

**In the Supreme Court of the United States**

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STATE OF ALABAMA, *et al.*,

*Plaintiffs,*

v.

STATES OF CALIFORNIA, CONNECTICUT, MINNESOTA, NEW  
JERSEY, AND RHODE ISLAND,

*Defendants.*

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ON MOTION FOR LEAVE TO FILE A BILL OF COMPLAINT

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**APPENDIX VOLUME ONE**

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**TABLE OF CONTENTS**

**Page**

**VOLUME ONE**

**Appendix A**  
State of California—**First Amended  
Complaint; Jury Trial Demanded**  
(filed June 10, 2024) .....1a

**Appendix B**  
State of Connecticut—**First Amended  
Complaint**  
(filed November 20, 2023) .....207a

**Appendix C**  
State of Minnesota—**Complaint**  
(filed June 24, 2020) .....262a

**VOLUME TWO**

**Appendix D**  
State of New Jersey—**Complaint and  
Jury Demand**  
(filed October 18, 2022).....372a

**Appendix E**  
State of Rhode Island—**Jury Trial  
Demanded**  
(filed July 2, 2018) .....611a

**APPENDIX A**

SUPERIOR COURT OF THE STATE OF  
CALIFORNIA  
COUNTY OF SAN FRANCISCO

Case No. CJC-24-005310

COORDINATION PROCEEDING SPECIAL TITLE  
(RULE 3.550)  
FUEL INDUSTRY CLIMATE CASES

*This Document Relates To:*

*The People of the State of California ex rel. Rob Bonta,  
Attorney General of California v. Exxon Mobil  
Corporation et al., San Francisco Superior Court, Case  
No. CGC-23-609134*

THE PEOPLE OF THE STATE OF CALIFORNIA ex  
rel. ROB BONTA, ATTORNEY GENERAL OF  
CALIFORNIA,

Plaintiff,

v.

EXXON MOBIL CORPORATION; EXXONMOBIL  
OIL CORPORATION; SHELL PLC; SHELL USA,  
INC.; SHELL OIL PRODUCTS COMPANY LLC;  
CHEVRON CORPORATION; CHEVRON U.S.A.  
INC.; CONOCOPHILLIPS; CONOCOPHILLIPS  
COMPANY; PHILLIPS 66; PHILLIPS 66  
COMPANY; BP P.L.C.; BP AMERICA INC.;  
AMERICAN PETROLEUM INSTITUTE; AND  
DOES 1 THROUGH 100, INCLUSIVE,

Defendants.

JUDICIAL COUNCIL COORDINATION  
PROCEEDING No. 5310

**FIRST AMENDED COMPLAINT FOR  
ABATEMENT, EQUITABLE RELIEF,  
PENALTIES, DISGORGEMENT, AND  
DAMAGES**

**JURY TRIAL DEMANDED**

- (1) PUBLIC NUISANCE;**
- (2) GOVERNMENT CODE SECTION 12607;**
- (3) UNTRUE OR MISLEADING ADVERTISING;**
- (4) MISLEADING ENVIRONMENTAL  
MARKETING;**
- (5) UNLAWFUL, UNFAIR, OR FRAUDULENT  
BUSINESS PRACTICES;**
- (6) STRICT PRODUCTS LIABILITY – FAILURE  
TO WARN; AND**
- (7) NEGLIGENT PRODUCTS LIABILITY –  
FAILURE TO WARN**

(Filed June 10, 2024)

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION .....	5 [6a]
II. PARTIES .....	8 [10a]
A. Plaintiff .....	8 [10a]
B. Defendants .....	8 [10a]
C. Relevant Non-Parties: Defendants’ Agents/Front Groups .....	30 [41a]
III. JURISDICTION AND VENUE .....	31 [42a]
IV. FACTUAL BACKGROUND .....	33[45a]
A. Defendants Are Substantially Responsible for Causing and Accelerating Climate Change.....	33 [45a]
B. Defendants Went to Great Lengths to Understand the Dangers Associated with Fossil Fuel Products, and Either Knew or Should Have Known of Those Dangers .....	37 [52a]
C. Defendants Did Not Disclose Known Harms Associated with the Intended Use of Fossil Fuel Products, and Instead Affirmatively Concealed Those Harms by Engaging in a Campaign of Deception to Increase the Use of Those Products .....	53 [75a]
D. Defendants Could Have Chosen to Facilitate, and Be Part of, a Lower- Carbon Future, but Instead Chose Corporate Profits and Continued Deception .....	73 [104a]

- E. Defendants’ Internal Actions Demonstrate Their Awareness of the Impacts of Climate Change and Their Intent to Continue to Profit from the Unabated Use of Fossil Fuel Products .....74 [106a]
- F. Defendants’ Actions Have Slowed the Development of Alternative Energy Sources and Exacerbated the Costs of Adapting to and Mitigating the Adverse Impacts of the Climate Crisis .....76 [109a]
- G. Defendants Continue to Deceive California Consumers Through Misleading Advertisements That Portray Defendants as Climate-Friendly Energy Companies and Obscure Their Role in Causing Climate Change .....82 [119a]
  - 1. Defendants’ Affirmative Promotion of Fossil Fuel Products as “Green,” “Clean,” or Otherwise Good for the Environment Is Likely to Mislead California Consumers About How Use of Those Fossil Fuel Products Leads to Climate Change.....83 [120a]
  - 2. Defendants’ Affirmative Claims That They Contribute Substantially to Climate Change Solutions Are Likely to Mislead California Consumers .....90 [128a]
- H. Defendants’ Concealments and Misrepresentations Regarding the Dangers of Fossil Fuel Products Encouraged Continued Use of Fossil Fuels and Discouraged Concerted Action on Greenhouse Gas Emissions.....101 [144a]

I.	The Effects of Defendants’ Deceit Are Ongoing .....	104	[148a]
J.	The State Has Suffered, Is Suffering, and Will Suffer Injuries from Defendants’ Wrongful Conduct .....	105	[150a]
	1. Extreme Heat .....	106	[151a]
	2. Drought and Water Shortages..	109	[155a]
	3. Extreme Wildfire .....	112	[158a]
	4. Public Health Injuries.....	117	[165a]
	5. Extreme Storms and Flooding..	119	[168a]
	6. Damage to Agriculture.....	121	[171a]
	7. Sea Level Rise, Coastal Flooding and Coastal Erosion .....	123	[175a]
	8. Ecosystem, Habitat, and Biodiversity Disruption.....	126	[178a]
V.	CAUSES OF ACTION .....	130	[183a]
	First Cause of Action: Public Nuisance.	130	[183a]
	Second Cause of Action: Action For Equitable Relief For Pollution, Impairment, And Destruction of Natural Resources .....	133	[187a]
	Third Cause of Action: Untrue or Misleading Advertising .....	135	[190a]
	Fourth Cause of Action: Misleading Environmental Marketing .....	136	[192a]
	Fifth Cause of Action: Unlawful, Unfair, or Fraudulent Business Practices .....	137	[193a]
	Sixth Cause of Action: Strict Products Liability.....	138	[194a]
	Seventh Cause of Action: Negligent Products Liability .....	140	[198a]
VI.	PRAYER FOR RELIEF .....	143	[201a]
VII.	REQUEST FOR JURY TRIAL .....	145	[205a]

The People of the State of California, by and through Rob Bonta, the Attorney General of California, allege as follows:

## **I. INTRODUCTION**

1. In 2023 alone, the State of California has endured both extreme drought and widespread flooding, sprawling wildfires and historic storms, and an unusually cold spring and a record-hot summer. These extremes are devastating the State and destroying people's lives and livelihoods, and they are accelerating. These extremes are the products of climate change, and climate change is the product of widespread combustion of fossil fuels. Oil and gas company executives have known for decades that reliance on fossil fuels would cause these catastrophic results, but they suppressed that information from the public and policymakers by actively pushing out disinformation on the topic. Their deception was rewarded with tremendous revenues and profits, while causing a delayed societal response to global warming. And their deception continues to this day, with these companies now misleadingly promoting their businesses as responsible environmental citizens focused on offering solutions to climate change. The companies' misconduct has resulted in tremendous costs to people, property, and natural resources, which continue to unfold each day. Californians and their families, communities, and small businesses should not have to bear all the costs of climate change alone; the companies that have polluted our air, choked our skies with smoke, wreaked havoc on our water cycle, and contaminated our lands must be made to mitigate the harms they have brought upon the State. This lawsuit seeks to hold those companies accountable for



the lies they have told and the damage they have caused.

2. The People of the State of California (State)<sup>1</sup> bring this action against Defendants Exxon Mobil Corporation; ExxonMobil Oil Corporation; Shell plc; Shell USA, Inc.; Shell Oil Products Company LLC; Chevron Corporation; Chevron U.S.A. Inc.; ConocoPhillips; ConocoPhillips Company; Phillips 66; Phillips 66 Company; BP p.l.c.; BP America Inc.; American Petroleum Institute, and Does 1 through 100 (collectively, Defendants) for creating, contributing to, and/or assisting in the creation of state-wide climate change-related harms in California. As more fully alleged below, Defendants created, contributed to, and/or assisted in the creation of a public nuisance, and harmed or destroyed natural resources.

3. Defendants are large companies in the fossil fuel industry who have misled consumers and the public about climate change for decades. Defendants have known since at least the 1960s that fossil fuels produce carbon dioxide and other greenhouse gas (GHG) pollution that would warm the planet and change our climate. Defendants' own scientists knew as early as the 1950s that these climate impacts would be catastrophic, and that there was only a narrow window of time in which communities and

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<sup>1</sup> In this Complaint, the term "State" refers to the State of California, unless otherwise stated. The term "California" refers to the area falling within the State's geographic boundaries, unless otherwise stated. The State expressly disclaims injuries arising on federal land and tribal lands held in trust by the United States and does not seek recovery or relief attributable to these injuries.

governments could take action before the consequences became catastrophic.

4. Rather than warn consumers, the public, and governments, however, Defendants mounted a disinformation campaign beginning at least as early as the 1970s to discredit the burgeoning scientific consensus on climate change; deny their own knowledge of climate change-related threats; create doubt in the minds of consumers, the media, teachers, policymakers, and the public about the reality and consequences of the impacts of burning fossil fuels; and delay the necessary transition to a lower-carbon future.

5. Defendants' climate deception campaign, and aggressive promotion of the use of fossil fuel products while knowing the dangers associated with them, had the purpose and effect of unduly and substantially inflating and sustaining the market for fossil fuels, and therefore the Fossil Fuel Defendants' profits, while misrepresenting and concealing the hazards of those products to deceive consumers and the public about the consequences of everyday use of fossil fuel products. Defendants' tortious and deceptive conduct caused an enormous, foreseeable, and avoidable increase in anthropogenic GHG emissions and accelerated global warming, bringing devastating consequences to the State and its people. While Defendants have promoted and/or profited from the extraction and consumption of fossil fuels, the State and its residents have spent, and will continue to spend, billions of dollars to recover from climate change-induced superstorms and wildfires; will have to allocate and manage dwindling water supplies in extreme drought; will have to fortify state infrastructure against sea level rise and coastal and

inland flooding; and will have to protect California's people, infrastructure, and natural resources from extreme heat and many other climate change hazards.

6. Defendants' deceptive and tortious conduct was a substantial factor in bringing about these devastating climate change impacts in California, including, but not limited to, extreme heat, more frequent and intense droughts, increasingly severe wildfires, more frequent and intense storms and associated flooding, degradation of air and water quality, damage to agriculture, sea level rise, and habitat and species loss. As a direct result of Defendants' egregious misconduct, the State has incurred significant climate change harms, and will continue to incur such harms into the future. The associated consequences of these physical and environmental changes are felt throughout every part of the State, across all ecosystems and communities, and can be compounded in frontline communities, which often disproportionately bear the burden of climate impacts.<sup>2</sup>

7. Defendants' individual and collective conduct was a substantial factor in bringing about the State's climate-related injuries. Defendants' knowing concealment and misrepresentation of fossil fuels' dangers—together with the affirmative promotion of unrestrained fossil fuel use—drove fossil fuel consumption and delayed the transition to a lower-carbon future, resulting in greater greenhouse gas pollution, accelerated global warming, and more dire

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<sup>2</sup> "Frontline communities" are those that are and will continue to be disproportionately impacted by climate change. In many cases, the most harmed are the same communities that have historically experienced racial, social, health, and economic inequities.

impacts from the climate crisis in California and elsewhere.

8. The scale of the devastating public nuisance created by Defendants' egregious misconduct is truly staggering, and California will be dealing with the consequences of this misconduct for many generations. The State respectfully requests that this Court order Defendants to abate the massive public nuisance they created, contributed to, and/or assisted in the creation of, and that this Court use its equitable powers to order Defendants to mitigate future harm to the environment and people of California attributable to Defendants' unlawful actions, including, but not limited to, by granting preliminary and permanent equitable relief. The State further respectfully requests that this Court order Defendants to pay damages, statutory penalties, restitution, and disgorgement.

## **II. PARTIES**

### **A. Plaintiff**

9. Plaintiff is the People of the State of California. This civil enforcement action is prosecuted on behalf of the People by and through Rob Bonta, Attorney General of California, under the Attorney General's broad independent powers to enforce state laws (Cal. Const., art. V, § 13), and pursuant to Government Code sections 12527.6 and 12600 et seq.; Civil Code sections 3479, 3480, 3491, and 3494; Business and Professions Code sections 17203, 17204, 17206, 17535, and 17536; and Code of Civil Procedure sections 731 and 1021.8.

### **B. Defendants**

10. Defendants include some of the largest oil and gas companies in the world, and a national oil and gas

industry trade association. The fossil fuels produced by the defendant companies (and promoted by the defendant trade association) are individually and collectively responsible for the emission of billions of tons of greenhouse gases.

11. When this Complaint references an act or omission of Defendants, unless specifically attributed or otherwise stated, such references 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 scope of their employment or agency.

**12. Exxon Entities: Exxon Mobil Corporation; ExxonMobil Oil Corporation**

a. Defendant Exxon Mobil Corporation is a New Jersey corporation headquartered in Spring, Texas, and has been registered to do business in California since 1972. 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, and has been registered to do business in California since 1959. ExxonMobil Oil Corporation was formerly known as, did or does business as, and/or is the successor in liability to Mobil Oil Corporation. ExxonMobil Oil Corporation is engaged in the business of oil and natural gas production, refining, marketing, and distribution.

c. Exxon Mobil Corporation controls and has controlled company-wide decisions about the quantity and extent of fossil fuel production and sales, including those of its subsidiaries. Exxon Mobil Corporation's 2022 Form 10-K filed with the United States Securities and Exchange Commission 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, including diversification among types and locations of [its] projects, products produced, and strategies to divest assets." Exxon Mobil Corporation determines whether and to what extent its subsidiaries market, produce, and/or distribute fossil fuel products.

d. Exxon Mobil Corporation 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 communications strategies concerning climate change and the link between fossil fuel use and climate-related impacts on

the environment and humans. Exxon Mobil Corporation's Board holds the highest level of direct responsibility for climate change policy within the company. 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 California and elsewhere that caused and will cause injuries in California.

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 California by distributing, marketing, advertising, promoting, and supplying its fossil fuel products in California, with knowledge that the intended use of those products for combustion has

caused and will continue to cause climate change-related harms in California, including the State's injuries. Exxon's statements in California 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 and influence the State and its residents to continue unabated use of Exxon's fossil fuel products in California, thereby resulting in the State's injuries.

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 California market related to its fossil fuel products. Since at least 1972, and continuing to the present day, Exxon has advertised its fossil fuel products in print publications circulated widely to California consumers, including but not limited to: *The Atlantic*, *Life*, *National Geographic*, *The New York Times*, *People*, *Sports Illustrated*, *Time*, *The Wall Street Journal*, and *The Washington Post*. Exxon has also run advertisements in California media outlets, including but not limited to the following: CBS 5 San Francisco, KRLA-AM, *The Sacramento Bee*, *San Francisco Examiner*, *The Santa Rosa Press Democrat*, *SFGate.com*, and *Sonoma Magazine*. 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 California, from which activities Exxon derives and has derived substantial revenue. Exxon owns and operates a petroleum storage and transport facility in the San Ardo Oil Field in San Ardo, California. Exxon and its predecessors owned and operated an oil refinery in Torrance, California from 1966 to 2016, shortly after an explosion disabled the refinery. Exxon Co. USA, an ExxonMobil subsidiary, operated a petroleum refinery in Benicia, California, from 1968 to 2000. Exxon also—both directly and through its subsidiaries and/or predecessors-in-interest—has supplied substantial quantities of fossil fuel products to California during the period relevant to this Complaint. Currently, Exxon promotes, markets, and sells gasoline and other fossil fuel products to California consumers through approximately 600 Exxon- and Mobil-branded petroleum service stations in California. During the period relevant to this Complaint, Exxon sold a substantial percentage of all retail gasoline in California. Exxon also markets and sells petroleum products, including engine lubricants and motor oils sold under the "Mobil 1" brand name, to California customers through local retailers.

k. Exxon historically directed its fossil fuel product advertising, marketing, and promotional campaigns to California residents, including through maps that identify the locations of its service stations in California. To this day, Exxon continues to market

and advertise its fossil fuel products in California to California residents by maintaining an interactive website available to prospective customers that directs California residents to Exxon's nearby retail service stations and lubricant distributors. Further, Exxon promotes its products in California by regularly updating and actively promoting its mobile device application, "Exxon Mobil Rewards+," throughout the State of California, which encourages California users to consume fuel at Exxon stations in California in exchange for rewards on every fuel purchase.

