dangers of consuming fossil fuel products. Instead, Defendants engaged in advertising and communications campaigns intended to promote consumer demand for Fossil Fuel Defendants’ fossil fuel products by downplaying the harms and risks of climate change. Initially, the campaigns tried to show that global warming was not occurring. More recently, the

¹⁶⁰ Sara Jerving et al., *Special Report: What Exxon Knew About the Earth’s Melting Arctic*, L.A. Times (Oct. 9, 2015), <https://perma.cc/7NNH-9QSY>.

¹⁶¹ Jeff Brady, *Exxon Lobbyist Caught on Video Talking About Undermining Biden’s Climate Push*, NPR (July 1, 2021, 11:37 AM ET), <https://perma.cc/MAZ7-TLG4>.

campaigns have sought to minimize the risks and harms from climate change. The deception campaigns have had the purpose and effect of inflating and sustaining the market for fossil fuels, which—in turn—drove up GHG emissions, accelerated global warming, delayed the energy economy’s transition to a lower-carbon future, and brought about climate change harms to Maine. These effects are ongoing and continue to worsen in the State due to Defendants’ conduct.

99. Defendants’ conduct was and is an abdication and contravention of their responsibility to consumers and the public, including the State and its residents, to act on their unique knowledge of the reasonably foreseeable hazards of reckless production and promotion of fossil fuel products. Had Defendants acted responsibly to issue reasonable warnings instead of engaging in a disinformation campaign, consumers would have acted sooner and faster to reduce their fossil fuel consumption and stimulate demand for non-carbon energy alternatives whose use does not imperil the Earth. This process is now underway, but was wrongfully delayed and is still being slowed by Defendants’ deception and continued downplaying of the reality and severity of climate change—and of fossil fuels’ role in causing it.

100. Several key events between 1988 and 1992 prompted Defendants to pivot from researching and discussing climate change internally to affirmatively deceiving consumers and the public about the climatic dangers of fossil fuels. As climate change—and the role of fossil fuels in causing it—became an increasingly prominent concern, Defendants realized that accurate consumer and public understanding of the dangers of fossil fuels would pose a paramount threat to Fossil Fuel Defendants’ business models, their assets, and their profits. Key events that precipitated the shift from research to deception included the following:

a. In 1988, National Aeronautics and Space Administration (“NASA”) scientists confirmed that human activities were contributing to global warming.¹⁶² On June 23 of that year, NASA scientist James Hansen’s presentation of this information to Congress engendered

¹⁶² See Peter C. Frumhoff et al., *The Climate Responsibilities of Industrial Carbon Producers*, 132 *Climatic Change* 157, 161 (2015), <https://perma.cc/QKA6-VBXP>.

significant news coverage and publicity for the announcement, including coverage on the front page of *The New York Times*.

b. On July 28, 1988, Senator Robert Stafford and four bipartisan co-sponsors introduced S. 2666, “The Global Environmental Protection Act,” to regulate CO₂ and other GHGs. Three more bipartisan bills to significantly reduce CO₂ pollution were introduced over the following ten weeks, and in August, U.S. Presidential candidate George H.W. Bush pledged that his presidency would combat the greenhouse effect with “the White House effect.”¹⁶³ Political will in the United States to reduce anthropogenic GHG emissions and mitigate the harms associated with Fossil Fuel Defendants’ fossil fuel products was gaining momentum.

c. In December 1988, the United Nations formed the IPCC, a scientific panel dedicated to providing the world’s governments with an objective, scientific analysis of climate change and its environmental, political, and economic impacts.

d. In 1990, the IPCC published its First Assessment Report on anthropogenic climate change,¹⁶⁴ which concluded that (1) “there is a natural greenhouse effect which already keeps the Earth warmer than it would otherwise be,” and (2) that

emissions resulting from human activities are substantially increasing the atmospheric concentrations of the greenhouse gases carbon dioxide, methane, chlorofluorocarbons (CFCs) and nitrous oxide. These increases will enhance the greenhouse effect, resulting on average in an additional warming of the Earth’s surface. The main greenhouse gas, water vapour, will increase in response to global warming and further enhance it.¹⁶⁵

The IPCC reconfirmed those conclusions in a 1992 supplement to the First Assessment Report.¹⁶⁶

e. The United Nations held the 1992 Earth Summit in Rio de Janeiro, Brazil, a major, newsworthy gathering of 172 world governments, of which 116 sent their heads of state. The Summit resulted in the United Nations Framework Convention on Climate Change

¹⁶³ N.Y. Times Editorial Board, *The White House and the Greenhouse*, N.Y. Times (May 9, 1989), <https://perma.cc/4NSN-KS2D>.

¹⁶⁴ See IPCC, *Reports*, ipcc.ch/reports (last visited Nov. 14, 2024).

¹⁶⁵ IPCC, *Climate Change: Policymaker Summary of Working Group I (Scientific Assessment of Climate Change)*, at 63 (1990), <https://perma.cc/2LZV-MV7J>.

¹⁶⁶ IPCC, *1992 IPCC Supplement to the First Assessment Report* (1992), <https://perma.cc/2LZV-MV7J>.

(“UNFCCC”), an international, environmental treaty providing protocols for future negotiations aimed at “stabiliz[ing] greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.”¹⁶⁷

101. To perpetuate and maximize dependence on fossil fuel products, Defendants embarked on a decades-long series of disinformation campaigns designed to stymie consumer and public understanding of climate change and the role of fossil fuel consumption in causing it.

102. Defendants’ campaigns focused on concealing, discrediting, and/or misrepresenting information that tended to support decreasing consumption of fossil fuels, thereby preserving and inflating demand for Fossil Fuel Defendants’ products and staving off the transition to a lower-carbon economy. The campaigns enabled Fossil Fuel Defendants to accelerate their business practice of exploiting fossil fuel reserves and to concurrently externalize the social and environmental costs of fossil fuel products. Those activities directly contradicted Defendants’ internal recognition that the science of anthropogenic climate change was clear and that profligate consumption of fossil fuels would result in dire consequences for the planet and states like Maine.

103. In 1988, Joseph Carlson, an Exxon public affairs manager, stated in an internal memo that Exxon “is providing leadership through API in developing the petroleum industry position” on “the greenhouse effect.”¹⁶⁸ He then went on to describe the “Exxon Position,” which included two important messaging tenets among others: (1) “[e]mphasize the uncertainty in scientific conclusions regarding the potential enhanced Greenhouse Effect”; and (2) “[r]esist the overstatement and sensationalization [sic] of potential greenhouse effect which could lead to noneconomic development of nonfossil fuel resources.”¹⁶⁹

¹⁶⁷ United Nations, *United Nations Framework Convention on Climate Change* art. 2 (1992), <https://perma.cc/59UX-HCZ3>.

¹⁶⁸ Memorandum from Joseph M. Carlson, *The Greenhouse Effect* (Aug. 3, 1988), <https://perma.cc/GHC9-NM2E>.

¹⁶⁹ *Id.*

104. Reflecting on his time as an Exxon consultant in the 1980s, Professor Martin Hoffert, a former New York University physicist who researched climate change, expressed regret over Exxon’s “climate science denial program campaign” in his sworn testimony before Congress:

[O]ur research [at Exxon] was consistent with findings of the United Nations Intergovernmental Panel on Climate Change on human impacts of fossil fuel burning, which is that they are increasingly having a perceptible influence on Earth’s climate. . . . If anything, adverse climate change from elevated CO₂ is proceeding faster than the average of the prior IPCC mild projections and fully consistent with what we knew back in the early 1980’s at Exxon. . . . I was greatly distressed by the climate science denial program campaign that Exxon’s front office launched around the time I stopped working as a consultant—but not collaborator—for Exxon. The advertisements that Exxon ran in major newspapers raising doubt about climate change were contradicted by the scientific work we had done and continue to do. Exxon was publicly promoting views that its own scientists knew were wrong, and we knew that because we were the major group working on this.¹⁷⁰

105. Likewise, Shell “shaped a series of influential industry-backed publications that downplayed or omitted key risks; emphasized scientific uncertainties; and pushed for more fossil fuels, particularly coal.”¹⁷¹ In 1992, for instance, Shell had released a publication for wide external distribution purporting to describe the “Basic Scientific Facts” of the “Potential Augmented Greenhouse Effect.”¹⁷² This document downplayed the scientific consensus (that Shell internally acknowledged) by referring to the “relatively few established scientific fundamentals” regarding the causes of climate change.¹⁷³ It also misleadingly suggested that a “particular cause” of climate change was “difficult” to identify, even though Shell had identified the use of its products as a significant contributor to the greenhouse effect in the previous decade.¹⁷⁴ For example, in 1985, a Shell UK environmental scientist published an article laying out the scientific fact that “[b]urning

¹⁷⁰ *Examining the Oil Industry’s Efforts to Suppress the Truth About Climate Change, Hearing Before the Subcomm. on Civil Rights and Civil Liberties of the Comm. on Oversight and Reform*, 116th Cong. 7–8 (Oct. 23, 2019) (statement of Martin Hoffert, Former Exxon Consultant, Professor Emeritus, Physics, New York University), <https://perma.cc/6E4K-EERL>.

¹⁷¹ Green, *supra* note 104.

¹⁷² Jan Kuyper, *Potential Augmented Greenhouse Effect, & Depletion of the Ozone Layer*, Shell Grp. 3 (Sept. 1992), <https://www.documentcloud.org/documents/24359060-1992-internal-shell-group-planning-report-potential-augmented-greenhouse-effect-and-depletion-of-the-ozone-layer>.

¹⁷³ *Id.* at 5.

¹⁷⁴ *Id.*

of fossil fuels which have taken millions of years to form has effectively upset the balance [of the Carbon Cycle] leading to an increase in CO₂ in the atmosphere.”¹⁷⁵

106. A 1994 Shell report entitled “The Enhanced Greenhouse Effect: A Review of the Scientific Aspects” similarly emphasized scientific uncertainty, falsely stating, for example, that “the postulated link between any observed temperature rise and human activities has to be seen in relation to natural variability, which is still largely unpredictable.”¹⁷⁶

107. In 1996, API published an extensive report that denied the human connection to climate change by falsely stating that “no conclusive—or even strongly suggestive—scientific evidence exists that human activities are significantly affecting sea levels, rainfall, surface temperatures or the intensity and frequency of storms.”¹⁷⁷

108. In 1996, Exxon released a publication called “Global Warming: Who’s Right? Facts about a debate that’s turned up more questions than answers.” In the publication’s preface, Exxon CEO Lee Raymond inaccurately stated that “taking drastic action immediately is unnecessary since many scientists agree there’s ample time to better understand the climate system.” The publication described the greenhouse effect as “unquestionably real and definitely a good thing,” while ignoring the severe consequences that would result from the influence of the increased CO₂ concentration on the Earth’s climate. Instead, it falsely characterized the greenhouse effect as simply “what makes the earth’s atmosphere livable.” Directly contradicting Exxon’s own internal knowledge and peer-reviewed science, the publication misleadingly ascribed the rise in temperature since the late nineteenth century to “natural fluctuations that occur over long periods of time” rather than to the anthropogenic emissions that Exxon itself and other scientists had confirmed were responsible. The publication also falsely challenged the computer models that

¹⁷⁵ T.G. Wilkinson, *Why and How to Control Energy Pollution: Can Harmonisation Work?*, 8 Conservation & Recycling 7, 19 (1985), <https://www.documentcloud.org/documents/24359067-1985-03-why-and-how-to-control-energy-pollution-by-tg-wilkinson-shell>.

¹⁷⁶ P. Langcake, Shell Internationale Petroleum, *The Enhanced Greenhouse Effect: A Review of the Scientific Aspects* (Dec. 1994), <https://www.documentcloud.org/documents/4411099-Documents11.html#document/p15/a411511>.

¹⁷⁷ Sally Gentile et al., *Reinventing Energy: Making the Right Choices*, Am. Petroleum Inst., at 63 (1996), <https://perma.cc/J63S-RLSW>.

projected the future impacts of fossil fuel product consumption, including those developed by Exxon's own employees, as having been "proved to be inaccurate." The publication contradicted the numerous reports prepared by and circulated among Exxon's staff, and by API, stating that "the indications are that a warmer world would be far more benign than many imagine . . . moderate warming would reduce mortality rates in the US, so a slightly warmer climate would be more healthful." Raymond concluded his preface by criticizing the basis for reducing consumption of his company's fossil fuel products as "drawing on bad science, faulty logic, or unrealistic assumptions"—despite the important role that Exxon's own scientists had played in compiling those same scientific underpinnings.¹⁷⁸

109. Imperial Oil (Exxon) CEO Robert Peterson falsely denied the established connection between Fossil Fuel Defendants' fossil fuel products and anthropogenic climate change in the Summer 1998 Imperial Oil Review, "A Cleaner Canada":

[T]his issue [referring to climate change] has absolutely nothing to do with pollution and air quality. Carbon dioxide is not a pollutant but an essential ingredient of life on this planet. . . . [T]he question of whether or not the trapping of 'greenhouse' gases will result in the planet's getting warmer . . . has no connection whatsoever with our day-to-day weather.

There is absolutely no agreement among climatologists on whether or not the planet is getting warmer, or, if it is, on whether the warming is the result of man-made factors or natural variations in the climate. . . . I feel very safe in saying that the view that burning fossil fuels will result in global climate change remains an unproved hypothesis.¹⁷⁹

110. Exxon paid for a series of "advertorials," advertisements located in the editorial section of *The New York Times* and meant to look like editorials rather than paid ads. These ads discussed various aspects of the public discussion of climate change and sought to undermine the justifications for tackling GHG emissions as unsettled science. For example, the 1993 Mobil advertorial below argued that "what's wrong with so much of the global warming rhetoric" is "[t]he lack of solid scientific data," and quoted a purportedly neutral scientific expert who insisted

¹⁷⁸ Exxon Corp., *Global Warming: Who's Right?* (1996), <https://perma.cc/6EBZ-JM8M>.

¹⁷⁹ Robert Peterson, *A Cleaner Canada*, Imperial Oil Rev. 29 (1998), <https://perma.cc/29RV-PXJU>.

that ““there is a large amount of empirical evidence suggesting that the apocalyptic vision is in error and that the highly touted greenhouse disaster is most improbable.””¹⁸⁰ It also quoted another purportedly neutral scientist who asserted that “the net impact [of a modest warming] may yet be beneficial.”

¹⁸⁰ Mobil, *Apocalypse No*, N.Y. Times, A19 (February 25, 1993), <https://perma.cc/MGA5-W43N>.

Apocalypse no

For the first half of 1992, America was inundated by the media with dire predictions of global warming catastrophes, all of which seemed to be aimed at heating up the rhetoric from the Earth Summit in Rio de Janeiro last June.

Unfortunately, the media hype proclaiming that the sky was falling did not properly portray the consensus of the scientific community. After the Earth Summit, there was a noticeable lack of evidence of the sky actually falling and subsequent colder than normal temperatures across the country cooled the warming hysteria as well.

Everybody, of course, remembers the Earth Summit and the tons of paper used up in reporting on it—paper now buried in landfills around the world. But few people ever heard of a major document issued at the same time and called the "Heidelberg Appeal." The reason? It just didn't make "news."

Perhaps that is because the Appeal urged Summit attendees to avoid making important environmental decisions based on "pseudoscientific arguments or false and non-relevant data."

The Heidelberg Appeal was issued initially by some 264 scientists from around the world, including 52 Nobel Prize winners. Today, the Appeal carries the signatures of more than 2,300 scientists—65 of them Nobel Prize winners—from 79 countries. If nothing else, its message is illustrative of what's wrong with so much of the global warming rhetoric. The lack of solid scientific data.

Scientists can agree on certain facts pertaining to global warming. First, the greenhouse effect is a natural phenomenon; it accounts for the moderate temperature that makes our planet habitable. Second, the concentration of greenhouse gases (mainly carbon dioxide) has increased and there has been a slight increase in global temperatures over the past century. Finally, if present trends continue, carbon dioxide levels will double over the next 50 to 100 years.

Controversy arises when trying to link past changes in temperatures to increased concen-

trations of greenhouse gases. And it arises again when climate prediction models are used to conclude Earth's temperature will climb drastically in the next century and—based on such models—to propose policy decisions that could drastically affect the economy.

According to Arizona State University climatologist Dr. Robert C. Balling in his book, *The Heated Debate* (San Francisco: Pacific Research Institute for Public Policy, 1992), until knowledge of the interplay between oceans and the atmosphere improves, "model predictions must be treated with considerable caution." Moreover, models don't simulate the complexity of clouds, nor do they deal adequately with sea ice, snow or changes in intensity of the sun's energy.

And they don't stand up to reality testing. Comparing actual temperatures over the last 100 years against model calculations, the models predicted temperature increases higher than those that actually occurred. Moreover, most of the earth's temperature increase over the last century occurred before 1940. Yet, the real build-up in man-made CO₂ didn't occur until after 1940. Temperatures actually fell between 1940 and 1970.

Sifting through such data, Dr. Balling has concluded, "there is a large amount of empirical evidence suggesting that the apocalyptic vision is in error and that the highly touted greenhouse disaster is most improbable."

Other scientists have an even more interesting viewpoint. Notes atmospheric physicist S. Fred Singer, president of the Washington, D.C.-based Science & Environmental Policy Project, "the net impact [of a modest warming] may well be beneficial."

All of which would seem to suggest that the jury's still out on whether drastic steps to curb CO₂ emissions are needed. It would seem that the phenomenon—and its impact on the economy—are important enough to warrant considerably more research before proposing actions we may later regret.

Perhaps the sky isn't falling, after all.

Mobil

Figure 7: 1993 Mobil Advertorial

The first of those purportedly neutral scientific experts, Robert C. Balling, acknowledged five years after the advertorial ran that he had received \$408,000 in research funding from the fossil fuel industry over the past decade, including from Exxon.¹⁸¹ The second, S. Fred Singer, was not a climatologist, and had previously been funded by tobacco companies to spread doubt about the scientific claim that exposure to second-hand smoke causes cancer.¹⁸²

111. Many other Exxon advertorials falsely or misleadingly characterized the state of climate science research to the readership of *The New York Times*' op-ed page. A sample of these untruthful statements includes:

- “We don’t know enough about the factors that affect global warming and the degree to which—if any—that man-made emissions (namely, carbon dioxide) contribute to increases in Earth’s temperature.”¹⁸³
- “[G]reenhouse-gas emissions, which have a warming effect, are offset by another combustion product—particulates—which leads to cooling.”¹⁸⁴
- “Even after two decades of progress, climatologists are still uncertain how—or even if—the buildup of man-made greenhouse gases is linked to global warming. It could be at least a decade before climate models will be able to link greenhouse warming unambiguously to human actions. Important answers on the science lie ahead.”¹⁸⁵
- “[I]t is impossible for scientists to attribute the recent small surface temperature increases to human causes.”¹⁸⁶
- “Within a decade, science is likely to provide more answers on what factors affect global warming, thereby improving our decision-making. We just don’t have this information today. Answers to questions about climate change will require more reliable measurements of

¹⁸¹ DeSmog, *Robert C. Balling, Jr.*, <https://www.desmog.com/robert-c-balling-jr/> (last visited Nov. 18, 2024).

¹⁸² Naomi Oreskes & Erik M. Conway, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*, 150–54 (Bloomsbury Press, 1st ed. 2011).

¹⁸³ Mobil, *Climate Change: A Prudent Approach*, N.Y. Times (Nov. 13, 1997), <https://perma.cc/8D9V-H88D>.

¹⁸⁴ Mobil, *Less Heat, More Light on Climate Change*, N.Y. Times (July 18, 1996), <https://perma.cc/BQJ3-4G2S>.

¹⁸⁵ Mobil, *Climate Change: Where We Come Out*, N.Y. Times (Nov. 20, 1997), <https://perma.cc/YX2Q-EZ87>.

¹⁸⁶ ExxonMobil, *Unsettled Science* (Mar. 23, 2000), reproduced in <https://perma.cc/YNM7-QT9J>.

temperature at many places on Earth, better understanding of clouds and ocean currents along with greater computer power.”¹⁸⁷

112. A peer-reviewed quantitative analysis of Exxon’s climate communications between 1989 and 2004 found that, while 83% of the company’s peer-reviewed papers and 80% of its internal documents acknowledged the reality and human origins of climate change, 81% of its advertorials communicated doubt about those conclusions.¹⁸⁸ Put differently, Exxon demonstrated a clear tendency to contradict its own peer-reviewed research in statements meant for lay audiences, including the State and its residents. Based on this “statistically significant” discrepancy between internal and external communications, the authors concluded that “ExxonMobil misled the public.”¹⁸⁹

113. Fossil Fuel Defendants also worked jointly through industry and front groups such as Defendant API and other groups like ICE and the GCC to fund, conceive, plan, and carry out sustained and widespread campaigns of denial and disinformation about the existence of climate change and fossil fuel products’ contribution to it, despite their own knowledge and the growing national and international scientific consensus about the hazards of doing so. The campaigns included a long-term pattern of direct misrepresentations and material omissions to consumers, as well as a plan to influence consumers indirectly by affecting public opinion through the mass dissemination of misleading research. Although Fossil Fuel Defendants were competitors in the marketplace, they combined and collaborated with each other and with industry and front groups such as Defendant API, and others like ICE and the GCC, on these public campaigns to misdirect and stifle public knowledge in order to inflate consumer demand for fossil fuels. The efforts included promoting hazardous fossil fuel products through advertising campaigns that failed to warn of the existential risks associated with the use of those products, and that were designed to

¹⁸⁷ Mobil, *Science: What We Know and Don’t Know* (1997), reproduced in <https://perma.cc/YNM7-QT9J>.

¹⁸⁸ Geoffrey Supran & Naomi Oreskes, *Assessing ExxonMobil’s Climate Change Communications (1977–2014)*, 12 *Envtl. Rsch. Letter* 12 (2017), <https://perma.cc/3W29-Z9NY>.

¹⁸⁹ *Id.*

influence consumers to continue using Fossil Fuel Defendants' fossil fuel products irrespective of those products' damage to communities and the environment.

114. One of the key organizations formed by Defendants to coordinate the fossil fuel industry's response to the world's growing awareness of climate change was the International Petroleum Industry Environmental Conservation Association ("IPIECA"). In 1987, the IPIECA formed a "Working Group on Global Climate Change" chaired by Duane LeVine, Exxon's manager for science and strategy development. The Working Group also included Brian Flannery from Exxon, Leonard Bernstein from Mobil, Terry Yosie from API, and representatives from BP, Shell, and Texaco (Chevron). In 1990, the Working Group sent a strategy memo created by LeVine to hundreds of oil companies around the world, including Defendants. This memo explained that, to forestall a global shift away from burning fossil fuels for energy, the industry should emphasize uncertainties in climate science and the need for further research.¹⁹⁰

115. In 1991, the Information Council for the Environment, also known as ICE, whose members included affiliates, predecessors and/or subsidiaries of Defendants, launched a national climate change science denial campaign with full-page newspaper ads, radio commercials, a public relations tour schedule, "mailers," and research tools to measure campaign success. Included among the campaign strategies was a plan to "reposition global warming as theory (not fact)." Its target audience included older, less-educated males who are "predisposed to favor the ICE agenda, and likely to be even more supportive of that agenda following exposure to new info."¹⁹¹

116. A goal of ICE's advertising campaign was to change public opinion and consumer perceptions of climate risk. A memo from Richard Lawson, president of the National Coal Association, a predecessor to the National Mining Association, warned, "[p]ublic opinion polls

¹⁹⁰ Benjamin A. Franta, *Big Carbon's Strategic Response to Global Warming, 1950-2020*, at 140 (2022) (Ph. D. Dissertation, Stanford University), <https://perma.cc/GCN6-CBN2>.

¹⁹¹ Union of Concerned Scientists, *Deception Dossier #5: Coal's "Information Council on the Environment" Sham*, at 9, 16 (1991), <https://perma.cc/BN2P-FKYS> (last visited Nov. 18, 2024).

reveal that 60% of the American people already believe global warming is a serious environmental problem. Our industry cannot sit on the sidelines in this debate.”¹⁹²

117. The following images are examples of ICE-funded print advertisements challenging the validity of climate science and intended to obscure the scientific consensus on anthropogenic climate change in order to inflate consumer demand for fossil fuels:¹⁹³



Figure 8: Information Council for the Environment Advertisements

118. The Global Climate Coalition, also known as GCC, on behalf of Defendants and other fossil fuel companies, spent millions of dollars on deceptive advertising campaigns and misleading material to discredit climate science and generate public uncertainty around the climate debate, and thereby inflate consumer demand for fossil fuels. The GCC operated between 1989 and 2001. Its founding members included Defendants Exxon, Shell, and API. Defendants BP and Chevron also participated as members of the GCC. William O’Keefe, former president of the GCC, was also a former executive of API.¹⁹⁴ GCC’s position on climate change contradicted decades of

¹⁹² Naomi Oreskes, *My Facts Are Better Than Your Facts: Spreading Good News About Global Warming* (2010), in Peter Howlett et al., *How Well Do Facts Travel?: The Dissemination of Reliable Knowledge* 149–50 (Cambridge University Press, 2011).

¹⁹³ Union of Concerned Scientists, *supra* note 191, at 47–49.

¹⁹⁴ Jeff Nesmith, *Industry Promotes Skeptical View of Global Warming*, Cox News Service (May 29, 2003).

its members' internal scientific reports by asserting that natural trends, not human combustion of fossil fuels, was responsible for rising global temperatures:

The GCC believes that the preponderance of the evidence indicates that most, if not all, of the observed warming is part of a natural warming trend which began approximately 400 years ago. If there is an anthropogenic component to this observed warming, the GCC believes that it must be very small and must be superimposed on a much larger natural warming trend.¹⁹⁵

119. The GCC's promotion of overt climate change denialism also contravened its internal assessment confirming that climate change was real and supported by overwhelming scientific evidence. In December 1995, the GCC's Science and Technology Advisory Committee ("GCC-STAC"), whose members included employees of Mobil Oil Corporation (an Exxon predecessor) and API, drafted a primer on the science of global warming for GCC members. The primer concluded that the GCC's contrarian theories "do not offer convincing arguments against the conventional model of greenhouse gas emission-induced climate change." However, the GCC excluded this section from the publicly released version of the report.¹⁹⁶ Nonetheless, for years afterward, the GCC and its members continued to tout their contrarian theories about global warming, even though the GCC had admitted internally these arguments were invalid. Between 1989 and 1998, the GCC spent \$13 million on one ad campaign to obfuscate the public's understanding of climate science and undermine its trust in climate scientists.¹⁹⁷ For example, the GCC distributed a video to hundreds of journalists, which claimed that carbon dioxide emissions would increase crop production and feed the hungry people of the world.¹⁹⁸

120. In a 1994 public report, the GCC stated that "observations have not yet confirmed evidence of global warming that can be attributed to human activities," and that "[t]he claim that

¹⁹⁵ Glob. Climate Coal., *Global Climate Coalition: An Overview 2* (Nov. 1996), <https://www.documentcloud.org/documents/5453339-1996-GCC-Overview-and-Reports.html>.

¹⁹⁶ Memorandum from Gregory J. Dana, Assoc. of Int'l Auto. Mfrs., to AIAM Technical Committee, *Global Climate Coalition (GCC) - Primer on Climate Change Science - Final Draft* (Jan. 18, 1996), <https://perma.cc/C9FV-C35P>.

¹⁹⁷ Wendy E. Franz, Kennedy Sch. of Gov't, Harvard Univ., *Science, Skeptics and Non-State Actors in the Greenhouse*, ENRP Discussion Paper E-98-18 1, 13 (Sept. 1998), <https://perma.cc/E4GR-8DK4>.

¹⁹⁸ The Center for Media and Democracy, *Global Climate Coalition*, Source Watch, <https://perma.cc/7K47-G6CP>.

serious impacts from climate change have occurred or will occur in the future simply has not been proven.”¹⁹⁹ In 1994, the GCC Board of Directors was composed of high-level executives from API, Exxon, and Texaco (Chevron). Representatives from Shell, Amoco (BP), and BP were also GCC members at that time.²⁰⁰ In 1995, the GCC published a booklet called “Climate Change: Your Passport to the Facts,” which stated, “While many warnings have reached the popular press about the consequences of a potential man-made warming of the Earth’s atmosphere during the next 100 years, there remains no scientific evidence that such a dangerous warming will occur.”²⁰¹ In 1995, GCC’s Board of Directors included high-level executives from Texaco (Chevron), API, ARCO, and Phillips Petroleum Company.²⁰²

121. In 1997, William O’Keefe, chairman of the GCC and executive vice president of API, falsely wrote in a *Washington Post* op-ed, “[c]limate scientists don’t say that burning oil, gas, and coal is steadily warming the earth.”²⁰³ This statement contradicted the established scientific consensus as well as Defendants’ own knowledge. Yet Defendants did nothing to correct the public record, and instead continued to fund the GCC’s anti-scientific climate skepticism.

122. In addition to publicly spreading false and misleading information about the climate science consensus, the GCC also sought to undermine credible climate science from within the IPCC. After becoming a reviewer of IPCC’s Second Assessment Report in 1996, the GCC used its position to accuse the convening author of a key chapter in the Report of modifying its conclusions. The GCC claimed that the author, climatologist Ben Santer, had engaged in “scientific cleansing” that “understate[d] uncertainties about climate change causes and effect . . . to increase the apparent scientific support for attribution of changes to climate to human

¹⁹⁹ GCC, *Issues and Options: Potential Global Climate Change*, Climate Files (1994), <https://perma.cc/5RNF-BNH6>.

²⁰⁰ *1994 GCC Board Member List*, *supra* note 72.

²⁰¹ GCC, *Climate Change: Your Passport to the Facts*, Climate Files (1995), <https://perma.cc/W3FL-UPDH> (last visited Nov. 14, 2024).

²⁰² *1995 GCC IRS 1024 and Attachments*, *supra* note 73.

²⁰³ William O’Keefe, *A Climate Policy*, *The Wash. Post* (July 4, 1997, 8:00 p.m. EDT), <https://perma.cc/3EG7-8GRG>.

activities.”²⁰⁴ The GCC also arranged to spread the accusation among reporters, editors of scientific journals, and even the op-ed page of *The Wall Street Journal*.²⁰⁵ This effort “was widely perceived to be an attempt on the part of the GCC to undermine the credibility of the IPCC.”²⁰⁶

123. In the late 1990s, alarmed by significant legal judgments against Big Tobacco for decades of publicly denying the health risks of smoking cigarettes, Defendants shifted away from openly denying anthropogenic warming and toward peddling a subtler but still deceptive form of climate change skepticism. A Shell employee explained that the company “didn’t want to fall into the same trap as the tobacco companies who have become trapped in all their lies.”²⁰⁷ Several large fossil fuel companies, including BP and Shell, left the GCC (although all Fossil Fuel Defendants remained members of API),²⁰⁸ and Defendants began claiming they had accepted climate science all along.²⁰⁹

124. Despite the shift in public messaging, Defendants surreptitiously continued to organize and fund programs designed to deceive the public about the weight and veracity of the climate science consensus. In 1998, API convened a Global Climate Science Communications Team (“GCSCT”) whose members included representatives from Exxon, Chevron, and API. There were no scientists on the “Global Climate Science Communications Team.” Steve Milloy (a key player in the tobacco industry’s deception campaigns) and his organization, The Advancement of Sound Science Coalition (“TASSC”), were also founding members of the GCSCT. TASSC was a fake grassroots citizen group created by the tobacco industry to sow uncertainty by discrediting the scientific link between exposure to second-hand cigarette smoke and increased rates of cancer and heart disease. Philip Morris launched TASSC on the advice of its public relations firm, which advised Philip Morris that the tobacco company itself would not be a credible voice on the issue

²⁰⁴ Franz, *supra* note 197, at 14.