**13. Shell Entities: Shell plc; Shell USA, Inc.; Shell Oil Products Company LLC**

a. Defendant Shell plc (formerly Royal Dutch Shell PLC) is a vertically integrated multinational energy and petrochemical company. Shell plc is incorporated in England and Wales, with its headquarters and principal place of business in The Hague, Netherlands. Shell plc 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 plc controls and has controlled company-wide decisions about the quantity and extent of fossil fuel production and sales, including those of its subsidiaries. Shell plc's Board of Directors determines whether and to what extent Shell subsidiary holdings around the globe produce Shell-branded fossil fuel products.

c. Shell plc 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 communications strategies concerning climate change and the link between fossil fuel use and climate-related impacts on the environment and humans. Overall accountability for climate change within the Shell Group lies with Shell plc's Chief Executive Officer and Executive Committee. For instance, at least as early as 1988, Shell plc, through its predecessors and subsidiaries, was researching company-wide CO<sub>2</sub> emissions and concluded that the Shell Group accounted for 4% of the CO<sub>2</sub> emitted worldwide from combustion, and that climatic changes could compel the Shell Group, as controlled by Shell plc, 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 plc that acts on Shell plc's behalf and is subject to Shell plc's control. Shell USA, Inc. is incorporated in Delaware, with its principal place of business in Houston, Texas. Shell USA, Inc. has been registered to do business in California 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 Shell Oil Products Company LLC 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. Shell Oil Products Company LLC is incorporated in Delaware, with its principal place of

business in Houston, Texas, and has been registered to do business in California since 2001. Shell Oil Products Company LLC was formerly known as, did or does business as, and/or is the successor in liability to Shell Oil Products Company, which was a Delaware corporation that converted to a limited liability company in 2001.

f. Defendants Shell plc, Shell USA, Inc., Shell Oil Products Company LLC, and their predecessors, successors, parents, subsidiaries, affiliates, and divisions are collectively referred to herein as “Shell.”

g. The State’s claims against Shell arise out of and are related to the acts and omissions of Shell in California and elsewhere that caused and will cause injuries in California.

h. Shell has purposefully directed its tortious conduct toward California by distributing, marketing, advertising, promoting, and supplying its fossil fuel products in California, with knowledge that the intended use of those products for combustion has caused and will continue to cause climate change-related harms in California, including the State’s injuries. Shell’s statements in California 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 the State 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 and influence the State and its residents, to continue unabated use of Shell’s fossil

fuel products in California, thereby resulting in the State's injuries.

i. 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 California market related to its fossil fuel products. Since at least 1970, and continuing to the present day, Shell has advertised its fossil fuel products in print publications circulated widely to California consumers, including but not limited to the following: *The Atlantic*, *The Economist*, *Life*, *National Geographic*, *Newsweek*, *The New York Times*, *Sports Illustrated*, *Time Magazine*, *The Wall Street Journal*, and *The Washington Post*. Shell has also run advertisements in California media outlets, including but not limited to the following: NBC 11 Bay Area, *The San Bernardino Sun*, *The Santa Rosa Press Democrat*, and *Whittier Daily News*. As further detailed herein, these include advertisements containing false or misleading statements, misrepresentations, 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.

j. Significant quantities of Shell's fossil fuel products are or have been transported, traded, distributed, promoted, marketed, manufactured, sold, and/or consumed in California, 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 California, at which locations it promotes, advertises, and sells its fossil fuel products under its Shell brand name. Shell

operates over 1,000 Shell-branded petroleum service stations in California. During the period relevant to this Complaint, Shell sold a substantial percentage of all retail gasoline sold in California. Shell also supplies, markets, and promotes its Pennzoil line of lubricants at retail and service stations throughout California. From 1924 to 1992, Shell owned and operated an oil refinery in Carson, California, where it now owns and operates the property as a distribution facility for petroleum and petroleum products throughout Southern California. From 1915 to 2020, Shell owned and operated an oil refinery in Martinez, California. From 1998-2007, Shell owned and operated an oil refinery in Wilmington, California. From 1998 to 2005, Shell owned and operated an oil refinery in Bakersfield, California.

k. Shell historically directed its fossil fuel product advertising, marketing, and promotional campaigns to California, including through maps that identified the locations of its service stations in California. Shell markets and advertises its fossil fuel products in California to California residents by maintaining an interactive website available to prospective customers by which it directs California 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 California to pay for gasoline and other products at Shell-branded service stations, and which 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 California consumers a cashless payment method for gasoline and other products at Shell-branded service stations. California consumers utilize

the payment method by providing their credit card information through the application. California consumers can also receive rewards, including discounts on gasoline purchases, by registering their personal identifying information in the Shell US App and using the application to identify and activate gas pumps at Shell service stations during a purchase.

**14. Chevron Entities: Chevron Corporation;  
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 place of business in San Ramon, California. Chevron Corporation, through its predecessor Standard Oil Company of California, has been registered to do business in California since 1926. Chevron Corporation was formerly known as, did or does business as, and/or is the successor in liability to Standard Oil Company of California (also known as “Socal”), 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 company-wide decisions about the quantity

and extent 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 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 communications strategies concerning climate change and the link between fossil fuel use and climate-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.

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 place of business in San Ramon, California. Through its predecessors, Chevron U.S.A. Inc. has been registered to do business in California since 1965. 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 Corporation of Pennsylvania, Chevron Products Company, and Chevron Chemical Company, and Chevron Chemical Company LLC.

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

h. Chevron has purposefully directed its tortious conduct toward California by distributing, marketing, advertising, promoting, and supplying its fossil fuel products in California, with knowledge that the intended use of those products for combustion has caused and will continue to cause climate change-related harms in California, including the State's injuries. Chevron's statements in California 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 and influence the State and its residents to continue unabated use of Chevron's fossil fuel products in California, thereby resulting in the State's injuries.

i. 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 California market related to its fossil fuel products. Since at least 1970, and continuing to the present day, Chevron has advertised in print publications circulated widely to California consumers, including but not limited to the following: *The Atlantic*, *Life*, *National Geographic*, *The New York*

*Times*, *Sports Illustrated*, *Time Magazine*, *The Wall Street Journal*, and *The Washington Post*. Chevron has also run advertisements in California media outlets, including but not limited to the following: CBS 5 San Francisco, *East Bay Times*, *Los Angeles Times*, *San Francisco Business Times*, *San Francisco Examiner*, and *The Mercury News*. As further detailed herein, these include advertisements containing 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.

j. Significant quantities of Chevron's fossil fuel products are or have been transported, traded, distributed, promoted, marketed, manufactured, sold, and/or consumed in California, from which activities Chevron derives and has derived substantial revenue. Chevron conducts and controls, either directly or through franchise agreements, retail fossil fuel sales at gas station locations throughout California, at which locations it promotes, advertises, and sells its fossil fuel products under its various brand names, including Chevron, Texaco, and other brand names. Chevron operates over 1,500 Chevron-branded petroleum service stations in California. Chevron has owned and operated an oil refinery in Richmond, California, since 1902, and has owned and operated an oil refinery in El Segundo, California, since 1911. During the period relevant to this Complaint, Chevron sold a substantial percentage of all retail gasoline sold in California.

k. Chevron historically directed its fossil fuel product advertising, marketing, and promotional

campaigns to California, including through maps that identified the locations of its service stations in California. Chevron markets and advertises its fossil fuel products in California to California residents by maintaining an interactive website available to prospective customers by which it directs California residents to Chevron's nearby retail service stations. Chevron markets and sells engine lubricants and motor oils to California customers under its Delo, IsoClean, Techron, and Havoline brand names at retail outlets. Chevron offers a proprietary credit card known as the "Chevron Techron Advantage Credit Card," which allows consumers in California to pay for gasoline and other products at Chevron-branded service stations, and which encouraged California consumers to use Chevron-branded service stations by offering various rewards, including discounts on gasoline purchases at Chevron service stations and cash rebates. Chevron further maintains two smartphone applications known as the "Chevron App" and the "Texaco App," both part of the "Chevron Texaco Rewards" program. The program offers California consumers a cashless payment method for gasoline and other products at Chevron- and Texaco-branded service stations. California consumers utilize the payment method by providing their credit card information through the application. California consumers can also receive rewards, including discounts on gasoline purchases, by registering their personal identifying information in the apps and by using the applications to identify and activate gas pumps at Chevron and Texaco service stations during a purchase.

**15. ConocoPhillips Entities: ConocoPhillips, ConocoPhillips Company, Phillips 66, Phillips 66 Company**

a. Defendant ConocoPhillips is a multinational energy company incorporated in Delaware, with its principal place of business in Houston, Texas. ConocoPhillips consists of numerous divisions, subsidiaries, and affiliates that execute ConocoPhillips's fundamental decisions related to all aspects of fossil fuel production, including exploration, extraction, production, manufacture, transport, and marketing.

b. ConocoPhillips controls and has controlled company-wide decisions about the quantity and extent of fossil fuel production and sales, including those of its subsidiaries. ConocoPhillips determines whether and to what extent its corporate holdings market, produce, and/or distribute fossil fuel products. ConocoPhillips's most recent annual report to the Securities and Exchange Commission subsumes the operations of ConocoPhillips's subsidiaries. In ConocoPhillips's Form 10-K filed with the Securities and Exchange Commission for Fiscal Year 2022, the company represents that its value—for which ConocoPhillips maintains ultimate responsibility—is a function of its decisions to direct subsidiaries to develop crude oil, bitumen, natural gas, and natural gas liquids from ConocoPhillips's reserves into fossil fuel products and to explore for and replace those reserves with more fossil fuels: “Unless we successfully develop resources, the scope of our business will decline, resulting in an adverse impact to our business. . . . If we are not successful in replacing the resources we produce with good prospects for future organic development or through

acquisitions, our business will decline.” ConocoPhillips optimizes the ConocoPhillips group’s oil and gas portfolio to fit ConocoPhillips’s strategic plan. For example, in November 2016, ConocoPhillips announced a plan to generate \$5 billion to \$8 billion of proceeds over two years by optimizing its business portfolio, including its fossil fuel product business, to focus on low cost-of-supply fossil fuel production projects that strategically fit its development plans.

c. ConocoPhillips 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 communications strategies concerning climate change and the link between fossil fuel use and climate-related impacts on the environment and humans. For instance, ConocoPhillips’s Board of Directors has the highest level of direct responsibility for climate change policy within the company. ConocoPhillips has developed and purportedly implements a corporate Climate Change Action Plan to govern climate change decision-making across all entities in the ConocoPhillips group.

d. Defendant ConocoPhillips Company is a wholly owned subsidiary of ConocoPhillips that acts on ConocoPhillips’s behalf and is subject to ConocoPhillips’s control. ConocoPhillips Company is incorporated in Delaware, with its principal place of business in Houston, Texas, and has been registered to do business in California since 1947. ConocoPhillips Company was formerly known as, did or does business as, and/or is the successor in liability to Phillips Petroleum Company.

e. Defendant Phillips 66 is a multinational energy and petrochemical company incorporated in Delaware, with its principal place of business in Houston, Texas. It encompasses downstream fossil fuel processing, refining, transport, and marketing segments that were formerly owned and/or controlled by ConocoPhillips.

f. Defendant Phillips 66 Company is a wholly owned subsidiary of Phillips 66 that acts on Phillips 66's behalf and is subject to Phillips 66's control. Phillips 66 Company is incorporated in Delaware, with its principal place of business in Houston, Texas, and has been registered to do business in California since 2011. Phillips 66 Company had been registered since 1964 under a different name, Phillips Chemical Company, which was a wholly owned subsidiary of the Phillips Petroleum Company. Phillips Chemical Company changed its name to Phillips 66 Company in 1985, and that iteration of Phillips 66 Company was terminated in 1991. Phillips 66 Company was formerly known as, did or does business as, and/or is the successor in liability to Phillips Petroleum Company; Phillips Chemical Company; Conoco, Inc.; Tosco Corporation; and Tosco Refining Co.

g. Defendants ConocoPhillips, ConocoPhillips Company, Phillips 66, and Phillips 66 Company, as well as their predecessors, successors, parents, subsidiaries, affiliates, and divisions, are collectively referred to herein as "ConocoPhillips."

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

i. ConocoPhillips has purposefully directed its tortious conduct toward California by distributing, marketing, advertising, promoting, and supplying its fossil fuel products in California, with knowledge that the intended use of those products for combustion has caused and will continue to cause climate change-related harms in California, including the State's injuries. ConocoPhillips's statements in California and elsewhere made in furtherance of its campaign of deception about and denial of climate change, and ConocoPhillips'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 ConocoPhillips's products. That conduct was purposefully directed to reach and influence the State and its residents to continue unabated use of ConocoPhillips's fossil fuel products in California, thereby resulting in the State's injuries.

j. Over the last several decades and continuing to the present day, ConocoPhillips spent millions of dollars on radio, television, online, social media, and outdoor advertisements in the California market related to its fossil fuel products. Since at least 1970, and continuing to the present day, ConocoPhillips has advertised in print publications circulated widely to California consumers, including but not limited to the following: *The Atlantic*, *Life*, *National Geographic*, *Newsweek*, *The New York Times*, *People*, *Sports Illustrated*, *Time Magazine*, *The Wall Street Journal*, and *The Washington Post*. As further detailed herein, these include advertisements containing false or misleading statements, misrepresentations, and/or

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

k. Significant quantities of ConocoPhillips's fossil fuel products are or have been transported, traded, distributed, promoted, marketed, manufactured, sold, and/or consumed in California, from which activities ConocoPhillips derives and has derived substantial revenue. ConocoPhillips conducts and controls, either directly or through franchise agreements, retail fossil fuel sales at gas station locations throughout California, at which locations it promotes, advertises, and sells its fossil fuel products under its various brand names, including Conoco, Phillips 66, and 76. ConocoPhillips also markets and sells to California customers at retail outlets engine lubricants and motor oils under its Phillips 66, Kendall, and Red Line brand names. ConocoPhillips operates hundreds of 76-branded petroleum service stations throughout California. During the period relevant to this Complaint, ConocoPhillips sold a substantial percentage of all retail gasoline sold in California.

l. ConocoPhillips does substantial fossil fuel product-related business in California, and a substantial quantity of its fossil fuel products are extracted, refined, transported, traded, distributed, marketed, and/or sold in California. For instance, ConocoPhillips owns and/or operates oil and natural gas terminals in Richmond and Los Angeles, California; owns and operates oil refineries in Arroyo Grande, Colton, and Wilmington, California; and distributes ConocoPhillips fossil fuel products



throughout California. Phillips 66 also owns and operates oil refineries in Rodeo, Santa Maria, and Los Angeles, California. All of these refineries were owned and operated by ConocoPhillips and its predecessors-in-interest from 1997 to 2012.

m. ConocoPhillips has historically directed its fossil fuel product advertising, marketing, and promotional campaigns to California, including through maps identifying its services throughout California. ConocoPhillips markets and advertises its fossil fuel products in California to California residents by maintaining an interactive website available to prospective customers by which it directs California residents to ConocoPhillips's nearby retail service stations. ConocoPhillips offers a proprietary credit card known as the "76 Credit Card," which allows consumers in California to pay for gasoline and other products at 76-branded service stations, and which encourages California consumers to use 76-branded service stations by offering various rewards, including discounts on gasoline purchases at 76-branded service stations and cash rebates. ConocoPhillips further maintains a nationwide smartphone application known as the "Fuel Forward App." The application offers California consumers a cashless payment method for gasoline and other products at 76-branded service stations. California consumers utilize the payment method by providing their credit card information through the application. California consumers can also apply for a 76 Credit Card through the application. By registering their personal identifying information in the application and by using the application to identify and activate gas pumps at 76-branded service stations, California consumers can receive additional rewards, such as

further discounts on ConocoPhillips gasoline purchases.

16. **BP Entities: BP p.l.c., BP America Inc.**

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 place of business in London, England. BP p.l.c. consists of three main operating segments: (1) exploration and production, (2) refining and marketing, and (3) gas power and renewables. BP p.l.c. is the ultimate parent company of numerous subsidiaries, including Atlantic Richfield Company, referred to collectively herein 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, fuel, other refined petroleum products, and natural gas worldwide. BP p.l.c.’s subsidiaries explore for oil and natural gas under a wide range of licensing and other contractual agreements. 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 company-wide decisions about the quantity and extent of fossil fuel production and sales, including those of its subsidiaries. BP p.l.c. is the ultimate decision-maker with respect to fundamental decisions about the BP Group’s core business, e.g., the level of fossil fuel production companywide, including production among BP p.l.c.’s subsidiaries. For instance, BP p.l.c. reported that in 2016-17, it brought online 13 major exploration and production projects. These 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. Based on these projects, BP p.l.c. noted that it expected the BP Group to deliver to customers 900,000 barrels of new product per day by 2021. BP p.l.c. further reported that in 2017 it sanctioned three new exploration projects in Trinidad, India, and the Gulf of Mexico.

c. BP p.l.c. 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 communications strategies concerning climate change and the link between fossil fuel use and climate-related impacts on the environment and humans. BP p.l.c. makes fossil fuel production decisions for the entire BP Group based on factors including climate change. BP p.l.c.'s Board of Directors is the highest decision-making body within the company, with direct responsibility for the BP Group's climate change policy. BP p.l.c.'s chief executive is responsible for maintaining the BP Group's system of internal control that governs the BP Group's business conduct. BP p.l.c.'s senior leadership directly oversees a "carbon steering group," which manages climate change-related matters and consists of two committees—both overseen directly by the Board of Directors—that focus on climate change-related investments.

d. 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 place of business in Houston, Texas, and has been registered to do

business in California since 2000. BP America Inc. consists of numerous divisions and affiliates in all aspects of fossil fuel production, 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, 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.

e. Defendants BP p.l.c. and BP America Inc., together with their predecessors, successors, parents, subsidiaries, affiliates, and divisions, are collectively referred to herein as “BP.”

f. The State’s claims against BP arise out of and are related to the acts and omissions of BP in California and BP’s actions elsewhere that caused and will cause injuries in California.

g. BP has purposefully directed its tortious conduct toward California by distributing, marketing, advertising, promoting, and supplying its fossil fuel products in California, with knowledge that the intended use of those products for combustion have caused and will continue to cause climate change-related harms in California, including the State’s injuries. BP’s statements in California 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 the State and its residents to continue unabated use of BP's fossil fuel products in California, thereby resulting in the State's injuries.

h. Over the last several decades and continuing to the present day, BP—especially BP p.l.c.—spent millions of dollars on radio, television, online, social media, and outdoor advertisements in the California market related to its fossil fuel products. Since at least 1988 and continuing to the present day, BP has advertised in print publications circulated widely to California consumers, including but not limited to the following: *The Atlantic*, *Life*, *Newsweek*, *The New York Times*, *Sports Illustrated*, *Time*, *The Wall Street Journal*, and *The Washington Post*. BP has also run advertisements in California media outlets, including but not limited to the following: ABC 7 San Francisco, *Inland Valley Daily Bulletin*, KBCW 44 San Francisco, *Los Angeles Times*, *The Orange County Register*, *Pasadena Star News*, *Redlands Daily Facts*, *The San Bernardino Sun*, *The Mercury News*, *SFGate.com*, and *Whittier Daily News*. As further detailed herein, these include advertisements containing 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.

i. Significant quantities of BP's fossil fuel products are or have been transported, traded, distributed, promoted, marketed, manufactured, sold, and/or consumed in California, from which activities BP derives and has derived substantial revenue. BP conducts and controls, either directly or through franchise agreements, retail fossil fuel sales at gas station locations in substantial portions of California, at which locations it promotes, advertises, and sells its fossil fuel products under its ARCO brand name. Among other operations, BP operates more than 300 ARCO-licensed and branded gas stations in California, and distributes and markets petroleum-based lubricants marketed under the Castrol brand name throughout California. From 2000 to 2013, BP also owned and operated an oil refinery in Carson, California. During the period relevant to this Complaint, BP sold a substantial percentage of all retail gasoline sold in California. BP's marketing and trading business maintains an office in Irvine, California. BP maintains an energy research center in San Diego, California.

j. BP historically directed its fossil fuel product advertising, marketing, and promotional campaigns to California, including through maps that identified the locations of its service stations in California. BP markets and advertises its fossil fuel products in California to California residents by maintaining an interactive website available to prospective customers by which it directs California residents to BP's nearby retail service stations and/or lubricant distributors.

17. The Exxon, Shell, Chevron, ConocoPhillips, and BP entities set forth above are collectively referred to as the "Fossil Fuel Defendants."

## 18. American Petroleum Institute

a. Defendant American Petroleum Institute (API) is a nonprofit corporation based in the District of Columbia and registered to do business in California. API was created in 1919 to represent the American oil and gas industry as a whole. With more than 600 members, API is the country's largest oil trade association. API's purpose is to advance its members' collective business interests, which includes increasing consumer consumption of oil and gas for the financial profit of the Fossil Fuel Defendants and other oil and gas companies. Among other functions, API also coordinates members of the petroleum industry, gathers information of interest to the industry, and disseminates that information to its members.

b. Acting on behalf of and under the supervision and control of the Fossil Fuel Defendants, API has, since at least 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, and Alliance for Climate Strategies. 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 the Fossil Fuel Defendants and other oil and gas companies. The Fossil Fuel 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 the Fossil Fuel Defendants.

c. API reports that in 2022 it made approximately \$239 million in total revenue, including approximately \$110 million from membership dues.

d. API's stated mission includes "influenc[ing] public policy in support of a strong, viable U.S. oil and natural gas industry," which includes increasing consumers' consumption of oil and gas for the financial benefit of the Fossil Fuel Defendants and other oil and gas companies. In effect, API acts and has acted as a marketing arm for its member companies, including the Fossil Fuel Defendants. Over the last several decades, API has spent millions of dollars on television, newspaper, radio, social media, and internet advertisements in the California market. API has also run advertisements in California media outlets, including but not limited to the following: ABC 7 San Francisco, *The Coast News*, *East Bay Times*, *Inland Valley Daily Bulletin*, *The Orange County Register*, *Pasadena Star News*, *Press Telegram*, *Redlands Daily Facts*, *The Mercury News*, *SFGate.com*, *Time Out Los Angeles*, and *Whittier Daily News*.

e. 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. The 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. The 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 the Fossil Fuel Defendants' fossil fuel products. The Fossil Fuel Defendants directly controlled, supervised, and participated in API's misleading messaging regarding climate change.

f. In addition to national promotional campaigns circulated in California, API has also targeted California consumers directly by creating and disseminating misleading advertisements that distinctly promote consumption of fossil fuel products in California. API has run numerous press releases within California touting the direct and indirect benefits to California of the oil and gas industries' operations in California and elsewhere in the United States. The reports, sponsored by API, on which API bases its claims, do not mention climate change at all, nor do the reports mention any of the direct and indirect harms to California caused by the production, marketing, sale, and use of API members' fossil fuel products. Further, API's Department of Production sponsors two local API chapters in California, the Coastal Chapter and the San Joaquin Valley Chapter, which function "to promote a more cordial understanding by the public of the close economic relationship that exists between the petroleum industry and other lines of business." API also regularly hosts within California trade association events for oil and gas and related industries.

g. All of the Fossil Fuel Defendants and/or their predecessors-in-interest have been key API members at all times relevant to this Complaint. All of the Fossil Fuel Defendants are currently members of API. Executives from Exxon, Shell, Chevron, ConocoPhillips, and BP 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 for 15 of the 25 years between 1991 and 2016 (1991, 1996-1997, 2001, 2005-2016). BP's CEO served as API's Chairman in 1988, 1989, and 1998. Chevron's CEO served as API Chairman in 1994, 1995, 2003, and 2012. Shell's President served on API's Executive Committee from 2005 to 2006. ConocoPhillips Chairman and CEO Ryan Lance was API Board President from 2016 to 2018, and Exxon President and CEO Darren Woods was API Board President from 2018 to 2020. In 2020, API elected Phillips 66 Chairman and CEO Greg Garland to serve a two-year term as its Board President. Executives from ConocoPhillips also served as members of API's Board of Directors at various times.

h. Relevant information was shared among API and the Fossil Fuel Defendants and the Fossil Fuel Defendants' predecessors-in-interest through the following: (1) API's distribution of information to its members, and/or (2) participation of the Fossil Fuel Defendants' officers and other personnel, and those of the Fossil Fuel Defendants' predecessors-in-interest, on API boards, committees, and task forces.

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

19. The true names and capacities, whether individual, corporate, associate, or otherwise of Defendants Does 1 through 100, inclusive, are unknown to Plaintiff, who therefore sues said Defendants by such fictitious names pursuant to Code of Civil Procedure section 474. Plaintiff is informed and believes, and on that basis alleges, that each of the fictitiously named Defendants is responsible in

some manner for the acts and occurrences herein alleged, and that the State's harms were caused by such Defendants.

**C. Relevant Non-Parties: Defendants' Agents/Front Groups**

20. 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 the fossil fuel products for combustion would substantially contribute to climate change and result in harms to the State. The Fossil Fuel Defendants obtained knowledge of the hazards of their products independently and through their membership and involvement in trade associations such as API.

21. The Fossil Fuel Defendants and 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 on behalf of and under the supervision and control of the Fossil Fuel Defendants, assisted the deception campaign by implementing public advertising and outreach campaigns to discredit climate science, funding scientists to cast doubt upon climate science and upon the extent to which climate change is caused by human activity. In sum, the Fossil Fuel Defendants, through their front groups, engaged in a significant marketing campaign that misrepresented and concealed the dangers of their fossil fuel products with the aim of protecting or enhancing sales of these products to consumers, including consumers in California. Defendants actively supervised, facilitated, consented to, and/or directly participated in the misleading messaging of

these front groups, from which the Fossil Fuel Defendants profited significantly, including in the form of increased sales in California.

22. **The Global Climate Coalition (GCC)** was an industry group formed to preserve and expand consumer demand for fossil fuels 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); ARCO (owned by BP at the time); and Phillips Petroleum Company (currently, ConocoPhillips). Tom Lambrix, director of government relations for Phillips Petroleum, was chairman of the GCC.

### **III. JURISDICTION AND VENUE**

23. This Court has original jurisdiction over this action pursuant to article VI, section 10, of the California Constitution.

24. This Court has personal jurisdiction over Defendants, pursuant to Code of Civil Procedure section 410.10, because each Defendant purposefully availed itself of the California market, and thus of the benefits of the laws of the State, during all times relevant to this Complaint, so as to render California 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 California.

25. 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 parent controls and has controlled 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 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 non-resident Fossil Fuel Defendant parent has the power to direct and control its non-resident subsidiaries named here. Thus, each subsidiary is the agent of its parent. As agents, the subsidiaries of each non-resident Fossil Fuel Defendant conducted activities in California 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 the State and increased sales to the parent company. Therefore, 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 Fossil Fuel 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 respectively branded gas stations in California, including point-of-sale advertising and marketing. The Fossil Fuel Defendants dictate which grades and formulations of their gasoline may be sold at their respectively branded stations.

c. The Fossil Fuel Defendants, by and through API and other organizations like the GCC, 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 engage in massive campaigns to promote continued and increased use of their fossil fuel products, which they knew would result in injuries to the State. Through their own actions and through their membership and participation in climate denialist front groups, API and each Fossil Fuel Defendant were and are members of this conspiracy. Defendants committed substantial acts to further the conspiracy in California by making affirmative misrepresentations to California consumers, as well as misleading them by omission, about the existence, causes, and effects of global warming; and by affirmatively promoting the Fossil Fuel Defendants' fossil fuel products as safe, with knowledge of the disastrous impacts that would result from the intended use of those products. A

substantial effect of this conspiracy has also and will also occur in California, as the State has suffered and will suffer injuries from Defendants' wrongful conduct, including but not limited to the following: extreme heat, severe droughts, water shortages, catastrophic wildfires, public health injuries, massive storms, flooding, damage to agriculture, sea level rise, coastal erosion, damage to ecosystems and habitat, biodiversity disruption, 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 California and elsewhere would result in these injuries in and to the State. Finally, the climate effects described herein are direct and foreseeable results of Defendants' conduct in furtherance of the conspiracy.

26. Venue is proper in this Court pursuant to Code of Civil Procedure section 393, subdivision (a), because the violations of law and the public nuisance alleged in this Complaint occurred in San Francisco County and throughout California.

#### **IV. FACTUAL BACKGROUND**

##### **A. Defendants Are Substantially Responsible for Causing and Accelerating Climate Change**

27. The earth's atmosphere is warming, sea level is rising, snow and ice cover is diminishing, oceans are warming and acidifying, and hydrologic systems have been altered, among other rapidly accelerating changes to our climate. These changes are directly harming people's health, lives, lifestyles, and livelihoods. According to the IPCC, the evidence that

humans are causing this warming of the Earth is unequivocal.<sup>3</sup>

28. Greenhouse gas emissions caused by human activities are the most significant driver of climate change and ocean acidification.<sup>4</sup> Over the past couple of decades, those emission rates have accelerated, exceeding those predicted under previous “worst case” global emissions scenarios. The severity of the continuing impacts of climate change on California will depend on the success of mitigation and adaptation efforts in California and on the reduction of fossil fuel consumption.<sup>5</sup>

29. Greenhouse gases are largely byproducts of human combustion of fossil fuels to produce energy and use of fossil fuels to create petrochemical products. While there are several greenhouse gases contributing to climate change, CO<sub>2</sub> is the primary greenhouse gas emitted as a result of human activities.

30. Prior to World War II, most anthropogenic CO<sub>2</sub> emissions were caused by land-use practices, such as forestry and agriculture, which altered the ability of the land and global biosphere to absorb CO<sub>2</sub> from the atmosphere. The impacts of such activities on

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<sup>3</sup> IPCC, Climate Change 2021: The Physical Science Basis, Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (2021) pp. v, 4, 41, 63, 150, 425, 506, available at [https://report.ipcc.ch/ar6/wg1/IPCC\\_AR6\\_WGI\\_FullReport.pdf](https://report.ipcc.ch/ar6/wg1/IPCC_AR6_WGI_FullReport.pdf) (as of June 5, 2024).

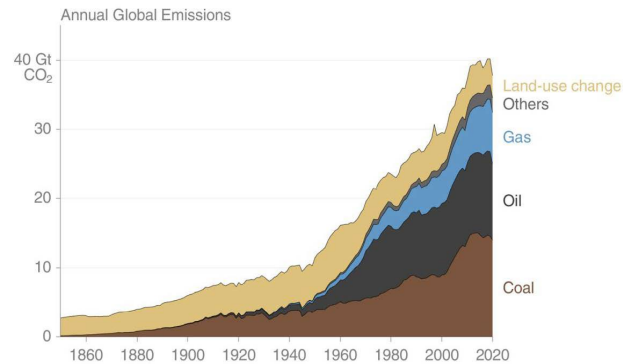
<sup>4</sup> *Id.* at p. 41.

<sup>5</sup> See Bedsworth et al., Statewide Summary Report, California’s Fourth Climate Change Assessment (2018) pp. 8-13, 20, 70, available at <https://www.climateassessment.ca.gov/state/> (as of June 5, 2024).



Earth's climate were relatively minor. Since that time, however, both the annual rate and total volume of anthropogenic CO<sub>2</sub> emissions have increased enormously following the dramatic rise of the combustion of oil, gas, and coal, in particular in transportation and the stationary energy market.

31. The graph below illustrates that fossil fuel emissions are the dominant source of increases in atmospheric CO<sub>2</sub> since the mid-twentieth century:



**Figure 1: Annual Global Emissions, 1850–2020<sup>6</sup>**

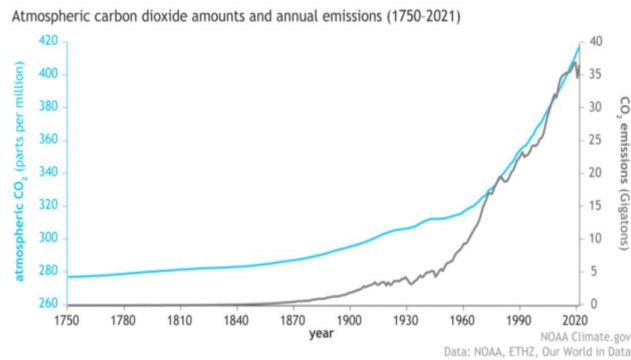
32. This acceleration of fossil fuel emissions has led to a correspondingly sharp rise in atmospheric concentration of CO<sub>2</sub>. Since 1960, the concentration of CO<sub>2</sub> in the atmosphere has spiked from under 320 parts per million (ppm) to approximately 423 ppm.<sup>7</sup> The concentration of atmospheric CO<sub>2</sub> has also been

<sup>6</sup> Global Carbon Project, Global Carbon Budget 2021 (Nov. 4, 2021) p. 83, available at [https://www.globalcarbonproject.org/carbonbudget/archive/2021/GCP\\_CarbonBudget\\_2021.pdf](https://www.globalcarbonproject.org/carbonbudget/archive/2021/GCP_CarbonBudget_2021.pdf) (as of June 5, 2024).

<sup>7</sup> Global Monitoring Laboratory, NOAA, Trends in Atmospheric Carbon Dioxide, Full Record, available at <https://gml.noaa.gov/ccgg/trends/mlo.html> (as of June 5, 2024).

accelerating. From 1960 to 1970, atmospheric CO<sub>2</sub> increased by an average of approximately 0.9 ppm per year; over the last five years, it has increased by approximately 2.4 ppm per year.<sup>8</sup>

33. Figure 2 indicates the tight nexus between the sharp increase in emissions from the combustion of fossil fuels and the step rise of atmospheric concentrations of CO<sub>2</sub>.



**Figure 2: Atmospheric CO<sub>2</sub> Concentration and Annual Emissions<sup>9</sup>**

34. Because of the increased burning of fossil fuel products, concentrations of greenhouse gases in the

<sup>8</sup> Global Monitoring Laboratory, NOAA, Trends in Atmospheric Carbon Dioxide, Growth Rate, available at <https://gml.noaa.gov/ccgg/trends/gr.html> (as of June 5, 2024).

<sup>9</sup> Lindsey, NOAA, Climate Change: Atmospheric Carbon Dioxide (May 12, 2023), available at <https://www.climate.gov/news-features/understanding-climate/climate-change-atmospheric-carbon-dioxide> (as of June 5, 2024).

atmosphere are now at an unprecedented level, one not seen in at least three million years.<sup>10</sup>

35. As greenhouse gases accumulate in the atmosphere, the Earth radiates less energy back to space. This accumulation and associated disruption of the Earth's energy balance have myriad environmental and physical consequences, including, but not limited to, the following:

a. Warming of the Earth's average surface temperature, both locally and globally, and increased frequency and intensity of heat waves. To date, global average surface temperatures have risen approximately 1.09°C (1.96°F) above preindustrial temperatures; temperatures in particular locations have risen more.

b. 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.

c. 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.

d. Adverse impacts on human health associated with extreme weather, extreme heat, worsening air quality, and vector-borne illnesses.

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<sup>10</sup> *More CO<sub>2</sub> Than Ever Before in 3 Million Years, Shows Unprecedented Computer Simulation*, Science Daily (Apr. 3, 2019), available at <https://www.sciencedaily.com/releases/2019/04/190403155436.htm> (as of June 5, 2024).

e. 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.

f. Sea level rise, due to the thermal expansion of warming ocean waters and runoff from melting glaciers and ice sheets.

g. Ocean acidification, primarily due to the increased uptake of atmospheric carbon dioxide by the oceans.

h. Changes to terrestrial and marine ecosystems, and consequent impacts on the populations and ranges of flora and fauna.

36. As discussed below, these consequences of Defendants' tortious and deceptive conduct and its exacerbation of the climate crisis are already impacting California, its communities, its people's health, and its natural resources, and these impacts will continue to increase in severity. Absent Defendants' tortious and deceptive conduct and resultant contributions to global warming, these harmful effects would have been far less extreme than those currently occurring. Similarly, future harmful effects would also have been far less detrimental—or would have been avoided entirely.<sup>11</sup>

37. From at least 1965 until the present, Defendants unduly inflated the market for fossil fuel

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<sup>11</sup> See, e.g., Clark et al., *Consequences of Twenty-First-Century Policy for Multi-Millennial Climate and Sea-Level Change* (2016) 6 Nature Climate Change 360, 365 (“Our modelling suggests that the human carbon footprint of about [470 billion tons] by 2000 . . . has already committed Earth to a [global mean sea level] rise of ~1.7m (range of 1.2 to 2.2 m).”).

products by aggressively promoting the use of these products while knowing their associated dangers, and by misrepresenting and concealing the hazards of those products to deceive consumers and the public about the consequences of everyday use of fossil fuel products. Consequently, substantially more anthropogenic greenhouse gases have been emitted into the environment than would have been emitted absent Defendants' tortious and deceptive conduct.

38. By quantifying GHG pollution attributable to the Fossil Fuel Defendants' products and conduct, climatic and environmental responses to those emissions are also calculable and can be attributed to the Fossil Fuel Defendants both on an individual and an aggregate basis.<sup>12</sup>

39. Defendants' tortious, deceptive, and unconscionable conduct, as alleged herein, caused a substantial portion of the global atmospheric GHG concentrations, and the past, ongoing, and future disruptions to the environment—and consequent injuries to California, its communities, and its resources—associated therewith.

40. Defendants, individually and collectively, have substantially and measurably contributed to California's climate crisis-related injuries.

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<sup>12</sup> See Heede, *Tracing Anthropogenic Carbon Dioxide and Methane Emissions to Fossil Fuel and Cement Producers*, 1854–2010 (2014) 122 *Climatic Change* 229, available at <https://link.springer.com/article/10.1007/s10584-013-0986-y> (as of June 5, 2024).

**B. Defendants Went to Great Lengths to Understand the Dangers Associated with Fossil Fuel Products, and Either Knew or Should Have Known of Those Dangers**

41. Defendants have known about the potential warming effects of GHG emissions since as early as the 1950s, and they developed a sophisticated understanding of climate change that far exceeded the knowledge of the general public. Although it was concealed at the time, the industry's knowledge was uncovered in 2015 by journalists at *Inside Climate News* and the *Los Angeles Times*, among others.<sup>13</sup>

42. In 1954, geochemist Harrison Brown and his colleagues at the California Institute of Technology wrote to API, informing the trade association of their finding that fossil fuels had caused atmospheric carbon dioxide levels to increase by about 5% since 1840.<sup>14</sup> API continued to fund the scientists for various research projects and measurements of carbon

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<sup>13</sup> See, e.g., Banerjee et al., *Exxon's Own Research Confirmed Fossil Fuels' Role in Global Warming Decades Ago*, L.A. Times (Sept. 16, 2015), available at <https://insideclimatenews.org/news/16092015/exxons-own-research-confirmed-fossil-fuels-role-in-global-warming/> (as of June 5, 2024); Jennings et al., *How Exxon went from leader to skeptic on climate change research*, L.A. Times (Oct. 23, 2015), available at <https://graphics.latimes.com/exxon-research> (as of June 5, 2024); Jerving et al., *What Exxon knew about the Earth's melting Arctic*, L.A. Times (Oct. 9, 2015), available at <https://graphics.latimes.com/exxon-arctic/> (as of June 5, 2024); Lieberman et al., *Big Oil braced for global warming while it fought regulations*, L.A. Times (Dec. 31, 2015), available at <https://graphics.latimes.com/oil-operations> (as of June 5, 2024).

<sup>14</sup> Franta, *Early Oil Industry Knowledge of CO<sub>2</sub> and Global Warming* (2018) 8 Nature Climate Change 1024, 1024.

dioxide, but the results were never published.<sup>15</sup> 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.<sup>16</sup>

43. In 1959, API organized an oil industry celebration in New York City.<sup>17</sup> High-level oil industry executives were in attendance, and one of the keynote speakers was the nuclear physicist Edward Teller. Teller warned the industry that “a temperature rise corresponding to a 10[%] 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.”<sup>18</sup> Following his speech, Teller was asked to “summarize briefly the danger from increased carbon dioxide content in the 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.”<sup>19</sup>

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<sup>15</sup> *Ibid.*

<sup>16</sup> *Ibid.*; Brannon, Jr. et al., *Radiocarbon Evidence on the Dilution of Atmospheric and Oceanic Carbon by Carbon from Fossil Fuels* (1957) 38 Am. Geophysical Union Transactions 643, 644-46.