²⁰⁵ Oreskes & Conway, *supra* note 182, at 205–13. *See also* S. Fred Singer, *Climate Change and Consensus*, *Sci.* vol. 271, no. 5249 (Feb. 2, 1996); Frederick Seitz, *A Major Deception on ‘Global Warming’*, *The Wall Street Journal* (June 12, 1996).

²⁰⁶ Franz, *supra* note 197, at 15.

²⁰⁷ Nathaniel Rich, *Losing Earth: A Recent History*, London: Picador 186 (2020).

²⁰⁸ *Id.* at 177.

²⁰⁹ Franta (2022), *supra* note 190, at 170.

of smoking and public health. TASSC, through API and with the approval of Defendants, also became a front group for the fossil fuel industry beyond its role in GCSCT, using the same tactics it had honed while operating on behalf of tobacco companies to spread doubt about climate science. Although TASSC posed as a grassroots group of concerned citizens, it received significant funding from Defendants. For example, between 2000 and 2004, Exxon donated \$50,000 to Milloy's Advancement of Sound Science Center; and an additional \$60,000 to the Free Enterprise Education Institute and \$50,000 to the Free Enterprise Action Institute, both of which were registered to Milloy's home address.²¹⁰ The GCSCT, including TASSC, represented a continuation of Defendants' concerted actions to sow doubt and confusion about climate change in order to inflate consumer demand for fossil fuels.

125. The GCSCT's and Defendants' concerted efforts involved a multi-million-dollar, multi-year plan that, among other elements, sought to: (a) "[d]evelop and implement a national media relations program to inform the media about uncertainties in climate science to generate national, regional, and local media coverage on the scientific uncertainties"; (b) "[d]evelop a global climate science information kit for media including peer-reviewed papers that undercut the 'conventional wisdom' on climate science"; (c) "[p]roduce . . . a steady stream of op-ed columns"; and (d) "[d]evelop and implement a direct outreach program to inform and educate members of Congress . . . and school teachers/students about uncertainties in climate science"²¹¹—a blatant attempt to deceive consumers and the public, including in Maine, in order to ensure a continued and unimpeded market for fossil fuel products.

126. Exxon, Chevron, and API directed and contributed to the development of the plan, which set forth the criteria by which the contributors would know when their efforts to manufacture doubt had been successful. "Victory," they wrote, "will be achieved when . . . average citizens 'understand' (recognize) uncertainties in climate science" and "recognition of uncertainties

²¹⁰ Union of Concerned Scientists, *Smoke, Mirrors & Hot Air: How ExxonMobil Uses Big Tobacco's Tactics to Manufacture Uncertainty on Climate Science* (July 16, 2007), <https://perma.cc/44CD-ARPN>.

²¹¹ E-mail from Joe Walker to Global Climate Science Team, *Draft Global Climate Science Communications Plan*, 5–7 (Apr. 3, 1998), <https://perma.cc/7Y5L-YYA6>.

becomes part of the ‘conventional wisdom.’”²¹² In other words, the plan was crafted to achieve Defendants’ goal of using disinformation to plant doubt about the reality of climate change in an effort to prevent consumers from accessing vital information, inflate consumer demand for fossil fuel products, and increase Fossil Fuel Defendants’ already large profits.

127. In furtherance of the strategies described in these memoranda, Defendants made misleading statements to consumers, including in Maine, about climate change, the relationship between climate change and fossil fuel products, and the urgency of the problem. Defendants made these statements in public fora and in advertisements published in newspapers and other media with substantial circulation to Maine, including national publications such as *The New York Times*, *The Wall Street Journal*, and *The Washington Post*.

128. Another key strategy in Defendants’ efforts to discredit scientific consensus on climate change and the IPCC was to bankroll unqualified or unscrupulous scientists to advance fringe conclusions about climate change. These scientists obtained part or all of their research budget from Fossil Fuel Defendants directly or through Fossil Fuel Defendant-funded organizations like Defendant API.²¹³ During the early- to mid-1990s, Exxon directed some of this funding to Dr. Fred Seitz, Dr. Fred Singer, and/or Seitz and Singer’s Science and Environmental Policy Project (“SEPP”) in order to launch repeated attacks on mainstream climate science and IPCC conclusions, even as Exxon scientists participated in the IPCC.²¹⁴ Seitz and Singer were not climate scientists. Rather, they and SEPP had previously been paid by the tobacco industry to create doubt in the public mind about the hazards of smoking.²¹⁵ Singer also acted as a paid consultant for Sun (Sunoco) and Shell.²¹⁶

²¹² *Id.* at 4.

²¹³ *E.g.*, Willie Soon & Sallie Baliunas, *Proxy Climatic and Environmental Changes of the Past 1000 Years*, 23 *Climate Rsch.* 89, 105 (Jan. 31, 2003), <https://perma.cc/9V32-EY8H>.

²¹⁴ Union of Concerned Scientists (2007), *supra* note 210.

²¹⁵ The Center for Media and Democracy, *S. Fred Singer*, Source Watch, <https://perma.cc/X35L-DYUY> (last visited Nov. 14, 2024); The Center for Media and Democracy, *Frederick Seitz*, <https://perma.cc/TV67-ABUH> (last visited Nov. 14, 2024).

²¹⁶ *Id.*

129. Industry-funded scientists frequently failed to disclose their fossil fuel industry underwriters.²¹⁷ At least one, Dr. Wei-Hock Soon, contractually agreed to allow donors to review his research before publication, and his housing institution agreed not to disclose the funding arrangement without prior permission from his fossil fuel donors.²¹⁸ Between 2001 and 2012, various fossil fuel interests, including Exxon and API, paid Soon over \$1.2 million.²¹⁹ “Dr. Soon, in correspondence with his corporate funders, described many of his scientific papers as ‘deliverables’ that he completed in exchange for their money.”²²⁰ His Defendant-funded research includes articles in scientific journals accusing the IPCC of overstating the negative environmental effects of carbon dioxide emissions and arguing that the sun is responsible for recent climate trends. Soon was the lead author of a 2003 article that argued that the climate had not changed significantly. The article was widely promoted by other denial groups funded by Exxon, including via “Tech Central Station,” a website supported by Exxon.²²¹ Soon published other bogus “research” in 2009, attributing global warming to solar activity, for which Exxon paid him \$76,106.²²² This 2009 grant was made several years after Exxon had publicly committed not to fund climate change deniers.²²³

130. Defendants intended for and acted to ensure that the papers of authors they funded would be distributed to and relied on by consumers when buying Fossil Fuel Defendants’ fossil fuel products, including by consumers in Maine.

131. Defendants have also funded dozens of think tanks, front groups, and dark money foundations pushing climate change denial. These include the Competitive Enterprise Institute, the Heartland Institute, Frontiers for Freedom, Committee for a Constructive Tomorrow, and Heritage

²¹⁷ E.g., *Smithsonian Statement: Dr. Wei-Hock (Willie) Soon*, Smithsonian (Feb. 26, 2015), <https://perma.cc/A4KY-W3NM>.

²¹⁸ Union of Concerned Scientists, *The Climate Deception Dossier #1: Dr. Wei-Hock Soon’s Smithsonian Contracts* 6 (2015), <https://perma.cc/JL2V-XYGL> (last visited Nov. 18, 2024).

²¹⁹ Justin Gillis & John Schwartz, *Deeper Ties to Corporate Cash for Doubtful Climate Researcher*, N.Y. Times (Feb. 21, 2015), <https://perma.cc/897V-7B22>.

²²⁰ *Id.*

²²¹ Union of Concerned Scientists (2007), *supra* note 210, at 13–14.

²²² *Willie Soon FOIA Grants Chart* (Jan. 28, 2011), <https://perma.cc/LJA5-BEQM>.

²²³ ExxonMobil, *2007 Corporate Citizenship Report*, at 39 (2007), <https://perma.cc/G4DK-TZGS>

Foundation. According to the Union of Concerned Scientists, from 1998 to 2017, Exxon spent over \$36 million funding numerous organizations misrepresenting the scientific consensus²²⁴ that fossil fuel products were causing climate change, sea level rise, and injuries to Maine, among other communities. Several Defendants have been connected to other groups that undermine the scientific basis linking fossil fuel products to climate change and sea level rise, including the Frontiers of Freedom Institute and the George C. Marshall Institute.

132. Philip Cooney, an attorney at API from 1996 to 2001, testified at a 2007 Congressional hearing that it was “typical” for API to fund think tanks and advocacy groups that minimized fossil fuels’ role in causing climate change.²²⁵

133. Creating a false perception of disagreement in the scientific community (despite the consensus that its own scientists, experts, and managers had previously acknowledged) disrupted vital channels of communication between scientists and the public. A 2007 Yale University-Gallup poll found that only 48% of Americans believed that there was a consensus among the scientific community that global warming was happening, and 40% believed there was a lot of disagreement among scientists over whether global warming was occurring.²²⁶ Eight years later, a 2015 Yale-George Mason University poll found that “[o]nly about one in ten Americans understands that nearly all climate scientists (over 90%) are convinced that human-caused global warming is happening, and just half . . . believe a majority do.”²²⁷ Further, it found that 33% of Americans believe that climate change is mostly due to natural causes, compared to the 97% of peer-reviewed papers that acknowledge that global warming is real and at least partly human-caused.²²⁸ The lack of progress, and even the regress, in the public understanding of climate science over this period—

²²⁴ Union of Concerned Scientists, *ExxonMobil Foundation & Corporate Giving to Climate Change Denier & Obstructionist Organizations* (1998–2017), <https://perma.cc/W3Q4-PCX2>.

²²⁵ Transcript of Deposition of Philip Cooney, U.S., House of Reps., Exec. Session Comm. on Oversight and Gov’t, at 32:3–5 (Mar. 12, 2007), <https://perma.cc/M8YK-CWD4>.

²²⁶ *American Opinions on Global Warming: A Yale/Gallup/Clearvision Poll*, Yale Program on Climate Change Commc’n (July 31, 2007), <https://perma.cc/JU76-XV82>.

²²⁷ Leiserowitz et al., *Climate Change in the American Mind*, Yale Program on Climate Change Commc’n. & George Mason Univ., Ctr. for Climate Change Commc’n eds. 9 (Oct. 2015), <https://perma.cc/4M77-25RM>.

²²⁸ *Id.* at 7.

during which Defendants professed to accept the conclusions of mainstream climate science— demonstrates the success of Defendants’ campaign to thwart dissemination of genuine scientific expertise and accurate information to the public regarding the effects fossil fuel consumption.

134. As a result of Defendants’ tortious, false, and misleading conduct, consumers of Fossil Fuel Defendants’ fossil fuel products in Maine and elsewhere have been deliberately and unnecessarily deceived about: the role of fossil fuel products in causing global warming, sea level rise, disruptions to the hydrologic cycle, and increased extreme precipitation, heat waves, and other consequences of the climate crisis; the acceleration of global warming since the mid-twentieth century and the continuation thereof; and the fact that the continued increase in fossil fuel consumption creates severe environmental threats and significant economic costs for coastal states, including Maine. Consumers in Maine and elsewhere have also been deceived about the depth and breadth of the state of the scientific evidence on anthropogenic climate change and, in particular, about the scientific consensus confirming the role of fossil fuels in causing both climate change and a wide range of potentially destructive impacts, including sea level rise, disruptions to the hydrologic cycle, extreme precipitation, heat waves, and associated consequences.

D. In Contrast to Public Misrepresentations About the Risks of Climate Change, Fossil Fuel Defendants’ Internal Actions Demonstrate Their Awareness of and Intent to Profit from Uses of Fossil Fuel Products They Knew Were Hazardous.

135. In contrast to their public-facing efforts challenging the validity of the scientific consensus about anthropogenic climate change, Fossil Fuel Defendants’ acts and omissions evidence their internal acknowledgement of the reality of climate change and its likely consequences. Those actions include, but are not limited to, making multi-billion-dollar infrastructure investments to protect their own operations against anthropogenic climate change-related hazards such as: raising offshore oil platforms to protect against sea level rise; reinforcing offshore oil platforms to withstand increased wave strength and storm severity; developing technology and infrastructure to extract, store, and transport fossil fuels in a warming arctic

environment; and developing and patenting designs for equipment intended to extract crude oil and/or natural gas in areas previously unreachable because of the presence of polar ice sheets.²²⁹

136. For example, oil and gas reserves in the Arctic that were not previously reachable due to sea ice are becoming increasingly reachable as sea ice thins and melts due to climate change.²³⁰ In 1973, Exxon obtained a patent for a cargo ship capable of breaking through sea ice²³¹ and for an oil tanker²³² designed specifically for use in previously unreachable areas of the Arctic.

137. In 1974, Chevron obtained a patent for a mobile arctic drilling platform designed to withstand significant interference from lateral ice masses,²³³ allowing for drilling in areas with increased ice floe movement due to elevated temperature.

138. That same year, Texaco (Chevron) worked toward obtaining a patent for a method and apparatus for reducing ice forces on a marine structure prone to being frozen in ice through natural weather conditions,²³⁴ allowing for drilling in previously unreachable Arctic areas that would become seasonally accessible.

139. In 1984, Shell obtained a patent for an Arctic offshore platform adapted for conducting operations in the Beaufort Sea, an area that previously was largely unreachable because of ice but has become increasingly accessible as polar ice has melted.²³⁵

140. As described below, in 1989, Norske Shell, Royal Dutch Shell's Norwegian subsidiary, altered designs for a natural gas platform planned for construction in the North Sea to

²²⁹ Amy Lieberman & Susanne Rust, *Big Oil Braced for Global Warming While It Fought Regulations*, L.A. Times (Dec. 31, 2015), <https://perma.cc/PWZ4-L9LC>.

²³⁰ James Henderson & Julia Loe, *The Prospects and Challenges for Arctic Oil Development*, Oxford Inst. for Energy Stud. 1 (Nov. 2014), <https://perma.cc/VDJ3-U5FZ>

²³¹ Icebreaking Cargo Vessel, ExxonMobil Techn. & Rsch. Eng'g Co., U.S. Patent No. 3727571A (filed July 7, 1971) (issued Apr. 17, 1973), <https://perma.cc/YF73-R6AG>.

²³² Tanker Vessel, ExxonMobil Rsch. Eng'g Co., U.S. Patent No. 3745960A (filed May 6, 1971) (issued July 17, 1973), <https://perma.cc/WL9C-DQ99>.

²³³ Arctic Offshore Platform, Chevron Rsch. & Techn. Co., U.S. Patent No. 3831385A (filed June 26, 1972) (issued Aug. 27, 1974), <https://perma.cc/MF5D-DSM9>.

²³⁴ Mobile, Arctic Drilling and Production Platform, Texaco Inc., U.S. Patent No. 3793840A (filed Oct. 18, 1971) (issued Feb. 26, 1974), <https://perma.cc/R9Y3-YXHR>.

²³⁵ Arctic Offshore Platform, Shell Oil Co., U.S. Patent No. 4427320A (filed Feb. 19, 1982) (issued Jan. 24, 1984), <https://perma.cc/YXH9-CS2B>.

account for anticipated sea level rise. Those design changes were ultimately carried out by Shell's contractors, adding substantial costs to the project.²³⁶

a. The Troll natural gas and oil field, off the Norwegian coast in the North Sea, was proven to contain large natural oil and gas deposits in 1979, shortly after Norske Shell was approved by Norwegian oil and gas regulators to operate a portion of the field.

b. In 1986, the Norwegian parliament granted Norske Shell authority to complete the first development phase of the Troll field gas deposits, and Norske Shell began designing the "Troll A" gas platform, with the intent to begin operation of the platform in approximately 1995. Based on the very large size of the gas deposits in the Troll field, the Troll A platform was projected to operate for approximately 70 years.

c. The platform was originally designed to stand approximately 100 feet above sea level—the amount necessary to stay above waves in a once-in-a-century strength storm.

d. In 1989, Shell engineers revised their plans to increase the above-water height of the platform by 3 to 6 feet, specifically to account for higher anticipated average sea levels and increased storm intensity due to global warming over the platform's 70-year operational life.²³⁷

e. Shell projected that the additional 3 to 6 feet of above-water construction would increase the cost of the Troll A platform by as much as \$40 million.

141. In 1989, Esso Resources Canada (Exxon) commissioned a report on the impacts of climate change on existing and proposed natural gas facilities in the Mackenzie River Valley and Delta, including extraction facilities on the Beaufort Sea and a pipeline crossing Canada's Northwest Territory.²³⁸ It reported that "large zones of the Mackenzie Valley could be affected dramatically by climatic change" and that "the greatest concern in Norman Wells [oil town in

²³⁶ *Greenhouse Effect: Shell Anticipates a Sea Change*, N.Y. Times (Dec. 20, 1989), <https://perma.cc/PJV7-6H25>.

²³⁷ *Id.*; Lieberman & Rust, *supra* note 229.

²³⁸ See Stephen Lonergan & Kathy Young, *An Assessment of the Effects of Climate Warming on Energy Developments in the Mackenzie River Valley and Delta, Canadian Arctic*, 7 *Energy Exploration & Exploitation* 359–81 (1989).

North West Territories, Canada] should be the changes in permafrost that are likely to occur under conditions of climate warming.”²³⁹ The report concluded that, in light of climate models showing a “general tendency towards warmer and wetter climate,” operation of those facilities would be compromised by increased precipitation, increase in air temperature, changes in permafrost conditions, and, significantly, sea level rise and erosion damage.²⁴⁰ The authors recommended factoring those eventualities into future development planning and also warned that “a rise in sea level could cause increased flooding and erosion damage on Richards Island.”

142. In the mid-1990s, Exxon, Shell, and Imperial Oil (Exxon) jointly undertook the Sable Offshore Energy Project in Nova Scotia. The project’s Environmental Impact Statement declared, “The impact of a global warming sea level rise may be particularly significant in Nova Scotia. The long-term tide gauge records at a number of locations along the N.S. coast have shown sea level has been rising over the past century. . . . For the design of coastal and offshore structures, an estimated rise in water level, due to global warming, of 0.5 m [1.64 feet] may be assumed for the proposed project life (25 years).”²⁴¹

E. Defendants Slowed the Development of Alternative Energy Sources and Knowingly Exacerbated the Costs of Adapting to and Mitigating the Adverse Impacts of the Climate Crisis.

143. As GHG pollution accumulates in the atmosphere, some of which does not dissipate for potentially thousands of years (namely CO₂), climate changes and consequent adverse environmental changes compound, and their frequencies and magnitudes increase—a phenomenon about which Defendants were keenly aware for decades. As those adverse environmental changes compound and their frequencies and magnitudes increase, so too do the physical, environmental, economic, and social injuries that result from them.

²³⁹ *Id.* at 369, 376.

²⁴⁰ *Id.* at 360, 377–78.

²⁴¹ ExxonMobil, Sable Project Development Plan, vol. 3, Environmental Impact Statement (Feb. 1996), at 4–77, <https://web.archive.org/web/20151106083051/http://soep.com/about-the-project/development-plan-application>.

144. By sowing doubt about the future consequences of unrestricted fossil fuel consumption, Defendants’ deception campaign successfully delayed the transition to alternative energy sources, which Defendants forecasted could penetrate half of a competitive energy market in 50 years if allowed to develop unimpeded. This delay caused the emission of huge amounts of avoidable GHGs and has increased the magnitude of and cost to address environmental harms, including in Maine, that have already occurred or are unavoidable due to previous emissions.

145. Knowledge of the full extent of the risks associated with the routine use of fossil fuel products is material to consumers’ decisions to purchase and use those products. Had consumer demand to transition away from fossil fuels—and the market for affordable, reliable sources of clean energy—been allowed to develop earlier absent Defendants’ deception, the subsequent impacts of climate change could have been avoided or reduced.

146. As with cigarettes, history demonstrates that when consumers are made aware of the extent of the harmful effects or qualities of the products they purchase, they often choose to stop purchasing them, to reduce their purchases, or to make different purchasing decisions. This phenomenon holds especially true when products have been shown to harm public health or the environment. For example, increased consumer awareness of the role of pesticides in harming human health, worker health, and the environment has spurred a growing market for food grown organically and without the use of harmful pesticides. With access to information about how their food is grown, consumers have demanded healthier choices, and the market has responded.

147. A consumer who received accurate information about how fossil fuel use was a primary driver of climate change, and about the true extent of the resultant dangers and impacts to the environment and to public health, likely would have decreased their use of fossil fuel products and/or demanded lower-carbon transportation options. Indeed, recent studies and surveys have found that consumers with substantial awareness of climate change are largely willing “to change their consumption habits . . . to help reduce the impacts of climate change.”²⁴² In addition, informed

²⁴² *Changes in Consumers’ Habits Related to Climate Change May Require New Marketing and Business Models*, The Conf. Bd. (Oct. 26, 2022), <https://perma.cc/2FFC-WYAY>.

consumers often attempt to contribute toward solving environmental problems by supporting companies that they perceive to be developing “green” or more environmentally friendly products.²⁴³ If consumers had been aware of what Defendants knew about climate change when Defendants knew it, many consumers likely would have opted to avoid or minimize airplane travel; avoid or combine car travel trips; carpool; switch to more fuel-efficient vehicles, hybrid vehicles, or electric vehicles; demand more charging infrastructure for electric vehicles; use a car-sharing service; seek transportation alternatives all or some of the time, if and when available (e.g., public transportation, biking, or walking); electrify houses and office buildings; or adopt any combination of these choices. Consumers, including in Maine, were deprived of this choice.

148. Defendants have been aware for decades that clean energy presents a feasible alternative to fossil fuels. In 1980, Exxon forecasted that non-fossil fuel energy sources, if pursued, could penetrate half of a competitive energy market in approximately 50 years.²⁴⁴ This internal estimate was based on extensive modeling within the academic community, including research conducted by the Massachusetts Institute of Technology’s David Rose, which concluded that a transition to non-fossil energy could be achieved in around 50 years. Exxon circulated an internal memo approving of Rose’s conclusions, stating they were “based on reasonable assumptions.”²⁴⁵ But instead of warning consumers about the dangers of burning fossil fuels, Defendants chose to deceive consumers and restrict the availability of truthful information in the market to preserve Fossil Fuel Defendants’ profits and assets. As a result, much time has been lost during which consumers and market forces would have spurred a societal transition away from fossil fuels, which would have reduced or eliminated entirely the harmful effects of climate change in Maine.

149. The costs of inaction on anthropogenic climate change and its adverse environmental effects were understood by Defendants. In a 1997 speech by John Browne, Group

²⁴³ See, e.g., Anthony Leiserwitz et al., *Consumer Activism on Global Warming*, Yale Program on Climate Change Commc’n & George Mason Univ. Ctr. for Climate Change Commc’n, George Mason University, eds (Sept. 2021), <https://perma.cc/5VXC-BN2H>.

²⁴⁴ Shaw, *supra* note 122, at 5.

²⁴⁵ Exxon Research and Engineering Company, Coordination and Planning Division, *CO₂ Greenhouse Effect: A Technical Review*, at 17–18 (Apr. 1, 1982), <https://perma.cc/83JJ-27CW>.

Executive for BP America, at Stanford University, Browne described Defendants' knowledge of foreseeable climate change and the entire fossil fuel industry's responsibility and opportunities to reduce use of fossil fuel products, reduce global CO₂ emissions, and mitigate the harms associated with the use and consumption of such products, but misleadingly described BP's own actions:

A new age demands a fresh perspective of the nature of society and responsibility. We need to go beyond analysis and to take action. It is a moment for change and for a rethinking of corporate responsibility. . . .

[T]here is now an effective consensus among the world's leading scientists and serious and well informed people outside the scientific community that there is a discernible human influence on the climate, and a link between the concentration of carbon dioxide and the increase in temperature.

The prediction of the IPCC is that over the next century temperatures might rise by a further 1 to 3.5 degrees centigrade [1.8°–6.3° F], and that sea levels might rise by between 15 and 95 centimetres [5.9 and 37.4 inches]. Some of that impact is probably unavoidable, because it results from current emissions. . . .

[I]t would be unwise and potentially dangerous to ignore the mounting concern.
. . .

We [the fossil fuel industry] have a responsibility to act, and I hope that through our actions we can contribute to the much wider process which is desirable and necessary.

BP accepts that responsibility and we're therefore taking some specific steps.

To control our own emissions.
To fund continuing scientific research.
To take initiatives for joint implementation.
To develop alternative fuels for the long term.²⁴⁶

150. Defendants' own knowledge of foreseeable climate change harms and their acknowledged responsibility to act to abate climate change make it all the more egregious that Defendants chose to cast doubt upon the scientific consensus on climate change, and deceived consumers about the relationship between consumption of fossil fuels and climate change and the magnitude of the threat posed by fossil fuel use. Consumers equipped with complete and accurate

²⁴⁶ Browne, *supra* note 159.

knowledge about the climate and the public health effects of continued consumption of fossil fuels likely would have reduced fossil fuel consumption and formed a receptive customer base for clean energy alternatives decades before such demand in fact developed. Instead, Defendants' campaign of deception allowed them to exploit public uncertainty to reap substantial profits.

151. The delayed emergence of a scalable market for non-fossil fuel energy is attributable to Defendants' deception and their obfuscation of the reality and severity of the climatic consequences associated with normal use of fossil fuels. The societal transition to a low-carbon economy would have been far cheaper had Defendants issued reasonable warnings about the dangers of runaway consumption of fossil fuels of which they were aware.

152. Despite Defendants' knowledge of the foreseeable, measurable, and significant harms associated with the unrestrained consumption and use of fossil fuel products, and despite Defendants' knowledge of technologies and practices that could have helped to reduce the foreseeable dangers associated with fossil fuel products, Defendants continued to misleadingly and wrongfully market and promote heavy fossil fuel use and mounted a campaign to obscure the connection between fossil fuel products and the climate crisis, dramatically increasing the costs of abatement. This campaign was intended to and did reach and influence consumers and the public, including in Maine.

153. For example, in 2006, Exxon wrote a letter to the Royal Society recognizing that "the accumulation of greenhouse gases in the Earth's atmosphere poses risks that may prove significant for society and ecosystems." "Yet behind closed doors, Exxon took a very different tack: Its executives strategized over how to diminish concerns about warming temperatures, and they sought to muddle scientific findings that might hurt its oil-and-gas business."²⁴⁷

154. At all relevant times, Fossil Fuel Defendants were deeply familiar with opportunities to reduce the use of their fossil fuel products and associated global greenhouse emissions, mitigate the harms associated with the use and consumption of their products, and

²⁴⁷ Christopher M. Matthews & Collin Eaton, *Inside Exxon's Strategy to Downplay Climate Change*, The Wall Street J. (Sept. 14, 2023, 5:30 am ET), <https://perma.cc/9BQ4-UN3C>.

promote the development of alternative, clean energy sources. Examples of that recognition include, but are not limited to, the following:

a. In 1963, Esso (Exxon) obtained multiple patents on technologies for fuel cells,²⁴⁸ including on the design of a fuel cell and necessary electrodes,²⁴⁹ and on a process for increasing the oxidation of a fuel, specifically methanol, to produce electricity in a fuel cell.²⁵⁰

b. In 1970, Esso (Exxon) obtained a patent for a “low-polluting engine and drive system” that used an interburner and air compressor to reduce pollutant emissions, including CO₂ emissions, from gasoline combustion engines (the system also increased the efficiency of the fossil fuel products used in such engines, thereby lowering the amount of fossil fuel product necessary to operate engines equipped with this technology).²⁵¹

c. In 1980, Imperial Oil wrote in its “Review of Environmental Protection Activities for 1978–79”: “There is no doubt that increases in fossil fuel usage and decreases in forest cover are aggravating the potential problem of increased CO₂ in the atmosphere. Technology exists to remove CO₂ from stack gases but removal of only 50% of the CO₂ would double the cost of power generation.”²⁵²

d. A 1987 company briefing Shell produced on “Synthetic Fuels and Renewable Energy” noted that while “immediate prospects” were “limited,” “nevertheless it is by pursuing commercial opportunities now and in the near future that the valuable experience needed for further development will be gained.” The brief also noted that “the task of replacing oil resources is likely to become increasingly difficult and expensive and there will be a growing need to develop lean, convenient alternatives. Initially these will supplement and eventually replace

²⁴⁸ Fuel cells use the chemical energy of hydrogen or other fuels to produce electricity. See U.S. Dep’t of Energy, *Fuel Cells*, <https://perma.cc/6W5L-EZGV> (last visited Nov. 14, 2024).

²⁴⁹ Fuel Cell and Fuel Cell Electrodes, ExxonMobil Rsch. Eng’g Co., U.S. Patent No. 3116169A (filed Mar. 14, 1960) (issued Dec. 31, 1963), <https://perma.cc/8NKJ-DEUL>.

²⁵⁰ Direct Production of Electrical Energy from Liquid Fuels, ExxonMobil Rsch. Eng’g Co., U.S. Patent No. 3113049A (filed Jan. 3, 1961) (issued Dec. 3, 1963), <https://perma.cc/CWW4-W4MF>.

²⁵¹ Low-polluting Engine and Drive System, ExxonMobil Rsch. Eng’g Co., U.S. Patent No. 3513929A (filed Aug. 25, 1967) (issued May 26, 1970), <https://perma.cc/N4AF-2M67>.

²⁵² Imperial Oil Ltd., *Review of Environmental Protection Activities for 1978–1979* 2 (Aug. 6, 1980), <https://perma.cc/T68E-Q3JB>.

valuable oil products. Many potential energy options are as yet unknown or at very early stages of research and development. New energy sources take decades to make a major global contribution. Sustained commitment is therefore needed during the remainder of this century to ensure that new technologies and those currently at a relatively early stage of development are available to meet energy needs in the next century.”²⁵³

e. A 1989 article in a publication from Exxon Corporate Research for company use only stated: “CO₂ emissions contribute about half the forcing leading to a potential enhancement of the Greenhouse Effect. Since energy generation from fossil fuels dominates modern CO₂ emissions, strategies to limit CO₂ growth focus near term on energy efficiency and long term on developing alternative energy sources. Practiced at a level to significantly reduce the growth of greenhouse gases, these actions would have substantial impact on society and our industry—near-term from reduced demand for current products, long term from transition to entirely new energy systems.”²⁵⁴

155. Defendants could have taken practical, cost-effective steps to mitigate the risks posed by fossil fuel products. Those alternatives could have included, among other measures:

a. Acknowledging scientific evidence of anthropogenic climate change and the damages it is causing and will cause people, communities, and the environment. Acceptance of that evidence, along with associated warnings and actions, would have allowed the public and the State to move beyond debating *whether* climate change was occurring to deciding *how* to combat it; avoided much of the public confusion that has ensued over more than 30 years, since no later than 1988; and contributed to an earlier and quicker transition to energy sources compatible with minimizing catastrophic climatic consequences.

b. Forthrightly communicating with Fossil Fuel Defendants’ shareholders, consumers, banks, insurers, the public, and the State and warning them about the climate hazards

²⁵³ Shell Briefing Serv., *Synthetic Fuels and Renewable Energy*, 2 SBS (1987), <https://perma.cc/CK92-YZC4>.

²⁵⁴ Brian Flannery, *Greenhouse Science*, Connections, Exxon Rsch. & Eng’g Co. (Fall 1989), <https://perma.cc/A4MC-67LC>.

of Fossil Fuel Defendants' fossil fuel products that were known to Defendants, which would have enabled those groups to make material, informed decisions about whether and how to address climate change and sea level rise vis-à-vis Fossil Fuel Defendants' products—including whether and how much to invest in alternative clean energy sources compared to fossil fuels;

c. Refraining from affirmative efforts, whether directly, through coalitions, or through front groups, to distort consumer awareness of the climatic dangers of fossil fuels, and to cause many consumers and business leaders to think the relevant science was far less certain than it actually was; and

d. Sharing their internal scientific research with consumers and the public, and with other scientists and business leaders, to increase public understanding of the scientific underpinnings of climate change and its relation to Fossil Fuel Defendants' fossil fuel products.

F. Defendants Continue to Deceive Maine Consumers Through Misleading Advertisements That Portray the Fossil Fuel Defendants as Climate-Friendly Energy Companies and Obscure Their Role in Causing Climate Change.

156. Defendants' coordinated campaign of disinformation and deception continues today, even as the scientific consensus about the causes and consequences of climate change has strengthened. Fossil Fuel Defendants have falsely claimed through advertising campaigns in Maine and/or campaigns intended to reach Maine that their businesses are substantially invested in lower-carbon technologies and renewable energy sources. In truth, however, each Fossil Fuel Defendant has invested minimally in renewable energy while continuing to expand its fossil fuel production. Reasonable consumers exposed to Fossil Fuel Defendants' advertisements would understand Fossil Fuel Defendants to be far more substantially invested in alternative energy sources than in fact is the case—this is deception. Each Fossil Fuel Defendant has also claimed that certain of its fossil fuel products are “green” or “clean,” and that using these products will sufficiently reduce or mitigate the dangers of climate change. None of Fossil Fuel Defendants' fossil fuel products are “green” or “clean” because they all continue to cause climate change and related impacts, and this marketing misleadingly minimizes these products' adverse environmental impacts and induces consumers to purchase these products under false impressions. Collectively,

these more recent deceptive promotional statements and practices are referred to as “greenwashing.”

157. Fossil Fuel Defendants intentionally greenwash their own brands and their fossil fuel products to maximize profit from fossil fuel consumption. Greenwashing is designed to increase consumption by portraying positive but false representations of Fossil Fuel Defendants and their products. While greenwashing occurs in many different forms—e.g., false advertising about “green” or “clean” fossil fuel products, or social media campaigns about Fossil Fuel Defendants’ commitments to the environment or to renewable energy—the common purpose of all greenwashing is to create a positive, but false, narrative about Fossil Fuel Defendants and their products. That false narrative drives brand loyalty and trust among consumers, alters consumer behavior, and thus increases consumption of fossil fuel products. Greenwashing is especially misleading today because consumers increasingly prioritize environmental sustainability, even when that means paying more, and because consumers report positive associations with brands that portray themselves as “green” or as committed to renewable energy.²⁵⁵

158. Fossil Fuel Defendants’ misleading greenwashing campaigns are intended to and do reach and influence the public and consumers, including in Maine. These campaigns are intended to capitalize on consumers’ concerns about climate change and lead consumers to believe that Fossil Fuel Defendants are substantially diversified energy companies making meaningful investments in low-carbon energy compatible with minimizing catastrophic climate change. At bottom, these deceptive campaigns are intended “to induce false positive perceptions”²⁵⁶ of the Fossil Fuel Defendants’ commitment to the environment while downplaying or otherwise concealing the role their fossil fuel products play in bringing about catastrophic climate harms.

²⁵⁵ Ronald S. Friedman & Dylan S. Campbell, *An Experimental Study of the Impact of Greenwashing on Attitudes toward Fossil Fuel Corporations’ Sustainability Initiatives*, 17 *Env’t Comm’n* 486 (2023), <https://perma.cc/4JNF-UTKZ>; see also Ravi Dutta-Powell et al., *Two Interventions for Mitigating the Harms of Greenwashing on Consumer Perceptions*, BIT Working Paper No. 001 (2023), <https://perma.cc/S59N-ECV2>.

²⁵⁶ Noémi Nemes et al., *An Integrated Framework to Assess Greenwashing*, 14 *Sustainability* 4431 (2022), <https://doi.org/10.3390/su14084431>.

159. Contrary to their messaging about commitments to low-carbon energy and energy diversification, however, Fossil Fuel Defendants’ spending on low-carbon energy is substantially and materially less than Fossil Fuel Defendants indicate to consumers. For example, according to a recent analysis, between 2010 and 2018, BP spent 2.3% of total capital spending on low-carbon energy sources, Shell spent 1.33%, Chevron spent 0.23%, and Exxon spent 0.22% despite an array of greenwashing advertisements and promotion conveying these companies as committed to green, clean, or sustainable energy.²⁵⁷

160. Ultimately, although Fossil Fuel Defendants currently claim to support reducing GHG emissions, their conduct belies these statements. Fossil Fuel Defendants have continued to ramp up fossil fuel production globally; to invest in new fossil fuel development, including in shale oil production and shale gas fracking—some of the most carbon-intensive extraction projects; and to plan for unabated oil and gas exploitation indefinitely into the future.

161. For example, Exxon’s 2023 Corporate Plan update states that the company expects its oil and gas production to rise from 3.8 million oil-equivalent barrels per day in 2024 to about 4.2 million oil-equivalent barrels per day in 2027.²⁵⁸ Exxon anticipates capital expenditures of between \$23 billion and \$27 billion annually through 2027, and says that it will “pursu[e]” \$20 billion of vaguely-defined “lower-emissions opportunities” through 2027.²⁵⁹ In 2023 alone, Exxon spent almost three times as much money acquiring fossil fuel producer Pioneer Natural Resources (\$59.5 billion) than it has stated that it will invest in “low carbon solutions” (largely carbon capture technology) through 2027.²⁶⁰

162. Similarly, Chevron announced in late 2023 that it would spend between \$18.5 billion and \$19.5 billion on new oil and gas projects in 2024, representing an 11% increase from

²⁵⁷ Fletcher et al., *Beyond the Cycle*, at 38, Figure 69 (“Disclosed low-carbon investment as a proportion of total CAPEX (2010-Q3 2018)”) (Nov. 2018), <https://perma.cc/3SY2-PNSX>.

²⁵⁸ Press Release, ExxonMobil, *Corporate Plan Update* (Dec. 6, 2023), <https://perma.cc/XAM4-F3WR>.

²⁵⁹ *Id.*

²⁶⁰ Aryn Baker, *How Chevron and Exxon’s Latest Fossil Fuel Deals Compare to Their Green Spending*, Time Magazine (Oct. 25, 2023, 2:31 PM EDT), <https://perma.cc/8ZF6-JL5D>.

the year before.²⁶¹ By contrast, Chevron expects to spend only \$2 billion in 2024 to “lower the carbon intensity of traditional operations and grow new energy business lines.”²⁶² In 2023 alone, Chevron spent more than five times as much money acquiring fossil fuel producer Hess as it has stated it will spend on lower-carbon energy projects through 2028.²⁶³

163. Likewise, Shell spent almost six times more money on oil and gas development than on renewable technology in 2022.²⁶⁴ In June 2023, Shell withdrew its 2021 pledge to cut oil production each year for the rest of the decade, announcing instead that it would maintain its current level of oil production until 2030 and would invest \$40 billion in oil and gas production between 2023 and 2035.²⁶⁵ And while Shell states that approximately 12% of its 2021 capital spending went to its “Renewables and Energy Solutions” division, its own financial reporting indicates it dedicated only approximately 1.5% of its capital expenditures to developing renewable energy sources such as wind and solar power production, with the large majority of other spending directed to projects related to natural gas.²⁶⁶ Shell also announced that notwithstanding its record profits in 2022, it would not increase spending on Renewables and Energy Solutions and would instead focus new spending on fossil fuel production.²⁶⁷

164. BP has also scaled back its recently stated decarbonization goals. In 2020, BP stated its intention to reduce the company’s total upstream emissions 20% by the year 2025, and 35–40% by the year 2030. In February 2023, however, BP reduced those projections to a 10–15% reduction

²⁶¹ Sabrina Valle, *Chevron Increases Project Spending Budget by 11% for 2024*, Reuters (Dec. 6, 2023, 8:56 PM EST), <https://perma.cc/JB7J-6UXN>

²⁶² Sam Ramon, *Chevron Announces \$16 Billion 2024 Capex Budget*, Chevron (Dec. 6, 2023), <https://perma.cc/H4X5-FH2M>.

²⁶³ *Id.*

²⁶⁴ Ron Bousso, *Exclusive: Shell Pivots Back to Oil to Win Over Investors*, Reuters (June 9, 2023, 1:06 PM EDT), <https://perma.cc/3MYK-T6TV>.

²⁶⁵ Lottie Limb, *Shell Joins BP and Total In U-Turning on Climate Pledges ‘to Reward Shareholders’*, euronews (June 15, 2023, 16:10 GMT), <https://perma.cc/9QR8-JQLB>.

²⁶⁶ Oliver Milman, *Shell’s Actual Spending on Renewables is Fraction of What It Claims, Group Alleges*, The Guardian (Feb. 1, 2023, 8:00 EST), <https://perma.cc/3QRS-FZYL>.

²⁶⁷ Will Mathis, *Shell Hits the Brakes on Growing Renewables Unit After Record 2022 Profit*, Bloomberg (Feb. 2, 2023, 7:49 AM EST), <https://perma.cc/VEX5-KCJD>.

by 2025, and a 20–30% reduction by 2030.^{268, 269} BP had also pledged in 2020 to reduce its total oil and gas production 40% from 2019 levels by 2030²⁷⁰—again in 2023, however, BP lowered its goal to a 25% reduction.²⁷¹

165. Fossil Fuel Defendants’ greenwashing campaigns deceptively minimize their own role in causing climate change, including by suggesting that small changes in consumer choice and behavior can adequately address climate change. These campaigns misleadingly portray Fossil Fuel Defendants as part of the solution to climate change and deceptively distract from the fact that their fossil fuel products are the primary driver of global warming and climate change.

166. Below are representative excerpts from Fossil Fuel Defendants’ greenwashing campaigns, which present a false image of Fossil Fuel Defendants as clean energy innovators taking meaningful action to address climate change. Fossil Fuel Defendants’ actions to further entrench fossil fuel production and consumption squarely contradict their public affirmations of corporate responsibility and support for reducing global GHG emissions. Functionally, Fossil Fuel Defendants have cut fossil fuels from their brand but not their business operations. Their greenwashing advertisements are deceptive to Maine consumers.

i. Exxon’s Misleading and Deceptive Greenwashing Campaigns

167. Beginning in 2009, Exxon ran a series of advertisements in print editions and posts in the electronic edition of *The New York Times*, as well as on Exxon’s YouTube channel, in which Exxon misleadingly promotes its efforts to develop energy from alternative sources such as algae and plant waste—efforts that are vanishingly small in relation to the investments Exxon continues to make in fossil fuel production.

²⁶⁸ Evan Halper and Aaron Gregg, *BP Dials Back Climate Pledge Amid Soaring Oil Profits*, *The Wash. Post* (Feb. 7, 2023, 11:41 AM EST), <https://perma.cc/HL7J-YZCV>.

²⁶⁹ BP, *Getting to Net Zero*, <https://perma.cc/3SGK-8JGU> (last visited Nov. 15, 2024); BP, *BP Integrated Energy Company Strategy Update* (Feb. 7, 2023), <https://perma.cc/PA3U-2EZ4>.

²⁷⁰ Shadia Nasralla and Ron Bousso, *BP to Cut Fossil Fuels Output By 40% By 2030*, *Reuters*, (Aug. 4, 2020, 3:34 AM EDT), <https://perma.cc/5PNG-ENJT>.

²⁷¹ Stanley Reed, *BP, in a Reversal, Says It Will Produce More Oil and Gas*, *N.Y. Times* (Feb. 7, 2023), <https://perma.cc/TV4V-QK2X>.

168. For example, an online advertisement in *The New York Times*, accessible to and marketed toward Maine consumers, promotes the company’s development of algae biofuels. The advertisement misleadingly tells consumers that Exxon is “working to decrease [its] overall carbon footprint,” and that the company’s “sustainable and environmentally friendly” biodiesel fuel could reduce “carbon emissions from transportation” by greater than 50%.²⁷²

169. As recently as 2018, Exxon claimed it would be producing 10,000 barrels of algae biofuel by 2025 and that this fuel could reduce “carbon emissions from transportation” by more than fifty percent.²⁷³ In 2019, Exxon continued to advertise that “[it] is growing algae for biofuels that could one day power planes, propel ships, and fuel trucks, and cut their emissions in half.”²⁷⁴

170. Exxon ultimately invested just \$350 million of the \$600 million it had promised to develop the technology before quietly pulling the plug on the project in December 2022.²⁷⁵ But even \$600 million likely would have fallen short; algae researchers believe several *billion* dollars would be necessary to truly commercialize biofuels, and that does not even account for the “fundamental biological limitations” associated with this technology.²⁷⁶ In fact, Exxon spent nearly twice as much on advertising algae biofuel than it spent on actual development of algae biofuel.²⁷⁷

171. Exxon’s advertisements promoting its investments in “sustainable and environmentally friendly” energy sources also fail to mention that the company’s investment in alternative energy is miniscule compared to its ongoing “business as usual” escalation of global fossil fuel exploration, development, and production activities. As explained above, Exxon has

²⁷² ExxonMobil Paid Post, *The Future of Energy? It May Come From Where You Least Expect*, N.Y. Times, <https://perma.cc/VBU3-8KH4> (last visited Nov. 14, 2024).

²⁷³ *Id.*

²⁷⁴ Exxon Mobil, *Algae Potential*, iSpot TV (Oct. 19, 2019), <https://perma.cc/N7KG-ELR4>.

²⁷⁵ Amy Westervelt, *Big Oil Firms Touted Algae as Climate Solution. Now All Have Pulled Funding*, The Guardian (Mar. 17, 2023), <https://perma.cc/MF7Y-5AGS>.

²⁷⁶ *Id.*; see also Ben Elgin and Kevin Crowley, *Exxon Retreats From Major Climate Effort to Make Biofuels From Algae*, Bloomberg (Feb. 10, 2023), <https://perma.cc/7LTQ-644J>.

²⁷⁷ *Id.*

consistently spent—and will continue to spend—the overwhelming majority of its capital expenditures on maintaining and expanding fossil fuel production.

172. Supplementing this misleading campaign, Exxon has promoted dozens of multimedia advertisements on platforms such as Instagram, X (f/k/a Twitter), Facebook, and LinkedIn, where Exxon has millions of social media followers and its content has received hundreds of thousands of “likes” and “views.” These advertisements emphasize its claimed leadership in research on lowering emissions, algae biofuel, climate change solutions, and clean energy research. These advertisements were intended to and did reach the public and consumers in Maine. An ordinary consumer viewing these advertisements would come away believing that Exxon is meaningfully invested in developing and deploying alternative energy technologies, whereas in truth nearly all the company’s expenditures are directed toward present and future oil and gas development that hurtles Maine and the world toward climate catastrophe. Exxon’s failure to inform ordinary consumers that its touted clean energy investments comprise only a miniscule percentage of its expenditures—and that it intends to increase fossil fuel production and sales in the future—renders these advertisements materially misleading.

173. Exxon’s “Lights Across America” website advertisement stated that natural gas is “helping dramatically reduce America’s emissions.”²⁷⁸ Natural gas is a fossil fuel that causes planetary warming, which harms coastal states, including Maine. Natural gas production and use competes with and disincentivizes the use of wind and solar power, which emit no GHGs.

174. In 2017, the Dutch Advertising Code Authority censured Shell and Exxon for advertising natural gas as the “cleanest fossil fuel.” The Advertising Code Authority reasoned that the claim “suggested that fossil fuels can be clean in that they do not cause environmental damage. It is firm . . . that that suggestion is not correct.”²⁷⁹ Yet Shell, along with other Defendants, continues to make the same representations in the United States, including in Maine.

²⁷⁸ Exxon Mobil TV Spot, *Lights Across America*, iSpot TV (Nov. 26, 2015), <https://www.ispot.tv/ad/AIOJ/exxon-mobil-lights-across-america> (at 0:43).

²⁷⁹ Arthur Neslen, *Shell and Exxon Face Censure over Claim Gas was ‘Cleanest Fossil Fuel’*, The Guardian (Aug. 14, 2017, 12:14 PM EDT), <https://perma.cc/VR3R-TEPN>.

ii. Shell’s Misleading and Deceptive Greenwashing Campaigns

175. Like Exxon, Shell has misleadingly promoted, and continues to promote, itself to Maine consumers as environmentally conscientious through advertisements in publications such as *The New York Times*. The advertisements are targeted at and read by Maine consumers and intended to influence consumer demand for Shell’s products.

176. As part of Shell’s “Make the Future” campaign, the company has published numerous advertisements currently viewable on *The New York Times* website,²⁸⁰ in which the company touts its investment in new energy sources, including liquified natural gas (“LNG”) and biofuel, which Shell refers to as “cleaner sources.”

177. One Shell advertisement in *The Washington Post*, “The Making of Sustainable Mobility,” refers to LNG as “a critical component of a sustainable energy mix” and a “lower-carbon fuel” that could “help decrease” CO₂ emissions.²⁸¹ The advertisement emphasizes Shell’s leadership in “setting the course” for a “lower-carbon mobility future.” Similarly, another Shell advertisement in *The Washington Post*, “The Mobility Quandary,” emphasizes Shell’s role in working to counteract climate change through investments in alternative energy, stating: “Shell is a bigger player than you might expect in this budding movement to realize a cleaner and more efficient transportation future.”²⁸²

178. Shell’s statements emphasizing its involvement in these many areas of energy-related research, development, and deployment are misleading because the company’s investments and activities are substantially smaller than its advertisements lead consumers to believe. As explained above, only 1.33% of Shell’s capital spending from 2010 to 2018 was in low-carbon

²⁸⁰ See, e.g., Shell Paid Post, *Moving Forward: A Path To Net-Zero Emissions By 2070*, N.Y. Times, <https://perma.cc/5J84-2MDW>.

²⁸¹ See, e.g., Content from Shell, *The Making of Sustainable Mobility*, Wash. Post, <https://www.washingtonpost.com/brand-studio/shell/the-making-of-sustainable-mobility> (last visited Nov. 13, 2024).

²⁸² Content from Shell, *The Mobility Quandary*, Wash. Post., <https://www.washingtonpost.com/brand-studio/shell/the-mobility-quandary> (“Another critical component of a sustainable energy mix in transportation is further investment in natural gas, a cleaner-burning fossil fuel . . .”).

energy sources, and that number continues to be heavily outweighed by Shell’s continued expansion of its fossil fuel business.²⁸³

179. Shell’s “Make the Future” advertisements also misled consumers about the extent to which Shell has invested in clean energy technology. For example, “The Mobility Quandary” touts Shell’s investments in hydrogen fuel cell technology, promoting hydrogen as “sustainable in the long-term” and “[o]ne of the cleaner sources” that power electric vehicles, stating that “[h]ydrogen fuel cell vehicles . . . emit nothing from their tailpipes but water vapor.”²⁸⁴ Shell’s “In for the Long Haul” advertisement in *The New York Times* similarly promotes its investment in hydrogen fuel cells, as well as biofuels, as meaningful attempts to mitigate climate change.²⁸⁵

180. One of Shell’s public relations firms described the intent of Shell’s “Make The Future” campaign, stating: “As part of their efforts to make consumers, particularly millennials, aware of their commitment to cleaner energy, Shell launched the #makethefuture campaign. The company tasked Edelman with the job of giving millennials a reason to connect emotionally with Shell’s commitment to a sustainable future. We needed them to forget their prejudices about ‘big oil’ and think differently about Shell.”²⁸⁶

181. Shell’s 2016 #makethefuture advertising campaign targets young people and misleadingly portrays the company as heavily engaged in developing and selling clean energy sources.²⁸⁷

182. Shell’s failure to inform ordinary consumers that its touted clean energy investments comprise only a miniscule percentage of its expenditures—and that it intends to ramp up fossil fuel production and sales in the future—renders its advertisements materially misleading.

²⁸³ Fletcher et al., *supra* note 257.

²⁸⁴ Shell, *The Mobility Quandary*, *supra* note 282.

²⁸⁵ Shell, *Moving Forward*, *supra* note 280.

²⁸⁶ *Shell: South Pole Energy Challenge*, Edelman, <https://perma.cc/FUM8-PE7K> (last visited Mar. 15, 2024).

²⁸⁷ See Graham Readfearn, *Hey Millennials, Don’t Fall for Shell’s Pop Star PR*, *The Guardian* (April 25, 2018, 1:28 EDT), <https://perma.cc/T5YD-YWGJ>.

183. In 2017, Shell’s CEO promoted massive fossil fuel use by stating that the fossil fuel industry could play a “crucial role” in lifting people out of poverty.²⁸⁸ Similarly, a 2017 Shell website promotion stated: “We are helping to meet the world’s growing energy demand while limiting CO₂ emissions, by delivering more cleaner-burning natural gas.”²⁸⁹

184. In 2023, the United Kingdom’s Advertising Standards Authority banned Shell’s marketing campaign in which Shell advertised itself as providing renewable energy, installing electric vehicle chargers, and catalyzing the energy transition.²⁹⁰ The Authority found that the advertisements “gave the overall impression that a significant proportion of Shell’s business comprised lower-carbon energy products,” but that the campaign was misleading because the “vast majority” of Shell’s business was oil and gas investments and extraction.²⁹¹ Shell, along with other Defendants, continues to make similar representations in the United States, including in Maine.

iii. BP’s Misleading and Deceptive Greenwashing Campaigns

185. BP also has misleadingly portrayed itself as diversifying its energy portfolio and reducing its reliance on fossil fuel sales, whereas its alternative energy portfolio is negligible compared to the company’s ever-expanding fossil fuel portfolio. To this end, BP has employed a series of misleading greenwashing advertisements, which are intended to influence consumer demand for its products, including consumers in Maine.

186. BP ran its extensive “Beyond Petroleum” advertising and rebranding campaign from 2000 to 2008 and even changed its logo to a sunburst, evoking the renewable resource of the sun. The “Beyond Petroleum” advertising campaign falsely portrayed the company as heavily engaged in low-carbon energy sources and no longer investing in but rather moving “beyond”

²⁸⁸ Shell Speech by Ben van Beurden, CEO of Shell, *Deliver Today, Prepare for Tomorrow* (Mar. 9, 2017), <https://web.archive.org/web/20170609135519/http://www.shell.com/media/speeches-and-articles/2017/deliver-today-prepare-for-tomorrow.html>.

²⁸⁹ Shell United States, *Transforming Natural Gas*, <https://web.archive.org/web/20171124090704/http://www.shell.us/energy-and-innovation/transforming-natural-gas.html>.

²⁹⁰ Ed Davey, *Shell’s Clean Energy Advertising Campaign is Misleading, UK Watchdog Says*, Assoc. Press (June 7, 2023, 11:50 AM EST), <https://perma.cc/9G3D-9P8K>; *see also* Advert. Standards Authority, *ASA Ruling on Shell UK Ltd t/a Shell* (June 7, 2023), <https://perma.cc/7QVU-MGYD>.

²⁹¹ Advert. Standards Authority, *supra* note 290.

petroleum and other fossil fuels. In truth, BP invested a small percentage of its total capital expenditure during this period on alternative energy research. The vast majority of its capital expenditure was focused on fossil fuel exploration, production, refining, and marketing.²⁹² BP ultimately abandoned what had been, until then, its solar and wind assets in 2011 and 2013, respectively, and even the “Beyond Petroleum” moniker in 2013.²⁹³

187. In 2019, BP launched an advertising campaign called “Possibilities Everywhere.” These advertisements were misleading both in their portrayal of BP as heavily involved in non-fossil energy systems, including wind, solar, and electric vehicles, as well as in their portrayal of natural gas as environmentally friendly.

188. One “Possibilities Everywhere” advertisement, called “Better fuels to power your busy life,” stated:

We [] want—and need—[] energy to be kinder to the planet. At BP, we’re working to make our energy cleaner and better. . . . At BP, we’re leaving no stone unturned to provide [the] extra energy the world needs while finding new ways to produce and deliver it with fewer emissions. . . . We’re bringing solar and wind energy to homes from the US to India. We’re boosting supplies of cleaner burning natural gas. . . . More energy with fewer emissions? We see possibilities everywhere to help the world keep advancing.²⁹⁴

The accompanying video showed a busy household while a voiceover said, “We all want more energy, but with less carbon footprint. That’s why at BP we’re working to make energy that’s cleaner and better.”²⁹⁵

189. But BP’s claim that non-fossil energy systems constitute a substantial portion of BP’s business was materially false and misleading. At the time of the advertisement, BP owned only approximately 1.7 gigawatts (“GW”) of wind capacity, which was dwarfed by other companies including GE, Siemens, and Vestas (with about 39 GW, 26 GW, and 23 GW capacities,

²⁹² See BP, *Annual Reports and Accounts 2008*, <https://perma.cc/9CLF-JTS4>.

²⁹³ Javier E. David, ‘*Beyond Petroleum*’ No More? *BP Goes Back to Basics*, CNBC (Apr. 20, 2013 12:00AM EDT), <https://perma.cc/U5UW-MYNK>.

²⁹⁴ See BP, *Better Fuels to Power Your Busy Life*, <https://perma.cc/FM43-6M3Z> (last visited Nov. 13, 2024).

²⁹⁵ *Id.*

respectively).²⁹⁶ Overall, installed wind capacity in the United States was approximately 100 GW, meaning BP’s installed capacity comprised a mere 1% of the market.²⁹⁷ Yet, “Blade runners,” another advertisement in BP’s “Possibilities Everywhere” campaign, described the company as “one of the major wind energy businesses in the US.”²⁹⁸ In short, BP’s proportionately small wind power portfolio was materially smaller than that conveyed in the company’s advertisements.

190. The same is true for BP’s activities in solar energy, which consist predominantly of its purchase of the solar company Lightsource (rebranded Lightsource BP).²⁹⁹ The total purchase price (\$454 million) represents only a miniscule percentage of BP’s annual capital spending (\$16 billion in 2023), nearly all of which is spent on fossil fuel production.³⁰⁰ This is a far cry from BP’s claim that it was “leaving no stone unturned” to find “new” ways to produce lower-emissions energy and playing a “leading role” in “advancing a low carbon future.” These claims convey the misleading impression to ordinary consumers that BP is substantially invested in developing and deploying clean energy technology, whereas in truth nearly all the company’s present and future expenditures are directed toward oil and gas development that hurtles the world toward climate catastrophe. BP’s failure to inform ordinary consumers that its touted clean energy investments comprise only a miniscule percentage of its expenditures—and that it intends to ramp up fossil fuel production and sales in the future—renders these advertisements materially misleading.

191. In BP’s web advertisement “Rise and shine,” the company nevertheless specifically touted its Lightsource partnership. “Our economics gurus believe [solar power] could account for 10% of the world’s power by 2040,” the advertisement stated, and “to help make that a reality,

²⁹⁶ For BP’s wind capacity, see Press Release, *BP Advances Offshore Wind Growth Strategy* (Feb. 8, 2021), <https://perma.cc/V33G-U6LU>. For wind capacity of GE, Siemens, and Vestas, see Abby McClain, *The 10 Largest Wind Power Companies in the World* (Apr. 18, 2023), <https://perma.cc/UB4P-WMXW>.

²⁹⁷ See Elizabeth Ingram, *U.S. Wind Capacity Grew 8% in 2019, AWEA says*, *Renewable Energy World* (Apr. 10, 2019), <https://perma.cc/4U9D-7S33>.

²⁹⁸ See BP, *Blade Runners*, <https://perma.cc/V7ZW-F58W> (last visited Nov. 13, 2024).

²⁹⁹ BP, *Annual Report and Form 20-F 42* (2017), <https://perma.cc/PD35-ZML6>; see also Ron Bousso, *BP to Buy Remaining 50% In Solar JV Lightsource BP*, *Reuters* (Nov. 30, 2023), <https://perma.cc/4M4M-NT26>.

³⁰⁰ See BP, *4Q 2023 Quarterly Results*, <https://perma.cc/3FZA-Q3LP> (last visited Nov. 19, 2024).

we've teamed up with Europe's largest solar company, [Lightsource BP]."³⁰¹ The advertisement highlighted Lightsource BP's 6.3 MW floating solar power station near London and Lightsource BP's deal with Budweiser to supply renewable energy to its U.K. breweries. "Projects like these are advancing the possibilities of solar," BP claimed, "and even rainy days can't dampen the excitement for this fast-growing energy source. That's because, whatever the weather, our cleaner-burning natural gas can play a supporting role to still keep your kettle ready for action."³⁰²

192. This portrayal of solar power as BP's strong interest, with natural gas used only as a backup, is also false. BP's investments in natural gas outstrip its solar investments by a factor of approximately 100 or more, and only a small fraction of its natural gas products, an estimated 5% or less, are used to backup renewables. Thus, the overall impression given by the advertisements—that BP is substantially invested in solar energy, with its natural gas used only for backup—is materially misleading to consumers.

193. BP misleadingly touts natural gas on its website as "a vital lower carbon energy source" and as playing a "crucial role" in a transition to a lower carbon future.³⁰³ BP promotes continued massive fossil fuel use as enabling two billion people to be lifted out of poverty.³⁰⁴

iv. Chevron's Misleading and Deceptive Greenwashing Campaigns

194. Chevron also engaged in greenwashing campaigns designed to deceive consumers about Chevron's products and its commitment to addressing climate change, including consumers in Maine.

195. In 2001, Chevron developed and shared a sophisticated information management system to gather GHG emissions data from its explorations and production to help regulate and set

³⁰¹ BP, *Rise and Shine*, <https://perma.cc/MM6Q-M6D7> (last visited Nov. 13, 2024).

³⁰² *Id.*

³⁰³ BP, *Sustainability Report 2016*, <https://perma.cc/2A7F-4YVZ>; BP, *Shifting Towards Gas*, <https://web.archive.org/web/20180203012051/http://www.bp.com/energytransition/shifting-towards-gas.html>.