<sup>17</sup> See Nevins and Dunlop, *Energy and Man: A Symposium* (1960). See also Franta, *Early Oil Industry Knowledge of CO<sub>2</sub> and Global Warming*, *supra*, p. 1024.

<sup>18</sup> Teller, *Energy Patterns of the Future*, in *Energy and Man: A Symposium* (1960) p. 58.

<sup>19</sup> *Id.* at p. 70.

44. In 1965, the president of API, Frank Ikard, addressed leaders of the petroleum industry at the trade association's annual meeting. Ikard relayed the findings of a recent 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."<sup>20</sup>

45. Thus, by 1965, Defendants and their predecessors-in-interest were aware that the scientific community had found that fossil fuel products, if their use continued to grow, would cause global warming by the end of the century, and that such global warming would have wide-ranging and costly consequences.

46. 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.<sup>21</sup> The assessment stated: "Significant temperature changes are almost certain to occur by the year 2000, and . . .

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<sup>20</sup> Ikard, *Meeting the Challenges of 1966*, in Proceedings of the American Petroleum Institute (1965) p. 13, available at <https://www.documentcloud.org/documents/5348130-1965-API-Proceedings> (as of June 5, 2024).

<sup>21</sup> Robinson and Robbins, Stanford Research Institute, Sources, Abundance, and Fate of Gaseous Atmospheric Pollutants (Feb. 1968) pp. 109-10, available at <https://www.smokeandfumes.org/documents/document16> (as of June 5, 2024).



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 CO<sub>2</sub> are detailed and seem to explain adequately the present state of CO<sub>2</sub> in the atmosphere.” What was missing, the scientists said, was work on “air pollution technology and . . . systems in which CO<sub>2</sub> emissions would be brought under control.”<sup>22</sup>

47. In 1969, the Stanford Research Institute delivered a supplemental report on air pollution to API, projecting with alarming particularity that atmospheric CO<sub>2</sub> concentrations would reach 370 ppm by 2000.<sup>23</sup> This projection turned out to almost exactly match the actual CO<sub>2</sub> concentrations measured in 2000 of 369.64 ppm.<sup>24</sup> The report explicitly connected the rise in CO<sub>2</sub> levels to the combustion of fossil fuels, finding it “unlikely that the observed rise in atmospheric CO<sub>2</sub> has been due to changes in the biosphere.”<sup>25</sup> By virtue of their membership and participation in API at that time, the Fossil Fuel Defendants received or should have received the Stanford Research Institute reports, and

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<sup>22</sup> *Id.* at pp. 108, 112.

<sup>23</sup> Robinson and Robbins, Stanford Research Institute, Sources, Abundance, and Fate of Gaseous Atmospheric Pollutants Supplement (June 1969) p. 3.

<sup>24</sup> NASA Goddard Institute for Space Studies, Global Mean CO<sub>2</sub> Mixing Ratios (ppm): Observations, available at <https://data.giss.nasa.gov/modelforce/ghgases/fig1A.ext.txt> (as of June 5, 2024).

<sup>25</sup> Robinson and Robbins, Sources, Abundance, and Fate of Gaseous Atmospheric Pollutants Supplement, *supra*, p. 19.

thus were on notice of the conclusions in those reports.<sup>26</sup>

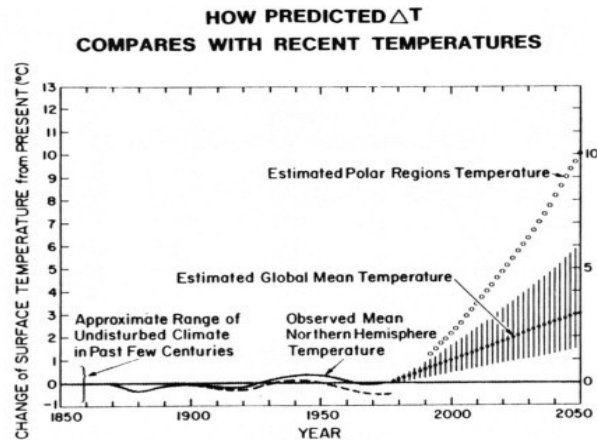
48. In 1977, James Black of Exxon gave a presentation to Exxon executives on the “greenhouse effect,” which was summarized in an internal memo the following year. Black reported that “current scientific opinion overwhelmingly favors attributing atmospheric carbon dioxide increase to fossil fuel consumption,” and 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 over most of the earth,” with two to three times as much warming at the poles.<sup>27</sup> Black reported that the impacts of global warming would include “more rainfall,” which would “benefit some areas and would harm others,” and that “[s]ome countries would benefit, but others could have their agricultural output reduced or destroyed.” “Even those nations which are favored, however, would be damaged for a while since their agricultural and industrial patterns have been established on the basis of the present climate.” Finally, Black reported that “[p]resent thinking holds that man has a time window of five to ten years before the need for hard decisions regarding changes in energy strategies might become

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<sup>26</sup> Abstracts of the Stanford Research Institute studies were included in a 1972 API status report to its members. See American Petroleum Institute, Committee for Air and Water Conservation, *Environmental Research: A Status Report* (Jan. 1972) p. 103, available at <http://files.eric.ed.gov/fulltext/ED066339.pdf> (as of June 5, 2024).

<sup>27</sup> J.F. Black, Exxon Research and Engineering Co., memorandum to F.G. Turpin, Exxon Research and Engineering Co. re The Greenhouse Effect (June 6, 1978) pp. 2, 23, available at <https://www.documentcloud.org/documents/2805568-1978-Exxon-Presentation-on-Greenhouse-Effect> (as of June 5, 2024).

critical.”<sup>28</sup> The figure below, reproduced from Black’s memo, illustrates Exxon’s understanding of the timescale and magnitude of global warming that its products would cause.



**Figure 3: Future Global Warming Predicted Internally by Exxon in 1978<sup>29</sup>**

49. In 1979, an internal Exxon memorandum stated, “The most widely held theory [about the increase in CO<sub>2</sub> concentration in the atmosphere] is that: The increase is due to fossil fuel combustion; [i]ncreasing CO<sub>2</sub> concentration will cause a warming of the earth’s surface; [and t]he present trend of fossil fuel consumption will cause dramatic environmental effects before the year 2050. . . . The potential problem

<sup>28</sup> *Id.* at p 2.

<sup>29</sup> *Id.* at p. 26. The company predicted global warming of 1°C to 3°C by 2050, with 10°C 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. (*Ibid.*)

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 [CO<sub>2</sub>] 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[.]<sup>30</sup>

50. Those projections proved remarkably accurate. Annual average atmospheric CO<sub>2</sub> concentrations surpassed 400 ppm in 2015 for the first time in millions of years.<sup>31</sup> Limiting the carbon dioxide 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,

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<sup>30</sup> W.L. Ferrall, Exxon Research and Engineering Co., memorandum to Dr. R.L. Hirsch re Controlling Atmospheric CO<sub>2</sub> (Oct. 16, 1979) pp. 1-2, 5, available at <https://www.industrydocuments.ucsf.edu/docs/mqwl0228> (as of June 5, 2024).

<sup>31</sup> Jones, *How the World Passed a Carbon Threshold and Why It Matters*, Yale Env’t 360 (Jan. 26, 2017), available at <http://e360.yale.edu/features/how-the-world-passed-a-carbon-threshold-400ppm-and-why-it-matters> (as of June 5, 2024).

such as shale oil, could not be substantially exploited at all.<sup>32</sup>

51. But instead of heeding these dire and repeated warnings, in November 1979, according to internal correspondence, Exxon urged “a very aggressive defensive program in . . . atmospheric science and climate because there is a good probability that legislation affecting our business will be passed.”<sup>33</sup> It urged an expanded research effort to “influence possible legislation on environmental controls” and suggested the formation of a “small task force” to evaluate a potential program in CO<sub>2</sub> and climate, acid rain, carcinogens, fine particulates, and other pollution issues caused by fossil fuels.<sup>34</sup>

52. In 1979, API and its members, including the Fossil Fuel Defendants, convened a Task Force to monitor and share cutting-edge climate research among members of the oil industry. This Climate and Energy Task Force (hereinafter referred to as “CO<sub>2</sub> Task Force”) included senior scientists and engineers from nearly every major U.S. and multinational oil and gas company—including Exxon, Mobil, Amoco, Phillips, Texaco, Shell, and Standard Oil of Ohio, as well as Standard Oil of California and Gulf Oil, the predecessors to Chevron—and was charged with monitoring research, evaluating the implications of emerging science for the petroleum and gas industries, and identifying where potential reductions in GHG

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<sup>32</sup> W.L. Ferrall, Controlling Atmospheric CO<sub>2</sub>, *supra*, pp. 3, 6-7.

<sup>33</sup> H. Shaw memorandum to H.N. Weinberg re Research in Atmospheric Science (Nov. 19, 1979) p. 2, available at <https://www.industrydocuments.ucsf.edu/docs/yqwl0228> (as of June 5, 2024).

<sup>34</sup> *Id.* at pp. 1-2.

emissions from Defendants' fossil fuel products could be made.<sup>35</sup>

53. In 1979, a paper prepared by API for the CO<sub>2</sub> Task Force asserted that CO<sub>2</sub> 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, which would revert to a warming trend around 1990, adding to the warming caused by CO<sub>2</sub>.<sup>36</sup>

54. In 1980, at the invitation of the CO<sub>2</sub> Task Force, climate expert J. Laurman delivered to API members a presentation providing a "complete technical discussion" of global warming caused by fossil fuels, including "the scientific basis and technical evidence of CO<sub>2</sub> buildup, impact on society, methods of modeling and their consequences, uncertainties, policy implications, and conclusions that can be drawn from present knowledge."<sup>37</sup> Laurmann informed the CO<sub>2</sub> Task Force of the

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<sup>35</sup> Banerjee, *Exxon's Oil Industry Peers Knew About Climate Dangers in the 1970s, Too*, Inside Climate News (Dec. 22, 2015), available at <https://insideclimatenews.org/news/22122015/exxon-mobil-oil-industry-peers-knew-about-climate-change-dangers-1970s-american-petroleum-institute-api-shell-chevron-texaco/> (as of June 5, 2024).

<sup>36</sup> R.J. Champion memorandum to J.T. Burgess re Comments on The API's Background Paper on CO<sub>2</sub> Effects (Sept. 6, 1979), available at <https://www.industrydocuments.ucsf.edu/docs/lqwl0228> (as of June 5, 2024).

<sup>37</sup> J. J. Nelson, American Petroleum Institute, letter to AQ-9 Task Force re The CO<sub>2</sub> Problem; Addressing Research Agenda Development (Mar. 18, 1980) p. 2, available at <https://www.industrydocuments.ucsf.edu/docs/gffl0228> (as of June 5, 2024).

“scientific consensus on the potential for large future climatic response to increased CO<sub>2</sub> levels” and that there was “strong empirical evidence that [the carbon dioxide] rise [was] caused by anthropogenic release of CO<sub>2</sub>, mainly from fossil fuel burning.”<sup>38</sup> According to Laurmann, unless fossil fuel production and use were controlled, atmospheric carbon dioxide would be twice preindustrial levels by 2038, using a 3% per annum growth of atmospheric release rate, with “likely impacts” along the following trajectory:

1°C RISE (2005): BARELY NOTICEABLE

2.5°C RISE (2038): MAJOR ECONOMIC  
CONSEQUENCES, STRONG REGIONAL  
DEPENDENCE

5°C RISE (2067): GLOBALLY  
CATASTROPHIC EFFECTS

Laurmann warned the CO<sub>2</sub> Task Force that global warming of 2.5°C would “bring[] world economic growth to a halt.” The minutes of the meeting, which were distributed to the entire CO<sub>2</sub> Task Force, show that one of the Task Force’s goals was “to help develop ground rules for ... the cleanup of fuels as they relate to CO<sub>2</sub> creation,” and the Task Force discussed potential research into the market and technical requirements for a worldwide “energy source changeover” away from fossil fuels.<sup>39</sup>

55. In 1980, a Canadian Esso (Exxon) company reported to managers and staff at affiliated Esso and Exxon companies that there was “no doubt” that fossil fuels were aggravating the build-up of CO<sub>2</sub> in the atmosphere, and that “[t]echnology exists to remove

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<sup>38</sup> *Id.* at pp. 9-10 (full capitalization in original removed).

<sup>39</sup> *Id.* at pp. 1, 13.

CO<sub>2</sub> from stack gases but removal of only 50% of the CO<sub>2</sub> would double the cost of power generation.”<sup>40</sup>

56. In December 1980, an Exxon manager distributed a memorandum on the “CO<sub>2</sub> 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.<sup>41</sup> Calculations predicting a lower temperature increase, such as 0.25°C, 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.<sup>42</sup> 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

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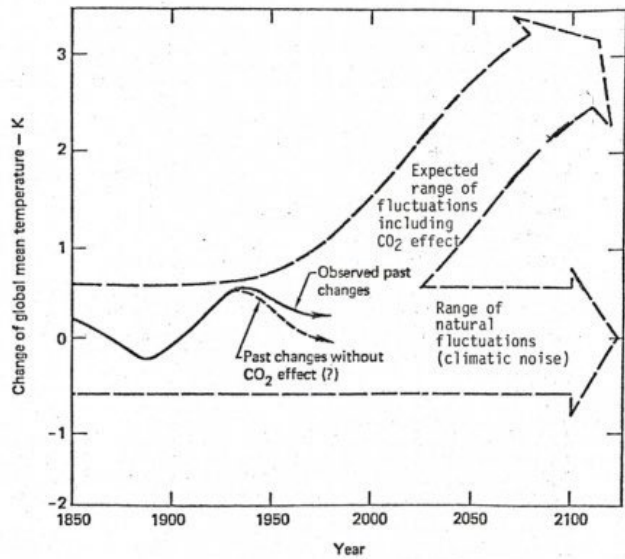
<sup>40</sup> Imperial Oil Ltd., Review of Environmental Protection Activities for 1978–1979 (Aug. 6, 1980) p. 2, available at <http://www.documentcloud.org/documents/2827784-1980-Imperial-Oil-Review-of-Environmental.html#document/> (as of June 5, 2024).

<sup>41</sup> Henry Shaw memorandum to T.K. Kett re Exxon Research and Engineering Company’s Technological Forecast: CO<sub>2</sub> Greenhouse Effect (Dec. 18, 1980) p. 3, available at <https://www.documentcloud.org/documents/2805573-1980-Exxon-Memo-Summarizing-Current-Models-And.html> (as of June 5, 2024).

<sup>42</sup> *Id.* at pp. 3-5.



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.”<sup>43</sup> The memo included the figure below, which illustrates both the global warming anticipated by Exxon and the company’s understanding that significant global warming would occur:



**Figure 4: Future Global Warming Predicted Internally by Exxon in 1980<sup>44</sup>**

57. In February 1981, Exxon’s Contract Research Office prepared and distributed a “Scoping Study on

<sup>43</sup> *Id.* at pp. 5-6.

<sup>44</sup> *Id.* at p. 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 warming by the end of the century.

CO<sub>2</sub>” to the leadership of Exxon Research and Engineering Company.<sup>45</sup> 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 CO<sub>2</sub> 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 “CO<sub>2</sub>-induced effects.” In discussing “options for reducing CO<sub>2</sub> build-up in the atmosphere,” the study noted that although capturing CO<sub>2</sub> from flue 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.”<sup>46</sup>

58. Thus, by 1981, Exxon and other fossil fuel companies were actively monitoring all aspects of CO<sub>2</sub> and global warming research, and Exxon had recognized that a shift away from fossil fuels and towards renewable energy sources would be necessary to avoid a large CO<sub>2</sub> build- up in the atmosphere and resultant global warming.

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<sup>45</sup> G.H. Long, Exxon Research and Engineering Co., letter to P.J. Lucchesi et al. re Atmospheric CO Scoping Study (Feb. 5, 1981), <https://www.industrydocuments.ucsf.edu/docs/yxfl0228> (as of June 5, 2024).

<sup>46</sup> *Ibid.*

59. An Exxon scientist warned 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 CO<sub>2</sub> 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.”<sup>47</sup> The memo expressed concern about the potential effects of unabated CO<sub>2</sub> emissions from Defendants’ fossil fuel products, saying, “it is distinctly possible that [Exxon Planning Division’s] scenario will later produce effects which will indeed be catastrophic (at least for a substantial fraction of the world’s population).”<sup>48</sup>

60. In 1982, another report prepared for API by climate scientists recognized that the atmospheric CO<sub>2</sub> concentration had risen significantly compared to the concentration at the beginning of the industrial revolution. It went further, warning that “[s]uch a warming can have serious consequences for man’s comfort and survival since patterns of aridity and rainfall can change, the height of the sea level can increase considerably and the world food supply can be affected.”<sup>49</sup> Exxon’s own modeling research

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<sup>47</sup> R.W. Cohen memorandum to W. Glass (Aug. 18, 1981), available at <http://www.climatefiles.com/exxonmobil/1981-exxon-memo-on-possible-emission-consequences-of-fossil-fuel-consumption> (as of June 5, 2024).

<sup>48</sup> *Ibid.*

<sup>49</sup> American Petroleum Institute, *Climate Models and CO<sub>2</sub> Warming: A Selective Review and Summary* (Mar. 1982) p. 4, available at <https://www.climatefiles.com/trade-group/american-petroleum-institute/api-climate-models-and-CO2-warming-a-selective-review-and-summary/> (as of June 5, 2024).

confirmed this.<sup>50</sup> In a 1982 internal memorandum, Exxon's Corporate Research and Science Laboratories acknowledged a consensus "that a doubling of atmospheric CO<sub>2</sub> from its pre-industrial revolution value would result in an average global temperature rise of (3.0 ± 1.5)°C [5.4 ± 2.7 °F]" as well as "unanimous agreement in the scientific community that a temperature increase of this magnitude would bring about significant changes in the earth's climate[.]"<sup>51</sup>

61. Also in 1982, Exxon's Environmental Affairs Manager distributed a primer on climate change to Exxon management; it was "restricted to Exxon personnel and not [to be] distributed externally."<sup>52</sup> The primer explained the science behind climate change, confirmed fossil fuel combustion as a primary anthropogenic contributor to global warming, and estimated a CO<sub>2</sub> doubling by 2090 with a "Most Probable Temperature Increase" of more than 2°C over the 1979 level, as shown in the figure on the following page.<sup>53</sup> The report also warned that "disturbances in the existing global water distribution

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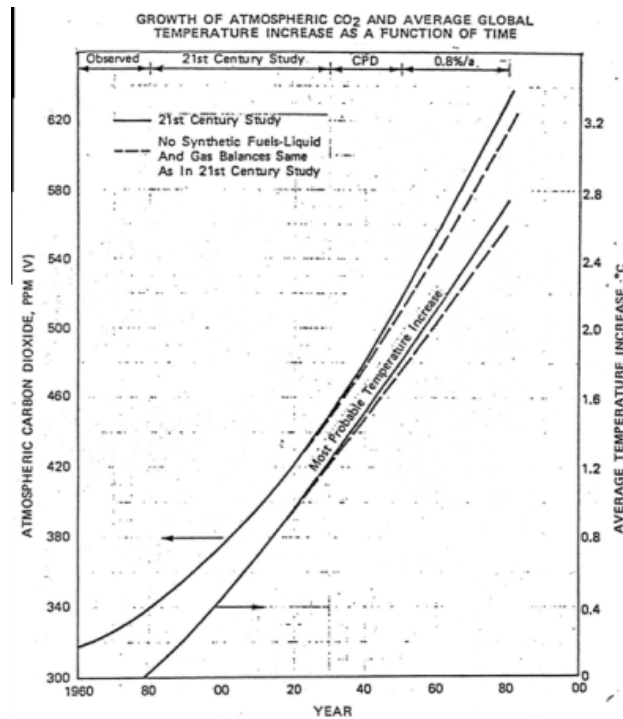
<sup>50</sup> See Roger W. Cohen, Exxon Research and Engineering Co., memorandum to A.M. Natkin, Office of Science and Technology, Exxon Corp. (Sept. 2, 1982), available at <https://www.climatefiles.com/exxonmobil/1982-exxon-memo-summarizing-climate-modeling-and-co2-greenhouse-effect-research/> (as of June 5, 2024).