³⁰⁴ BP, *Energy Outlook 2024* (July 10, 2024), <https://perma.cc/YK6K-BTW3>.

reduction goals.³⁰⁵ Beyond this technological breakthrough, Chevron touted “profitable renewable energy” as part of its business plan for several years and launched a 2010 advertising campaign promoting the company’s move towards renewable energy. Despite this rhetoric—and Chevron renewable power group’s \$27 million profit in 2013—Chevron sold its renewable energy unit in 2014.³⁰⁶

196. Chevron’s 2007 “Will You Join Us?” campaign and its 2008 “I Will” campaign both misleadingly portrayed the company as a leader in renewable energy. The campaigns’ advertisements portrayed minor changes in consumer choices (e.g., changing light bulbs) as sufficient to address environmental problems such as climate change.³⁰⁷

197. The overall thrust of the campaigns was to shift the perception of fault and responsibility for climate change to consumers and make Chevron’s role, and that of the broader fossil fuel industry, appear small. The misleading solution promoted to consumers was not to transition away from fossil fuels, but instead to implement small changes in consumer behavior with continued reliance on fossil fuel products. By portraying GHG emissions as deriving from numerous sources in addition to fossil fuels, Chevron’s advertisements obfuscated the fact that fossil fuels are the primary cause of increased GHG emissions and the primary driver of climate change.

³⁰⁵ Press Release, *Chevron Introduces New System to Manage Energy Use*, Chevron (Sept. 25, 2001), <https://perma.cc/LY9M-XW4Y>.

³⁰⁶ Ben Elgin, *Chevron Dims the Lights on Green Power*, Bloomberg (May 29, 2014), <https://perma.cc/RZT7-WY9C>.

³⁰⁷ See Mark Robert Wills, *Chevron*, <https://perma.cc/TW6G-W4BV> (last visited Nov. 13, 2024). See also Jean Halliday, *Chevron: We’re Not Big Bad Oil*, AdAge (Sept. 28, 2007), <https://perma.cc/8T8Q-G9QY> (last visited Nov. 13, 2024).

198. Misleading messages were emblazoned over images of everyday Americans, as in the example highlighted below:

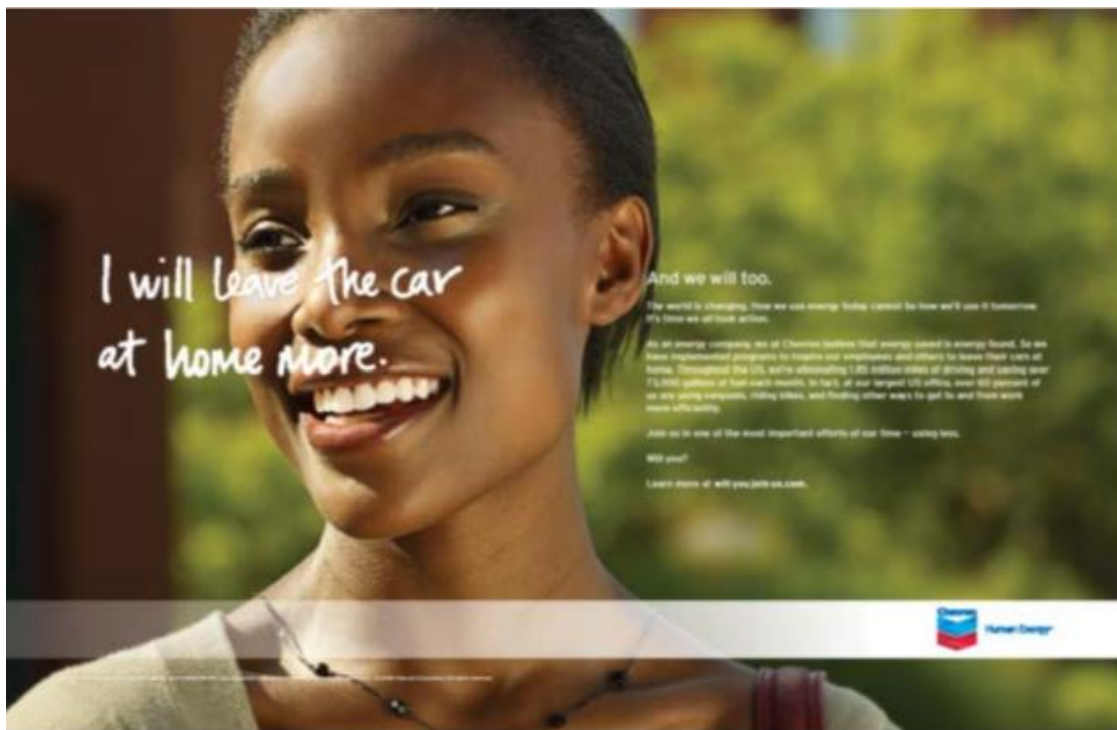


Figure 9: “Will You Join Us?” Chevron Advertisement³⁰⁸

199. In 2010, Chevron launched an advertising campaign titled “We Agree.” The print, internet, and television ad campaign expanded across the United States and internationally. For example, the advertisement below highlighted Chevron’s supposed commitment to the development of renewable energy, stating in large letters next to a photo of a young girl, “It’s time oil companies get behind the development of renewable energy. We agree.” The advertisement emphasized: “We’re not just behind renewables. We’re tackling the challenge of making them affordable and reliable on a large scale.”³⁰⁹

³⁰⁸ *Id.*

³⁰⁹ *Id.*



Figure 10: “We Agree” Chevron Advertisement

200. Chevron’s portrayal of itself as a renewable energy leader was false and misleading. In reality, only 0.23% of Chevron’s capital spending from 2010 to 2018 was in low-carbon energy sources, and 99.77% was in continued fossil fuel exploration and development—a stark contrast to the message communicated to consumers through the company’s advertisements.³¹⁰

³¹⁰ Fletcher et al., *supra* note 257; Anjali Raval & Leslie Hook, *Oil and Gas Advertising Spree Signals Industry’s Dilemma*, *Fin. Times* (Mar. 6, 2019).

201. By 2013, Chevron’s “We Agree” campaign featured 1,700 print advertisements, 141 online projects, 55 web pages, and a local community advertising kit of more than 100 advertisements.³¹¹ Chevron’s “We Agree” campaign also featured misleading television advertisements. In one focused on renewable energy, a teacher says, “Ok, listen. Somebody has got to get serious. We need renewable energy.” To which a Chevron environmental operations employee responds, “At Chevron we’re investing millions in solar and biofuel technologies to make it work.” In reality, Chevron has continued to overwhelmingly focus on fossil fuel extraction and development, and its investment of “millions” in renewables is miniscule in comparison to its investment of billions in fossil fuels. An ordinary consumer watching the “We Agree” advertisements would be misled into believing Chevron has meaningfully invested in developing and deploying clean technologies, whereas nearly all the company’s spending is directed toward oil and gas development. Chevron’s failure to inform ordinary consumers that its touted clean energy investments comprise only a miniscule percentage of its expenditures—and that it intends to ramp up fossil fuel production and sales in the future—renders these advertisements materially misleading.

202. Today, Chevron’s website implores that they “believe the future of energy is lower carbon” while continuing to promote widespread use of fossil fuels, touting that a mix of oil and gas will be required to meet future energy demands and that Chevron is investing in its oil and gas operations to meet those demands.³¹² A prior Chevron advertisement still available on the web promotes Chevron fossil fuels on a massive scale by stating that “our lives demand oil.”³¹³

³¹¹ See Wills, *supra* note 307, *Chevron “We Agree” Case Study* Vimeo at 03:28.

³¹² Chevron, *Explore a Lower Carbon Future For All*, <https://www.chevron.com/lower-carbon#manifesto-card> (last visited Nov. 19, 2024); Chevron, *Sustainability Climate*, <https://perma.cc/EA3T-MB2Z>.

³¹³ *Driving Sales Beyond*, *Chevron Human Energy*, YouTube, at 0:59 (Feb. 26, 2009), <https://perma.cc/WG28-WM7G>.

v. Sunoco’s Misleading and Deceptive Greenwashing Campaigns

203. Sunoco also engaged in greenwashing campaigns designed to deceive consumers about Sunoco’s products and its commitment to addressing climate change, including consumers in Maine.

204. In 2019, Sunoco launched a nationwide advertising campaign, “Fuel Your Best,” to promote its fuel. This campaign “drove two of Sunoco’s record-highest sales quarters, ever.”³¹⁴ Sunoco explains on its website that Sunoco Ultratech “help[s] your engine run cleaner” and that other fuels can have “[u]p to 200 percent more carbon monoxide and a 30 percent increase in hydrocarbon emissions.”³¹⁵ Sunoco also ran multiple advertisements, through its own accounts and through social media influencers, stating that “[n]ot all fuels are created equal” and that Sunoco Ultratech is a fuel “that helps your engine run cleaner, longer, and more efficient.”³¹⁶

205. Sunoco’s website says that the company “takes great pride and commitment in working to protect the public and environment.”³¹⁷

206. Sunoco created advertisements in the form of “license plate” posters that appeared above pump stations. According to the consultant who worked on the campaign, Sunoco “proudly *owned* the campaign” which ran for years. The Sunoco campaign “tap[ped] the tension between high performance and clean – two contrary brand attributes,” and the campaign was “constantly refreshed with new *mean* and *green* brand messages.” Overall, the campaign featured a new headline every week for a year and an auto show car with over 150 license plate advertisements on it. Sunoco messages featured on the license plates and the auto show car include “Proud sponsor of breathing”; “Spring is in the air. Not sulphur”; and “Do something good for the environment. Drive.”

³¹⁴ Effie, *Sunoco, Fuel Your Best* (2021), <https://perma.cc/9W74-PBKP>.

³¹⁵ News Staff, *Passion Meets Performance, 5 Reasons to Always Use Top Tier Fuel*, Sunoco (Jan. 26, 2021), <https://perma.cc/9VN9-L5PD>.

³¹⁶ GoSunoco, *Fill Up With Sunoco UltraTech*, Facebook (Sep. 16, 2020), <https://perma.cc/F6P5-52U3>; TikTok, @milesabovetech (Mar. 3, 2023), <https://perma.cc/4D2F-X6H5>.

³¹⁷ Sunoco, *Discover Sunoco’s History*, <https://perma.cc/9BF3-XP4D> (last visited Nov. 13, 2024).



Figure 11: Sunoco License Plate Advertisements³¹⁸

vi. API’s Misleading and Deceptive Greenwashing Campaigns

207. The Fossil Fuel Defendants also collectively promote their fossil fuel products through Defendant API, which makes public statements and claims about oil and natural gas. These public statements include advertisements and promotional campaign websites that have been directed at and/or reached Maine, and which reasonable consumers would understand to mean that the Fossil Fuel Defendants’ fossil fuel products are beneficial or benign and not harmful to the environment. In particular, API’s marketing material falsely promotes the narrative that natural gas is an environmentally friendly fuel. A Facebook advertisement by API states, “Cleaner burning natural gas reduces CO₂ emissions at home and bolsters energy security abroad.”³¹⁹

208. In several advertisements in *The Washington Post*—e.g., “Why natural gas will thrive in the age of renewables,” “Real climate solutions won’t happen without natural gas and oil,” and “Low- and no-carbon future starts with natural gas”—API has misleadingly touted natural gas as “part of the solution” to climate change. API falsely claims natural gas is “clean.”³²⁰ API

³¹⁸ Marc Stoiber, *Case Study: Sunoco* (Oct. 22, 2024), <https://perma.cc/VHD5-WJ52>.

³¹⁹ Am. Petroleum Inst., *LNG is Pro-Environment and Pro-Energy Security*, Facebook Ad Libr., <https://www.facebook.com/ads/library/?id=321331956671661> (last visited June 11, 2024).

³²⁰ Am. Petroleum Inst., *Why Natural Gas will Thrive in the Age of Renewables*, Wash. Post Creative Grp., <https://www.washingtonpost.com/brand-studio/api-why-natural-gas-will-thrive-in-the-age-of-renewables/> (last visited Nov. 14, 2024); Mike Sommers, *Real Climate Solutions Won’t Happen Without Natural Gas and Oil*, Wash. Post (Dec. 14, 2020), <https://perma.cc/6RPX-R2SX>.

also promotes natural gas's purported benefits through a campaign titled "Energy for a Cleaner Environment."

209. API further claims, falsely, that, "[n]atural gas is an economical, environmentally friendly complement to renewable energy. The sooner green activists realize that, the more effective they'll be at continuing to slash emissions."³²¹

210. API markets itself as being an environmental steward, committed to helping reduce GHG emissions. API's 2021 Climate Action Framework portrays the organization as a partner in moving towards a climate solution, stating: "Our industry is essential to supplying energy that makes life modern, healthier and better while doing so in ways that tackle the climate challenge: lowering emissions, increasing efficiency, advancing technological innovation, building modern infrastructure and more."³²² As part of this campaign, API has offered on its website, in social media posts, and in other advertisements that have reached residents of Maine, the image below, of lush greenery and a message that "88 [percent] of Americans favor energy companies helping meet environmental challenges." API elaborates within the advertisement that "natural gas and oil [] powers and supports modern living . . . with lower emissions."

³²¹ WP BrandStudio, *Low- And No-Carbon Future Starts with Natural Gas*, Wash. Post Creative Grp. (Content from API) (Feb. 15, 2019), <https://perma.cc/ZRA7-7FDY>.

³²² *Climate Action Framework*, Am. Petroleum Inst., 5 (2021), <https://perma.cc/2DQN-2P52>.

Energy For A Cleaner Environment



Figure 12: API, We Are America’s Generation Energy³²³

211. In 2017, API launched an advertising campaign called “Power Past Impossible,” which portrayed the oil and gas industry as a sustainable, healthy, and essential part of societal progress.³²⁴ API President and CEO Jack Gerrard misleadingly stated that “greenhouse gas emissions . . . are near 25 year lows,” when GHG emissions globally were in fact increasing, and total GHG emissions in the U.S. (including methane, not just carbon dioxide) had not been shown to decline as claimed.³²⁵ The campaign’s opening advertisement, which aired nationally during the Superbowl, stated: “Oil pumps life. Oil runs cleaner.” The advertisement ignored the climate and

³²³ *We Are America’s Generation Energy*, Am. Petroleum Inst. (2019), <https://perma.cc/G9H3-62RP>.

³²⁴ See Am. Petroleum Inst., *API Launches Power Past Impossible Campaign During Super Bowl Showing Natural Gas and Oil Benefit to Consumers in Everyday Life*, PR Newswire (Feb. 5, 2017, 18:32 ET), <https://perma.cc/UE5Y-QFAQ>.

³²⁵ *Id.*

public health harms caused by oil.³²⁶ And as of July 21, 2020, the Power Past Impossible website described oil as “Energy for a Cleaner Environment.” In touting the environmental benefits of oil, the website also made the following false or misleading assertions: “This is Energy for a Cleaner Environment,” “99 [percent] Fewer Vehicle Emissions,” and “Cleanest Air in More Than a Decade.”³²⁷ In 2020, API launched a nationwide advertising campaign called “Energy for Progress,” which portrays the oil and gas industry as a leader in reducing GHG emissions.³²⁸ The opening advertisement for the campaign states that “natural gas and oil companies have . . . reduced carbon emission levels to the lowest in a generation.”³²⁹ Similarly, in a September 2023 Twitter post, API stated “American natural gas & oil is committed to creating climate solutions.”³³⁰

212. The Energy for Progress website also contains advertisements such as “Five Ways We’re Helping to Cut Greenhouse Gas Emissions,” which misleadingly portrays the oil and gas industry as an environmental leader by focusing on marginal improvements in operational emissions while ignoring the much greater emissions from the industry’s products.³³¹

³²⁶ Am. Petroleum Inst. (@powerpastimpossible), *Oil: Power Past Impossible*, YouTube (Feb. 4, 2017), <https://perma.cc/67CK-3AE9>.

³²⁷ See Am. Petroleum Inst., *Energy for a Cleaner Environment*, Power Past Impossible, <https://perma.cc/FAS7-NNXB> (last visited Mar. 15, 2024).

³²⁸ See *API Launches New National Campaign ‘Energy for Progress’, Highlights U.S. Energy Leadership in Annual State of American Energy Event*, Am. Petroleum Inst. (Jan. 7, 2010), <https://perma.cc/53NP-SCJZ>.

³²⁹ See Am. Petroleum Inst., *Solving Big Challenges Requires Energy*, YouTube (Jan. 7, 2020), <https://perma.cc/32NW-ESFE>.

³³⁰ Am. Petroleum Inst. (@APIenergy), X (Sept. 5, 2023, 12:25 PM), <https://perma.cc/4QJG-WTZB>.

³³¹ See Am. Petroleum Inst., *Five Ways We’re Helping to Cut Greenhouse Gas Emissions*, Am. Natural Gas & Oil Energy for Progress (Apr. 17, 2020), <https://perma.cc/Q3KN-RHUC>.



Figure 13: API advertisement from its Energy for Progress campaign, used as the campaign’s Facebook banner.³³²

213. Tellingly, however, API’s strategy does not advocate for or even mention a reduction in fossil fuel production as a strategy to protect the climate. Rather, it focuses on potential technological advances and shifting to heavier reliance on natural gas as a “clean fuel.” And an internal API email shows that its Climate Action Framework was in fact organized around the purpose of “the continued promotion of natural gas in a carbon constrained economy.”³³³ As discussed above, natural gas is far from a “clean” fuel, as API misleadingly claims, because natural gas production and transmission contribute substantially to climate change by the release of methane, an extremely potent GHG, and combustion, which releases CO₂.

214. API’s misinformation campaign has and continues to reach Maine residents. API has and continues to finance advertisements targeting Maine consumers, including a recent advertisement stating “I am Pro-Natural Gas. It’s Who I Am.”³³⁴ Another API advertisement stated

³³² Am. Natural Gas & Oil Energy for Progress, *LET’S CREATE CLIMATE SOLUTIONS TOGETHER* (photograph), Facebook, <https://www.facebook.com/energyforprogress> (last visited Nov. 14, 2024).

³³³ See Memorandum from Chairwoman Carolyn B. Maloney & Chairman Ro Khanna to Members of the U.S., House of Rep., Comm. on Oversight & Reform, *Investigation of Fossil Fuel Industry Disinformation* (Dec. 9, 2022), <https://perma.cc/JSX6-JNLK>.

³³⁴ Energy Citizens, *I AM PRO-NATURAL GAS. ITS WHO I AM*, Am. Petroleum Inst., Facebook Ad Libr. (Oct. 2, 2024), <https://www.facebook.com/ads/library/?id=444139458115267>.

that “[i]ndustry investment in carbon capture technology has kept America at the forefront of decreasing emissions.”³³⁵

G. Fossil Fuel Defendants and API Also Made Misleading Claims About Specific “Green” or “Greener” Fossil Fuel Products.

215. At all times relevant to this Complaint and increasingly in recent history, Fossil Fuel Defendants and API have also engaged in extensive and highly misleading marketing efforts aimed at promoting some fossil fuel products as “green” and environmentally beneficial. For example, as early as the 1970 advertorial below (Figure 14)—at which time Chevron already knew of the environmental risks posed by its fossil fuel products—Chevron marketed a gasoline additive as one that “helps towards cleaner air” by reducing “unburned hydrocarbon and carbon monoxide exhaust emissions dramatically.”³³⁶ The Chevron advertorial further claimed that “Clearly, this [additive] is a major step towards solving one of today’s most urgent problems.”

³³⁵ Am. Petroleum Inst., *CARBON CAPTURE*, Facebook Ad Libr. (Jan. 22, 2020 - Feb. 3, 2020), <https://www.facebook.com/ads/library/?id=516912808950487>.

³³⁶ *New F-310 in Chevron Gasolines Turns Dirty Exhaust Into Extra Mileage*, Bangor Daily News (Oct. 20, 1970), <https://perma.cc/4QB2-Y9A2>.

Remarkable gasoline breakthrough from the research laboratories of Chevron Oil Company



BEFORE

"This car was placed in a clear plastic bag with the engine running. A car with a very dirty engine was purposely used to create a smoke test. The bag inflated to fit with dirty exhaust until the exhaust completely obscured the car. This shows how exhaust emissions from dirty engines get into the air and waste mileage."

Scott Carpenter
Assistant

Personally witnessed the engine demonstration.



AFTER F-310

"The same car-after running on just six tanksful of Chevron with Formula F-310. Dirty exhaust emissions reduced sharply. The bag remains clear! No dirty smoke. Chevron with F-310 saves dirty smoke and extra mileage."

New F-310 in Chevron gasolines turns dirty exhaust into extra mileage.

Now, research scientists at Chevron Oil Company have achieved the most outstanding gasoline development in years! It's a new gasoline additive—Formula F-310—that sharply reduces dirty exhaust from dirty engines. And helps toward cleaner air.

Tests conducted by Scott Research Laboratories, an independent research group, showed that Chevron gasoline with F-310 reduced unburned hydrocarbon and carbon monoxide exhaust emissions dramatically. Clearly, this is a major step toward solving one of today's most urgent problems.

F-310 also improves mileage, because dirty exhaust is really wasted gasoline. So F-310 literally keeps good mileage from going up in smoke.

How does an engine produce dirty exhaust in the first place?

As a car accumulates mileage, deposits build up. The amounts of gasoline and air fed into the engine get out of balance. This causes the engine to "run rich," wasting gasoline. As a result, excessive unburned hydrocarbons and carbon monoxide exhaust emissions go into the air. F-310 can correct this condition. Just six tanksful can do the job.

Of course, the degree of improvement in your car will depend on how dirty your engine is. Not all engines are so dirty that they emit dirty smoke. But F-310 also keeps clean engines clean—another step toward cleaner air.

Formula F-310, Polybutene Amine Gasoline Additive, is now available in Chevron gasolines wherever you see the F-310 sign.

*Registered Trademark for Polybutene Amine Gasoline Additive.



Chevron with F-310. There isn't a car on the road that shouldn't be using it.

CHEVRON OIL COMPANY

Figure 14: 1970 Chevron Advertorial in *Bangor Daily News*³³⁷

216. Fossil Fuel Defendants' advertising and promotional materials fail to disclose the extreme safety risk associated with the use of fossil fuel products, which are causing "catastrophic" climate change, as understood by Defendants for decades.³³⁸ Fossil Fuel Defendants continue to omit that important information to this day, consistent with their goal of maintaining consumer demand for fossil fuel products despite the risks those products pose for the planet and its people.

217. Defendants misleadingly represent that consumer use of certain fossil fuel products actually helps customers reduce emissions. But emphasizing relative climate and "green" benefits while concealing the dangerous effects of continued high rates of fossil fuel use creates an overall misleading picture that hides the dire climate impacts resulting from normal consumer use of Fossil

³³⁷ *Id.*

³³⁸ *See, e.g., Compl.* ¶¶ 55–95, *supra*.

Fossil Fuel Defendants' fossil fuel products. Contrary to Fossil Fuel Defendants' "green" claims, the development, production, refining, and consumer use of Fossil Fuel Defendants' fossil fuel products (even products that may yield relatively more efficient engine performance) *increase* GHG emissions to the detriment of public health and consumer welfare. No matter what chemicals are added to the fuel mixture, burning gasoline always emits GHGs, thereby contributing to climate change and its associated impacts. Fossil Fuel Defendants' additive marketing cloaks their gasoline products in an environmentally friendly veneer while misleadingly concealing the hazardous climatic effects of burning fossil fuels.

218. In addition, at the same time Fossil Fuel Defendants have been actively promoting their "greener" gasoline products at Maine gas stations and on their company websites, Fossil Fuel Defendants have also been massively expanding fossil fuel production and increasing emissions. If consumers understood the full degree to which Fossil Fuel Defendants' fossil fuel products contributed to climate change and realized that Fossil Fuel Defendants had not in fact materially invested in alternative energy sources or were otherwise environmentally cautious, they likely would have acted differently, e.g., by not purchasing Fossil Fuel Defendants' products or purchasing less of them.

219. In the promotion of these and other fossil fuel products, including at their branded gas stations in Maine, Fossil Fuel Defendants fail to disclose the fact that fossil fuels are the leading cause of climate change and that current levels of fossil fuel use—even purportedly "cleaner" or more efficient products—represent a direct threat to Maine and the environment. Fossil Fuel Defendants' omissions in this regard are consistent with their goal of influencing consumer demand for fossil fuel products through greenwashing. Fossil Fuel Defendants also fail to require their vendors and third-party retail outlets to disclose facts pertaining to the impact the consumption of fossil fuels and their "cleaner" alternatives have on climate change when selling Fossil Fuel Defendants' fossil fuel products.

220. Fossil Fuel Defendants' marketing of these fossil fuel products to Maine consumers as "safe," "clean," "emissions-reducing," and impliedly beneficial to the climate—when

production and use of such products is the leading cause of climate change—is reminiscent of the tobacco industry’s effort to promote “low-tar” and “light” cigarettes as an alternative to quitting smoking after the public became aware of the life-threatening health harms associated with smoking.³³⁹

221. As with tobacco companies’ misleading use of scientific and engineering terms in advertising to enhance the credibility of their representations, Fossil Fuel Defendants’ promotional materials for their fossil fuel products also misleadingly invoke similar terminology to falsely convey to Maine consumers that the use of these products benefits the environment.

222. For example, Exxon advertises that its Synergy Diesel Efficient fuel will permit vehicles to “[r]educe emissions and burn cleaner.”³⁴⁰ Exxon also publishes online content under the banner “Energy Factor,” wherein Exxon claims that it “offers a range of products—including lightweight materials and advanced lubricants and fuels—that improve performance, durability, and efficiency to drive down emissions.” With this “portfolio of solutions,” Exxon claims, it is pursuing “[t]he vital task of reducing greenhouse gas emissions across the transportation sector.”³⁴¹

223. Since no later than 2016, Exxon has offered for sale and marketed its Synergy fossil fuels, including, since no later than 2017, at a substantial number of Exxon-branded gas stations in Maine. In Exxon’s advertisements for its Synergy fuels, including those on or near the gas pumps at Exxon-branded gas stations in Maine, Exxon makes several claims that a reasonable consumer would understand to mean that the Synergy fuels are beneficial or benign, and not harmful, to the environment. For example, Exxon consistently promotes Synergy fuels as “clean” or “cleaner,” and the company’s climate strategy mentions its Synergy fuel, claiming it can help reduce GHG emissions. Exxon also cites Synergy’s alleged reduction of CO₂ emissions in Exxon’s

³³⁹ See Am. Cancer Soc’y Cancer Action Network, *23 Year History of the Racketeering Lawsuit Against the Tobacco Industry: Guilty of Deceiving the American Public*, at 1, 5 (History of DOJ Rico Lawsuit Fact Sheet) (June 29, 2023), <https://perma.cc/F9NQ-ZBHC>; see also Tobacco Control Legal Consortium, *The Verdict Is In: Findings from United States v. Philip Morris, Section on Light Cigarettes*, at 1–9 (2006), <https://perma.cc/9VGN-67NX>.

³⁴⁰ Exxon, *Synergy Diesel Efficient Fuels For Fleets, Light-Duty Trucks, and Passenger Vehicles*, <https://perma.cc/Y78T-SVB5> (last visited Nov. 14, 2024).

³⁴¹ Exxon, *Transforming Transportation*, <https://perma.cc/P9AY-ZKFA> (last visited Nov. 14, 2024).


advertisement of the company's improved environmental performance. An advertisement on Exxon's website, which is reproduced on the following page, includes an image featuring a bright sunrise in a clear sky over hills of green grass, green trees, and little to no industrial or urban development.

Exxon Mobil | Fuels

Find Station | Our fuel | Rewards and payment | Commercial | Get help | About us

Home > Environmental performance

Important Additional Information Regarding Proxy Solicitation:
 This website contains information on a variety of topics that may be of interest to shareholders, some of which may be related to the Company's solicitation materials.
 Click here for more information.



Environmental performance


Conscientious practices. Rigorous standards.

Continually improving environmental performance while pursuing reliable and affordable energy

Ten years ago, we introduced *Protect Tomorrow. Today.* – a set of expectations that serves as the foundation for our environmental performance. Guided by a scientific understanding of the environmental impacts and related risks of our operations, these rigorous standards and good practices have become an integral part of our day-to-day operations in every country in which we do business including those with minimal regulations in place.


As well, we consider the long-term social and economic needs of the communities in which we work and continually engage stakeholders in the process.

The following are the three major areas in which we've concentrated our efforts to reduce environmental impacts:



Improve the efficiency of our operations

ExxonMobil invested more than \$1.5 billion over the last six years to improve efficiency and reduce greenhouse gas emissions from our operating facilities, such as refineries and chemical plants. In the past ten years we have reduced greenhouse gas emissions in our operations by more than 7 million metric tons, which is the equivalent of taking about 1.4 million cars off the road.



Improve efficiency in consumer use of fuels

We're continually innovating to develop products that enable customers to reduce their energy use and CO2 emissions. For example, we have:

- Developed specially formulated synthetic lubricants for cars, trucks and industrial equipment that last longer and help end-users reduce their energy consumption
- Created tire liners that retain air better than their predecessors, thereby improving vehicle fuel efficiency
- Developed a technology to improve the separator films used in lithium-ion batteries, which are used in laptops, cell phones and, increasingly, hybrid vehicles
- Engineered Fuel Technology Synergy™ fuels to help improve fuel economy and reduce CO2 emissions**

Figure 15: ExxonMobil Fuels “Environmental Performance” website³⁴²

224. In addition to its Synergy fuels, Exxon offers for sale, and has marketed, Mobil 1™ ESP x2 motor oil to Maine consumers. From 2016 through at least 2022, Exxon promoted Mobil

³⁴² ExxonMobil, *Environmental Performance*, <https://perma.cc/4GUF-7YVS> (last visited Sep. 11, 2024).

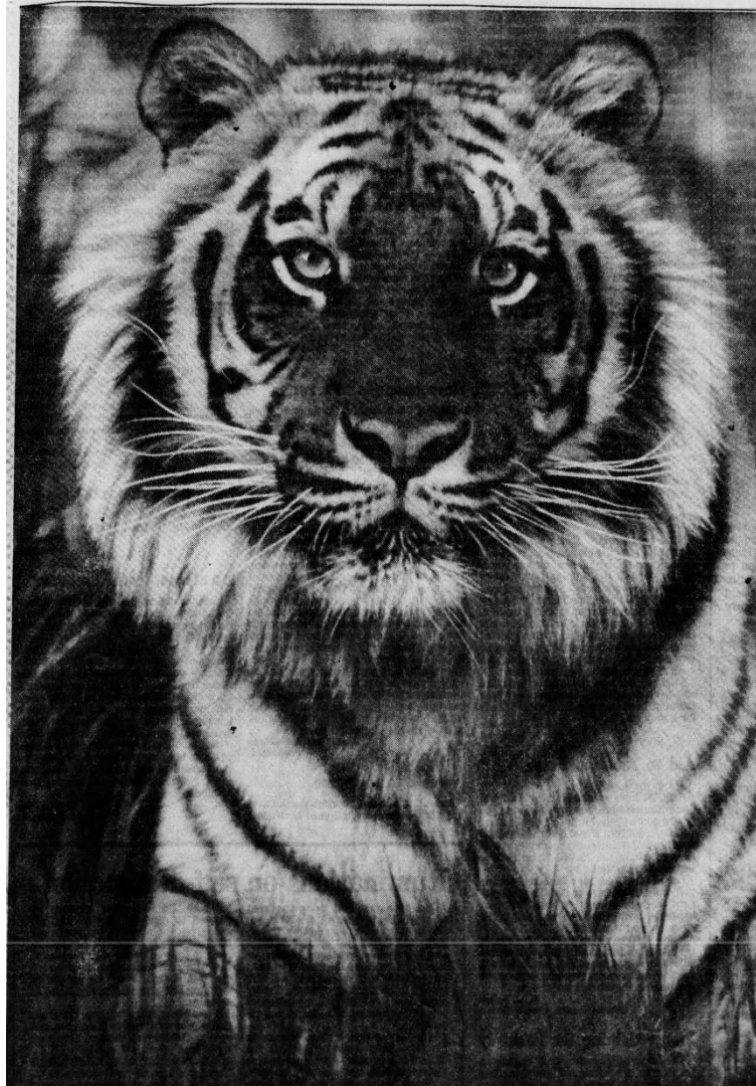
1™ ESP x2 on the website Energy Factor—effectively a corporate blog for Exxon, in which Exxon claims to discuss developing safe and reliable energy sources for the future—in a post titled, “Green motor oil? ExxonMobil scientists deliver an unexpected solution.”³⁴³ According to its advertisement for Mobil 1™ ESP x2, Exxon specially formulated the green oil to “contribute to [] carbon-emission reduction efforts.” Exxon’s advertising suggests to the consumer that purchase and use of this motor oil convey an environmental benefit, when in fact the opposite is true.

225. Around 1990, Exxon unveiled its “Exxon Supreme, Reduced Emissions Unleaded” marketing campaign promoting “New Exxon 93 Supreme” gasoline that “has been reformulated to reduce emissions.” In September 1996, Exxon discontinued the 93 Supreme gasoline marketing campaign after the Federal Trade Commission accused Exxon of false and misleading advertising. According to studies, high-octane premium gas, such as Exxon’s 93 Supreme, not only consumes more energy to produce than a gallon of regular gas,³⁴⁴ but also increases emissions.³⁴⁵

³⁴³ Energy Factor, *Green Motor Oil? Exxonmobil Scientists Deliver an Unexpected Solution*, ExxonMobil (Jul. 19, 2016), <https://web.archive.org/web/20220221083851/https://energyfactor.exxonmobil.com/energy-innovation/transportation/green-motor-oil-exxonmobil-scientists-deliver-unexpected-solution/>.

³⁴⁴ Elizabeth Martin-Malikian, *High Octane: Eco-Adaptive Architecture*, 2012 ACSA Fall Conference 123 (“Making a gallon of premium gas thus consumes more energy than making a gallon of regular.”).

³⁴⁵ Cenk Sayin et al., *An Experimental Study of the Effect of Octane Number Higher than Engine Requirement on the Engine Performance and Emissions*, 25 *Applied Thermal Eng’g* 1315, 1317 (2005) (“The results demonstrated that as the octane number was increased from 91 to 93, CO emissions boosted nearly 5%.”).



**NEW EXXON 93 SUPREME.
HIGHER PERFORMANCE
AND LOWER EMISSIONS.**

New Exxon 93 Supreme still helps eliminate knock in virtually any car. It still gives you our clean engine formula. And now, it too has been reformulated to reduce emissions. Exxon Supreme and Exxon Plus. The first of a new generation of gasolines from Exxon.

NEW Exxon Supreme
Reduced Emissions Unleaded
Precision equipment for precision engines.
Exxon reduced emissions gasolines unavailable in some areas

Figure 16: New Exxon 93 Supreme “reformulated to reduce emissions”³⁴⁶

³⁴⁶ Exxon, *New Exxon 93 Supreme. Higher Performance and Lower Emissions*, Bangor Daily News, at 9 (July 21, 1990), <https://perma.cc/6QVZ-CP7F>.

226. Similarly, Shell advertises that using its gasoline “produce[s] fewer emissions.”³⁴⁷

227. BP markets its Invigorate gasoline as a “proprietary detergent additive” that “help[s] cars become clean, mean, driving machines,” and its bp Diesel as fuel that “can reduce emissions with powerful, reliable, and energy efficient fuel made with low sulfur and additives.”³⁴⁸ BP’s website also advertises its fuel selection as “including a growing number of lower-carbon and carbon-neutral products.”³⁴⁹

228. Chevron advertises its Techron fuel with claims that emphasize its supposed positive environmental qualities, such as: “less is more,” “minimizing emissions,” and “up to 50% cleaner.”³⁵⁰ In a Q and A on Chevron’s website, one question says, “I care for the environment. Does Techron impact my car’s emissions?” Chevron answers that “[g]asolines with Techron” clean up carburetors, fuel injectors, and intake valves, “giving you reduced emissions.”³⁵¹

229. These misrepresentations, which were intended to and did in fact reach and influence consumers, including consumers in Maine, were misleading because they emphasize the fuels’ supposed environmental benefits without disclosing the key role fossil fuels play in causing climate change.

230. Additionally, Defendants often represent hydrogen fuel as “clean,” “renewable,” or “zero / low carbon.” These representations omit that the vast majority of hydrogen fuel is produced from fossil gas.³⁵² For example, ExxonMobil issued an advertisement on Twitter stating, “Hydrogen is the most abundant element on earth. And because hydrogen fuel is versatile - and produces no emissions at point-of-use, #hydrogen can play a big role helping society meet its net-

³⁴⁷ See, e.g., Shell, *Shell Nitrogen Enriched Gasolines*, <https://perma.cc/R2SZ-7YNS> (last visited Oct. 14, 2022).

³⁴⁸ See, e.g., BP, *Our Fuels*, <https://perma.cc/Q439-PV9S> (last visited Oct. 14, 2022).

³⁴⁹ BP, *Advanced Fuels and Lubricants*, <https://perma.cc/JC3F-9JLG> (last visited Feb. 5, 2022).

³⁵⁰ See, e.g., Chevron, *Techron*, <https://perma.cc/E8Z9-9EQJ> (last visited Oct. 14, 2022).

³⁵¹ *Techron Technology*, Chevron, <https://perma.cc/W4JH-LQPG> (last visited Nov. 20, 2024).

³⁵² See U.S. Dep’t of Energy, *Hydrogen Production: Natural Gas Reforming*, Office of Energy Efficiency & Renewable Energy, <https://perma.cc/E4Y5-3ATZ> (last visited Nov. 14, 2024).

zero goals.”³⁵³ In another example, Shell has posted on Twitter, “A car that only emits water and heat? Learn more about #hydrogen, a fuel for the future that can help clean up transport today #makethefuture.”³⁵⁴

231. Defendants also misrepresent the characteristics of biofuels. These misrepresentations fail to disclose that biofuels created from bioethanol and blended into gasoline are typically composed mostly of fossil fuel, and Fossil Fuel Defendants’ production of biofuels is insignificant compared to fossil fuel production and fuel demand. For example, in addition to not disclosing the very small scope of these efforts, Exxon’s advertisements do not acknowledge that Exxon’s biodiesel fuel is generally a blend that uses only 5% to 20% biofuel, with the remainder composed of fossil fuel.³⁵⁵ Thus, Exxon’s greenwashing advertisements misleadingly overstate both the “sustainable” or “environmentally friendly” nature of its biodiesel investment as well as its scope. Chevron has a Renewable Energy Group that produces “EnDura Fuels,” which it advertises as “A Simple Lower Carbon Solution Now.”³⁵⁶ The front page of Chevron’s website, as of September 8, 2023, featured “renewable diesel,”³⁵⁷ and another page on its website touts biofuels used on ships³⁵⁸ and an advertising campaign linking to that page.³⁵⁹ The page says, “Biofuels can quickly change transportation sectors for the better. When used as a marine fuel, biofuels can reduce greenhouse gas (GHG) emissions on a lifecycle analysis.” Similarly, BP claims

³⁵³ ExxonMobil (@ExxonMobil), X (Aug. 3, 2023, 10:00 AM), <https://perma.cc/WWP7-MK5L> (The advertisement also includes a video where an Exxon employee touts hydrogen as “decarbonizing.” The advertisement later shows a diagram (but nothing spoken) showing that hydrogen comes from natural gas.).

³⁵⁴ Shell USA (@Shell USA), X (Dec. 20, 2017, 2:45 AM), <https://perma.cc/X3EV-YP6B>.

³⁵⁵ See ExxonMobil, *Mobility Reimagined: On the Road to Lower GHG Emissions*, at 8, <https://perma.cc/HGN3-K5VD>.

³⁵⁶ *Endura Fuels: A Simple Lower Carbon Solution Now*, Chevron Renewable Energy Grp., <https://perma.cc/2WX9-RAPH> (last visited Mar. 15, 2024).

³⁵⁷ *Advancing Energy Progress*, Chevron, <https://www.chevron.com/> (last visited Mar. 15, 2024); see also Chevron, *Energy Everywhere: Renewable Diesel – Episode 2*, YouTube, <https://perma.cc/G8FQ-BHQJ> (last visited June 11, 2024) (video embedded on front page).

³⁵⁸ *Biofuels Steer into Maritime Sector*, Chevron (July 5, 2023), <https://perma.cc/ZP9Y-22GW>.

³⁵⁹ Chevron, *Biofuels Steer into Maritime Sector*, Facebook Ad Libr., <https://www.facebook.com/ads/library/?id=1241282153250811> (last visited Nov. 20, 2024).

in advertisements that “We’re making motor oil that’s 25 [percent] sugarcane based” to “make energy cleaner and better.”³⁶⁰

232. As with the tobacco companies’ use of scientific terms to promote “light” cigarettes, Fossil Fuel Defendants’ claim that their purportedly high-tech new fossil fuel products help consumers reduce emissions renders their promotional materials misleading because they seek to convey—with the imprimatur of scientific credibility—an overall message that is false and contradicted by Defendants’ own decades-old internal knowledge regarding the dangers of fossil fuel use.

H. Defendants’ Deceit Only Recently Began Coming to Light, and Their Misconduct Is Ongoing and Yet to be Fully Uncovered.

233. Defendants’ long campaign of deception has just started to be uncovered, with confidential documents beginning to enter certain public spheres. One of the early sources of this information was a niche non-profit news organization focused on covering environmental topics. Journalists at the organization uncovered archives and conducted interviews of former employees of one Defendant—Exxon—demonstrating that Exxon had sophisticated knowledge of the causes and consequences of climate change and the role its products played in causing climate change as far back as the 1970s.³⁶¹

234. Additional journalists then began to expose some information pertaining to Exxon’s knowledge, and other select members of the fossil fuel industry related to the consequences of climate change and the role their products played in causing climate change going back to the 1970s.³⁶²

235. As information about Defendants’ tortious and deceptive conduct and knowledge of their fossil fuel products slowly trickled to light, the Center for International Environmental

³⁶⁰ BP America, *Possibilities Everywhere*, Facebook Ad Libr. (Jul. 23–28, 2019), <https://www.facebook.com/ads/library/?id=353302112007843> (last visited June 11, 2024).

³⁶¹ Neela Banerjee et al., *Exxon: The Road Not Taken*, Inside Climate News (Sept. 16, 2015), <https://perma.cc/U9L4-U99E>.

³⁶² See Katie Jennings et al., *How Exxon Went from Leader to Skeptic on Climate Change Research*, L.A. Times (Oct. 23, 2015), <https://graphics.latimes.com/exxon-research>; Jerving et al., *supra* note 160; Lieberman & Rust, *supra* note 229.

Law—another environmental non-profit organization—issued a report summarizing the evidence that had been uncovered up to that point.³⁶³

236. Since then, public reporting on Defendants’ deceptive conduct has become more widespread. Just last year, for example, *The Wall Street Journal* reported that Exxon worked “behind closed doors” to sow public doubt about climate change. The article was based on “documents reviewed by the Journal, which haven’t been previously reported.”³⁶⁴ The fact that new, non-public and potentially confidential documents are still being discovered demonstrates not just Defendants’ efforts to conceal their knowledge of the role their products play in climate change, but also highlights the lengths Defendants’ went—and continue to go—to conceal their role in obfuscating that science, their knowledge, and their role in bringing about catastrophic climate harms to consumers in Maine and elsewhere. These recent investigations and reports are but a fraction of Defendants’ knowledge and misconduct. The full extent of all Defendants’ deception and concealed knowledge remain unknown to Maine.

237. The fact that Defendants and their proxies knowingly provided incomplete and misleading information to the public, including Maine consumers, only recently became discoverable due to, among other things:

- a. Defendants’ above-described deception campaign, which continues to this day;
- b. Defendants’ concealment and misrepresentations regarding the fact that fossil fuel products cause catastrophic harms; and
- c. The fact that Fossil Fuel Defendants used front groups such as API, GCC, and ICE to obscure their involvement in these actions, which put Maine off the trail of inquiry.

238. Moreover, Defendants’ tortious misconduct—in the form of misrepresentations, omissions, and deceit—began decades ago and continues to this day. Now, rather than engaging

³⁶³ Carol Muffett & Steven Feit, *Smoke and Fumes: The Legal and Evidentiary Basis for Holding Big Oil Accountable for the Climate Crisis*, Ctr. for Int’l Env’tl. Law 10 (Nov. 2017), <https://perma.cc/TE6L-DSUL>.

³⁶⁴ Matthews & Eaton, *supra* note 247.

in outright denials of the existence of climate change, Defendants deflect attention from their role in causing climate change by falsely portraying fossil fuel products as environmentally friendly, climate-friendly, or otherwise less environmentally damaging than those products really are, and by overstating Defendants' investments in renewable or alternative energy.

239. Defendants have continued to mislead the public about the impact of fossil fuel products on climate change through "greenwashing." Through recent advertising campaigns and public statements in Maine and/or intended to reach Maine, including but not limited to online advertisements and social media posts, Defendants falsely and misleadingly portray these products as "green," and Fossil Fuel Defendants portray themselves as climate-friendly energy companies that are deeply engaged in finding solutions to climate change. In reality, Defendants continue to primarily, and overwhelmingly, invest in, develop, promote, and profit from fossil fuel products and heavily market those products to consumers, with full knowledge that those products will continue to exacerbate climate change harms.

240. Defendants' greenwashing exploits consumers' concerns about climate change and their desire to purchase "green" products and spend their consumer dollars on products and businesses that are taking substantial and effective measures to combat climate change. Defendants' false advertisements are likely to mislead the public, including Maine consumers, by giving the impression that in purchasing Fossil Fuel Defendants' fossil fuel products, consumers are supporting genuine, substantial, and effective measures to mitigate climate change through these companies' alleged investments in clean energy. Defendants' greenwashing ultimately attempts to persuade consumers to continue purchasing Fossil Fuel Defendants' fossil fuel products.

241. As described above, Fossil Fuel Defendants, directly and/or through membership in other organizations, continue to misrepresent their own activities, the fact that their products cause climate change, and the danger presented by climate change. Exemplars of continuing misrepresentations, omissions, and deceit follow below.

242. As recently as June 2018, a post on the official Shell blog stated: “the potential extent of change in the climate itself could now be limited. In other words, the prospect of runaway climate change might have passed.”³⁶⁵ However, this statement is not supported by valid scientific research and was, and is, contradicted by various studies.³⁶⁶

243. In March 2018, Chevron issued a report entitled “Climate Change Resilience: A Framework for Decision Making,” which misleadingly stated that “[t]he IPCC Fifth Assessment Report concludes that there is warming of the climate system and that warming is due in part to human activity.”³⁶⁷ In reality, the Fifth Assessment report concluded that “[i]t is *extremely likely* [defined as 95–100% probability] that human influence has been the *dominant cause* of the observed warming since the mid-20th century.”³⁶⁸

244. Despite this fact, in April 2017, Chevron CEO and Chairman of the Board John Watson said on a podcast, “There’s no question there’s been some warming; you can look at the temperatures data and see that. The question and debate is around how much, and how much is caused by humans.”³⁶⁹

245. On May 27, 2015, at Exxon’s annual shareholder meeting, then-CEO Rex Tillerson misleadingly downplayed global warming’s risks by stating that climate models used to predict future impacts were unreliable: “What if everything we do, it turns out our models are lousy, and we don’t get the effects we predict? Mankind has this enormous capacity to deal with adversity,

³⁶⁵ David Hone, *Has Climate Change Run Its Course??*, Shell Climate Change Blog (June 14, 2018), <https://perma.cc/C939-ZAEJ>.

³⁶⁶ See, e.g., Fiona Harvey, *Carbon Emissions from Warming Soils Could Trigger Disastrous Feedback Loop*, The Guardian (Oct. 5, 2017), <https://perma.cc/4RZM-KK3N>; Jonathan Watts, *Domino-Effect of Climate Events Could Move Earth into a ‘Hothouse’ State*, The Guardian (Aug. 7, 2018), <https://perma.cc/73FU-6RKE>; Fiona Harvey, *‘Tipping Points’ Could Exacerbate Climate Crisis, Scientists Fear*, The Guardian (Oct. 9, 2018), <https://perma.cc/2FBD-Q594>.

³⁶⁷ Chevron, *Climate Change Resilience: A Framework for Decision Making* 20 (Mar. 2018), <https://perma.cc/P6EQ-P47Q>.

³⁶⁸ IPCC, *Summary for Policymakers: Working Group I Contribution to the Fifth Assessment Report*, at 17 (2013), <https://perma.cc/DRD2-VFGR>.

³⁶⁹ Columbia Energy Exchange Podcast, *Guest John Watson, CEO, Chevron*, Ctr. on Glob. Energy Pol’y at Columbia (Apr. 10, 2017), <https://perma.cc/HVD6-3FD6>.

and those solutions will present themselves as those challenges become clear.”³⁷⁰ But as noted above, in 1982, Exxon’s scientific staff stated, based upon the climate models, that there was a “clear scientific consensus” with respect to the level of projected future global warming and starting shortly thereafter Exxon relied upon the projections of climate models, including its own climate models, in order to protect its own business assets. Tillerson’s statement reached consumers because it was reported in the press, including in Maine,³⁷¹ as is common when fossil fuel company CEOs make statements regarding climate change and as Exxon had reason to know would occur.

246. Until approximately early 2017, Exxon’s website continued to emphasize the “uncertainty” of global warming science and impacts: “current scientific understanding provides limited guidance on the likelihood, magnitude, or time frame” of events like temperature extremes and sea level rise.³⁷² Exxon’s insistence on crystal-ball certainty was clear misdirection, since Exxon knew that the fundamentals of climate science were well-settled and showed global warming to be a clear and present danger.³⁷³

247. Until approximately early 2016, API’s website referred to global warming as “possible man-made warming” and claimed that the human contribution is “uncertain.” API removed this statement from its website in 2016 when journalistic investigations called attention to API’s misleading statements on global warming and its participation in the CO₂ and Climate Task Force during the late 1970s and early 1980s.

³⁷⁰ *Exxon CEO: Let’s Wait for Science to Improve Before Solving Problem of Climate Change*, Dallas Morning News (May 27, 2015), <https://perma.cc/666G-Y8MS>.

³⁷¹ See, e.g., David Koenig, *Oil Shareholders Reject Fracking, Climate Proposals*, Morning Sentinel (May 28, 2015), <https://perma.cc/S7J4-BMUX>.

³⁷² *Meeting Global Needs – Managing Climate Change Business Risks*, ExxonMobil, <https://web.archive.org/web/20151119012509/http://corporate.exxonmobil.com/en/current-issues/climate-policy/meeting-global-needs/managing-climate-change-business-risks>.

³⁷³ See IPCC, *Climate Change 2014, Impacts, Adaptation, and Vulnerability, Summary for Policymakers* (2014), <https://perma.cc/K2WB-XMMX>.

I. Maine Has Suffered, Is Suffering, and Will Suffer Injuries from Defendants' Conduct.

248. Defendants' individual and collective conduct brought about or helped bring about climate change and consequent harms to Maine. That conduct includes, but is not limited to, Fossil Fuel Defendants' failures to warn of the known threats fossil fuel products pose to the world's climate; Defendants' wrongful promotion of fossil fuel products and concealment of known hazards associated with the use of those products; and their public deception campaigns designed to mislead consumers that fossil fuel products are climate-friendly, and to obscure the connection between those products and the environmental, physical, social, and economic consequences of climate change.

249. Maine is experiencing global warming acutely, especially in its rising air and ocean temperatures. Maine is warming significantly faster than the global average rate, already exceeding the 1.5°C threshold.³⁷⁴ Maine's warming trend has placed each calendar year from 2020 through 2023 among the State's top 10 warmest years since record keeping began in 1895.³⁷⁵ And Maine is projected to continue warming because of climate change.³⁷⁶ In addition, the Gulf of Maine is warming faster than 99% of the world's other ocean waters.³⁷⁷ A distinct thermal shift in the Gulf of Maine began in 2010, and Maine's oceans are now seeing their warmest temperatures in recorded history.³⁷⁸

250. The exceptional rate of warming globally and in Maine has caused manifold harms, including sea level rise, storm surge, extreme high tides and attendant flooding; warming and acidification of Gulf of Maine waters and concomitant damages to Maine's fishing and aquaculture

³⁷⁴ Young & Young, *supra* note 89, at 176.

³⁷⁵ Susie Arnold et al., *Scientific Assessment of Climate Change and Its Effects in Maine: 2024 Update*, Sci. and Tech. Subcomm. of the Me. Climate Council, 27–28, 30 (2024) (“Maine Scientific Assessment of Climate Change, 2024 Update”).

³⁷⁶ *Id.* at 40.

³⁷⁷ Brian Skerry et al., *The Gulf of Maine is Warming Fast. What Does that Mean for Lobsters – And Everything Else?*, Nat'l Geographic (May 14, 2024); Gulf of Me. Rsch. Inst., *Annual Warming Update 2023* (Feb. 15, 2024) (“Annual Warming Update 2023”), <https://perma.cc/LBJ7-3YVG>.

³⁷⁸ Annual Warming Update 2023, *supra* note 377; Gulf of Me. Rsch. Inst., *Gulf of Maine Warming Update: Spring 2024* (July 2, 2024); *Gulf of Maine Has One of Its Warmest Years Ever, Report Finds*, Assoc. Press (Apr. 29, 2024), <https://perma.cc/ACN7-B74Y>.

industries; increased frequency and intensity of precipitation events and associated flooding; more dangerously hot days and accompanying emergency room visits for heat-related illnesses; increased transmission of vector-borne diseases; reduced air quality; and the cascading social, economic, health, and other consequences of these environmental changes.

251. Indicators of the changing climate are accelerating, including the frequency of extreme climate harms in Maine.³⁷⁹ These harms affect, and will continue to disproportionately impact, Maine's frontline communities,³⁸⁰ who are least able to prepare for and recover from such events.

252. Sea level rise, extreme precipitation, extreme heat, vector-borne diseases, and poor air quality affect Mainers differently, depending on where in Maine they live and work and other social, economic, and environmental factors. The lowest-lying areas of coastal Maine are most at risk from sea level rise, storm surge, extreme high tides, and attendant flooding. But those risks also stretch far inland along Maine's extensive tidal rivers. Many Maine communities and much of the State's infrastructure are also vulnerable to flooding from extreme precipitation events. Mainers who are unhoused or reside in older, less resilient buildings and homes are and will continue to be disproportionately impacted by exposure to extreme heat and air pollution. And Mainers employed in the tourism, winter sports, agriculture, lobstering, and aquaculture industries are at particular risk of employment disruptions up to and including total job loss. Maine has incurred and will continue to incur costs to respond to public health, safety, and economic impacts of climate change.

253. Maine has suffered and will continue to suffer severe climate change harms because of Defendants' deceptive promotion of fossil fuel consumption as described in this Complaint. These include, but are not limited to, injury, obstruction, invasion, or destruction of State property, natural resources, and infrastructure, as well as other assets that are essential to community health, safety, and well-being; increased planning and implementation costs for confronting sea level rise,

³⁷⁹ Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 23.

³⁸⁰ Report on Equity, *supra* note 1, at 23; Governor's Summary Report, *supra* note 1, at 6.

coastal and inland storms and associated flooding, erosion, landslides, extreme precipitation, extreme heat events, vector-borne diseases, and poor air quality; increased costs for emergency preparedness and response measures; and increased costs for public education and awareness, and for extensive community adaptation and resilience efforts.

254. As a result of Defendants’ wrongful conduct, Maine has expended and will continue to expend resources to abate the existing and projected adverse harms of climate change on the State, including, but not limited to, efforts to abate the harms described below.

i. Sea Level Rise in the Gulf of Maine

255. Global warming has caused and continues to cause accelerated sea level rise in the Gulf of Maine and its adjacent ocean with severe, and potentially catastrophic, consequences for the State. Maine and its residents are at particular risk from sea level rise because Maine’s residential communities and economic drivers—such as its tourism, real estate, and fishing industries—are concentrated on or near Maine’s 3,478 miles of coastline.³⁸¹ Many of Maine’s coastal communities will thus be doubly impacted by sea level rise: they will be physically inundated by water, and the waterfront and shorefront industries they rely on—such as fishing, ports, and tourism—will be heavily disrupted by increased flood frequency.³⁸² And as sea levels rise in Maine, the number of Maine’s frontline communities at risk of coastal flooding also increases. These Maine communities are likely to be hardest hit because they are likely to struggle to prepare for and to recover from coastal flooding.³⁸³

256. The Gulf of Maine has experienced significant sea level rise over the last half century attributable to Defendants’ conduct. In the 2005–2023 time period, mean sea levels in the Gulf of Maine were 7.5 inches above levels seen between 1912–1930, the earliest period for which

³⁸¹ Governor’s Summary Report, *supra* note 1, at 10.

³⁸² GOPIF, *Assessing the Impacts Climate Change May Have on the State’s Economy, Revenues, and Investment Decisions: Volume 2: Cost of Doing Nothing Analysis*, 34 (September 29, 2020) (“Governor’s Cost Report”).

³⁸³ Governor’s Cost Report, *supra* note 382, at 33–34.

Maine has records.³⁸⁴ And sea level rise in Maine is accelerating: 2023 mean sea level was approximately three inches higher than 2022 mean sea level.³⁸⁵

257. Maine's residents, economy, and infrastructure are already being harmed and will continue to be harmed by rising sea levels, which will become more severe as water levels continue to rise. Maine expects to experience a minimum of 1.6 feet of relative sea level rise by 2050, and 3.9 feet by 2100, but the State believes it should prepare for up to 3 feet of relative sea level rise by 2050, and 8.8 feet by 2100.³⁸⁶

258. At 1.6 feet of sea level rise, a single coastal flood event in Maine is projected to cause \$512.1 million in damages to buildings and their contents, and to flood six wastewater treatment facilities that will cause between \$31.0 and \$92.9 million in losses there.³⁸⁷ Flooded wastewater facilities can contaminate coastal waters and public landings, obstructing use and passage. At that amount of sea level rise, 26 miles of public roads and six miles of rail will be exposed to ocean flooding, between 977 and 1,022 tidal crossing and culverts will be at risk of failure, Maine's GDP will lose \$118.8 million every year because of inundated job sites, and approximately 21,500 Maine jobs will be lost because of sea level rise and repeated storms inundating job locations.³⁸⁸ Between 2020 and 2050, cumulative losses to buildings statewide are projected to be \$17.5 billion.³⁸⁹

259. At 3.9 feet of sea level rise, a single coastal flood event in Maine is projected to cause \$671 million in damages to buildings and their contents, and to flood 10 wastewater treatment facilities, causing between \$99 and \$297 million in damages there and obstructing use and passage of impacted waters and public landings.³⁹⁰ At that amount of sea level rise, Maine's GDP is projected to lose \$664.9 million each year, 116 miles of public roads and 23 miles of rail

³⁸⁴ Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 89.

³⁸⁵ *Id.*

³⁸⁶ Governor's Summary Report, *supra* note 1, at 4.

³⁸⁷ *Id.* at 11.

³⁸⁸ *Id.* at 7, 11; Governor's Cost Report, *supra* note 382, at 37, 40, 41.

³⁸⁹ Governor's Summary Report, *supra* note 1, at 11; Governor's Cost Report, *supra* note 382, at 36–37.

³⁹⁰ Governor's Summary Report, *supra* note 1, at 11.

will flood, between 1,128 and 1,180 tidal crossing and culverts will be at risk of failure, and port infrastructure in Eastport and Portland will flood.³⁹¹

260. At 8.8 feet of sea level rise, a single coastal flood event in Maine is projected to cause \$1.3 billion in damages to buildings and their contents, inundate multiple wastewater treatment facilities beyond the 10 facilities projected to be flooded by 3.9 feet of sea level rise, and flood 336 miles of public roads and 61 miles of rail.³⁹² Between 1,348 and 1,410 tidal crossing and culverts will be at risk of failure,³⁹³ and port infrastructure in Searsport, Eastport, and Portland will flood.³⁹⁴ At that amount of sea level rise, Maine’s GDP is projected to lose \$2.415 billion every year.³⁹⁵

261. Sea level rise alone is projected to cause approximately 70 days of high tide flooding each year by 2050, and nearly 365 days of high tide flooding each year by 2100 in Maine.³⁹⁶ But the risks of sea level rise are also amplified by astronomical high tides, coastal storms, storm surge, and riverine flooding.

262. Stronger storm surges during tropical systems and nor’easters exacerbate the risk of coastal flooding in Maine by compounding on top of sea level rise, creating particularly hazardous conditions for coastal communities.³⁹⁷ When such events occur during astronomical high tides, the potential damage is further increased. These concurrent dangers are all projected to increase in both frequency and magnitude in Maine over the coming years.³⁹⁸

263. When Maine’s present-day exposure to coastal flooding risks are combined with its current exposure to riverine flooding risks, the State already stands to lose between \$1.197 and

³⁹¹ *Id.* at 7, 11; Governor’s Cost Report, *supra* note 382, at 37, 40, 41; GOPIF, *Volume 1: Vulnerability Mapping*, 36 (Nov. 20, 2020) (“Governor’s Vulnerability Mapping Report”), <https://perma.cc/2XXS-K8XD>.

³⁹² Governor’s Summary Report, *supra* note 1, at 8, 11.

³⁹³ *Id.*; Governor’s Cost Report, *supra* note 382, at 41.

³⁹⁴ Governor’s Vulnerability Mapping Report, *supra* note 391, at 36.

³⁹⁵ Governor’s Summary Report, *supra* note 1, at 7, 11.

³⁹⁶ Hannah Baranes, *Gulf of Maine, Explained: Storms and Coastal Flooding*, Gulf of Me. Rsch. Inst. (Jan. 30, 2024), <https://perma.cc/SL3C-DNET>.

³⁹⁷ U.S. Glob. Change Rsch. Program, *Chapter 21: Northeast, in Fifth National Climate Assessment*, 8 (Nov. 14, 2023) (“Fifth National Climate Assessment”), <https://doi.org/10.7930/NCA5.2023>.

³⁹⁸ *Id.* at 8.