<sup>51</sup> *Id.* at p. 1.

<sup>52</sup> M.B. Glaser, Exxon Research and Engineering Co., memorandum to R.W. Cohen et al. re CO<sub>2</sub> "Greenhouse" Effect (Nov. 12, 1982) p. 1, available at <https://insideclimatenews.org/wp-content/uploads/2015/09/1982-Exxon-Primer-on-CO2-Greenhouse-Effect.pdf> (as of June 5, 2024).

<sup>53</sup> *Id.* at pp. 1, 7.

balance would have dramatic impact on soil moisture, and in turn, on agriculture,” and that the American Midwest would become much drier. It further warned of “potentially catastrophic effects that must be considered[.]”<sup>54</sup> It concluded that “[a]ll biological systems are likely to be affected,” and “the most severe economic effects could be on agriculture.”<sup>55</sup>



**Figure 5: Exxon’s Internal Prediction of Future CO<sub>2</sub> Increase and Global Warming from 1982<sup>56</sup>**

<sup>54</sup> *Id.* at p. 11.

<sup>55</sup> *Id.* at p. 14.

<sup>56</sup> *Id.* at p. 7. The company predicted a doubling of atmospheric (continued...)

62. The report 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[.]”<sup>57</sup> The report 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 \$25,640 billion in 2022).<sup>58</sup> To avoid such impacts, the report 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.”<sup>59</sup> The primer also noted that the analysis indicated that other greenhouse gases related to fossil fuel production, such as methane (which is a more powerful GHG than CO<sub>2</sub>), “may significantly contribute to a global warming,” and that concerns over CO<sub>2</sub> would be reduced if fossil fuel use were decreased due to “high price, scarcity, [or] unavailability.”<sup>60</sup> “Mitigation of the ‘greenhouse effect’ would require major reductions

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carbon dioxide concentrations above preindustrial levels by around 2090 (left curve), with a temperature increase of more than 2°C over the 1979 level (right curve).

<sup>57</sup> *Id.* at p. 14.

<sup>58</sup> *Ibid.*; See Federal Reserve Bank of St. Louis, Gross National Product (updated Mar. 30, 2023), available at <https://fred.stlouisfed.org/series/GNPA> (as of June 5, 2024).

<sup>59</sup> M.B. Glaser, CO<sub>2</sub> “Greenhouse” Effect, *supra*, p. 18.

<sup>60</sup> *Id.* at pp. 18, 29.

in fossil fuel combustion,” the primer stated.<sup>61</sup> The primer was widely distributed to Exxon leadership.

63. 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.<sup>62</sup> Cohen reported:

[O]ver the past several years a clear scientific consensus has emerged regarding the expected climatic effects of increased atmospheric CO<sub>2</sub>. The consensus is that a doubling of atmospheric CO<sub>2</sub> from its pre-industrial revolution value would result in an average global temperature rise of (3.0 ± 1.5) °C. . . . 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 temperature increase of this magnitude would bring about significant changes in the earth’s climate, including rainfall distribution and alterations in the biosphere. The time required for doubling of atmospheric CO<sub>2</sub> depends on future world consumption of fossil fuels. Current

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<sup>61</sup> *Id.* at p. 2.

<sup>62</sup> Roger W. Cohen, Exxon Research and Engineering Co., memorandum to A.M. Natkin, Exxon Corp. Office of Science and Technology (Sept. 2, 1982), available at <https://www.climatefiles.com/exxonmobil/1982-exxon-memo-summarizing-climate-modeling-and-co2-greenhouse-effect-research/> (as of June 5, 2024).

projections indicate that doubling will occur sometime in the latter half of the 21st century. The models predict that CO<sub>2</sub> climate changes should be observable well before doubling. It is generally believed that the first CO<sub>2</sub>-induced temperature increase will not be observable until around the year 2000.

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 CO<sub>2</sub> on climate."

64. Throughout the early 1980s, at Exxon's direction, Exxon climate scientist Henry Shaw forecasted emissions of CO<sub>2</sub> 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 CO<sub>2</sub> concentrations would double in 2090 per the Exxon model, with an attendant 2.3–5.6°F average global temperature increase.<sup>63</sup>

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<sup>63</sup> Banerjee, *More Exxon Documents Show How Much It Knew About Climate 35 Years Ago*, Inside Climate News (Dec. 1, 2015), available at <https://insideclimatenews.org/news/01122015/documents-exxons-early-co2-position-senior-executives-engage-and-warming-forecast/> (as of June 5, 2024).



65. During the 1980s, many Defendants formed their own research units focused on climate modeling. API, including the API CO<sub>2</sub> Task Force, provided a forum for the Fossil Fuel Defendants to share their research efforts and corroborate their findings related to anthropogenic GHG emissions.<sup>64</sup>

66. 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 CO<sub>2</sub> 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).”<sup>65</sup>

67. The 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

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<sup>64</sup> Banerjee, *Exxon’s Oil Industry Peers Knew About Climate Dangers in the 1970s, Too*, Inside Climate News (Dec. 22, 2015), available at <https://insideclimatenews.org/news/22122015/exxon-mobil-oil-industry-peers-knew-about-climate-change-dangers-1970s-american-petroleum-institute-api-shell-chevron-texaco/> (as of June 5, 2024).

<sup>65</sup> Shell Internationale Petroleum, Greenhouse Effect Working Group, *The Greenhouse Effect* (May 1988) pp. 1, 27, available at <https://www.documentcloud.org/documents/4411090-Document3.html#document/p9/a411239> (as of June 5, 2024).

or even to stabilise the situation.” The authors mentioned the need to consider policy changes, 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.”<sup>66</sup>

68. In 1991, a researcher for Exxon’s subsidiary Imperial Oil stated to an audience of engineers that greenhouse gases are rising “due to the burning of fossil fuels. . . . Nobody disputes this fact.”<sup>67</sup>

69. The fossil fuel industry was at the forefront of carbon dioxide research for much of the latter half of the twentieth century. It worked with many of the field’s top researchers to produce exceptionally sophisticated studies and models. For instance, as early as the 1980s, Shell began developing and employing scenarios to plan how the company could respond to various global forces in the future. In a confidential 1989 scenario planning report, Shell noted that evidence “that mankind and his actions could affect the climate . . . is strong and accumulating fast.” In that report, Shell evaluated a scenario it called “Sustainable World,” which would address climate change by reducing CO<sub>2</sub> emissions to 1989 levels by 2010. Contrasting the “Sustainable World” scenario with another scenario titled “Global Mercantilism,” Shell reported that under a “Sustainable World” scenario, global temperatures

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<sup>66</sup> *Id.* at pp. 1, 6.

<sup>67</sup> Jerving et al., *Special Report: What Exxon Knew About Global Warming’s Impact on the Arctic*, L.A. Times (Oct. 10, 2015), available at <https://www.latimes.com/business/la-na-adv-exxon-arctic-20151011-story.html> (as of June 5, 2024).

would likely increase between 0.5 and 1.5 degrees Celsius from CO<sub>2</sub> concentration increases that had already occurred by 1989, but the scenario “could mitigate the problem.” In contrast, under the “Global Mercantilism” scenario, which forecasted a continual increase in CO<sub>2</sub> emissions, CO<sub>2</sub> concentrations and temperatures would rise considerably higher.<sup>68</sup>

70. In 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 US. 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 1995 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

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<sup>68</sup> Shell, Scenarios 1989-2010: Challenge and Response (1989), pp. 33, 35, available at <https://s3.documentcloud.org/documents/23776891/1989-oct-confidential-shell-group-planning-scenarios-1989-2010-challenge-and-response-disc-climate-refugees-and-shift-to-non-fossil-fuels.pdf> (as of June 5, 2024).

campaigns against companies escalate. Young consumers, especially, demand action.<sup>69</sup>

71. Fossil fuel companies did not just consider climate change impacts in scenarios; they also incorporated those impacts in their on-the-ground planning. In the mid-1990s, Exxon, Shell, and Imperial Oil (Exxon) jointly undertook the Sable Offshore Energy Project in Nova Scotia. The project's own 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)."<sup>70</sup>

72. Climate change research conducted by 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. Defendants' researchers and the researchers at their industry associations harbored little doubt that climate change was occurring and that fossil fuel products were, and are, the primary cause.

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<sup>69</sup> Royal Dutch Shell Group, *Group Scenarios 1998–2020* (1998) pp. 115, 118, available at <http://www.documentcloud.org/documents/4430277-27-1-Compiled.html> (as of June 5, 2024).

<sup>70</sup> ExxonMobil, *Sable Project Development Plan*, vol. 3, Environmental Impact Statement (Feb. 1996), pp. 4-77.

73. Despite the overwhelming information about the threats to people and the planet posed by continued unabated use of their fossil fuel products, the Fossil Fuel Defendants failed to act as they reasonably should have to avoid or mitigate those dire adverse impacts. The Fossil Fuel Defendants instead undertook affirmative efforts to promote their fossil fuel products as safe and cast doubt in the public's mind about the burgeoning scientific consensus on climate change, as described below. This was an abdication of the Fossil Fuel Defendants' responsibility to consumers and the public, including the State, to act on their knowledge of the reasonably foreseeable hazards of unabated production and consumption of their fossil fuel products.

**C. Defendants Did Not Disclose Known Harms Associated with the Intended Use of Fossil Fuel Products, and Instead Affirmatively Concealed Those Harms by Engaging in a Campaign of Deception to Increase the Use of Those Products**

74. By 1980, Defendants had amassed a compelling body of knowledge about the role of anthropogenic greenhouse gases, specifically those emitted from the use of fossil fuel products, in causing climate change and its cascading impacts, including disruptions to the hydrologic cycle, extreme precipitation, extreme drought, increasing temperatures, and associated consequences for human communities and the environment.

75. On notice that their products were causing global climate change and dire effects on the planet, the Fossil Fuel Defendants and API faced the decision whether to take steps to limit the damage that the use of fossil fuel products was causing and would continue

to cause Earth's inhabitants, including the people of California. Before or thereafter, Defendants could and reasonably should have taken any number of steps to mitigate the damage caused by the use of fossil fuel products. Their own comments reveal an awareness of what steps should have been taken. Defendants should have warned civil society and California consumers of the dangers known to Defendants of the unabated use of fossil fuel products, and they could and should have taken reasonable steps to limit the greenhouse gases emitted by use of fossil fuel products. This would have allowed policymakers to act sooner and more quickly to limit fossil fuel consumption and accelerate the transition to non-carbon sources. This work is now underway, but was wrongfully delayed by Defendants' deception. Simply put, Defendants should have issued warnings commensurate with their own understanding of the risks posed by the expected and intended uses of fossil fuel products. Instead, they put their profits first.

76. Not only did Defendants fail to issue any warnings, but several key events during the period between 1988 and 1992 prompted them to change their tactics from pursuing, then concealing, general research and internal discussion on climate change to engaging in a public campaign aimed at deceiving consumers and the public, including the inhabitants of California. These key events included the following:

a. In 1988, National Aeronautics and Space Administration (NASA) scientists confirmed that human activities were actually contributing to global warming. On June 23, 1988, NASA scientist James Hansen's presentation of this information to Congress engendered significant news coverage and publicity

for the announcement, including coverage on the front page of *The New York Times*.<sup>71</sup>

b. On July 28, 1988, Senator Robert Stafford and four bipartisan co-sponsors introduced S. 2666, “The Global Environmental Protection Act,” to regulate CO<sub>2</sub> and other greenhouse gases. Three more bipartisan bills to significantly reduce CO<sub>2</sub> 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.”<sup>72</sup> Political will in the United States to reduce anthropogenic GHG emissions and mitigate the harms associated with 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,<sup>73</sup> which concluded that (1) “there is a natural

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<sup>71</sup> See Frumhoff et al., *The Climate Responsibilities of Industrial Carbon Producers* (2015) 132 *Climatic Change* 157, 161, available at <http://dx.doi.org/10.1007/s10584-015-1472-5> (as of June 5, 2024).

<sup>72</sup> N.Y. Times Editorial Board, *The White House and the Greenhouse*, N.Y. Times (May 9, 1989), available at <https://www.nytimes.com/1989/05/09/opinion/the-white-house-and-the-greenhouse.html> (as of June 5, 2024).

<sup>73</sup> See IPCC, Reports, available at <https://www.ipcc.ch/reports/> (as of June 5, 2024).

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.<sup>74</sup>

The IPCC reconfirmed those conclusions in a 1992 supplement to the First Assessment Report.<sup>75</sup>

e. The United Nations held the 1992 Earth Summit in Rio de Janeiro, Brazil, a major, newsworthy gathering of over 170 world governments, of which more than 100 sent their heads of state. The Summit resulted in the United Nations Framework Convention on Climate Change, 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.”<sup>76</sup>

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<sup>74</sup> IPCC, *Climate Change: The IPCC Scientific Assessment* (Houghton et al. edits. 1990) p. xi, available at <https://www.ipcc.ch/report/ar1/wg1/> (as of June 5, 2024).

<sup>75</sup> IPCC, *Climate Change: The 1990 and 1992 IPCC Assessments* (1992) p. 52, available at <https://www.ipcc.ch/report/climate-change-the-ipcc-1990-and-1992-assessments> (as of June 5, 2024).

<sup>76</sup> United Nations, *United Nations Framework Convention on Climate Change* (1992) art. 2, p. 4, available at <https://unfccc.int/resource/docs/convkp/conveng.pdf> (as of June 5, 2024).



77. Defendants' campaign of deception focused on concealing, discrediting, and/or misrepresenting information that tended to support restricting the use of fossil fuels and transitioning society to a lower-carbon future, thereby decreasing demand for Fossil Fuel Defendants' products. The campaign enabled the Fossil Fuel Defendants to continue their business practice of exploiting fossil fuel reserves and concurrently externalizing the social and environmental costs of their fossil fuel products. Those activities ran counter to Defendants' own prior recognition that the science of anthropogenic climate change was clear, and that action was needed to avoid or mitigate dire consequences to the planet and to communities like California's.

78. The Fossil Fuel Defendants—both on their own and jointly through industry and front groups such as API and the GCC—funded, conceived, planned, and carried out a sustained and widespread campaign of denial and disinformation about the existence of climate change and their products' contribution to it. The campaign included a long-term pattern of direct misrepresentations and material omissions, as well as a plan to influence consumers indirectly by affecting public opinion through the dissemination of misleading information to the press, government, and academia. Although the Fossil Fuel Defendants were competitors in the marketplace, they combined and collaborated with each other and with API on this public campaign to misdirect and stifle public knowledge in order to increase sales and protect profits. The effort 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 influence consumers to continue using the Fossil Fuel

Defendants' fossil fuel products, irrespective of those products' damage to communities and the environment.

79. For example, 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."<sup>77</sup> 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 of potential Greenhouse effect which could lead to noneconomic development of nonfossil fuel resources."<sup>78</sup>

80. 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

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<sup>77</sup> Joseph M. Carlson, memorandum re The Greenhouse Effect (Aug. 3, 1988) p. 7, available at <https://assets.documentcloud.org/documents/3024180/1998-Exxon-Memo-on-the-Greenhouse-Effect.pdf> (as of June 5, 2024).

<sup>78</sup> *Id.* at pp. 7-8.

elevated CO<sub>2</sub> 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.<sup>79</sup>

81. A 1994 Shell report entitled “The Enhanced Greenhouse Effect: A Review of the Scientific Aspects” by Royal Dutch Shell’s Peter Langcake stands in stark contrast to the company’s 1988 report on the same topic. Whereas before the authors had recommended consideration of policy solutions early on, Langcake warned of the potentially dramatic “economic effects of ill-advised policy measures.” While the report recognized the IPCC conclusions as the mainstream view, Langcake still falsely emphasized scientific uncertainty, noting, for example, that “the postulated link between any observed temperature rise and

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<sup>79</sup> Martin Hoffert, former Exxon consultant and Professor Emeritus of Physics at New York University, Examining the Oil Industry’s Efforts to Suppress the Truth About Climate Change, Hearing Before the House Comm. on Oversight and Reform, Subcomm. on Civil Rights and Civil Liberties, 116th Cong., 1st Sess., at pp. 7-8 (Oct. 23, 2019), available at <https://www.congress.gov/event/116th-congress/house-event/110126> (as of June 5, 2024).

human activities has to be seen in relation to natural climate variability, which is still largely unpredictable.” The Shell position is stated clearly in the report: “Scientific uncertainty and the evolution of energy systems indicate that policies to curb greenhouse gas emissions beyond ‘no regrets’ measures could be premature, divert resources from more pressing needs and further distort markets.”<sup>80</sup>

82. 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 CO<sub>2</sub> concentration on the Earth’s climate. Instead, it 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 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

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<sup>80</sup> Langcake, Shell Internationale Petroleum, *The Enhanced Greenhouse Effect: A Review of the Scientific Aspects* (Dec. 1994) pp. 1, 9, 14, available at <https://www.documentcloud.org/documents/4411099-Document11.html#document/p15/a411511> (as of June 5, 2024).

models that projected the future impacts of unabated 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 U.S., so a slightly warmer climate would be more healthful." Raymond concluded his preface by attacking advocates for limiting the use 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.<sup>81</sup>

83. API published an extensive report in the same year warning against concern over CO<sub>2</sub> buildup and any need to curb consumption or regulate the fossil fuel industry. The introduction stated that "there is no persuasive basis for forcing Americans to dramatically change their lifestyles to use less oil." The authors discouraged the further development of certain alternative energy sources, writing that "government agencies have advocated the increased use of ethanol and the electric car, without the facts to support the assertion that either is superior to existing fuels and technologies" and that "[p]olicies that mandate replacing oil with specific alternative fuel technologies freeze progress at the current level of technology, and reduce the chance that innovation will develop better

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<sup>81</sup> Exxon Corp., *Global Warming: Who's Right?* (1996) pp. 3, 5-7, available at <https://www.documentcloud.org/documents/2805542-Exxon-Global-Warming-Whos-Right.html> (as of June 5, 2024).

solutions.” The paper also 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.” The report’s message was false but clear: “facts don’t support the arguments for restraining oil use.”<sup>82</sup>

84. In a speech presented at the World Petroleum Congress in Beijing in 1997 at which many of the Defendants were present, Exxon CEO Lee Raymond reiterated those views. This time, he presented a false dichotomy between stable energy markets and abatement of the marketing, promotion, and sale of fossil fuel products Defendants knew to be hazardous. He stated:

[S]ome people . . . argue that we should drastically curtail our use of fossil fuels for environmental reasons . . . my belief [is] that such proposals are neither prudent nor practical. With no readily available economic alternatives on the horizon, fossil fuels will continue to supply most of the world’s and this region’s energy for the foreseeable future.