\$1.449 billion in GDP each year.³⁹⁹ The personal and financial hardships from flooding that have been, and will be, felt by Maine residents are large and are made worse due to a widespread lack of flood insurance coverage in the State.⁴⁰⁰

264. Sea level rise is also projected to have widespread impacts on Maine's public infrastructure, rendering some coastal infrastructure unusable, impassable, or unsafe without major reconstruction and adaptation, such as raising the height of roads and rail, reengineering tidal crossings, and hardening wastewater treatment facilities and waste and sewer water systems.⁴⁰¹ Flooded wastewater, waste and sewer systems contaminate adjoining waters, rendering them unsafe and thus obstructing use and passage of those waters and public landings. Maine's public transportation infrastructure is also at risk. As noted, sea level rise will flood, obstruct, and render unpassable public roads and rail lines, and cause culverts and other tidal crossing infrastructure to fail. Many additional miles of transportation infrastructure will become inaccessible, and thereby functionally unusable, during these regular flooding events. Multiple shipping ports will flood.⁴⁰²

265. Coastal inundation also imperils freshwater aquifers and buried structures in Maine, such as septic tanks and pipes, which degrade water quality when they fail.⁴⁰³

266. Coastal flooding will inundate wastewater treatment plants and sewer district facilities in Maine, which is creating, and will continue to create, a significant threat to community resilience, public health, and use of impacted coastal and inland waters. When one of these facilities floods, raw sewage can contaminate community drinking water and impede use and passage of surrounding harbors, rivers, ponds, streams, and other bodies of water, and cause extensive environmental and safety hazards. When flooding and contamination occur in coastal and marine areas in Maine, fisheries and hospitality industries will inevitably be impacted. These

³⁹⁹ Governor's Summary Report, *supra* note 1, at 7, 11.

⁴⁰⁰ Fifth National Climate Assessment, *supra* note 397, at 26 & Figure 21.9.

⁴⁰¹ Governor's Cost Report, *supra* note 382, at 33.

⁴⁰² Governor's Summary Report, *supra* note 1, at 8.

⁴⁰³ Fifth National Climate Assessment, *supra* note 397 at 13.

treatment plants and sewer district facilities also represent significant community investments that make flooding of such facilities costly for Maine residents.⁴⁰⁴

267. Sea level rise in Maine imperils valuable ecosystem functions. For example, sea level rise could contribute to the net loss of over 10 square kilometers of eelgrass and nearly 40 square kilometers of salt marsh by 2100, leading to lost fish spawning habitats that support Maine's commercial fisheries that are valued at more than \$250 million.⁴⁰⁵

268. Many of Maine's sand dune systems are also at risk of complete inundation from sea level rise.⁴⁰⁶ Maine's sand dunes, eelgrass, and salt marshes currently help protect against coastal flooding and erosion.⁴⁰⁷ The loss of these natural barriers will leave coastal infrastructure and real estate vulnerable to flooding, and will increase harms to coastal communities.⁴⁰⁸

269. Maine is already experiencing, and working to abate, current harms caused by sea level rise. But while harms to the State have commenced, additional and far more severe injuries will occur in the future if prompt action is not taken now. Indeed, the sea level rise harms inflicted on Maine by global warming are insidious partly because they are projected to continue, and to worsen, far into the future if Defendants' tortious and deceptive conduct is not abated. The State must plan for future harms from sea level rise now to ensure that adaptation to protect human well-being and public and private property is done most efficiently and effectively.

ii. Extreme Precipitation and Flooding in Maine

270. Warmer global temperatures cause storm systems in Maine to hold higher volumes of water, which are then released in increasingly unprecedented levels of precipitation. Extreme precipitation events are occurring in Maine and will continue to increase in frequency and severity as a result of climate change attributable to Defendants' wrongful conduct.

⁴⁰⁴ Governor's Cost Report, *supra* note 382 at 33.

⁴⁰⁵ Governor's Summary Report, *supra* note 1, at 1, 10.

⁴⁰⁶ Governor's Cost Report, *supra* note 382, at 53.

⁴⁰⁷ *Id.* at 48; Governor's Summary Report, *supra* note 1, at 10.

⁴⁰⁸ Governor's Cost Report, *supra* note 382, at 54.

271. The “warmer, wetter future that climate scientists have been predicting for New England is already here.”⁴⁰⁹ Regional precipitation has increased across all seasons, and the occurrence of extreme precipitation events has increased by approximately 60%—the largest amount seen anywhere in the United States.⁴¹⁰ Maine has become wetter, with overall precipitation levels continuing to increase because of climate change.⁴¹¹ 2023 was the fifth wettest year on record in Maine.⁴¹²

272. Warming in the Northeast is also driving a more intense hydrologic cycle, causing more frequent and extreme precipitation events in Maine.⁴¹³ The State is also seeing more short-duration but high-intensity precipitation events concentrated over localized areas.⁴¹⁴

273. Maine is also experiencing extreme precipitation variability in which the State swings from extremely wet periods to extremely dry periods. As such, the State has recently experienced severe drought conditions. These swings are caused by intensification of the hydrologic cycle in which dry periods become drier and wet periods become wetter.⁴¹⁵ These extreme dry periods threaten Mainers who, and State properties that, rely on wells, and whose occupations and uses require stable water supplies—such as farmers, freshwater river guides, and State natural resources that rely on adequate amounts of freshwater.

274. Maine’s extreme precipitation events have caused, and will cause, flooding in Mainers’ homes, businesses, and communities. The risk of extreme riverine flooding in Maine also places many of the State’s frontline communities at high risk. Those Maine residents and communities will be harder hit and will have a harder time recovering from each flooding event.⁴¹⁶

⁴⁰⁹ Penelope Overton, *New England’s Wetter, Warmer Future is Already Here*, Portland Press Herald (Nov. 14, 2023), <https://perma.cc/B2RF-5V4J>; Fifth National Climate Assessment, *supra* note 397, at 5.

⁴¹⁰ Fifth National Climate Assessment, *supra* note 397, at 5.

⁴¹¹ Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 30.

⁴¹² *Id.* at 27.

⁴¹³ *Id.* at 27; Fifth National Climate Assessment, *supra* note 397, at 5.

⁴¹⁴ Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 27, 31.

⁴¹⁵ *Id.* at 32.

⁴¹⁶ Governor’s Summary Report, *supra* note 1, at 5–6.

275. State property, natural resources, and public infrastructure also stand to suffer widespread damage from extreme precipitation events, which are projected to become more intense and frequent. For example, a 1% annual chance flood (i.e., a 100-year-flood) in Maine risks submerging 675 miles of public roads, 163 miles of rail, and 26 airports. A 0.2% annual chance flood (i.e., a 500-year-flood) risks inundating 744 miles of public road, 178 miles of rail, and 27 airports.⁴¹⁷ In both scenarios, approximately 2,300 culverts under public roads are at risk of failure.⁴¹⁸ A conservative cost estimate of replacing those culverts is \$76.6 million.⁴¹⁹ Overwhelmed culverts can also cause substantial additional damage to roads themselves, incurring additional public costs. Bridges, abutments, State parks, and other State property and infrastructure is, and will be, at risk of flooding. Because of climate change, these types of extreme flooding events are projected to become more frequent than once every 100- or 500-years.

⁴¹⁷ Governor's Vulnerability Mapping Report, *supra* note 391, at 36.

⁴¹⁸ *Id.* at 37.

⁴¹⁹ Governor's Cost Report, *supra* note 382, at 40.

276. Figure 17 shows the geographic scope of areas in Maine that will be impacted by such flooding. Additional flooding is likely in many areas lacking FEMA data.

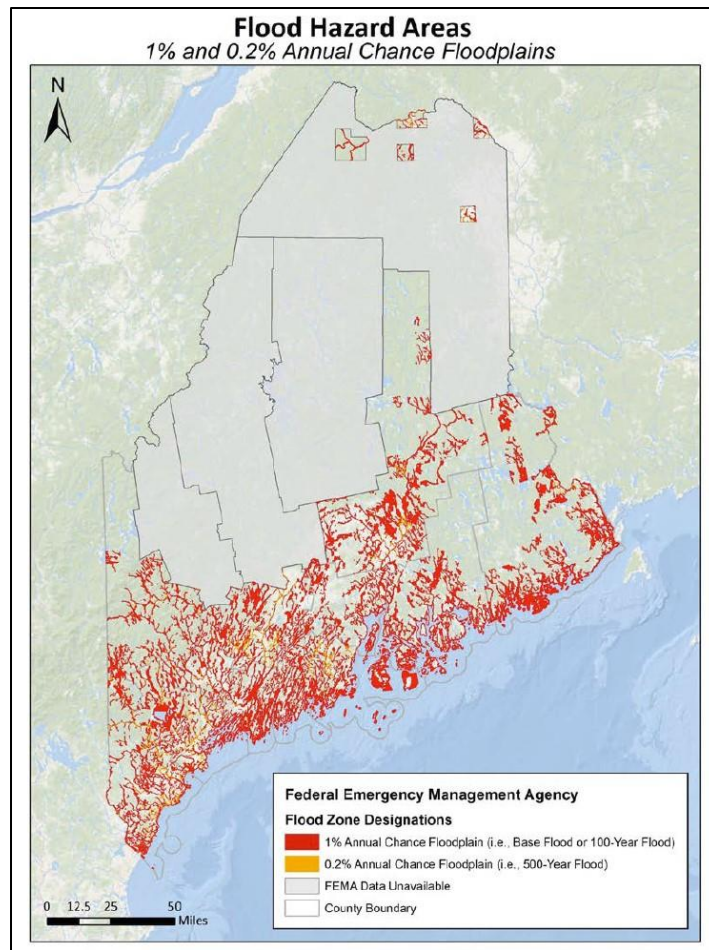


Figure 17: Maine Coastal and Riverine Flood Hazard Areas⁴²⁰

277. The risk of flooding in Maine caused by extreme precipitation will impact cities, towns, rural areas, and State property and infrastructure because many are inside areas at risk of flooding and are not adequately protected against the elevated risks from extreme precipitation events.⁴²¹ Flooded wastewater, waste and sewer systems contaminate, and will contaminate, rivers, streams, ponds, lakes, and other bodies of water—rendering them unsafe and obstructing use and passage of those waters and public landings.

⁴²⁰ Governor’s Vulnerability Mapping Report, *supra* note 391, at 9.

⁴²¹ Governor’s Summary Report, *supra* note 1, at 8, 10

278. Maine stands to lose over \$1.8 billion statewide from cumulative building losses caused by riverine flooding.⁴²² Across the State, Maine residents and communities stand to face particular financial hardships from building flooding because of the dearth of flood insurance coverage.⁴²³ Relatedly, Maine will incur the second-largest home insurance rate increase in the United States in 2024 to adjust for the impacts to buildings, and the costs of repair, from Maine’s extreme precipitation and storm events in 2023.⁴²⁴

279. More frequent and extreme precipitation events caused by climate change also compound coastal Maine’s vulnerability to storm surge and sea level rise. As riverine flood waters running downriver encounter tidal waters elevated by storm surge and sea level rise, river waters may be unable to discharge into the ocean and thereby backup into the rivers, causing yet higher riverine flooding levels. Maine is today at risk of a losing \$1.197 and \$1.449 billion in statewide gross domestic product (“GDP”) due to riverine and coastal flooding.⁴²⁵

iii. Extreme Storms in Maine

280. Extratropical storms have also become and are projected to increasingly become more severe in a warming climate.⁴²⁶ Maine has experienced, and will continue to experience, these more severe storms, which have caused and will cause future damages.

281. On August 28, 2011, Tropical Storm Irene hit Maine with high-winds and over eight inches of rain in the western part of the State.⁴²⁷ More than 300,000 Maine customers lost power; State property, public infrastructure, and private property were damaged; and approximately 200 roads and 12 bridges were closed by floods or fallen trees that obstructed passage and use.⁴²⁸ The town of Carrabassett Valley was isolated when a bridge failed and water

⁴²² *Id.* at 10

⁴²³ Fifth National Climate Assessment, *supra* note 397, at 26 & Figure 21.9.

⁴²⁴ Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 56.

⁴²⁵ Governor’s Summary Report, *supra* note 1, at 7, 10–11.

⁴²⁶ Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 39.

⁴²⁷ Emily Santom, *Reflecting on Tropical Storm Irene’s Impact 13 Years Later in New England*, WGME (Aug. 29, 2024, 5:24 AM), <https://perma.cc/PF7A-TLZU>.

⁴²⁸ Assoc. Press, *Hurricane Irene: State-by-State Damage*, Politico (Aug. 29, 2011, 8:13 PM EDT), <https://perma.cc/2KLG-D5CB>; *Photos: Irene’s Aftermath in Maine, Storm Damage from Tropical Storm Irene*, WMTW (Sept 1, 2011), <https://perma.cc/AD7P-TS52>.

inundated Route 27.⁴²⁹ Major rivers flooded, including the Androscoggin and Kennebec, leading to evacuations and property damage. Two people died in Maine from Tropical Storm Irene.⁴³⁰

282. On October 30–31, 2021, the “Halloween Storm” brought high-winds and between 2–6.5 inches of rain across western and southern Maine within a matter of hours, causing extensive flash flooding and damage to State property, public infrastructure, homes, businesses, and a healthcare facility.⁴³¹ More than 50,000 Maine customers lost power.⁴³² A Major Disaster Declaration was later issued.⁴³³

283. On December 23, 2022, “Winter Storm Elliot” struck Maine with high-winds and waves riding atop a storm surge that caused more than 350,000 power outages across the State; flooded homes, businesses, and downtowns; damaged State property and iconic Maine lighthouses; and forced water rescues.⁴³⁴ A Major Disaster Declaration was later issued.⁴³⁵

284. On May 1, 2023, the “May Day Storm” struck Maine with damaging winds and extreme precipitation, causing widespread damage to State property and public infrastructure; flooding businesses, homes, and vehicles; and leaving tens of thousands of Maine residents without power.⁴³⁶ A Major Disaster Declaration was later issued.⁴³⁷

⁴²⁹ *Irene Knocks Out Power to 200,000 in Maine*, Assoc. Press (Aug. 28, 2011), <https://perma.cc/79SL-LHRD>.

⁴³⁰ *Maine’s Top 10 Most Dangerous Storms*, VisitMaine.net (Sept. 18, 2023), <https://perma.cc/ZL6V-X43N>.

⁴³¹ Me. Emergency Mgmt. Agency, *Flooding, Notable Flood: The 2021 “Halloween Storm”*, <https://perma.cc/C958-Z933> (last visited Sept. 10, 2024); Dennis Hoey, *Heavy Rainfall, Powerful Wind Gusts Clobber Maine Coastal Communities*, Portland Press Herald (Oct. 31, 2021), <https://perma.cc/K5YN-N68A>.

⁴³² Me. Emergency Mgmt. Agency, *Notable Flood*, *supra* note 431.

⁴³³ Me. Emergency Mgmt. Agency, *Declared Disasters – List of Open Disasters* (last visited Sept. 10, 2024), <https://perma.cc/3R8E-FZ3A>.

⁴³⁴ Emily Allen, *Storm Batters Maine’s Coastal Communities, Causes Widespread Flooding and Outages*, Portland Press Herald (Dec. 23, 2022), <https://perma.cc/P793-QVQL>; CMP, *Nearly 170,000 CMP Customers Restored from Winter Storm* (Dec. 23, 2022), <https://perma.cc/CMJ3-9YPZ>; Mal Meyer et al., *Coastal Maine Hit With Strong Winds, ‘Historic’ High Tide from Powerful Storm*, WGME (Dec. 25, 2022), <https://perma.cc/HCV7-57PP>.

⁴³⁵ Me. Emergency Mgmt. Agency, *Declared Disasters*, *supra* note 433.

⁴³⁶ Julie Sherburne et al., *Maine communities recovering after storm brings flooding, power outages*, News Center Maine (May 1, 2023), <https://perma.cc/6WNJ-E9KE>.

⁴³⁷ Me. Emergency Mgmt. Agency, *Declared Disasters*, *supra* note 433.

285. On September 16, 2023, “Post-Tropical Cyclone Lee” brought high-winds and torrential rains to Maine, sinking and smashing ships, causing widespread power outages and property damage, and toppling trees—one of which struck and killed a Maine resident.⁴³⁸ A federal Emergency Declaration was issued.⁴³⁹

286. Extreme storms that hit Maine between December 2023 and January 2024 have generated significant concern for future extratropical storm trends in the State.⁴⁴⁰ Those weather extremes were reflective of anomalous conditions worldwide and occurred against the backdrop of record warm wintertime ocean temperatures in the North Atlantic.⁴⁴¹ Those extreme precipitation events caused, and events like them tend to cause, substantial damage because they occurred in high-intensity bursts, in succession, and when the ground was frozen which makes stormwater particularly susceptible to runoff.⁴⁴²

287. On December 18, 2023, the “Grinch Storm” caused Governor Janet Mills to declare a civil state of emergency in 14 of Maine’s 16 counties. The storm resulted in torrential rains, damaging winds at near-hurricane strength, and flooded rivers.⁴⁴³ The Kennebec River experienced major flooding, with water levels rising to more than 30 feet and causing inundation, business losses, and evacuations in multiple central Maine communities.⁴⁴⁴ The overflowing

⁴³⁸ David Sharp et al., *Thousands Without Power and 1 Dead After Atlantic Storm Lee Pummels New England and Maritime Canada*, Assoc. Press (Sept. 16, 2023), <https://perma.cc/TR8F-Q9ER>; Brian Lada, *Lee Turns Deadly as Powerful Storm Bombards Maine, Nova Scotia*, AccuWeather (Sept. 16, 2023), <https://perma.cc/H58V-HP74>.

⁴³⁹ Me. Emergency Mgmt. Agency, *Declared Disasters*, *supra* note 433.

⁴⁴⁰ Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 39.

⁴⁴¹ *Id.* at 37.

⁴⁴² Overton, *supra* note 409.

⁴⁴³ Jessica Lowell, *Flooding Kennebec River Leaves Wake of Destruction as Thousands Remain Without Power in Central Maine*, Kennebec Journal (Dec. 19, 2023), <https://perma.cc/E5J5-EZGT>; Patrick Whittle et al., *Northeastern U.S. Mops up Ahead of Holidays After Deadly Storm Slams the Region, Killing at Least Five*, Assoc. Press (Dec. 19, 2023), <https://perma.cc/W3CP-BNPQ>.

⁴⁴⁴ Lowell, *supra* note 443; Rai, *supra* note 42.

Androscoggin River caused evacuations and flooded downtowns, homes, and vehicles,⁴⁴⁵ and reached the designation of a 100-year flood event in Rumford.⁴⁴⁶

288. The Grinch Storm severely damaged Maine’s infrastructure, leaving over 400,000 Maine residents without power. There were nearly 100 road closures from downed trees and power lines, flooding, and significant damage to public infrastructure.⁴⁴⁷ The storms overwhelmed the State’s sewer systems, causing over 745 million gallons of raw storm and sewer water to enter Maine’s rivers and bays, which resulted in beach and shellfishing area closures.⁴⁴⁸

289. Cold temperatures followed soon after the Grinch Storm, causing dangerous conditions for many Maine residents, especially those who remained without power.⁴⁴⁹ At least four Maine residents died due to the December 2023 storm.⁴⁵⁰

290. On the heels of the December 2023 Grinch Storm, Maine experienced back-to-back storms in January 2024 that compounded prior damages and hit coastal communities particularly hard because the storms’ strong-winds and storm surge coincided with astronomical high tides, producing significant flooding.⁴⁵¹

291. On January 10, 2024, and then again on January 13, 2024, two separate storms brought heavy winds, rain, and surging ocean water that corresponded with extreme high tides to inundate swaths of Maine’s coast—closing roads, destroying property, and flooding businesses,

⁴⁴⁵ Troy R. Bennet, *Watch the Mighty Power of the Androscoggin River Wednesday Morning*, Bangor Daily News (Dec. 20, 2023), <https://perma.cc/9YP8-SZMK>; Anna Coon, *City of Lewiston Evacuates Some Areas near Androscoggin River Due to Flooding*, WGME (Dec. 19, 2023), <https://perma.cc/ZL7N-94GQ>.

⁴⁴⁶ Emily Santom, *‘100-Year Flood’: Flooding Due to Raging Androscoggin River in Rumford Makes History*, WGME (Dec. 19, 2023), <https://perma.cc/HYN7-24LQ>.

⁴⁴⁷ Johanna Knapschaefer, *Maine Hardest Hit by Powerful East Coast Storm*, ENR (2023) <https://perma.cc/2X69-U4GD>.

⁴⁴⁸ Penelope Overton, *Volume of Maine’s Storm and Sewage Overflows More than Doubled in 2023*, Portland Press Herald (July 1, 2024), <https://perma.cc/3KRJ-CKS3/>.

⁴⁴⁹ Chris Oberholtz, *Drone Video Shows Devastating Floods in Northeast After Deadly Storm Walloped East Coast*, Fox Weather (Dec. 20, 2023), <https://perma.cc/B7A7-GZBC>.

⁴⁵⁰ Scott Sisteck, *Death Toll from Northeast Flooding Grows as Another Victim Found in Maine*, Fox Weather (Dec. 22, 2023), <https://perma.cc/3YUY-J87R>.

⁴⁵¹ Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 36–37.

State property, public infrastructure, and historic ports.⁴⁵² The storms caused extensive physical damage and financial losses, a new high-water record in Portland, stay at home advisories, rescues of Maine residents, and forced electricity shut-offs due to inundated electrical infrastructure.⁴⁵³ The storms lifted piers and buildings into the air and pulled other buildings off their pilings before dragging them into the ocean.⁴⁵⁴

292. In January 2024, President Biden approved a Public Assistance Disaster Declaration for nine Maine counties to help recovery efforts following the December 2023 Grinch Storm.⁴⁵⁵ In March 2024, President Biden approved a Public Assistance Disaster Declaration to assist eight Maine counties recovering from the two January 2024 storms.⁴⁵⁶

293. Maine continues to suffer injuries caused by and in responding to extreme precipitation, storms, and flooding and must adapt now to protect its people, property, facilities, and equipment from impacts caused by more frequent and extreme events that are driven by Defendants' wrongful conduct.

iv. Harmful Health Outcomes in Maine

294. Climate change is already harming human health and well-being in Maine, and is projected to have significant health impacts in the future.⁴⁵⁷ “Climate change is the greatest global health threat facing the world in the 21st century.”⁴⁵⁸ It “affects the physical environment as well as all aspects of both natural and human systems—including social and economic conditions and

⁴⁵² Keith Shortall et al., *Maine coast walloped by flooding amid rainfall, astronomical tides*, Maine Public (Jan. 13, 2024), <https://perma.cc/CFY8-BMCG>; Daniele Dunkle, *Second Storm Causes Damage, Flooding in Camden*, The Courier-Gazette (Jan. 15, 2024), <https://perma.cc/J369-QTT6>.

⁴⁵³ Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 37; Keith Shortall, *supra* note 452; Susan Cover, *Camden Recovering from Powerful Storms That Damaged Seawalls, Ripped Apart Private Piers*, Spectrum News (Jan. 23, 2024), <https://perma.cc/G6H3-KF3Q>; Sean Murphy, *Maine Receives Second Disaster Declaration to Help Recover from January Storms*, Spectrum News (Mar. 21, 2024), <https://perma.cc/TA6V-EM9D>.

⁴⁵⁴ Michael Shepherd & Bill Trotter, *Flooding Smashes Maine's Coast, Destroying Historic Buildings and Forcing Rescues*, Bangor Daily News (Jan. 13, 2024), <https://perma.cc/PHY5-FHQX>.

⁴⁵⁵ Me. Emergency Mgmt. Agency, *Declared Disasters*, *supra* note 433.

⁴⁵⁶ *Id.*

⁴⁵⁷ Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 48.

⁴⁵⁸ The Lancet, *The Lancet Countdown on Health and Climate Change*, <https://perma.cc/AA4F-4K2P> (last visited Sept. 15, 2024); *see also* Marina Romanello et al., *The Lancet Countdown on Health and Climate Change*, The Lancet (Dec. 16, 2023).

the functioning of health systems. It is therefore a threat multiplier, undermining and potentially reversing decades of health progress.”⁴⁵⁹

295. In Maine, vector-borne diseases, heat-related illnesses, and worsening air quality are among the many health harms driven by climate change, all of which are caused by Defendants’ wrongful conduct.

296. Climate change is increasing the occurrence and risk of serious vector-borne diseases in Maine, including tickborne illness like Lyme disease and mosquito-borne illnesses like Eastern equine encephalitis. These illnesses have substantial impacts on Maine residents, and they harm the State’s public health and its healthcare systems.⁴⁶⁰

297. These vector-borne diseases are also likely to become increasingly prevalent because of climate change. Warmer, shorter winters encourage tick population expansion. Deer tick populations are projected to expand into northern Maine and Lone Star tick populations are projected to become established in southern and coastal Maine. And increases in summer length, precipitation, and humidity encourage mosquito populations.⁴⁶¹

298. Lyme disease, anaplasmosis, babesiosis, and Powassan encephalitis virus are caused by tick bites. The incidence of Lyme disease, anaplasmosis, and babesiosis have been steadily growing in Maine over the last two decades.⁴⁶² Lyme disease infection rates in Maine hit a record level in 2022, only to be surpassed in 2023.⁴⁶³ Maine’s incidence of Lyme disease exceeds the New England and the national averages.⁴⁶⁴

299. Escalating Lyme disease infection rates are particularly concerning because Lyme disease can, and does, severely impact human joints, the heart, and the nervous system; and can

⁴⁵⁹ World Health Org., *Climate Change* (Oct. 12, 2023), <https://perma.cc/CU6R-WFY4>; *see also* Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 48.

⁴⁶⁰ Governor’s Summary Report, *supra* note 1, at 12; Governor’s Cost Report, *supra* note 382, at 56.

⁴⁶¹ Governor’s Summary Report, *supra* note 1, at 1, 12; Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 51–52, 56.

⁴⁶² Me. Tracking Network, *Tickborne Diseases*, Me. Dep’t of Health and Hum. Servs., <https://perma.cc/8YV3-6TN9> (last visited Sept. 14, 2024).

⁴⁶³ *Id.*; Maine Cntr. for Disease Control & Prevention, *Lyme and Other Tickborne Illnesses 2023 Report*, at 4, 14–15 (2023) (“Maine CDC 2023 Lyme Report”).

⁴⁶⁴ Maine CDC 2023 Lyme Report, *supra* note 463, at 15.

cause symptoms such as arthritis, Bell’s palsy and other cranial nerve palsies, meningitis, and carditis—all of which lead to health risks, costly medical treatments, lost income, and lower quality of life.⁴⁶⁵

300. In Maine, annual Lyme disease costs have historically exceeded \$11.5 million for patient treatment, and those costs are projected to increase as Lyme disease becomes more prevalent.⁴⁶⁶ In 2018, for example, Lyme disease costs exceeded \$16.7 million.⁴⁶⁷

301. Mosquito-borne Eastern equine encephalitis has historically been rare in Maine, but outbreaks are occurring and are expected to increase because of climate change.⁴⁶⁸ Climate change leads to more summer precipitation and humidity, greater frequency of extreme rain events, earlier degree day accumulation, and warmer falls—all of which create conditions that exacerbate mosquitoes’ active season and the risk of Eastern equine encephalitis transmission.⁴⁶⁹ Maine has historically relied on hard frosts in October to end the mosquito season, but extended frost-free autumns are now causing the mosquito-bite season to persist longer in Maine.⁴⁷⁰

302. In 2023 and 2024, Eastern equine encephalitis, West Nile Virus, and Jamestown Canyon Virus were all reported in Maine mosquito populations.⁴⁷¹ Thirteen of Maine’s sixteen counties showed the presence of these mosquito-borne diseases in 2024.⁴⁷² Human cases of Eastern equine encephalitis and West Nile Virus occurred in Maine in 2024.⁴⁷³ In 2009, 2023, and 2024,

⁴⁶⁵ Governor’s Cost Report, *supra* note 382, at 56.

⁴⁶⁶ *Id.* at 56; Governor’s Summary Report, *supra* note 1, at 1, 12.

⁴⁶⁷ Governor’s Cost Report, *supra* note 382, at 57.

⁴⁶⁸ *Id.* at 56; Governor’s Summary Report, *supra* note 1, at 12.

⁴⁶⁹ Governor’s Cost Report, *supra* note 382, at 56.

⁴⁷⁰ Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 53.

⁴⁷¹ *Id.* at 52; Maine Dep’t of Health & Human Servs., *Maine CDC Warns of Mosquito-Borne Virus Identified in Three Additional Counties* (Sept. 23, 2024), <https://perma.cc/JJ3F-WFNQ>.

⁴⁷² *Maine CDC Warns of Mosquito-Borne Virus Identified in Three Additional Counties*, *supra* note 471.

⁴⁷³ *Id.*; Maine Dep’t of Health & Human Servs., *Locally Acquired Eastern Equine Encephalitis Virus Infection Identified in a Maine Resident* (Nov. 7, 2024), <https://perma.cc/APW5-BUW5>.

Eastern equine encephalitis was present in wild birds, Maine veterinary cases, and Maine mosquito populations, increasing the risk of outbreaks among humans.⁴⁷⁴

303. Eastern equine encephalitis causes death in approximately 30% of infected humans, with survivors often experiencing ongoing serious neurological maladies.⁴⁷⁵ There are no vaccines to prevent or medicines to treat Eastern equine encephalitis.⁴⁷⁶

304. Individuals who suffer a case of Eastern equine encephalitis can incur approximately \$40,360 in direct treatment costs, and approximately \$5.76 million over the course of a lifetime to treat their ongoing neurological issues.⁴⁷⁷

305. Climate change has also increased, and will continue to increase, average temperatures and the frequency and severity of extreme heat events in Maine. Maine is already experiencing extreme heatwaves, which have become longer lasting and more severe.⁴⁷⁸ Extreme heat is also putting increased pressure on emergency managers and electric utilities and is causing human illnesses and death.⁴⁷⁹

306. If GHG emissions continue at their current pace, Maine's average air temperature is expected to be 6°F warmer in 2050 and over 12°F warmer by 2100.⁴⁸⁰

307. These rising average temperatures will increase the number of high heat index days, which are days that feel like 90°F or hotter.⁴⁸¹ During the final decades of the Twentieth Century, Maine typically experienced only one high heat index day each year.⁴⁸² If GHG emissions continue at their current pace, Maine can expect 14 high heat index days annually by 2050 and 36 high heat

⁴⁷⁴ Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 52; Maine Dep't of Health & Human Servs., *Eastern Equine Encephalitis Identified in a Maine Horse* (Sept. 6, 2024), <https://perma.cc/ZWF3-B7NB>; *Maine CDC Warns of Mosquito-Borne Virus Identified in Three Additional Counties*, *supra* note 471.

⁴⁷⁵ Governor's Summary Report, *supra* note 1, at 12.

⁴⁷⁶ Ctrs. for Disease Control and Prevention, *About Eastern Equine Encephalitis* (May 15, 2024), <https://perma.cc/B4ZS-JAAH>.

⁴⁷⁷ Governor's Summary Report, *supra* note 1, at 12, 24.

⁴⁷⁸ Fifth National Climate Assessment, *supra* note 397, at 5, 7.

⁴⁷⁹ *Id.* at 7.

⁴⁸⁰ Governor's Cost Report, *supra* note 382, at 65.