. . . .

Governments also need to provide a stable investment climate . . . . They should avoid the temptation to intervene in energy markets in

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<sup>82</sup> Gentile et al., American Petroleum Institute, *Reinventing Energy: Making the Right Choices* (1996) pp. 2, 11, 63, 79, available at <https://www.documentcloud.org/documents/4224133-Reinventing-Energy> (as of June 5, 2024).

ways that give advantage to one competitor over another—or one fuel over another.

. . . .

We also have to keep in mind that most of the greenhouse effect comes from natural sources . . . . Leaping to radically cut this tiny sliver of the greenhouse pie on the premise that it will affect climate defies common sense and lacks foundation in our current understanding of the climate system.

. . . .

[L]et's agree there's a lot we really don't know about how climate will change in the 21st century and beyond . . . . It is highly unlikely that the temperature in the middle of the next century will be significantly affected whether policies are enacted now or 20 years from now. . . . It's bad public policy to impose very costly regulations and restrictions when their need has yet to be proven.<sup>83</sup>

85. Imperial Oil (Exxon) CEO Robert Peterson falsely denied the established connection between the Fossil Fuel Defendants' fossil fuel products and anthropogenic climate change in an essay in the Summer 1998 issue of Imperial Oil's magazine, "Imperial Oil Review":

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<sup>83</sup> Lee R. Raymond, Chairman and Chief Executive Officer, Exxon Corp., in an address at the World Petroleum Congress at pp. 4, 8, 9, 11, (Oct. 13, 1997), available at <https://assets.documentcloud.org/documents/2840902/1997-Lee-Raymond-Speech-at-China-World-Petroleum.pdf> (as of June 5, 2024).

[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.<sup>84</sup>

86. Mobil (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. Many of those advertorials communicated doubt about the reality and severity of human-caused climate change, even as industry scientists contemporaneously reiterated that climate change was real, serious, and caused by human activity. The ads addressed various aspects of the public discussion of climate change and sought to undermine the justifications for tackling GHG emissions as unsettled science. The 1997 advertorial

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<sup>84</sup> Peterson, *A Cleaner Canada*, Imperial Oil Review (1998) p. 29, available at <https://www.documentcloud.org/documents/6555577-1998-Robert-PetersonA-Cleaner-Canada-Imperial.html> (as of June 5, 2024).



on the following page argued that economic analysis of emissions restrictions was faulty and inconclusive and therefore provided a justification for delaying action on climate change.

like race, but when no longer allow those choices, both civility and common sense will have been diminished. □

who was dragged from his sister's car by police officers and shot in the face at point-blank range. The cops who have the power to do something about these officers, but choose not to. □

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**When facts don't square with the theory, throw out the facts**

That seems to characterize the administration's attitude on two of its own studies which show that international efforts to curb global warming could spark a big run-up in energy prices.

For months, the administration—playing its cards close to the vest—has promised to provide details of the emission reduction plan it will put on the table at the climate change meeting in Kyoto, Japan, later this year. It also promised to evaluate the economics of that policy and measure its impact. Those results are important because the proposals submitted by other countries thus far would be disruptive and costly to the U.S. economy.

Yet, when the results from its own economic models were finally generated, the administration started distancing itself from the findings and models that produced them. The administration's top economic advisor said that economic models can't provide a "definitive answer" on the impact of controlling emissions. The effort, she said, was "futile." At best, the models can only provide a "range of potential impacts."

Frankly, we're puzzled. The White House has promised to lay the economic facts before the public. Yet, the administration's top advisor said such an analysis won't be based on models and it will "preclude... detailed numbers." If you don't provide numbers and don't rely on models, what kind of rigorous economic examination can Congress and the public expect?

We're also puzzled by ambivalence over models. The administration downplays the utility of economic models to forecast cost impacts 10-15 years from now, yet its negotiators accept as gospel the 50-100-year predictions of global warming that have been generated by climate models—many of which have been criticized as seriously flawed.

The second study, conducted by Argonne National Laboratory under a contract with the Energy Department, examined what would happen if the U.S. had to commit to higher energy prices under the emission reduction plans that several nations had advanced last year. Such increases, the report concluded, would result in "significant reductions in output and employment" in six industries—aluminum, cement, chemical, paper and pulp, petroleum refining and steel.

Hit hardest, the study noted, would be the chemical industry, with estimates that up to 30 percent of U.S. chemical manufacturing capacity would move offshore to developing countries. Job losses could amount to some 200,000 in that industry, with another 100,000 in the steel sector. And despite the substantial loss of U.S. jobs and manufacturing capacity, the net emission reduction could be insignificant since developing countries will not be bound by the emission targets of a global warming treaty.

Downplaying Argonne's findings, the Energy Department noted that the study used outdated energy prices (mid-1996), didn't reflect the gains that would come from international emissions trading and failed to factor in the benefits of accelerated developments in energy efficiency and low-carbon technologies.

What it failed to mention is just what those new technologies are and when we can expect their benefits to kick in. As for emissions trading, many economists have theorized about the role they could play in reducing emissions, but few have grappled with the practicality of implementing and policing such a scheme.

We applaud the goals the U.S. wants to achieve in these upcoming negotiations—namely, that a final agreement must be "flexible, cost-effective, realistic, achievable and ultimately global in scope." But until we see the details of the administration's policy, we are concerned that plans are being developed in the absence of rigorous economic analysis. Too much is at stake to simply ignore facts that don't square with preconceived theories.

**Mobil** The energy to make a difference.

<http://www.mobil.com> ©1997 Mobil Corporation

Figure 6: 1997 Mobil Advertorial<sup>85</sup>

<sup>85</sup> Mobil, *When Facts Don't Square with the Theory, Throw Out the Facts*, in N.Y. Times (Aug. 14, 1997) p. A31, available at (continued...)

87. Many other Exxon and Mobil advertorials falsely or misleadingly characterized the state of climate science research to the readership of The New York Times’s op-ed page. A sample of misleading or outright untruthful statements in paid advertisements that resembled op-eds includes the following:

- “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.”<sup>86</sup>
- “[G]reenhouse-gas emissions, which have a warming effect, are offset by another combustion product—particulates—which leads to cooling.”<sup>87</sup>
- “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.”<sup>88</sup>

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<https://www.documentcloud.org/documents/705550-mob-nyt-1997-aug-14-whenfactsdentsquare.html> (as of June 5, 2024).

<sup>86</sup> Mobil, *Climate Change: A Prudent Approach*, in N.Y. Times (Nov. 13, 1997) p. A27, available at <https://www.documentcloud.org/documents/705548-mob-nyt-1997-11-13-climateprudentapproach.html> (as of June 5, 2024).

<sup>87</sup> Mobil, *Less Heat, More Light on Climate Change*, in N.Y. Times (July 18, 1996) p. A23, available at <https://www.documentcloud.org/documents/705544-mob-nyt-1996-jul-18-lessheatmorelight.html> (as of June 5, 2024).

<sup>88</sup> Mobil, *Climate Change: Where We Come Out*, in N.Y. Times (continued...)

- “[I]t is impossible for scientists to attribute the recent small surface temperature increase to human causes.”<sup>89</sup>

88. A 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.<sup>90</sup> Based on this “statistically significant” discrepancy between internal and external communications, the authors concluded that “ExxonMobil misled the public.”<sup>91</sup>

89. The Fossil Fuel Defendants—individually, and through API, other trade associations, and various front groups—mounted a public campaign of deception in order to continue wrongfully promoting and marketing their fossil fuel products, despite their own knowledge and the growing national and

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(Nov. 20, 1997) p. A31, available at <https://www.documentcloud.org/documents/705549-mob-nyt-1997-11-20-ccwherewecomeout.html> (as of June 5, 2024) (emphasis in original).

<sup>89</sup> ExxonMobil, *Unsettled Science*, in N.Y. Times (Mar. 23, 2000), available at <https://www.documentcloud.org/documents/705605-xom-nyt-2000-3-23-unsettledscience> (as of June 5, 2024).

<sup>90</sup> Supran and Oreskes, *Assessing ExxonMobil’s Climate Change Communications (1977–2014)* (2017) 12(8) Environmental Research Letters, available at <https://iopscience.iop.org/article/10.1088/1748-9326/aa815f/pdf> (as of June 5, 2024).

<sup>91</sup> *Ibid.*; Supran and Oreskes, *Addendum to ‘Assessing ExxonMobil’s Climate Change Communications (1977–2014)’* (2020) 15(11) Environmental Research Letters, available at <https://iopscience.iop.org/article/10.1088/1748-9326/aa815f/pdf> (as of June 5, 2024).

international scientific consensus about the hazards of doing so.

90. In addition to casting doubt on climate science and concealing their own internal research on climate change, Defendants also funded misleading studies on the economic consequences of reducing fossil fuel use. Beginning in the early 1990s, API hired economic consultants at Charles River Associates to conduct studies on the costs of mitigating global warming, then presented the results of those studies as independent research. One such study, published in 1997, found that keeping GHG emissions at 1990 levels would reduce economic growth by one to three percent every year, ultimately resulting in an annual drop in gross domestic product of \$105 billion in 2010, and \$460 billion in 2030. This study was widely publicized, without any acknowledgment that API had funded the study. Mobil (Exxon) cited the study in advertorials in *The New York Times*, API's executive vice president William O'Keefe cited the study in testimony before Congress, and a United States Senator cited the study in a resolution to block any treaty that could result from the upcoming meeting on the United Nations Framework Convention on Climate Change in Kyoto. One of the study's authors has since disclosed that the models used in the 1997 study (and other Charles River Associates studies funded by API) ignored the benefits of reducing GHG emissions, such as avoiding warming or improving air quality.<sup>92</sup>

91. One of the key organizations formed by the Fossil Fuel Defendants to coordinate the fossil fuel

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<sup>92</sup> Franta, *Weaponizing economics: Big Oil, economic consultants, and climate policy delay* (2022) 31(4) *Environmental Politics* 555, 562-564, 568, available at <https://www.tandfonline.com/doi/full/10.1080/09644016.2021.1947636> (as of June 5, 2024).

industry's response to the world's growing awareness of climate change was the International Petroleum Industry Environmental Conservation Association (IPIECA). In 1988, 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 IPIECA member companies. This memo explained that, to forestall a global shift away from burning fossil fuels for energy, the industry should emphasize uncertainties in climate science, call for further research, and promote industry friendly policies that would leave the fossil fuel business intact.<sup>93</sup>

92. The GCC, on behalf of Defendants and other fossil fuel companies, also funded deceptive advertising campaigns and distributed misleading material to generate public uncertainty around the climate debate. By doing so, the GCC and Defendants sought to prevent U.S. adoption of a 1997 international agreement to limit and reduce GHG emissions known as the Kyoto Protocol and thereby inflate the market for fossil fuels and the revenues and profits for GCC members, including Defendants, despite the leading role that the U.S. had played in

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<sup>93</sup> Bonneuil et al., *Early Warnings and Emerging Accountability: Total's Responses to Global Warming, 1971-2021* (2021) 71 *Global Environmental Change*, available at <https://www.science-direct.com/science/article/pii/S0959378021001655> (as of June 5, 2024).

negotiating the Protocol.<sup>94</sup> The GCC's position on climate change contradicted decades of its members' internal scientific reports by asserting that natural trends, not human combustion of fossil fuels, were 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.<sup>95</sup>

93. The GCC's promotion of overt climate change skepticism also contravened its internal assessment that such theories lacked scientific support. Despite an internal primer acknowledging that various "contrarian theories" (i.e., climate change skepticism) "do not offer convincing arguments against the conventional model of greenhouse gas emission-

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<sup>94</sup> Brulle, *Advocating Inaction: A Historical Analysis of the Global Climate Coalition* (2023) 32 *Environmental Politics* 2, 13-14, available at <https://cssn.org/wp-content/uploads/2022/04/GCC-Paper.pdf> (as of June 5, 2024). Brulle notes in particular the effectiveness of the GCC in opposing the Kyoto protocol: "In one final compliment, the GCC's effectiveness was acknowledged in a meeting with White House staff on 21 June 2001. The talking points for that meeting noted that 'POTUS rejected Kyoto, in part, based on input from you.'" (*Id.* at p. 15.)

<sup>95</sup> Global Climate Coalition, *Global Climate Coalition: An Overview* (Nov. 1996) p. 2, available at <https://www.documentcloud.org/documents/5453339-1996-GCC-Overview-and-Reports> (as of June 5, 2024).

induced climate change,”<sup>96</sup> the GCC excluded this section from the publicly released version of the background, <sup>97</sup> and instead funded and promoted some of those same contrarian theories. Between 1989 and 1998, the GCC spent \$13 million on advertisements as part of a campaign to obfuscate the facts and the science relating to climate change and undermine the public’s trust in climate scientists.<sup>98</sup> Ultimately, the GCC’s efforts “created an influential discourse of climate skepticism in the U.S. that continues to be an influential political current.”<sup>99</sup>

94. For example, in a 1994 report, the GCC stated that “observations have not yet confirmed evidence of

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<sup>96</sup> Dana, Association of International Automobile Manufacturers, memorandum to AIAM Technical Committee, Global Climate Coalition (GCC) re Primer on Climate Change Science - Final Draft (Jan. 18, 1996) p. 16, available at <http://www.webcitation.org/6FyqHawb9> (as of June 5, 2024).

<sup>97</sup> See Dana, Association of International Automobile Manufacturers, memorandum to AIAM Technical Committee, Global Climate Coalition (GCC) re Science and Technology Assessment Committee (STAC) Meeting – February 15, 1996 – Summary (Feb. 27, 1996) p. 7, available at <https://www.documentcloud.org/documents/5631461-AIAM-050835.html> (as of June 5, 2024) (“Most suggestions [at the STAC meeting] had been to drop the ‘contrarian’ part. This idea was accepted and that portion of the paper will be dropped.”).

<sup>98</sup> Franz, Kennedy School of Government, Harvard University, *Science, Skeptics and Non-State Actors in the Greenhouse* (Sept. 1998) ENRP Discussion Paper E-98-18, p. 13, available at <https://www.belfercenter.org/sites/default/files/legacy/files/Science%20Skeptics%20and%20Non-State%20Actors%20in%20the%20Greenhouse%20-%20E-98-18.pdf> (as of June 5, 2024).

<sup>99</sup> Boon, *A Climate of Change? The Oil Industry and Decarbonization in Historical Perspective* (2019) 93 *Bus. History Rev.* 101, 110.

global warming that can be attributed to human activities,” that “[t]he claim that serious impacts from climate change have occurred or will occur in the future simply has not been proven,” so “there is no basis for the design of effective policy actions that would eliminate the potential for climate change.”<sup>100</sup> 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 actually occur.”<sup>101</sup>

95. In 1997, William O’Keefe, chairman of the GCC and executive vice president of API, made the following false statement in a Washington Post op-ed: “Climate scientists don’t say that burning oil, gas, and coal is steadily warming the earth.”<sup>102</sup> 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.

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<sup>100</sup> GCC, *Issues and Options: Potential Global Climate Change* (1994), preface & p. 43, available at <https://www.documentcloud.org/documents/5628164-Potential-Global-Climate-Change-Issues-and-Options> (as of June 5, 2024).

<sup>101</sup> GCC, *Climate Change: Your Passport to the Facts* (1995), available at <https://www.documentcloud.org/documents/5628109-Climate-Change-Your-Passport-to-the-Facts> (as of June 5, 2024).

<sup>102</sup> O’Keefe, *A Climate Policy*, *The Washington Post* (July 5, 1997), available at <https://www.washingtonpost.com/archive/opinions/1997/07/05/a-climate-policy/6a11899a-c020-4d59-a185-b0e7eebf19cc/> (as of June 5, 2024).



96. 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 lead author of a key chapter in the Report of modifying the chapter's conclusions. The GCC claimed that the author, climatologist Ben Santer, had engaged in "scientific cleansing" that "understate[d] uncertainties about climate change causes and effects . . . to increase the apparent scientific support for attribution of changes to climate to human activities."<sup>103</sup> The GCC also arranged to spread the accusation among legislators, reporters, and scientists, and similar accusations were published in a *Wall Street Journal* op-ed.<sup>104</sup> This effort "was widely perceived to be an attempt on the part of the GCC to undermine the credibility of the IPCC."<sup>105</sup>

97. In the late 1990s, Defendants shifted away from openly denying anthropogenic warming and

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<sup>103</sup> Franz, Kennedy School of Government, Harvard University, *Science, Skeptics and Non-State Actors in the Greenhouse* (Sept. 1998) ENRP Discussion Paper E-98-18, p. 14, available at <https://www.belfercenter.org/sites/default/files/legacy/files/Science%20Skeptics%20and%20Non-State%20Actors%20in%20the%20Greenhouse%20-%20E-98-18.pdf> (as of June 5, 2024).

<sup>104</sup> Oreskes and Conway, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming* (2011) p. 207. See also Singer, *Climate Change and Consensus*, 271 *Science* no. 5249 (Feb. 2, 1996); Seitz, *A Major Deception on 'Global Warming'*, *Wall Street Journal* (June 12, 1996), available at <https://www.wsj.com/articles/SB834512411338954000> (as of June 5, 2024).

<sup>105</sup> Franz, *Science, Skeptics, and Non-State Actors in the Greenhouse*, *supra*, p. 15.

toward peddling a subtler form of climate change skepticism. Defendants became alarmed by the enormous legal judgments the tobacco industry then faced as a result of decades spent publicly denying the health risks of smoking cigarettes; 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.”<sup>106</sup> Defendants began to shift their communications strategy, claiming they had accepted climate science all along.<sup>107</sup> Several large fossil fuel companies, including BP and Shell, left the GCC (although all the Fossil Fuel Defendants remained members of API).<sup>108</sup> At this point in time, Defendants publicly claimed to accept the reality of anthropogenic climate change, while insisting that the costs of climate action were unacceptably high in light of the allegedly yet-unresolved uncertainties in climate science—especially around the severity and timeframe of future climate impacts. Reflecting this new strategy, API Executive Vice President (and GCC chairman) William O’Keefe announced in November 1998 that “[w]e are committed to being part of the solution to the climate risk and to active participation in the debate to forge a clear, defensible policy.” “[T]he debate is not about action or inaction,” O’Keefe wrote, “but what set of actions is consistent with our state of knowledge and economic well-being.”<sup>109</sup> Rather than

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<sup>106</sup> Rich, *Losing Earth: A Recent History* (2020) p. 186.

<sup>107</sup> Bonneuil et al., *Early Warnings and Emerging Accountability: Total’s Responses to Global Warming, 1971-2021* (2021) 71 *Global Env’tl. Change* 6, available at <https://www.sciencedirect.com/science/article/pii/S0959378021001655> (as of June 5, 2024).

<sup>108</sup> *Ibid.*

<sup>109</sup> API, *U.S. Oil Industry Recognizes Climate Change Risk*, 28 *Oil & Gas Journal* (Nov. 1, 1998).

publicly deny the need to address climate change, Defendants' new communications strategy sought to forestall policy actions that might decrease consumption of fossil fuel products and therefore threaten Defendants' revenues and profits.

98. Despite their public about-face, 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 Exxon's senior environmental lobbyist, an API public relations representative, and a federal relations representative from Chevron. There were no climate scientists on the GCSCT. Steve Milloy and his organization, The Advancement of Sound Science Coalition (TASSC), were founding members of the GCSCT. TASSC was an organization created by the tobacco industry to give the impression of a "grassroots" movement, which aimed 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 had 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 of smoking and public health. TASSC also became a front group for the fossil fuel industry, using the same tactics it had honed while operating on behalf of tobacco companies to spread doubt about climate science.

99. The GCSCT continued Defendants' efforts to deceive the public about the dangers of fossil fuel use by launching a campaign in 1998 to convince the public that the scientific basis for climate change was

in doubt. The multi-million-dollar, multi-year “Global Climate Science Communications Action Plan” plan, sought, among other things, to do the following: (a) “[d]evelop and implement a national media relations program to inform the media about uncertainties in climate science”; (b) “generate national, regional and local media coverage on the scientific uncertainties”; (c) “[d]evelop a global climate science information kit for media including peer-reviewed papers that undercut the ‘conventional wisdom’ on climate science”; (d) “[p]roduce . . . a steady stream of op-ed columns”; and (e) “[d]evelop and implement a direct outreach program to inform and educate members of Congress, state officials, . . . and school teachers/students about uncertainties in climate science” to “begin to erect a barrier against further efforts to impose Kyoto [Protocol]-like measures in the future”<sup>110</sup> —a blatant attempt to disrupt international efforts to negotiate any treaty curbing GHG emissions and to ensure a continued and unimpeded market for, and profits from, Fossil Fuel Defendants’ fossil fuel products.

100. Exxon, Chevron, and API directed and contributed to the development of the plan, which plainly 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 becomes part of the

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<sup>110</sup> Joe Walker, email to Global Climate Science Team re Draft Global Climate Science Communications Plan (Apr. 3, 1998), available at <https://assets.documentcloud.org/documents/784572/api-global-climate-science-communications-plan.pdf> (as of June 5, 2024).

‘conventional wisdom.’”<sup>111</sup> In other words, the plan was part of Defendants’ goal to use disinformation to plant doubt about the reality of climate change in an effort to maintain consumer demand for their fossil fuel products and their large profits.

101. Soon after, API distributed a memo to its members illuminating API’s and the Fossil Fuel Defendants’ concern over the potential regulation of their fossil fuel products: “Climate is at the center of the industry’s business interests. Policies limiting carbon emissions reduce petroleum product use. That is why it is API’s highest priority issue and defined as ‘strategic.’”<sup>112</sup> The API memo stressed many of the strategies that Defendants collectively utilized to combat the perception of fossil fuel products as hazardous. These strategies included the following:

a. Influencing the tenor of the climate change “debate” as a means to establish that greenhouse gas reduction policies like the Kyoto Protocol were not necessary to responsibly address climate change;

b. Maintaining strong working relationships between government regulators on the one hand, and, on the other, communications-oriented organizations and other groups carrying Defendants’ message minimizing the hazards of the unabated use of fossil fuel products and opposing regulation thereof; and

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<sup>111</sup> *Ibid.*

<sup>112</sup> Allegations of Political Interference with Government Climate Change Science, Hearing Before the Comm. on Oversight and Government Reform, 110th Cong. 324 (Mar. 19, 2007), available at <https://www.govinfo.gov/content/pkg/CHRG-110hhrg37415/html/CHRG-110hhrg37415.htm> (as of June 5, 2024).

c. Presenting Defendants' positions on climate change in domestic and international forums, including by presenting an "alternative" to the IPCC.

102. In furtherance of the strategies described in these memoranda, Defendants made misleading statements 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 in California, including national publications such as *The New York Times*, *The Wall Street Journal*, and *The Washington Post*.

103. Another key strategy in Defendants' efforts to discredit the scientific consensus on climate change as well as the IPCC itself was to fund scientists who held fringe opinions. Those scientists obtained part or all of their research budget from the Fossil Fuel Defendants, either directly or through Fossil Fuel Defendant-funded organizations like API,<sup>113</sup> but frequently failed to disclose their funding sources.<sup>114</sup> At least one such scientist, Dr. Wei-Hock Soon, took the highly unusual approach of contractually agreeing to allow donors to review his research before publication, and his housing institution, the Smithsonian Institute, agreed not to disclose the

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<sup>113</sup> E.g., Soon and Baliunas, *Proxy Climatic and Environmental Changes of the Past 1000 Years*, (Jan. 31, 2003) 23 *Climate Rsch.* 88, 105, available at <https://www.int-res.com/articles/cr2003/23/c023p089.pdf> (as of June 5, 2024).

<sup>114</sup> Allman, *Climate Change Researcher Received Funds From Fossil Fuel Industry* (Feb. 26, 2015) *Smithsonian Magazine*, available at <https://www.smithsonianmag.com/smithsonianmag/smithsonian-climate-change-scientist-180954380/> (as of June 5, 2024).

funding arrangement without prior permission from his fossil fuel donors.<sup>115</sup> Defendants intended for the research of scientists they funded to be distributed to and relied on by consumers when buying Fossil Fuel Defendants' products, including by consumers in California.

104. Creating a false perception of disagreement in the scientific community (despite the consensus previously acknowledged within the industry) has evidently disrupted vital channels of communication between scientists and the public. A 2007 Yale University-Gallup poll found that while 71% of Americans personally believed global warming was happening, only 48% believed that there was a consensus among the scientific community, and 40% believed, falsely, that there was substantial disagreement among scientists over whether global warming was occurring.<sup>116</sup> 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

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<sup>115</sup> Mulvey et al., Union of Concerned Scientists, *The Climate Deception Dossiers: Internal Fossil Fuel Industry Memos Reveal Decades of Disinformation*, Climate Deception Dossiers #1: Dr. Wei-Hock Soon's Smithsonian Contracts (July 2015) pp. 6-9, available at <https://www.ucsusa.org/sites/default/files/attach/2015/07/The-Climate-Deception-Dossiers.pdf> (as of June 5, 2024).

<sup>116</sup> American Opinions on Global Warming: A Yale/Gallup/Clearvision Poll, Yale Program on Climate Change Communication (July 31, 2007), available at <https://climatecommunication.yale.edu/publications/american-opinions-on-global-warming/> (as of June 5, 2024).

half . . . believe a majority do.”<sup>117</sup> Further, it found that 33% of Americans believe that climate change is mostly due to natural changes in the environment, in stark contrast to the 97% of peer-reviewed climate science papers that acknowledge that global warming is happening and at least partly human-caused.<sup>118</sup> The lack of progress, and indeed the regression, in the public’s understanding of climate science over this period—during which Defendants professed to accept the conclusions of mainstream climate science while at the same time promoting a false, contradictory narrative—demonstrates the success of Defendants’ deception campaign in thwarting the dissemination of accurate scientific information to the public regarding the effects of the use of fossil fuels.

105. Defendants, individually, collectively, and through their trade association memberships, worked directly, and often in a deliberately obscured manner, to conceal and misrepresent fossil fuel products’ known dangers from consumers, the public, and the State.

106. Defendants have funded dozens of think tanks, front groups, and “dark money” foundations—i.e., organizations that raise funds to influence elections while concealing their contributions to political candidates or causes, and the sources of their contributions—promoting climate change denial.

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<sup>117</sup> Leiserowitz et al., Program on Climate Change Communication, Yale University, and Center for Climate Change Communication, George Mason University, *Climate Change in the American Mind* (Oct. 2015), available at <https://climatecommunication.yale.edu/wp-content/uploads/2015/11/Climate-Change-American-Mind-October-20151.pdf> (as of June 5, 2024).

<sup>118</sup> *Ibid.*



These organizations include the Competitive Enterprise Institute, the Heartland Institute, Frontiers of Freedom, Committee for a Constructive Tomorrow, and the Heritage Foundation. According to the Union of Concerned Scientists, from 1998 to 2017, Exxon spent over \$36 million funding numerous organizations misrepresenting the scientific consensus<sup>119</sup> that fossil fuel products were causing climate change, sea level rise, and injuries to California, among other communities. Several Defendants have been linked 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.

107. Beginning in 2015, journalists began to uncover mounting evidence of Defendants' campaign of deception. In September 2015, journalists at *Inside Climate News* reported that, as far back as the 1970s, Exxon had had sophisticated knowledge of the causes and consequences of climate change and of the role its products played in contributing to climate change.<sup>120</sup>

108. Between October and December 2015, several journalists at the Energy and Environment Reporting Project at Columbia University's Graduate School of Journalism and the *Los Angeles Times* also exposed the fact that, as far back as the 1970s, Exxon and other

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<sup>119</sup> Union of Concerned Scientists, ExxonMobil Foundation & Corporate Giving to Climate Change Denier & Obstructionist Organizations (1998-2017), available at <https://www.ucsusa.org/sites/default/files/attach/2019/ExxonMobil-Worldwide-Giving-1998-2017.pdf> (as of June 5, 2024).

<sup>120</sup> Banerjee et al., *Exxon: The Road Not Taken*, Inside Climate News (Sept. 16, 2015), available at <https://insideclimatenews.org/project/exxon-the-road-not-taken/> (as of June 5, 2024).

members of the fossil fuel industry had had superior knowledge of the causes and consequences of climate change and the role their products played in causing it.<sup>121</sup>

109. In November 2017, the Center for International Environmental Law issued a report revealing that Defendants, including API, had had superior knowledge of the causes and consequences of climate change and the role fossil fuel products played in causing it as early as the 1970s.<sup>122</sup>

**D. Defendants Could Have Chosen to Facilitate, and Be Part of, a Lower-Carbon Future, but Instead Chose Corporate Profits and Continued Deception**

110. Defendants could have chosen a different path. Defendants could have refrained from undermining the global effort to mitigate the impacts of GHG emissions, or contributed to it by, for example, delineating practical technical strategies, policy goals,

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<sup>121</sup> The Los Angeles Times published a series of three articles between October and December 2015. (See Jennings et al., *How Exxon Went From Leader to Skeptic on Climate Change Research*, Los Angeles Times (Oct. 23, 2015), available at <https://graphics.latimes.com/exxon-research> (as of June 5, 2024); Jerving et al., *What Exxon Knew About the Earth's Melting Arctic*, Los Angeles Times (Oct. 9, 2015), available at <https://graphics.latimes.com/exxon-arctic/> (as of June 5, 2024); Lieberman and Rust et al., *Big Oil Braced for Global Warming While it Fought Regulations*, Los Angeles Times (Dec. 31, 2015), available at <https://graphics.latimes.com/oil-operations> (as of June 5, 2024)).

<sup>122</sup> Muffett and Feit, *Smoke and Fumes: The Legal and Evidentiary Basis for Holding Big Oil Accountable for the Climate Crisis*, Center for International Environmental Law (2017), available at <https://www.ciel.org/reports/smoke-and-fumes> (as of June 5, 2024).

and regulatory structures that would have allowed them to continue their business ventures while reducing GHG emissions and supporting a transition to a lower-carbon future. Defendants' own internal documents from as early as the 1970s detailed alternative low-carbon pathways that would reduce GHG emissions by reducing fossil fuel production and use, and developing non-fossil energy sources. Instead, Defendants devoted significant efforts to deceiving consumers, lawmakers, and the public about the existential hazards of burning fossil fuels—all with the purpose and effect of perpetuating and inflating usage of fossil fuels, and therefore Defendants' revenues and profits, and delaying the advent of alternative energy sources not based on fossil fuels.

111. As a result of Defendants' tortious, deceptive, and misleading conduct, consumers of Defendants' fossil fuel products, the public, and policymakers, in California as elsewhere, have been deliberately and unnecessarily deceived about the following: the role of fossil fuel products in causing global warming, sea level rise, disruptions to the hydrologic cycle, more extreme precipitation, heat waves, droughts, and other consequences of the climate crisis; the acceleration of global warming since the mid-twentieth century; and the fact that continued increases in fossil fuel consumption create increasingly severe environmental threats and increasingly significant economic costs for coastal and other communities in California. Consumers, the public, and policymakers in California 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 strength of the scientific consensus regarding the role of fossil

fuels in causing both climate change and a wide range of potentially destructive impacts.

112. Defendants' deception also significantly delayed the transition to alternative energy sources that could have prevented some of the worst impacts of climate change in California. Exxon had long forecasted—and other Defendants were aware—that alternative energy sources could have penetrated half of a competitive energy market in 50 years if allowed to develop unimpeded. However, by sowing doubt about the future consequences of unrestricted fossil fuel consumption, Defendants' deception campaign successfully forestalled development and dissemination of alternative fuels, as well as legislation supporting a broad-based transition to alternative energy sources. This delay resulted in tremendous revenues and profits to Defendants, and led to emission of huge amounts of avoidable greenhouse gases, thereby ensuring that the damage caused by climate change will be substantially more severe than if Defendants had acted in a manner commensurate with their internal knowledge of climate risks.

**E. Defendants' Internal Actions Demonstrate Their Awareness of the Impacts of Climate Change and Their Intent to Continue to Profit from the Unabated Use of Fossil Fuel Products**

113. In contrast to their public-facing efforts challenging the validity of the scientific consensus about anthropogenic climate change, the Fossil Fuel Defendants' acts and omissions since the 1970s—including taking expensive actions to protect their own investments from the impacts of climate change—have evinced their clear understanding of the realities

of climate change and its likely consequences. These actions have included making multi-billion-dollar infrastructure investments for their own operations, including, among others, the following: raising offshore oil platforms to protect against sea level rise; reinforcing offshore oil platforms to withstand increased wave strength and storm severity; and developing technology and infrastructure to extract, store, and transport fossil fuels in a warming Arctic environment.<sup>123</sup>

114. 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.<sup>124</sup> In 1973, Exxon obtained a patent for a cargo vessel, such as a tank ship, capable of breaking through sea ice for use in Arctic operations<sup>125</sup> and for an oil tanker<sup>126</sup> designed for Arctic operations.

115. Similarly, in 1974, Texaco (Chevron) obtained a patent for a mobile Arctic drilling platform designed

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<sup>123</sup> Lieberman and Rust, *Big Oil braced for global warming while it fought regulations*, Los Angeles Times (Dec. 31, 2015), available at <https://graphics.latimes.com/oil-operations> (as of June 5, 2024).

<sup>124</sup> Henderson and Loe, *The Prospects and Challenges for Arctic Oil Development*, Oxford Institute for Energy Studies (Nov. 2014) p. 1, available at <https://www.oxfordenergy.org/publications/the-prospects-and-challenges-for-arctic-oil-development/> (as of June 5, 2024).

<sup>125</sup> ExxonMobil Research Engineering Co., Patent US3727571A: Icebreaking cargo vessel (granted Apr. 17, 1973), available at <https://www.google.com/patents/US3727571> (as of June 5, 2024).

<sup>126</sup> ExxonMobil Research Engineering Co., Patent US3745960A: Tanker vessel (granted July 17, 1973), available at <https://www.google.com/patents/US3745960> (as of June 5, 2024).

to withstand significant interference from lateral ice masses.<sup>127</sup>

116. Shell obtained a patent for an Arctic offshore platform adapted for conducting operations in the Beaufort Sea in 1984.<sup>128</sup>

117. 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 account for anticipated sea level rise. Those design changes added substantial costs to the project.<sup>129</sup>

a. In 1979, Norske Shell was approved by Norwegian oil and gas regulators to operate a portion of the Troll oil and gas 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

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<sup>127</sup> Texaco Inc., Patent US3793840A: Mobile, arctic drilling and production platform (granted Feb. 26, 1974), available at <https://www.google.com/patents/US3793840> (as of June 5, 2024).

<sup>128</sup> Shell Oil Co., Patent US4427320A: Arctic offshore platform (granted Jan. 24, 1984), available at <https://www.google.com/patents/US4427320> (as of June 5, 2024).

<sup>129</sup> *Greenhouse Effect: Shell Anticipates a Sea Change*, N.Y. Times (Dec. 20, 1989), available at <https://www.nytimes.com/1989/12/20/business/greenhouse-effect-shell-anticipates-a-sea-change.html>; Lieberman and Rust, *Big Oil Braced for Global Warming While it Fought Regulations*, L.A. Times (Dec. 31, 2015), available at <https://graphics.latimes.com/oil-operations> (as of June 5, 2024).

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 height necessary to stay above the 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 three to six feet in order to account for higher anticipated average sea levels and increased storm intensities due to global warming over the platform's 70-year operational life.<sup>130</sup>

e. Shell projected that the additional three to six feet of above-water construction would increase the cost of the Troll A platform by tens of millions of dollars.

**F. Defendants' Actions Have Slowed the Development of Alternative Energy Sources and Exacerbated the Costs of Adapting to and Mitigating the Adverse Impacts of the Climate Crisis**

118. As GHG pollution accumulates in the atmosphere, some of which (namely CO<sub>2</sub>) does not dissipate for potentially thousands of years, climate changes and consequent adverse environmental changes compound, and their frequencies and magnitudes increase. As those adverse environmental changes compound, and their frequencies and magnitudes increase, so too do the physical, environmental, economic, and social injuries resulting therefrom.

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<sup>130</sup> *Ibid.*

119. Delayed societal development and adoption of alternative energy sources and related efforts to curb anthropogenic GHG emissions have therefore increased environmental harms and increased the magnitude and cost to address harms, including to California, that have already occurred or are locked in as a result of historical emissions.

120. Therefore, Defendants' campaign to obscure the science of climate change to protect and expand the use of fossil fuels greatly increased and continues to increase the injuries suffered by California and its residents. Had concerted action to reduce GHG emissions begun earlier, the subsequent impacts of climate change could have been avoided or mitigated.

121. 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.<sup>131</sup> 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."<sup>132</sup> But

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<sup>131</sup> Shaw and McCall, Exxon Research and Engineering Company's Technological Forecast: CO<sub>2</sub> Greenhouse Effect (Dec. 18, 1980) p. 5, available at <https://www.climatefiles.com/exxonmobil/1980-exxon-memo-on-the-co2-greenhouse-effect-and-current-programs-studying-the-issue/> (as of June 5, 2024).

<sup>132</sup> Exxon Research and Engineering Company, Coordination and Planning Division, CO<sub>2</sub> Greenhouse Effect: A Technical Review (continued...)



instead of pursuing a clean energy transition or warning the public about the dangers of burning fossil fuels, Defendants chose to deceive consumers to preserve Fossil Fuel Defendants' profits and assets. As a result, much time has been lost in which consumers and policymakers could have done much to mitigate the climate crisis in California.

122. The costs of inaction on anthropogenic climate change and its adverse environmental effects were not lost on Defendants. In a 1997 speech by John Browne, Group Chief Executive for BP America, at Stanford University, Browne described Defendants' and the entire fossil fuel industry's responsibility and opportunity to reduce the use of fossil fuel products, reduce global CO<sub>2</sub> emissions, and mitigate the harms associated with the use and consumption of such products:

[W]e 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.

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(Apr. 1, 1982) pp. 17-18, available at <https://www.climatefiles.com/exxonmobil/1982-memo-to-exxon-management-about-co2-greenhouse-effect/> (as of June 5, 2024).

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.

And to contribute to the public policy debate in search of the wider global answers to the problem.<sup>133</sup>

123. Despite Defendants' knowledge of the foreseeable, measurable, and significant harms associated with the unrestrained consumption and use of fossil fuel products, in California as elsewhere, and despite Defendants' knowledge of technologies and practices that could have helped to reduce the foreseeable dangers associated with their fossil fuel products, Defendants continued to promote heavy fossil fuel use, and mounted a campaign to obscure the connection between fossil fuel products and the climate crisis, thus dramatically adding to the costs of abatement. (See *supra*, Section IV.C.) This campaign was intended to, and did, reach and influence

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<sup>133</sup> John Browne, Group Executive for BP America, BP Climate Change Speech to Stanford (May 19, 1997), available at <http://www.climatefiles.com/bp/bp-climate-change-speech-to-stanford> (as of June 5, 2024).