⁴⁸¹ *Id.*

⁴⁸² *Id.*; Governor's Summary Report, *supra* note 1, at 13.

index days annually by 2100. Under a scenario of moderate GHG emissions reductions, Maine can expect 9 high heat index days each year by 2050 and 13 by 2100.⁴⁸³

308. Exposure to extreme heat is linked to a range of negative health outcomes, including heatstroke; renal failure; dehydration; exacerbation of existing respiratory, cardiovascular, cerebrovascular, and diabetes-related conditions; and mental health issues. Exposure to extreme heat is also linked to harmful fetal health effects and pre-term births.⁴⁸⁴

309. Mainers are particularly vulnerable to these high heat days because residents of historically cool climates, like Maine, are less physiologically adapted to extreme heat and experience disproportionate health effects.⁴⁸⁵ Mainers are also vulnerable to high heat days because Maine's building stock is oriented toward trapping heat indoors, is often inefficient, and disproportionately lacks air conditioning in its homes, schools, workplaces, and other buildings.⁴⁸⁶ Mainers who work outside are particularly susceptible to heat-related illnesses severe enough to cause emergency room visits.⁴⁸⁷ Elderly Mainers are also particularly vulnerable to heat-related illnesses, and are a growing proportion of the State's population.⁴⁸⁸ The health risks posed by extreme heat also impact Maine's frontline communities disproportionately.⁴⁸⁹

310. Nearly the entire State is experiencing moderate or high heat vulnerability today, as depicted in Figure 18 below, which does not present future heat projections.

⁴⁸³ Governor's Cost Report, *supra* note 382, at 65.

⁴⁸⁴ Governor's Summary Report, *supra* note 1, at 13; Governor's Cost Report, *supra* note 382, at 65; Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 49.

⁴⁸⁵ Governor's Cost Report, *supra* note 382, at 65; Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 49–50.

⁴⁸⁶ Governor's Summary Report, *supra* note 1, at 13; Governor's Cost Report, *supra* note 382, at 65.

⁴⁸⁷ Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 49.

⁴⁸⁸ Governor's Summary Report, *supra* note 1, at 13.

⁴⁸⁹ *Id.* at 6.

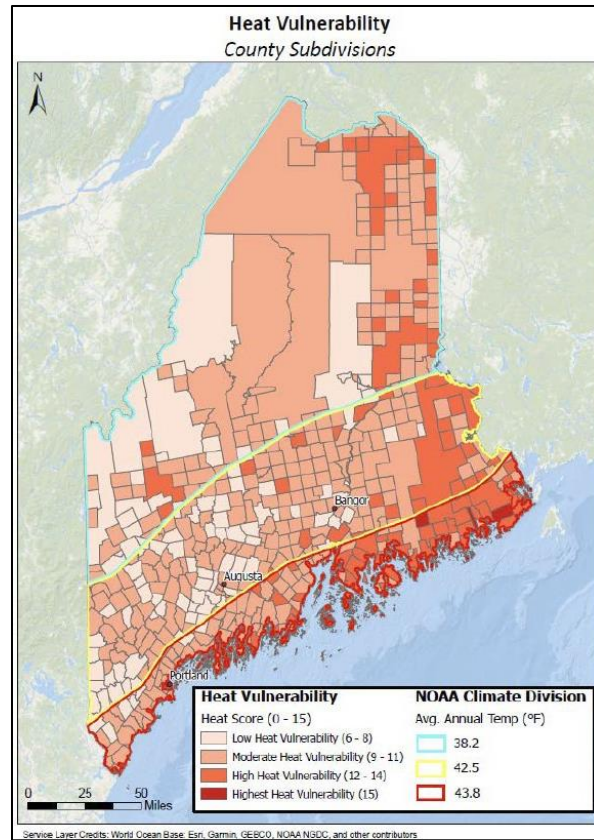


Figure 18: Maine Heat Vulnerability Map⁴⁹⁰

311. Direct healthcare costs for heat-related illnesses in Maine were at least \$224,000 in 2019 because of 200 emergency department visits and 15 hospitalizations. Heat-related health care costs are projected to be 9 to 14 times higher in 2050, costing \$1.9 to \$3.2 million annually, and 13 to 36 times higher in 2050, costing \$2.9 to \$8.1 million annually.⁴⁹¹ Those costs are likely underestimated because they do not include lost wages, childcare, or other indirect costs.⁴⁹²

312. Maine’s annual emergency department visits for heat-related illnesses have been trending upwards since 2019. In 2020, there were 287 emergency department visits for heat-related illness. In 2021, there were more than 362 such visits. In 2022, there were 334. In 2023, there were 360. And 2024 has exceeded 425 emergency department visits for heat-related illnesses.⁴⁹³

⁴⁹⁰ Governor’s Vulnerability Mapping Report, *supra* note 391, at 12.

⁴⁹¹ Governor’s Summary Report, *supra* note 1, at 13; Governor’s Cost Report, *supra* note 382 at 66.

⁴⁹² Governor’s Cost Report, *supra* note 382, at 66.

⁴⁹³ Me. Tracking Network, *Heat-Related Illness*, Me. Dep’t of Health & Hum. Servs., <https://perma.cc/TH87-7DCT> (last visited Nov. 14, 2024).

313. Air quality in Maine is also likely to deteriorate because of climate change. Air quality is closely associated with public health. Exposure to pollutants like fine particulate matter and ozone increases rates of allergies, bronchitis, asthma attacks and other respiratory illnesses; heart disease and other cardiovascular illnesses; and is an environmental risk factor connected to premature birth and low birth weight, mental health conditions, and many cancers.

314. Extreme wildfire smoke exposures in the eastern U.S. during 2023 revealed the importance of planning for wildfire smoke pollutants in Maine.⁴⁹⁴ Large-scale wildfires in the western U.S. and across Canada have transported wildfire smoke to the East Coast, especially during the summers of 2023 and 2024, which can cause exposure to airborne pollutants like fine particulate matter and associated health outcomes.⁴⁹⁵ Although the majority of large landscape fires have typically occurred in the western U.S., between 2006 and 2018, 74% of mortality, and on average 75% of asthma morbidity attributable to particulate matter from wildfire smoke occurred in the eastern United States.⁴⁹⁶ And wild fires are increasingly occurring in the eastern portions of the U.S. and Canada.

315. Extreme heat also accelerates the development of ground-level ozone, the main ingredient of smog, by promoting the chemical reaction between sunlight, nitrogen oxide, and volatile organic compounds that produces ozone. Smog is a harmful air pollutant because of its effects on people and the environment. Smog can be transported long distances by wind.⁴⁹⁷

v. Maine's Economic Vulnerability from Climate Change

316. Climate change due to Defendants' conduct is weakening, and will continue to weaken, Maine's economy by threatening industries that rely on the Gulf of Maine, tourism, and Maine's historically stable ecosystems and cold winters.

⁴⁹⁴ Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 53.

⁴⁹⁵ *Id.*

⁴⁹⁶ *Id.*

⁴⁹⁷ EPA, *Ground-level Ozone Basics*, <https://perma.cc/89AY-D43G> (last updated May 14, 2024).

317. The ocean and coastal habitats in the Northeast are experiencing changes that are unprecedented in recorded history, including ocean warming, marine heatwaves, sea level rise, and ocean acidification.⁴⁹⁸

318. These events are already causing significant disruptions in commercial fisheries, and are projected to worsen because of ongoing climate change.⁴⁹⁹ Northern shrimp and Atlantic cod face declines in the Gulf of Maine, and sea scallops are projected to migrate northward.⁵⁰⁰ The American oyster, which accounted for \$7.6 million of Maine’s total landings value in 2019, is highly sensitive to sea surface temperature changes.⁵⁰¹ And Atlantic salmon only thrive in a small range of temperatures, with mortality rates increasing when temperatures exceed 68°F.⁵⁰²

319. Maine’s marine species also face risk from ocean acidification. Increasing concentrations of atmospheric CO₂ are already causing ocean acidification, which is projected to continue increasing.⁵⁰³ As the Gulf of Maine acidifies, juvenile lobsters and shellfish, particularly mollusks, will experience slower shell growth, and Maine’s mussels will dissolve their shells to counter the increased acidity of their environment.⁵⁰⁴

320. Maine’s fishing and aquaculture industries that rely on marine species and healthy marine ecosystems are particularly at risk from ocean warming and ocean acidification.⁵⁰⁵ Harvesting of fish, shellfish, and macroalgae contributes many jobs to Maine’s economy, with harvests valued at about \$88 million annually, and the economic sector’s annual revenue valued at nearly \$600 million.⁵⁰⁶ If the lobster and fishing industry were to decline linearly between 2020 and 2050 due to climate impacts, reaching -50 percent output by the year 2050, the State’s cumulative GDP would lose \$838 million each year, and the State’s output would fall by \$1.3

⁴⁹⁸ Fifth National Climate Assessment, *supra* note 397, at 9.

⁴⁹⁹ *Id.* at 9–10.

⁵⁰⁰ *Id.* at 10, 15.

⁵⁰¹ Governor’s Cost Report, *supra* note 382, at 63.

⁵⁰² *Id.*

⁵⁰³ *Id.*; Me. Climate Off., *Climate Change in Maine*, Univ. of Me., <https://perma.cc/J5JK-6YKZ> (last updated June 26, 2023).

⁵⁰⁴ Governor’s Cost Report, *supra* note 382, at 63.

⁵⁰⁵ *Id.* at 59; Fifth National Climate Assessment, *supra* note 397, at 15.

⁵⁰⁶ Governor’s Summary Report, *supra* note 1, at 12–13.

billion.⁵⁰⁷ Climate change risks substantial financial and job losses to the State and to many of its residents.⁵⁰⁸

321. Of all the many commercial fisheries in Maine, lobstering is especially vital to the State's economic wellbeing and cultural heritage.⁵⁰⁹ It generates hundreds of millions of dollars in landings annually,⁵¹⁰ and supports many other jobs in Maine such as those on bait docks and bait boats, in the lobster trade, and in restaurants. Lobstering accounts for over 73% of the State's total commercial landings value across the fishing and aquaculture sector, and 80% of the entire U.S. lobster industry.⁵¹¹

322. The Gulf of Maine is among the most rapidly warming regions of the global ocean, and its marine ecosystem is losing its subarctic characteristics. The mean sea-surface temperature in the Gulf of Maine is projected to warm 1–3°F by 2050 and up to 1–7°F by 2100 depending on future GHG emissions worldwide.⁵¹² Lobster populations are projected to decline as ocean waters get warmer, and lobster populations that survive are anticipated to move farther offshore and northward outside of Maine's waters.⁵¹³ Marine heatwaves have caused early molting among lobsters, and spring warming and increased exposure to summer heat are associated with the prevalence of lobster shell disease.⁵¹⁴ In the waters of southern New England, between 30% and 40% of lobsters have epizootic shell disease, a development that occurred alongside warming ocean temperatures.⁵¹⁵ In those same southern New England states, warmer waters have seen fewer lobsters.⁵¹⁶

⁵⁰⁷ *Id.* at 13.

⁵⁰⁸ *Id.* at 1, 12–13.

⁵⁰⁹ *Id.* at 12.

⁵¹⁰ Governor's Cost Report, *supra* note 382, at 61 (noting that in 2019, Maine's lobster industry generated approximately \$485 million in landings).

⁵¹¹ *Id.* at 59, 61.

⁵¹² Me. Climate Off., *Climate Change in Maine*, *supra* note 503.

⁵¹³ Fifth National Climate Assessment, *supra* note 397, at 12–13, 15; Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 118.

⁵¹⁴ Fifth National Climate Assessment, *supra* note 397, at 12, 15.

⁵¹⁵ Governor's Cost Report, *supra* note 382, at 63.

⁵¹⁶ Governor's Summary Report, *supra* note 1, at 12–13.

323. 2023 saw Maine’s lowest lobster haul in 15 years, mimicking the declining catch trends seen in southern New England states.⁵¹⁷ Today, fewer lobsters in the Gulf of Maine are surviving into adulthood.⁵¹⁸ Forecasting models indicate that Maine’s iconic lobster industry is already in decline.⁵¹⁹

324. Sea level rise also puts Maine jobs at risk because places of employment along Maine’s coast and along inland stretches of tidally influenced rivers are increasingly prone to flooding.⁵²⁰ Sea level rise could also impact Maine residents’ jobs located near tidal rivers, such as in cities like Bangor.⁵²¹ With 1.6 feet of sea level rise, Maine is projected to lose approximately 21,500 jobs between 2020 and 2050.⁵²²

325. Sea level rise poses a particular risk to Maine’s tourism industry. Of the 21,500 jobs at risk from 1.6 feet of sea level rise, most are concentrated in Maine’s tourism sector.⁵²³

326. Sea level rise also threatens the tourism industry because it impacts Maine’s iconic sand beaches, which attract millions of tourists to the State each year.⁵²⁴ The sand beaches along the State’s southern coastline (“Maine’s Beach Region”) are Maine’s most popular area for leisure tourists and the most frequent primary destination for day and overnight visitors to Maine.⁵²⁵ Those beaches currently support over 28,000 Maine jobs, and over 13 million people visited those beaches in 2018.⁵²⁶ Those visitors generate approximately \$1.7 billion in annual spending, and provide the State approximately \$165 million in annual tax revenue.⁵²⁷

⁵¹⁷ Brian Skerry, *supra* note 377.

⁵¹⁸ *Id.*

⁵¹⁹ Governor’s Summary Report, *supra* note 1, at 12–13.

⁵²⁰ Governor’s Cost Report, *supra* note 382, at 37.

⁵²¹ Governor’s Summary Report, *supra* note 1, at 7.

⁵²² *Id.* at 1, 10; Governor’s Cost Report, *supra* note 382, at 38–39.

⁵²³ Governor’s Summary Report, *supra* note 1, at 1, 7, 10; Governor’s Cost Report, *supra* note 382, at 38–39.

⁵²⁴ Governor’s Summary Report, *supra* note 1, at 12.

⁵²⁵ Governor’s Cost Report, *supra* note 382, at 47.

⁵²⁶ *Id.*; Governor’s Summary Report, *supra* note 1, at 12.

⁵²⁷ *See supra* note 526.

327. At 1.6 feet of sea level rise, 43% of dry beach area will vanish from Maine’s Beach Region, resulting in 1.1 million fewer annual visitors, \$136 million less in annual tourism spending, \$39 million less in consumer surplus, and far greater total indirect economic losses.⁵²⁸

328. At 3.9 feet of sea level rise, 74–75 % of dry beach area in Maine’s Beach Region will vanish, resulting in 6.12 million fewer annual visitors, \$765 million less in annual tourism economic activity, significant lost tax revenue, lost jobs, and far greater total indirect economic losses.⁵²⁹

329. At 8.8 feet of sea level rise, 98% of dry beach area in Maine’s Beach Region will be permanently lost, resulting in 13.328 million fewer annual visitors, as much as \$1.67 billion less in annual tourism spending, significant lost tax revenue, lost jobs, and even greater total indirect economic losses.⁵³⁰

330. Maine’s other dry beaches up the coast will also shrink from sea level rise. At 1.6 feet of sea level rise, Maine’s northern beaches will lose between 39% and 72% of all dry beach area. At 3.9 feet of sea level rise, they will shrink by 69% to 95%. And at 8.8 feet of sea level rise, they will shrink by 92% to 100%.⁵³¹

331. Cumulative impacts of sea level rise paired with extreme high tides could reduce Maine’s statewide annual GDP by \$119 million each year by 2050, with losses ranging between \$665 million and \$2.415 billion per year by 2100.⁵³²

332. Maine’s winter tourism economy will be harmed by shorter ice-fishing, skating, alpine skiing, snowboarding, cross-country skiing, and snowmobiling seasons.⁵³³ Maine is projected to have 50% to 90% more days above freezing each year, shortened periods of snow cover, fewer days amenable to snowmaking, and earlier ice out dates.⁵³⁴ These changes will cause

⁵²⁸ Governor’s Cost Report, *supra* note 382, at 47–48.

⁵²⁹ *Id.*

⁵³⁰ *Id.*; Governor’s Summary Report, *supra* note 1, at 12.

⁵³¹ Governor’s Cost Report, *supra* note 382, at 50.

⁵³² Governor’s Summary Report, *supra* note 1, at 7.

⁵³³ Maine Scientific Assessment of Climate Change, 2024 Update, *supra* note 375, at 57.

⁵³⁴ *Id.* at 35.

substantial impacts to Maine’s winter recreation and tourism industries.⁵³⁵ Under these conditions, only 15% of all ski areas in the northeastern U.S. and Quebec, Canada are likely to remain viable.⁵³⁶

333. Warming winters also threaten Maine’s forestry industry, which has historically required frozen and snowy conditions to transport felled trees. That industry includes jobs in forestry and logging; forestry services; forestry machinery and equipment merchant wholesalers rentals, leasing, and repair and maintenance services; and forestry research and development laboratories or services.⁵³⁷

VI. CAUSES OF ACTION

FIRST CAUSE OF ACTION

NEGLIGENCE

(Against All Defendants)

334. The State realleges and reaffirms each and every allegation set forth in all preceding paragraphs as if fully restated in this section.

335. Defendants are responsible for causing and accelerating climate change. *See e.g.*, Section V.A., ¶¶ 43–54, *supra*. Fossil fuel products release GHGs into the atmosphere, causing the harms in Maine alleged in Section V.I., ¶¶ 248–333, *supra*—including but not limited to climate destabilization, global warming, more frequent and extreme precipitation and flooding, more frequent and extreme drought, more frequent and severe heat waves and extreme temperature days, vector-borne illnesses, worsening air quality, more frequent and extreme weather events and storms, sea level rise, storm surge, and ocean acidification. The consequences and injuries associated with those physical and environmental changes, including without limitation injuries to the State’s property, economy, infrastructure, and natural resources, result in risks to human health and safety, damage to property, infrastructure, and loss of use of State services in the State (“Climate-Related Harms”).

⁵³⁵ *Id.*

⁵³⁶ *Id.*

⁵³⁷ Governor’s Cost Report, *supra* note 382, at 13, 16.

336. For years, Defendants possessed knowledge that fossil fuels are the primary cause of climate change and that, if unabated, climate change would cause Climate-Related Harms. *See, e.g.,* Section V.B., ¶¶ 55–95, *supra*.

337. Given the scientific evidence available to and/or conducted by Defendants, as referenced herein, such injury was likely and reasonably foreseeable.

338. Under Maine law, Defendants had a duty to the State and its residents to exercise due care in the marketing, sale, and/or labeling of fossil fuel products and to act reasonably for the protection of the State and its residents and to avoid inflicting the injuries described herein.

339. Under Maine law, Defendants also had a duty to the State and its residents to honestly communicate their knowledge about the hazards of fossil fuel products, and a duty not to make false and misleading statements about the hazards of fossil fuel products.

340. Defendants had superior knowledge of the risks posed by fossil fuel products at all times relevant to this Complaint.

341. Defendants breached their duty of care when they advertised, promoted, and/or sold fossil fuel products, while failing to include warnings of the risk of harm associated with fossil fuel products, in a manner that they knew or should have known would result in injury to human health and safety, damage to State property, infrastructure, and natural resources, loss of use of State services, and other damages to the State and its residents.

342. Defendants further breached their duty of care by waging a years-long deceptive marketing and public relations campaign to discredit climate science.

343. Any warnings provided by Defendants were rendered ineffective by their decades-long tortious campaign of deception described herein, and by promulgating false and misleading statements which cast doubt on the consensus of climate scientists—including Fossil Fuel Defendants' own scientists—and advanced pseudo-scientific theories.

344. Defendants individually and in concert failed to warn about the foreseeable dangers of fossil fuel products, widely disseminated misleading marketing materials, refuted the scientific knowledge generally accepted at the time—including by Fossil Fuel Defendants' own scientists—

advanced and promoted pseudo-scientific theories of their own, and developed public relations materials that directly and proximately prevented reasonable consumers from recognizing or discovering the latent risks posed by Fossil Fuel Defendants' fossil fuel products and their contributions to grave climate changes. This conduct directly and proximately inflated fossil fuel consumption, which in turn delayed the emergence of clean-energy alternatives, delayed the transition to a lower-carbon economy, caused the emission of huge amounts of avoidable GHGs into the atmosphere, accelerated climate change, and exacerbated Climate-Related Harms in Maine, causing loss to the State and its residents.

345. A reasonably careful company would not engage in the decades-long tortious campaign of deception described herein, would not advertise, market, manufacture or distribute fossil fuel products without proper warning, would warn of these products' hazardous properties, and/or would take steps to enhance the safety and/or reduce the risk of the products.

346. As a direct and proximate result of Defendants' acts and omissions as alleged herein, the State suffered monetary losses and damages in amounts to be proven at trial. Defendants' conduct caused injury to the lives and health of the State's residents, and to the State's property and natural resources, including by causing Climate-Related Harms.

347. Each Defendant, individually and collectively, engaged in the tortious conduct alleged in this Count, conspired to do so, and is thereby vicariously liable for the conduct of the other Defendants, individually and collectively, for the commission of negligence and civil conspiracy to commit negligence.

348. Defendants' decades-long campaign of intentional deception was, and is, wantonly designed by Defendants to enrich themselves without regard to or remorse for the known and increasingly catastrophic injuries to the State and its property, infrastructure, and natural resources, or to the health, safety, and wellbeing of the State's residents—all of which Defendants and Fossil Fuel Defendants' scientists long foresaw. Defendants' depraved deception is so callous and outrageous as to exceed all bounds of decency and would be regarded as atrocious and intolerable by impartial jurors in a civilized society. Defendants acted with malice in their deliberate conduct,

which was motivated by ill will toward the State and its residents, and which was so outrageous that malice toward the State and its residents may also be implied. Punitive damages are warranted to punish and deter Defendants.

SECOND CAUSE OF ACTION
PUBLIC NUISANCE
(Against All Defendants)

349. The State realleges and reaffirms each and every allegation set forth in all preceding paragraphs as if fully restated in this section.

350. Defendants, individually and in concert with each other, through their decades-long campaign of deception; their failure to include warnings of the risk of harm associated with fossil fuel products; and their affirmative promotion, advertisement, sale, and/or distribution of fossil fuel products, including in the State, have created, caused, contributed to, and assisted in creating a common law public nuisance of Climate-Related Harms that unreasonably endanger and injure public rights and the property, health, safety, peace, comfort, and welfare of Maine and its residents.

351. Defendants were fully aware and substantially certain that their decades-long campaign of deception, failure to include warnings of the risk of harm associated with fossil fuel products, and their advertisement, marketing, promotion, sale, and/or distribution of fossil fuel products would injure public rights by causing long-lasting Climate-Related Harms when those products were used as intended or in a reasonably foreseeable manner. Defendants intentionally proceeded with their conduct despite their substantial certainty about the foreseeable harms to the State and its residents.

352. Defendants' individual and collective actions in fact created, caused, contributed to, and assisted in the creation of Climate-Related Harms in the State by, *inter alia*, affirmatively advertising, marketing, and promoting the sale and use of fossil fuel products in the State, which Defendants knew would cause or exacerbate Climate-Related Harms in the State, while simultaneously engaging in the decades-long tortious campaign of deception described herein and failing to include warnings of the risk of harm associated with fossil fuel products.

353. Each Defendant individually and collectively has created, caused, contributed to, and assisted in a public nuisance by substantially and unreasonably interfering with, obstructing, and/or threatening Mainers’ health, safety, peace, comfort, and convenience—including, among other things, (i) Mainers’ common public rights to enjoy the State’s natural resources and property free from unacceptable health risk, pollution, and contamination, (ii) Mainers’ public rights with respect to State property held in trust for the public benefit, and (iii) the State’s *parens patriae* and public trust abilities and responsibilities to protect, conserve, and manage the State’s natural resources. These interferences include Climate-Related Harms, *see* Compl. ¶ 335 & Section V.I, ¶¶ 248–333, *supra*, and include, among other things:

- a. Severe precipitation events and storms, storm surge, sea level rise, and rising tidal rivers, which result in coastal and inland flooding, obstruct the use and enjoyment of property, obstruct the free passage and use of roads and rail, impede the use and enjoyment of critical public infrastructure, and lead to unprecedented levels of water surge into communities that can cause injury and death. *See, e.g., id.* ¶¶ 255–293, 327–331.
- b. More extreme heat days and heat waves, which increase the risk of injury or death, and which Mainers’ are particularly susceptible to. *See, e.g., id.* ¶¶ 305–312.
- c. More frequent and severe droughts, which can result in drinking water shortages, especially for Maine residents who rely on wells. *See, e.g., id.* ¶¶ 54.c, 91, 273.
- d. Increased prevalence of vector-borne diseases experienced by Maine residents, and worsening air quality in Maine. *See, e.g., id.* ¶¶ 295–304, 313–315.
- e. Significant disruptions to the use and enjoyment of the Gulf of Maine and the State’s other natural resources that depend on a stable, cool climate. *See, e.g., id.* ¶¶ 316–325, 332–333.

354. The State has not consented to Defendants' tortious conduct in creating the substantial and unreasonable public nuisance or the associated harms of that conduct.

355. These Climate-Related Harms are injurious to health; indecent and offensive to the senses; interfere with the comfortable enjoyment of life, property, and natural resources; and constitute a substantial and unreasonable interference with rights enjoyed by the State and its residents. An ordinary person would be reasonably disturbed by these Climate-Related Harms.

356. The Climate-Related Harms caused by Defendants' nuisance-creating conduct are extremely grave, and far outweigh any social utility of that tortious and deceptive conduct.

357. Defendants' conduct caused harm, and will cause worsening harm, to the State and its residents many years into the future if not abated. Abating Defendants' injurious deceptive conduct will prevent the public nuisance caused by Climate-Related Harms from becoming as severe as it would become absent abatement.

358. As a direct and proximate result of Defendants' acts and omissions, the State will be required to expend significant public resources to adapt to the impacts of Climate-Related Harms throughout the State to abate the nuisance.

359. The Climate-Related Harms are severe, exceed what the State and its residents should bear without compensation, and outweigh any utility of Defendants' tortious conduct.

360. As a direct and proximate result of Defendants' acts and omissions as alleged herein, Defendants are liable for damages under 17 M.R.S. § 2701—which proscribes common law public nuisance—arising from real and personal property damage, out of pocket expense, loss of use and enjoyment, diminution in value, and the discomfort, annoyance, aggravation, and inconvenience that has resulted, and will result, from Defendants' tortious conduct if not abated.

361. Each Defendant, individually and collectively, engaged in the tortious conduct alleged in this Count, conspired to do so, and is thereby vicariously liable for the conduct of the other Defendants, individually and collectively, for the commission of public nuisance and civil conspiracy to commit public nuisance.

362. Defendants’ decades-long campaign of intentional deception was, and is, wantonly designed by Defendants to enrich themselves without regard to or remorse for the known and increasingly catastrophic injuries to the State and its property, infrastructure, and natural resources; or to the health, safety, and wellbeing of the State’s residents—all of which Defendants and Fossil Fuel Defendants’ scientists long foresaw. Defendants’ depraved deception is so callous and outrageous as to exceed all bounds of decency and would be regarded as atrocious and intolerable by impartial jurors in a civilized society. Defendants acted with malice in their deliberate conduct, which was motivated by ill will toward the State and its residents, and which was so outrageous that malice toward the State and its residents may also be implied. Punitive damages are warranted to punish and deter Defendants.

THIRD CAUSE OF ACTION
PRIVATE NUISANCE
(Against All Defendants)

363. The State realleges and reaffirms each and every allegation set forth in all preceding paragraphs as if fully restated in this section.

364. Defendants, individually and in concert with each other, through their decades-long campaign of deception, their failure to include warnings of the risk of harm associated with fossil fuel products, and their affirmative promotion, advertisement, sale, and/or distribution of fossil fuel products, including in the State, have created, caused, contributed to, and assisted in creating a private nuisance of Climate-Related Harms that substantially and unreasonably endangers and impairs the use, enjoyment, and value of State property.

365. The State owns, leases, occupies, and manages extensive State property, some of which is held in trust. *See* Compl. ¶ 28, *supra*.

366. Defendants were fully aware and substantially certain that their decades-long campaign of deception, failure to include warnings of the risk of harm associated with fossil fuel products; and their advertising, marketing, promotion, sale, and/or distribution of fossil fuel products would cause Climate-Related Harms to occur in the State when those products were used as intended or in a reasonably foreseeable manner. Defendants proceeded with their conduct

despite their substantial certainty about the foreseeable harms to the State. Defendants thus acted with the intent of interfering with the use and enjoyment of State property.

367. Defendants' individual and collective actions in fact created, caused, contributed to, and assisted in the creation of Climate-Related Harms in the State by, among other things, affirmatively advertising, marketing, and promoting the sale and use of fossil fuel products in the State, which Defendants knew would cause or exacerbate Climate-Related Harms in the State and elsewhere, while simultaneously engaging in the decades-long tortious campaign of deception described herein and failing to include warnings of the risk of harm associated with fossil fuel products.

368. State property has been and will be impaired by private nuisances from Climate-Related Harms caused by Defendants' tortious conduct, thereby impeding use and enjoyment of State property by the State and its residents for the public benefit and welfare. Defendants, by their individual and collective acts and omissions, have caused, created, and contributed to conditions on State property, and permitted those conditions to persist, which substantially and unreasonably interfere with the use and enjoyment of such property for the public benefit and welfare, and which materially diminishes the values of such property to the State and the public.

369. The State has not consented to Defendants' conduct in creating the substantial and unreasonable conditions on its real property or to the associated harms of that conduct.

370. These substantial and unreasonable conditions affect State property and reduce its value and its benefit to the State and its residents. These conditions include Climate Related Harms, *see* Compl. ¶ 335 & Section V.I, ¶¶ 248–333, *supra*, among other things, such as:

- a. Severe precipitation events and storms, storm surge, sea level rise, and rising tidal rivers, which result in coastal and inland flooding that obstructs the use and enjoyment of State property; obstructs the free passage and use of State-owned roads, bridges, and transportation infrastructure; impedes the use and enjoyment of critical public infrastructure; and leads to unprecedented levels of

water surge into State property that can cause damages, injury and death. *See, e.g., id.* ¶¶ 255–293, 327–331.

- b. More frequent and severe droughts, which can result in arid conditions on State property and cause groundwater and drinking water shortages, which especially interferes with State property that relies on wells. *See, e.g., id.* ¶¶ 54.c, 91, 273.
- c. Increased prevalence of vector-borne diseases experienced by Maine residents who come into contact with such vectors when using State property. *See, e.g., id.* ¶¶ 295–304.
- d. Significant disruptions to the use and enjoyment of the Gulf of Maine and the State’s other natural resources that depend on a stable, cool climate. *See, e.g., id.* ¶¶ 316–325, 332–333.
- e. Worsening air quality experienced by Maine residents who come into contact with such air when using State property. *See, e.g., id.* ¶¶ 313–315.
- f. More frequent extreme heat days experienced by Maine residents exposed to dangerous heat conditions when using State property. *See, e.g., id.* ¶¶ 305–312.

371. The gravity of the harm caused by Defendants’ substantial interference with the use and enjoyment of State property outweighs the utility of Defendants’ continued efforts to distort information available to consumers, maximize profits, and engage in a deceptive marketing campaign to promote the unrestrained use of fossil fuel products, which has already inflated and sustained the market for fossil fuels.

372. An ordinary person would be reasonably annoyed or disturbed by Defendants’ conduct and resulting Climate-Related Harms.

373. Defendants’ conduct has caused and will continue to cause worsening harm to the State’s properties many years into the future if not abated. Abating Defendants’ injurious deceptive conduct will prevent the private nuisance caused by Climate-Related Harms from becoming as severe as they will become absent abatement.

374. As a direct and proximate result of Defendants’ acts and omissions, the State will be required to expend significant public resources to adapt to the impacts of Climate-Related Harms to its properties throughout the State to abate the nuisance.

375. The Climate-Related Harms are severe, greater than the State and its residents should bear without compensation, and outweigh any utility of Defendants’ tortious conduct.

376. As a direct and proximate result of Defendants’ acts and omissions as alleged herein, Defendants are liable for damages under 17 M.R.S. § 2701—which proscribes common law private nuisance—arising from loss of use and enjoyment, damages, and diminution in value of State property that has resulted, and will result, from Defendants’ tortious conduct if not abated.

377. Each Defendant, individually and collectively, engaged in the tortious conduct alleged in this Count, conspired to do so, and is thereby vicariously liable for the conduct of the other Defendants, individually and collectively, for the commission of private nuisance and civil conspiracy to commit private nuisance.

378. Defendants’ decades-long campaign of intentional deception was, and is, wantonly designed by Defendants to enrich themselves without regard to or remorse for the known and increasingly catastrophic injuries to the State and its property, which Defendants and Fossil Fuel Defendants’ scientists long foresaw. Defendants’ depraved deception is so callous and outrageous as to exceed all bounds of decency and would be regarded as atrocious and intolerable by impartial jurors in a civilized society. Defendants acted with malice in their deliberate conduct, which was motivated by ill will toward the State and its residents, and which was so outrageous that malice toward the State and its residents may also be implied. Punitive damages are warranted to punish and deter Defendants.

FOURTH CAUSE OF ACTION
COMMON LAW TRESPASS
(Against All Defendants)

379. The State realleges and reaffirms each and every allegation set forth in all preceding paragraphs as if fully restated in this section.

380. Defendants, individually and in concert with each other, through their decades-long campaign of deception, their failure to include warnings of the risk of harm associated with fossil fuel products; and their affirmative advertisement, marketing, promotion, advertisement, sale, and/or distribution of fossil fuel products in the State acted intentionally and in a manner that created, caused, contributed to, and assisted in creating Climate-Related Harms that have entered and invaded, and will enter and invade, State property, creating a common law trespass.

381. The State owns, leases, occupies, and manages extensive real property, some of which is held in trust, and which was previously defined as “State property,” Compl. ¶ 28, *supra*, that is already being invaded by multiple Climate-Related Harms.

382. Defendants were fully aware and substantially certain that their decades-long campaign of deception, failure to include warnings of the risk of harm associated with fossil fuel products; and their advertisement, marketing, promotion, sale, and/or distribution of fossil fuel products would cause Climate-Related Harms—including but not limited to rising tidal waters, extreme precipitation, and flood waters—to intrude and enter State property, when those fossil fuel products were used as intended or in a reasonably foreseeable manner. Defendants proceeded with their tortious and deceptive conduct despite their substantial certainty about the foreseeable intrusion of State property. Defendants thus acted with the intent of causing Climate-Related Harms to invade and enter State property.

383. The Defendants had considerable scientific knowledge—including from Fossil Fuel Defendants’ own scientists—affording them substantial certainty that GHG emissions from combusting fossil fuel products cause, and will cause, sea level rise, extreme precipitation, flood events, and other extreme weather that cause seawater, river water, and extreme storm runoff to invade State property.

384. Defendants actually did foresee—including through Fossil Fuel Defendants’ own studies—that their intentional conduct would cause such an invasion of State property.

385. By engaging in intentional conduct that Defendants were substantially certain would result in Climate-Related Harms in the State that enter and intrude State property, Defendants have intentionally intruded upon State property without permission or privilege.

386. These undeniably severe, substantial, and unreasonable conditions affecting State property include Climate-Related Harms, *see* Compl. ¶ 335 & Section V.I, ¶¶ 248–333, *supra*, among other things, such as:

- a. Extreme precipitation events that cause, and will cause, riverine flooding and severe runoff to enter and intrude State property—including but not limited to State roads, bridges, public infrastructure, land, buildings, and facilities. *See, e.g., id.* ¶¶ 270–282, 284, 286–289.
- b. Sea level rise, extreme astronomical tides, and storm surge which cause, and will cause, ocean water to enter and intrude State property near the coast and inland along tidal rivers—including but not limited to State roads, bridges, public infrastructure, land, buildings, and facilities. *See, e.g., id.* ¶¶ 255–269.
- c. Sea level rise and extreme astronomical tides that are now, and will substantially in the foreseeable future, intrude and inundate the State’s beaches. *See, e.g., id.* ¶¶ 326–330.
- d. Extreme storms that topple trees and other objects onto State property and cause, and will cause, flood waters to enter and intrude State property—including but not limited to State roads, bridges, public infrastructure, land, buildings, and facilities. *See, e.g., id.* ¶¶ 270–293.
- e. Extreme winter storms, which cause, and will cause, dangerous runoff and riverine flooding—because the ground is frozen and snowmelt adds to total runoff levels—that enter and intrude State property, including but not limited to State roads, bridges, public infrastructure, land, buildings, and facilities. *See, e.g., id.* ¶¶ 283, 286–292.

387. The State has not consented to, and does not consent to, the intrusion of Climate-Related Harms on its property.

388. Defendants knew or reasonably should have known that the State would not consent to this trespass.

389. The State is, and will continue to be, injured by the entry of Climate-Related Harms caused by Defendants' intentional misconduct onto its properties.

390. Defendants' tortious and deceptive conduct has caused and will continue to cause worsening harm to State property many years into the future if not abated. Abating Defendants' injurious deceptive conduct will prevent the trespass caused by Climate-Related Harms from becoming as severe as it would become absent abatement.

391. As a direct and proximate result of the Defendants' tortious acts and omissions, the State will be required to expend significant resources to adapt to the impacts of Climate-Related Harms to its properties throughout the State to abate those trespasses.

392. The Climate-Related Harms are severe and greater than the State and the public should bear without compensation and outweigh any utility of the Defendants' tortious conduct.

393. As a direct and proximate result of Defendants' acts and omissions as alleged herein, the State has suffered monetary losses and damages in amounts to be proven at trial.

394. Each Defendant, individually and collectively, engaged in the tortious conduct alleged in this Count, conspired to do so, and is thereby vicariously liable for the conduct of the other Defendants, individually and collectively, for the commission of the tort of trespass and civil conspiracy to commit trespass.

395. Defendants' decades-long campaign of intentional deception was, and is, wantonly designed by Defendants to enrich themselves without regard to or remorse for the known and increasingly catastrophic injuries to the State and intrusions of State property—all of which Defendants and Fossil Fuel Defendants' scientists long foresaw. Defendants' depraved deception is so callous and outrageous as to exceed all bounds of decency and would be regarded as atrocious and intolerable by impartial jurors in a civilized society. Defendants acted with malice in their

deliberate conduct, which was motivated by ill will toward the State and its residents, and which was so outrageous that malice toward the State and its residents may also be implied. Punitive damages are warranted to punish and deter Defendants.

FIFTH CAUSE OF ACTION
CIVIL AIDING AND ABETTING
(Against API)

396. The State realleges and reaffirms each and every allegation set forth in all preceding paragraphs as if fully restated in this section.

397. The Fossil Fuel Defendants committed and are liable for common law negligence, public nuisance, private nuisance, and trespass, as alleged in Counts 1–4, each of which harmed the State and its residents as alleged therein and in Section V.I, ¶¶ 248–333, *supra*.

398. API has long had actual knowledge Fossil Fuel Defendants were committing the torts alleged in Counts 1–4 because Fossil Fuel Defendants committed those torts collectively through API, and individually as members of API, which was and is the primary industry forum in which Fossil Fuel Defendants strategize about and execute the decades-long deception campaign at the core of the tortious conduct alleged in this lawsuit. Fossil Fuel Defendants have long worked through, and in full cooperation with, API to advance their decades-long deception campaign. Defendants’ tortious conduct impacting Maine, and API’s assistance and encouragement of that conduct, remains ongoing today. For example, API assisted Fossil Fuel Defendants’ commission of tortious activities by making public statements, including advertisements and promotional campaign websites that have been directed at and/or reached Maine, giving the impression that Fossil Fuel Defendants’ operations and fossil fuel products are beneficial or benign to the environment. In particular, API promoted natural gas, one of Fossil Fuel Defendants’ fossil fuel products, as a clean fuel that reduces carbon dioxide emissions, an “environmentally friendly complement to renewable energy,” and as “part of the solution” to climate change. API additionally promoted the oil and gas industry, including Fossil Fuel Defendants, as leaders in tackling climate change while ignoring the emissions from the industry’s products. API had, and continues to have, actual knowledge of Fossil Fuel Defendants’ alleged

tortious conduct at the center of this lawsuit—all of which remains ongoing. *See, e.g., id.* ¶¶ 38, 39–40, 42, 55–65, 71–74, 86, 107, 113–32, 144–47, 208–14, 247, *supra*.

399. API had actual knowledge that it was aiding and abetting the torts alleged in Counts 1–4 because API acted on behalf of, as an agent for, and at the direction of Fossil Fuel Defendants to execute the decades-long deception campaign at the center of this lawsuit through marketing, advertising, and other means while simultaneously promoting Fossil Fuel Defendants’ fossil fuel products with full knowledge that the foreseeable use of those products would cause Climate-Related Harms in the State and elsewhere. *See, e.g., id.* ¶¶ 23(c), 38(a)–(b), (f)–(k), (n), 39–40, 42, 107, *supra*.

400. API had actual knowledge that it was—at the direction of Fossil Fuel Defendants—conceiving, planning, funding, and carrying out the sustained and widespread campaign of denial and disinformation about the existence of climate change and about the role of Fossil Fuel Defendants’ fossil fuel products in causing Climate-Related Harms. API had actual knowledge that it took those actions in order to misdirect and stifle public knowledge about climate change, and to promote consumer demand for fossil fuels. API’s actual knowledge of its own role in the deception campaign is ongoing, with API’s 2021 Climate Action Framework organized around the purpose of “the continued promotion of natural gas in a carbon constrained economy.” *See, e.g., id.* ¶¶ 113–14, 118–32, 208–14, 237–41, 247, *supra*.

401. API gave substantial assistance and encouragement to the Fossil Fuel Defendants in committing the torts alleged in Counts 1–4, who likewise encouraged and accepted API’s assistance, over decades and in close coordination during repeated API meetings and initiatives and through ongoing communication. API did so, and continues to do so, by actively marketing fossil fuel products and fossil fuel operations in a knowingly and intentionally misleading manner for Fossil Fuel Defendants’ benefit and in breach of due care; assisting Fossil Fuel Defendants’ campaign to conceal and obscure from the State and its residents data and information demonstrating that fossil fuel products were causing, and would increasingly cause, grave Climate-Related Harms in the State and elsewhere; widely disseminating materials refuting the scientific

knowledge generally accepted at the time; promoting and amplifying pseudo-scientific theories; and developing commercial public relations materials that prevented reasonable consumers from recognizing or discovering the latent risk that Fossil Fuel Defendants' fossil fuel products and operations were causing, and would increasingly cause, grave Climate-Related Harms in the State and elsewhere. Additionally, by acting as a front group on behalf of Fossil Fuel Defendants and providing the primary industry forum through which Fossil Fuel Defendants organized, conspired, strategized about, and executed their decades-long deception campaign, API was present at the time of the tortious conduct alleged in this lawsuit. *See, e.g., id.* ¶¶ 38(a)–(b), (f)–(k), (n), 39–40, 42, 55–65, 71–74, 86, 107, 113–32, 144–47, 208–14, 247, *supra*.

402. As a direct and proximate result of Fossil Fuel Defendants' acts and omissions, aided and abetted by API, the State will be required to expend significant public resources to adapt to Climate-Related Harms throughout the State, which are so severe as to exceed what the State and its residents should bear without compensation.

403. Fossil Fuel Defendants' decades-long campaign of intentional deception was, and is, maliciously aided and abetted by API and wantonly designed by Fossil Fuel Defendants to enrich themselves without regard to or remorse for the known and increasingly catastrophic injuries to the State and its property, infrastructure, and natural resources; or to the State's residents' health, safety, and wellbeing—all of which Defendants and Fossil Fuel Defendants' scientists long foresaw. Fossil Fuel Defendants' depraved deception, aided and abetted by API, is so callous and outrageous as to exceed all bounds of decency and would be regarded as atrocious and intolerable by impartial jurors in a civilized society. In aiding and abetting this outrageous conduct, API acted with malice in its deliberate conduct, which was motivated by ill will toward the State and its residents, and which was so outrageous that malice toward the State and its residents can also be implied. Punitive damages are warranted to punish and deter API.

SIXTH CAUSE OF ACTION
STATUTORY NUISANCE
(Against All Defendants)

404. The State realleges and reaffirms each and every allegation set forth in all preceding paragraphs as if fully restated in this section.

405. 17 M.R.S. § 2701 proscribes, and allows recovery for, statutory nuisances.

406. Under 17 M.R.S. § 2802, such nuisances include, *inter alia*, “obstructing or impeding, without legal authority, the passage of any navigable river, harbor or collection of water”; “obstructing . . . highways, private ways, streets, alleys, commons, [and] common landing places; and “corrupting or rendering unwholesome or impure the water of a river, stream, pond or aquifer.”

407. Defendants, individually and in concert with each other, through their decades-long campaign of deception, their failure to include warnings of the risk of harm associated with fossil fuel products; and their affirmative marketing, promotion, advertisement, sale, and/or distribution of Fossil Fuel Defendants’ fossil fuel products in the State have created, caused, contributed to, and assisted in creating a statutory nuisance of Climate-Related Harms that unreasonably endanger and impair the use and enjoyment of property owned by the State, held in trust by the State, or protected by the State pursuant to its *parens patriae* and public trust authority—including corrupting the purity of water in rivers, streams, ponds, and aquifers in the State; obstructing passage of navigable rivers, harbors, and other waters in the State; and obstructing or encumbering of highways, private ways, streets, commons, and common landing places in the State.

408. Defendants were fully aware and substantially certain that their decades-long campaign of deception, failure to include warnings of the risk of harm associated with fossil fuel products; and their actions in promoting, selling, and distributing fossil fuel products would injure public rights and interfere with the use and enjoyment of State property by causing Climate-Related Harms when those products were used as intended or in a reasonably foreseeable manner. Defendants intentionally proceeded with their conduct despite their substantial certainty about the foreseeable harms to the State and its residents.

409. The State owns, leases, and manages extensive real property, some of which is held in trust, that has been, and will continue to be, damaged by Climate-Related Harms—including corrupting the purity of water in rivers, streams, ponds, and aquifers in the State; obstructing passage on navigable rivers, harbors, and other waters; and obstructing or encumbering highways, private ways, streets, commons, and common landing places.

410. Through their actions and omissions, Defendants have in fact caused, created, and contributed to unreasonable conditions that obstruct passage on navigable rivers, harbors, and other waters; obstructing or encumbering highways, private ways, streets, commons, and common landing places; and that corrupt the purity of water in rivers, streams, ponds, and aquifers in the State, all of which substantially and unreasonably interferes with the use and enjoyment of such property and resources for the public benefit and welfare by the State and its residents, and which materially diminishes the values of such property and resources for its public purposes. Defendants persist in their tortious conduct, making ongoing and additional statutory nuisances foreseeable.

411. The State has not consented to Defendants’ tortious and deceptive conduct that has created these substantial and unreasonable conditions or the harms associated with that conduct.

412. Each Defendant individually and collectively has created, caused, contributed to, and assisted in a statutory nuisance from Climate-Related Harms by substantially and unreasonably interfering with, obstructing, and/or threatening the passage of navigable rivers, harbors, and other waters; and obstructing or encumbering highways, private ways, streets, commons, and common landing places; and by corrupting the purity of rivers, streams, ponds, and aquifers in the State. These undeniably severe, substantial, and unreasonable conditions affecting real property and public rights include, among other things:

- a. Impeded passage on rivers and other waters—such as Maine’s lakes and ponds—and impeded use of common landing places due to extreme storms, precipitation, and flooding; and from unsafe conditions caused by inundation of substances from flooded wastewater facilities, sewage systems, and septic

tanks; and the resulting hazardous conditions that impede passage. *See, e.g., id.* ¶¶ 257–61, 264–66, 277, 288, 291, *supra*.

- b. Impeded passage in harbors and use of common landing places caused by extreme storms, storm surge, and astronomical tides; and unsafe conditions caused by inundation of substances from flooded wastewater facilities, sewage systems, and septic tanks; and the resulting hazardous conditions that impede passage. *See, e.g., id.* ¶¶ 255, 258–61, 266, 277, 288, *supra*.
- c. Impeded passage and use of highways, private ways, streets, and commons caused by extreme storms, high winds, precipitation, flooding, felled trees and power lines, washed out culverts and bridges, and other Climate-Related Harms; and the resulting hazardous conditions that impede passage and use. *See, e.g., id.* ¶¶ 258–61, 264, 275, 281–83, 291, *supra*.
- d. The corruption of water quality in groundwater aquifers, rivers, streams, and ponds, caused by infiltration of unwholesome or impure substances because of sea level rise, saltwater inundation, extreme precipitation, and associated flooding events. *See, e.g., id.* ¶¶ 264–66, 277, 288, *supra*.

413. These harms caused by Defendants’ tortious conduct are injurious to health; indecent and offensive to the senses; interfere with the comfortable enjoyment of life, property, and natural resources; and constitute a substantial and unreasonable interference with rights enjoyed by the State and its residents. An ordinary person would be reasonably disturbed by these Climate-Related Harms.

414. The Climate-Related Harms caused by Defendants’ statutory nuisance-creating conduct are extremely grave, and far outweigh any social utility of that tortious conduct.

415. Defendants’ conduct caused harm and will cause worsening harm to the State and its residents many years into the future if not abated. Abating Defendants’ injurious deceptive conduct will prevent the public nuisances caused by Climate-Related Harms from becoming as severe as they will become absent abatement.

416. As a direct and proximate result of Defendants’ acts and omissions, the State will be required to expend significant public resources to adapt to the impacts of Climate-Related Harms to its properties throughout the State to abate the nuisance.

417. The Climate-Related Harms are severe, exceed what the State and its residents should bear without compensation, and outweigh any utility of Defendants’ tortious conduct.

418. As a direct and proximate result of Defendants’ acts and omissions as alleged herein, Defendants are liable for damages under 17 M.R.S. § 2701—which proscribes statutory nuisance—arising from substantial interference with the passage of navigable rivers, harbors, and other waters; obstruction of use and passage of highways, private ways, streets, commons, and common landing places; and from corruption of the purity of rivers, streams, ponds, and aquifers in the State.

419. Defendants’ decades-long campaign of intentional deception was, and is, wantonly designed by Defendants to enrich themselves without regard to or remorse for the known and increasingly catastrophic injuries to the State and its property, infrastructure, and natural resources; or to the State’s residents’ health, safety, and wellbeing—all of which Defendants and Fossil Fuel Defendants’ scientists long foresaw. Defendants’ depraved deception is so callous and outrageous as to exceed all bounds of decency and would be regarded as atrocious and intolerable by impartial jurors in a civilized society. Defendants acted with malice in their deliberate conduct, which was motivated by ill will toward the State and its residents, and which was so outrageous that malice toward the State and its residents may also be implied. Punitive damages are warranted to punish and deter Defendants.

SEVENTH CAUSE OF ACTION
THE MAINE UNFAIR TRADE PRACTICES ACT
(Against All Defendants)

420. The State realleges and reaffirms each and every allegation set forth in all preceding paragraphs as if fully restated in this section.

421. From the 1970s through the present day, the Fossil Fuel Defendants’ course of conduct, as alleged herein, has been undertaken in the conduct of trade or commerce, as defined

in 5 M.R.S. § 206(3). Fossil Fuel Defendants systematically and continually conducted trade or commerce throughout the State of Maine by marketing, advertising, offering for sale, distributing, and selling the fossil fuel products directly and indirectly affecting the people of Maine, and which are the subject of this lawsuit.

422. From at least 1942 until the present day, API's course of conduct, as alleged herein, has been undertaken in the conduct of trade or commerce, as defined in 5 M.R.S. § 206(3) by engaging in the marketing, advertising, and promotion of fossil fuel products directly and indirectly affecting the people of Maine. That marketing, advertising, and promotion is the subject of this lawsuit.

423. In the course of trade or commerce, including the marketing, advertising, promotion, and (in the case of the Fossil Fuel Defendants) selling of fossil fuels to consumers in Maine, Defendants made misrepresentations regarding the safety of and contributions to climate change made by fossil fuel products which Defendants intended would induce consumers to continue to use Fossil Fuel Defendants' fossil fuel products.

424. The misrepresentations made by API and Fossil Fuel Defendants, both together and separately, or through front groups, regarding the safety of fossil fuels, the environmentally friendly nature of fossil fuels, and the production by Fossil Fuel Defendants of clean energy alternatives were false, omitted critical information, and therefore had a capacity or tendency to deceive.

425. Defendants misled the State and its residents through a range of advertisements and promotional materials that contained false or misleading statements, misrepresentations, and significant omissions. These deceptive practices obscured the critical connection between the production and use of fossil fuel products and their adverse effects on climate change, thereby undermining the informed choices of consumers.

426. The misrepresentations by Defendants were not only pervasive but also sophisticated, as they were supported by industry-funded research and extensive media campaigns designed to cast doubt on well-established climate science. As a result, reasonable consumers faced

considerable difficulty in discerning Defendants' deceptive claims from legitimate scientific consensus, further perpetuating a harmful reliance on fossil fuel products.

427. Defendants' misrepresentations and omissions as described herein are material to a consumer's decision to purchase and use fossil fuels.

428. Defendants' conduct described herein was deceptive in violation of 5 M.R.S. §§ 205-A-214.

429. Defendants' conduct in violation of 5 M.R.S. § 207 was intentional.

EIGHTH CAUSE OF ACTION
STRICT LIABILITY FOR FAILURE TO WARN – 14 M.R.S. § 221
(Against Fossil Fuel Defendants)

430. The State realleges and reaffirms each and every allegation set forth in all preceding paragraphs as if fully restated in this section.

431. Strict liability attaches to manufacturers when, by the failure to provide adequate warnings about its hazards, a product is sold in an unreasonably dangerous condition.

432. At all relevant times, the Fossil Fuel Defendants and their affiliates and subsidiaries were engaged in the business of advertising, manufacturing, promoting, and/or selling fossil fuel products. The Fossil Fuel Defendants placed these fossil fuel products into the stream of commerce knowing they would reach Maine.

433. At all times relevant to this action, Fossil Fuel Defendants' fossil fuel products were used, distributed, and sold in a manner in which they were reasonably foreseeably intended to be used, distributed, and sold, including but not limited to being combusted for energy, combusted to power automobiles, refined into petrochemicals, and refined and/or incorporated into petrochemical products including, but not limited to, fuels and plastics.

434. As manufacturers, marketers, distributors, promoters, and/or sellers of fossil fuel products, Fossil Fuel Defendants had a duty to warn the State and its residents (both of whom are users and consumers) of the risks posed by fossil fuel products.

435. Fossil Fuel Defendants knew that fossil fuel products would be purchased, transported, stored, handled, used, and disposed of, including within Maine, without notice of the

hazards which the fossil fuel products pose to State natural resources and property and to the State's residents.

436. Fossil Fuel Defendants' failure to warn of these hazards made their fossil fuel products unreasonably dangerous.

437. Fossil Fuel Defendants knew that by failing to warn the State and its residents of the risks posed by fossil fuels, their fossil fuel products would be purchased, transported, stored, handled, used, and disposed of without the State and its residents being aware of the hazards fossil fuels pose to human health and the environment.

438. At the time of manufacture, merchandising, advertising, promotion, or sale, Fossil Fuel Defendants could have provided warnings or instructions regarding the full and complete risks fossil fuel products posed, including the risks of climate destabilization, Climate-Related Harms, and other dangers, because they knew and/or should have known of the unreasonable risks of harm associated with the use of these products, as described herein.

439. Despite the Fossil Fuel Defendants' superior and unequal knowledge of the risks posed by fossil fuel products, the Fossil Fuel Defendants failed to adequately warn consumers and the State and its residents of the known and foreseeable risks of climate destabilization, Climate-Related Harms, and other dangers that would inevitably follow from the intended or reasonably foreseeable use of these products.

440. Not only did Fossil Fuel Defendants fail to adequately warn, but the Fossil Fuel Defendants, through their decades-long tortious campaign of deception described herein, also represented, asserted, claimed, and warranted that their fossil fuel products were safe for their intended and foreseeable uses.

441. Any warnings the Fossil Fuel Defendants may have issued as to the risks of their fossil fuel products were rendered ineffective and inadequate by Fossil Fuel Defendants' false and misleading public relations campaigns and statements about fossil fuel products, and their years-long efforts to conceal and misrepresent the dangers that follow from the intended or reasonably foreseeable use of such products.

442. Fossil Fuel Defendants individually and in concert widely disseminated marketing materials, refuted the scientific knowledge generally accepted at the time—including by their own research divisions—advanced and promoted pseudo-scientific theories of their own, and developed public relations materials that prevented reasonable users and consumers, including the State and its residents, from recognizing or discovering the latent risk that Fossil Fuel Defendants’ fossil fuel products would cause grave climate changes, undermining and rendering ineffective any warnings that Fossil Fuel Defendants may have disseminated.

443. Accordingly, the ordinary user and consumer, including the State and its residents, would not have recognized and did not recognize that the use of fossil fuel products causes global and localized changes in climate, and would result in injuries to the State and its residents, communities, property, and resources, as described herein.

444. Fossil Fuel Defendants knew, or should have known, based on information passed to them from their internal research divisions and affiliates, from trade associations and entities, and/or from the international scientific community, that the Climate-Related Harms described herein rendered their fossil fuel products dangerous, or likely to be dangerous, when used in the manner reasonably foreseeably intended.

445. The fossil fuel products that Fossil Fuel Defendants refined, formulated, designed, manufactured, merchandised, advertised, promoted, and/or sold—whether used as intended or used in a reasonably foreseeable manner—were not reasonably safe at the time they left Fossil Fuel Defendants’ control because they lacked adequate warnings and instructions.

446. The fossil fuel products reached consumers and the environment substantially unchanged from that in which they left the Fossil Fuel Defendants’ control.

447. At all times relevant to this Complaint, Fossil Fuel Defendants have had actual and/or constructive knowledge about Climate-Related Harms, based on information known to their internal research divisions and affiliates, from their non-party trade associations and entities, and/or from the international scientific community, which rendered the fossil fuel products hazardous to State natural resources and property.

448. The foregoing facts relating to the hazards that fossil fuel products pose to State natural resources and property are not the sort of facts that, at the relevant times, the State and its residents could ordinarily observe or protect themselves against.

449. Fossil Fuel Defendants breached their duty to warn by unreasonably failing to provide the State and its residents with warnings regarding the potential and/or actual threat to human health and the environment caused by pollution released from the manufacturing and consumption of fossil fuels, despite Fossil Fuel Defendants' vast amounts of knowledge and research demonstrating the threats Fossil Fuel Defendants' fossil fuel products presented to the State and its residents.

450. Had the Fossil Fuel Defendants provided adequate warnings and not waged a deceptive campaign against climate science, their fossil fuel products would not have earned widespread acceptance in the marketplace, fossil fuel alternatives could have been developed faster, investment in fossil fuel alternatives would be greater, and/or fossil fuel alternatives would be used in greater amounts.

451. Moreover, had the Fossil Fuel Defendants provided adequate warnings about the adverse impacts to public health and the environment, and to the State and its residents in particular, that result from the intended and reasonably foreseeable use of fossil fuel products, the State and its residents would have taken measures to decrease fossil fuel dependency in order to avoid or lessen the Climate-Related Harms and property damage that would inevitably follow.

452. As a result of the Fossil Fuel Defendants' failure to warn about the unreasonably dangerous conditions of their fossil fuel products, Fossil Fuel Defendants are strictly liable to the State.

453. The Fossil Fuel Defendants consciously disregarded the health, safety, property, and rights of others in engaging in the decades-long tortious campaign of deception described herein.

454. As a direct and proximate result of Fossil Fuel Defendants' acts and omissions, the State has sustained and will sustain substantial expenses and damages, including damages for loss

of use and enjoyment, for which Defendants are strictly, jointly, and severally liable under 14 M.R.S. § 221.

455. As a direct and proximate result of the Fossil Fuel Defendants' failure to warn about the unreasonably dangerous conditions of their fossil fuel products, the State has incurred and will continue to incur costs and damages related to physical damage to State property, State infrastructure, human health, and natural resources.

456. As a direct and proximate result of Fossil Fuel Defendants' acts and omissions as alleged herein, the State and its residents have suffered monetary losses and damages in amounts to be proven at trial.

457. Fossil Fuel Defendants' decades-long campaign of intentional deception was, and is, wantonly designed by them to enrich themselves without regard to or remorse for the known and increasingly catastrophic injuries to the State and its property, infrastructure, and natural resources; or to the State's residents' health, safety, and wellbeing—all of which Fossil Fuel Defendants and their scientists long foresaw. Fossil Fuel Defendants' depraved deception is so callous and outrageous as to exceed all bounds of decency and would be regarded as atrocious and intolerable by impartial jurors in a civilized society. Fossil Fuel Defendants acted with malice in their deliberate conduct, which was motivated by ill will toward the State and its residents, and which was so outrageous that malice toward the State and its residents may also be implied. Punitive damages are warranted to punish and deter Fossil Fuel Defendants.

PRAYER FOR RELIEF

WHEREFORE, the State of Maine seeks judgment in its favor and against Defendants for:

- A. Compensatory damages in an amount according to proof;
- B. Punitive damages as permitted by law;
- C. Any other damages as permitted by law;
- D. Civil penalties pursuant to 5 M.R.S. § 209;
- E. Disgorgement of profits;

- F. Equitable relief, including abatement in Maine of the nuisances complained of herein, for example by means of an equitable fund to pay for adaptation, mitigation, and resilience measures in the State;
- G. A finding that Fossil Fuel Defendants failed to warn Plaintiff about the unreasonably dangerous conditions of the fossil fuel products;
- H. A finding that Defendants' actions alleged herein constituted common law trespass;
- I. An order enjoining Defendants from further acts constituting common law trespass;
- J. An order pursuant to 5 M.R.S. § 209 enjoining Defendants from engaging in the deceptive acts or practices described herein;
- K. Holding Defendants jointly and severally liable for all past damages the State has incurred, and future damages the State will incur as a result of Defendants' conduct, including but not limited to loss-of-use damages, the costs of enhancing infrastructure, damage to property, natural resource damages, any other compensatory and exemplary damages available under Maine law, interest on the damages according to law, and any other relief necessary to remedy climate change-related harms that the State will face;
- L. Costs (including reasonable attorney fees, court costs, and other expenses of litigation), including but not limited to those costs, fees, and expenses recoverable pursuant to 14 M.R.S. § 1522(1)(A);
- M. Pre-judgment and post-judgment interest; and
- N. Any other and further relief as the Court deems appropriate and just.

JURY DEMAND

The State of Maine hereby demands a jury trial on all issues so triable.

Dated: November 26, 2024

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**Motions for admission pro hac vice to be filed*