California consumers, along with consumers elsewhere.

124. At all relevant times, Defendants were deeply familiar with opportunities to reduce the use of fossil fuel products and associated GHG emissions, mitigate the harms associated with the use and consumption of these products, and promote development of alternative, clean energy sources. Examples of that recognition date back to the 1960s, and include, but are not limited to, the following:

a. In 1980, Imperial Oil (Exxon) 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 CO<sub>2</sub> in the atmosphere. Technology exists to remove CO<sub>2</sub> from stack gases but removal of only 50% of the CO<sub>2</sub> would double the cost of power generation.”<sup>134</sup>

b. A 1987 company briefing produced by Shell on “Synthetic Fuels and Renewable Energy” emphasized the importance of immediate research and development of alternative fuel sources, noting that “the task of replacing oil resources is likely to become increasingly difficult and expensive and there will be a growing need to develop clean, convenient alternatives. . . . 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

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<sup>134</sup> Imperial Oil Ltd., Review of Environmental Protection Activities for 1978–1979 (Aug. 6, 1980) p. 2, available at <https://www.climatefiles.com/exxonmobil/1980-imperial-oil-review-of-environmental-protection-activities-for-1978-1979/> (as of June 5, 2024).

those currently at a relatively early stage of development are available to meet energy needs in the next century.”<sup>135</sup>

c. A 1989 article in a publication from Exxon Corporate Research for company use only stated: “CO<sub>2</sub> emissions contribute about half the forcing leading to a potential enhancement of the Greenhouse Effect. Since energy generation from fossil fuels dominates modern CO<sub>2</sub> emissions, strategies to limit CO<sub>2</sub> 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.”<sup>136</sup>

125. Despite these repeated recognitions of opportunities to reduce emissions and mitigate corresponding harms from climate change, Defendants continued to sow doubt and disinformation in the minds of the public regarding the causes and effects of climate change, and methods of reducing emissions. Examples of those efforts include, but are not limited to, the following:

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<sup>135</sup> Shell Briefing Service, *Synthetic Fuels and Renewable Energy*, Shell Service Briefing, No. 2 (1987), available at <https://www.climatefiles.com/shell/1987-shell-synthetic-fuels-renewable-energy-briefing/> (as of June 5, 2024).

<sup>136</sup> Flannery, Greenhouse Science, Connections: Corporate Research, Exxon Research and Engineering Company (Fall 1989), available at <https://www.climatefiles.com/exxonmobil/1989-exxon-mobil-article-technologys-place-marketing-mix/> (as of June 5, 2024).

a. In 1996, more than 30 years after API's president told petroleum industry leaders that carbon emissions from fossil fuels could "cause marked changes in climate" by the year 2000 if not abated,<sup>137</sup> API published the book *Reinventing Energy: Making the Right Choices* to refute this very conclusion. Contradicting the scientific consensus of which its members had been aware for decades, the book claims: "Currently, **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."<sup>138</sup> The book also suggested that even if some warming does occur, such warming "would present few if any problems" because, for example, farmers could be "smart enough to change their crop plans" and low-lying areas would "likely adapt" to sea level rise.<sup>139</sup>

b. In the publication, API also contended that "[t]he state of the environment does not justify the call for the radical lifestyle changes Americans would have to make to substantially reduce the use of oil and other fossil fuels" and that the "benefits of alternatives aren't worth the cost of forcing their use." "Some jobs definitely will be created in making, distributing and

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<sup>137</sup> Ikard, *Meeting the Challenges of 1966*, in Proceedings of the American Petroleum Institute (1965) p. 13, available at <https://www.documentcloud.org/documents/5348130-1965-API-Proceedings> (as of June 5, 2024).

<sup>138</sup> American Petroleum Institute, *Reinventing Energy: Making the Right Choices* (1996) p. 79 (emphasis in original), available at <https://www.climatefiles.com/trade-group/american-petroleum-institute/1996-reinventing-energy/> (as of June 5, 2024).

<sup>139</sup> *Id.* at pp. 85-87.

selling alternatives. But they will come at the expense of lost jobs in the traditional automobile and petroleum industries,” the authors continued. “[A]lternatives will likely be more expensive than conventional fuel/vehicle technology. Consumers, obviously, will bear these increased expenses, which means they will have less to spend on other products. This in turn will . . . cost jobs.”<sup>140</sup>

c. API published this book to ensure its members could continue to produce and sell fossil fuels in massive quantities that it knew would devastate the planet. The book’s final section reveals this purpose. API concluded: “[S]evere reductions in greenhouse gas emissions by the United States, or even all developed countries, would impose large costs on those countries but yield little in the way of benefits—even under drastic climate change scenarios.”<sup>141</sup>

d. From at least 2005 to 2016, Exxon executives strategized in internal communications about how to diminish concerns about climate change and muddle scientific findings that might hurt the company’s fossil fuel business.<sup>142</sup>

126. The Fossil Fuel Defendants could have made major inroads towards mitigating the harms they caused, and in particular, the State’s injuries, by developing and employing technologies to capture and sequester GHG emissions associated with conventional use of their fossil fuel products. The

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<sup>140</sup> *Id.* at pp. 59, 68, 69.

<sup>141</sup> *Id.* at p. 89.

<sup>142</sup> Matthews and Eaton, *Inside Exxon’s Strategy to Downplay Climate Change*, Wall Street Journal (Sept. 14, 2023), available at <https://www.wsj.com/business/energy-oil/exxon-climate-change-documents-e2e9e6af> (as of June 5, 2024).

Fossil Fuel Defendants had knowledge of these technologies dating back at least to the 1960s, and, had indeed, internally researched many such technologies.

127. Even if the Fossil Fuel Defendants did not adopt technological or energy source alternatives that would have reduced the use of fossil fuel products, reduced global GHG pollution, and/or mitigated the harms associated with the use and consumption of such products, the Fossil Fuel Defendants could have taken other practical, cost-effective steps to mitigate the harms caused by their fossil fuel products. Those alternatives could have included, among other measures, the following:

a. Refraining from affirmative efforts, whether directly, through coalitions, or through front groups, to distort public debate, manipulate public perception and the public policy agenda, and cause many consumers, business, and political leaders to think the relevant science is far less certain than it actually is;

b. Acknowledging the validity of scientific evidence on anthropogenic climate change and the damages it will cause people, communities (including the State), and the environment. Disseminating that evidence would have changed the public policy agenda from determining whether to combat climate change to deciding how to combat it; avoided much of the public confusion that has ensued since at least 1988; and contributed to an earlier and quicker transition to cleaner energy sources in California that could help minimize catastrophic climatic consequences;

c. Forthrightly communicating with consumers, the public, regulators, shareholders, banks, insurers, and the State, and warning them about the global

warming hazards of fossil fuel products that were known to Defendants, which would have enabled those groups to make informed decisions about whether to curb the use of these products—including whether and to what extent to invest in alternative clean energy sources instead of in fossil fuels;

d. Sharing their internal scientific research with consumers, lawmakers, and the public, as well as with other scientists and business leaders, to increase public understanding of the scientific underpinnings of climate change and its relation to fossil fuel products;

e. Supporting and encouraging policies to avert catastrophic climate change, and demonstrating corporate leadership in addressing the challenges of transitioning to a low-carbon economy; and

f. Prioritizing development of alternative sources of energy through sustained investment and research on renewable energy sources to replace dependence on hazardous fossil fuel products.

128. Despite their knowledge of the foreseeable harms associated with the consumption of fossil fuel products, and despite the existence of, and the fossil fuel industry's knowledge of, opportunities to reduce the foreseeable dangers associated with those products, Defendants wrongfully promoted and concealed the hazards of using fossil fuel products, delaying meaningful development of alternative energy sources and exacerbating the costs of adapting to and mitigating the adverse impacts of the climate crisis, including the climate crisis in California.



**G. Defendants Continue to Deceive California Consumers Through Misleading Advertisements That Portray Defendants as Climate-Friendly Energy Companies and Obscure Their Role in Causing Climate Change**

129. Defendants' deceptive conduct continues to the present day, albeit through updated messaging. Now, rather than engaging 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 and companies as environmentally friendly, climate-friendly, or otherwise less environmentally damaging than those products and companies really are.

130. 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 California and/or intended to reach California, including but not limited to online advertisements and social media posts, Defendants falsely and misleadingly portray these products as "green," and the Fossil Fuel Defendants portray themselves as climate-friendly energy companies that are deeply engaged in finding solutions to climate change. In reality, Fossil Fuel Defendants continue to primarily 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.

131. Defendants' greenwashing exploits California 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 California consumers by giving the impression that in purchasing the 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 California consumers to support Defendants' purported attempts to contribute to climate change solutions by purchasing and consuming these products, including the Fossil Fuel Defendants' fossil fuel products, thereby contributing to Defendants' revenues and profits by misleading consumers.

132. Below are representative examples of Defendants' greenwashing campaigns.

**1. Defendants' Affirmative Promotion of Fossil Fuel Products as "Green," "Clean," or Otherwise Good for the Environment Is Likely to Mislead California Consumers About How Use of Those Fossil Fuel Products Leads to Climate Change**

133. At all times relevant to this complaint, Defendants have promoted certain of the Fossil Fuel Defendants' fossil fuel products as environmentally beneficial, when in fact those products continue to contribute to climate change, and thus imperil the environment, if used as intended. These products, which Defendants tout as "green," "clean" and/or "cleaner," and/or "environmentally friendly," in fact result in the increase of GHG emissions, despite Defendants' knowledge that, when used as designed and intended, these products lead to climate change.

134. Defendants' advertisements capitalize on California consumers' concern over environmental degradation. Because of a growing collective realization of past environmental damage and increasingly severe current and anticipated future climate change harms, consumers more often seek to buy products that they believe will not contribute to further injury to the environment. By portraying fossil fuel products as environmentally friendly, and with words, phrases, colors, and imagery that evoke positive environmental attributes, these advertisements present fossil fuel products as beneficial to the environment. Reasonable consumers are likely to be misled by Defendants' advertisements into believing that these products do not contribute to substantial injury to the environment. However, these supposedly environmentally friendly fossil fuel products, through increased GHG emissions, contribute to the sweeping environmental degradation caused by climate change—just as other fossil fuel products do. By promoting fossil fuel products as environmentally beneficial, Defendants exploit concerned consumers' goodwill and mislead them into purchasing products that they believe will be part of the solution, even though Defendants are aware that these products only exacerbate the problem.

135. Defendants' marketing of fossil fuel products as environmentally beneficial follows in the footsteps of the tobacco industry's advertising campaigns to de-emphasize, and confuse the public about, the deadly effects of smoking cigarettes. Just as tobacco companies promoted "low-tar" and "light" cigarettes, inducing consumers to think of them as healthy alternatives to quitting smoking, while knowing that smoking "healthy" cigarettes was still harmful to human health, so too do Defendants peddle "low-

carbon” and “emissions-reducing” fossil fuel products to persuade consumers that those products are climate-friendly alternatives to traditional fossil fuels. In reality, the fossil fuel products they describe as “low-carbon,” “clean” and/or “cleaner,” “green,” and “emissions-reducing” in fact contribute to climate change and are harmful to the health of the planet and its people.

136. Below are representative examples of the Fossil Fuel Defendants’ advertisements to California consumers that misleadingly portray fossil fuels as environmentally beneficial or benign and fail to mention the products’ role in causing environmentally injurious climate change. The emphasis on lower emissions, “cleaning” terminology, and positive environmental imagery and messaging—individually and together—in Defendants’ advertisements are likely to mislead reasonable consumers by suggesting that Defendants’ fuels are environmentally beneficial or benign when they contribute to climate change like any other fossil fuel product. The examples are representative of Defendants’ other advertisements and public statements in Defendants’ greater greenwashing strategy to confuse consumers about the consequences of using fossil fuel products and consequently to increase demand for—and profits from—those fossil fuel products.

a. Since at least 2016, Exxon has offered for sale and marketed its Synergy fossil fuels, including, since at least 2020, at a substantial number of Exxon-branded gas stations in California. In Exxon’s advertisements for its Synergy fuels, including those on or near the gas pumps at Exxon-branded gas stations in California, 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 CO<sub>2</sub> emissions in Exxon’s 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.  
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**Environmental performance**  
Conscientious practices. Rigorous standards.

Continuously improving environmental performance while pursuing reliable and affordable energy

Ten years ago, we introduced Proven 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 CO<sub>2</sub> 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 ion-batteries 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 CO<sub>2</sub> emissions\*\*

**Figure 7: ExxonMobil Fuels “Environmental Performance” website**

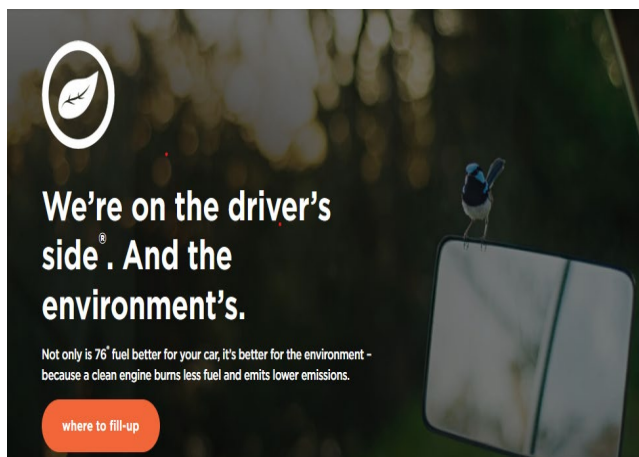
b. In addition to its Synergy fuels, Exxon offers for sale, and has marketed, Mobil 1™ ESP x2 motor oil to California consumers. From 2016 through at least 2022, Exxon promoted Mobil 1™ ESP x2 on the website *Energy Factor*—effectively a corporate blog for Exxon, in which Exxon claims to discuss developing safe and reliable energy sources for the future—in a post titled, “Green motor oil? ExxonMobil scientists deliver an unexpected solution.” According to its advertisement of 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 conveys an environmental benefit, when in fact the opposite is true.

c. Shell also offers for sale and markets in California gasoline and oil products. Shell describes its products as “cleaning” and that their use “produces fewer emissions.” Shell’s repeated claim that its products are clean, and its frequent use of green and environmentally positive imagery in its marketing materials, individually and together, are likely to mislead reasonable consumers into believing that Shell’s fuels are environmentally beneficial or benign, when in fact they are fossil fuels which, when used as designed and intended, contribute to climate change.

d. Similarly, Chevron’s gasoline offered for sale and marketed in California, Chevron with Techron, is marketed as having “cleaning power” that minimizes emissions. Chevron’s repeated emphasis on “cleaning” terminology, its focus in its marketing materials on “advancing a lower carbon future” and “ever-cleaner” energy, and its express solicitation of consumers who “care for the environment” are all likely to mislead reasonable consumers by suggesting that Chevron’s

fuels are environmentally beneficial or benign, when they are not.

e. Phillips 66, through its 76-branded gas stations in California, offers for sale and markets its 76-brand fossil fuels. In Phillips 66's advertisements for its 76-brand fuels, including advertisements on or near the pumps at 76-branded gas stations in California, Phillips 66 claims that its fuels "clean" a car's engine, resulting in "lower emissions, and that deposits left from other gasolines "can increase emissions." Phillips 66 advertises that 76's fossil fuels are "better for the environment." The 76 website for 76's fuels contains the marketing materials shown below, in which Phillips 66 makes the claim—superimposed on an image of a bluebird standing on a car's side mirror and looking at the viewer, with silhouetted trees in the background—that 76 and its fossil fuels align with the values of environmentally conscious consumers: "We're on the driver's side®. And the environment's."



**Figure 8: Phillips 66, 76 Fuels Website: Top Tier Gas**

137. The Fossil Fuel Defendants also collectively promote their petroleum and natural gas products through Defendant API, which makes public statements and claims about oil and natural gas. These include advertisements and promotional campaign websites that have been directed at and/or reached California, which reasonable consumers would understand to mean that the Fossil Fuel Defendants' fossil fuels are beneficial or benign, not harmful, to the environment. In particular, API's marketing material falsely promotes the narrative that natural gas is an environmentally friendly fuel.

138. 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,” “Low- and no-carbon future starts with natural gas”—API has misleadingly touted natural gas as “part of the solution” to climate change. API claims natural gas is “clean.” API also promotes natural gas’s purported benefits through a campaign titled “Energy for a Cleaner Environment.” As part of this campaign, API has offered on its website, in social media posts, and in other advertisements that have reached Californians, the image on the following page, of lush greenery and a message that “88% 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.”



## Energy For A Cleaner Environment



**Figure 9: API, We Are America's Generation Energy**

139. 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.” API’s misleading messaging regarding the alleged environmental benefits of natural gas, coupled with its positive environmental imagery and messaging, is likely to mislead reasonable consumers by suggesting that fossil fuels, in particular natural gas, are environmentally beneficial and not harmful to the climate. In reality, the majority of natural gas is derived from fossil fuels, and its primary constituent is methane, a potent greenhouse gas which plays a significant role in accelerating climate change. Methane has a relatively short lifespan, but its global warming potential is approximately 28 times greater

than an equivalent weight of carbon dioxide over a 100-year time period, and approximately 84 times greater than carbon dioxide over a 20-year timeframe. Accounting for methane leaks, flaring, and venting in production and supply chains, as well as combustion of natural gas, the net GHG emissions of natural gas are on a par with—and sometimes higher than—the GHG emissions from coal combustion. Moreover, combustion of methane for use as a fuel emits carbon dioxide. Methane is the second largest component of GHG emissions in California, behind carbon dioxide.

## **2. Defendants’ Affirmative Claims That They Contribute Substantially to Climate Change Solutions Are Likely to Mislead California Consumers**

140. Recognizing a shift in consumer knowledge and understanding of climate change, Defendants have changed tactics from seeking to deceive the public about the science and reality of climate change to deceptively portraying themselves as part of the solution to climate change. The Fossil Fuel Defendants tout their climate-friendly investments in “clean” fuels and renewable energy, when in fact those investments are nonexistent or miniscule in comparison to the Fossil Fuel Defendants’ investments in developing and expanding their fossil fuel production. In many cases, those “clean” fuels themselves contribute substantially to climate change. Defendants also market themselves as being in alignment with international goals to reduce GHG emissions, while instead working to grow the Fossil Fuel Defendants’ fossil fuel businesses and increase profits generated from fossil fuel sales. Thus, Defendants’ efforts to mislead the public about climate change have not stopped. Defendants have simply

shifted gears to engage in a different form of deceptive conduct. In doing so, their marketing presents another lie to California consumers: that Defendants have made and are making substantial contributions to solving climate change.

141. By deceptively portraying themselves and their products as part of the climate solution, rather than as the problem, Defendants' advertisements induce consumers to purchase fossil fuel products and develop brand affinity under the misimpression that purchasing and using fossil fuels will somehow contribute to a "greener" energy future rather than contributing to climate change.

142. In reality, the Fossil Fuel Defendants' expansion of their fossil fuel businesses and insubstantial investments in non-GHG-emitting technology belie Defendants' purported commitments to solving climate change. The following are but a few examples of Defendants' attempts to falsely portray themselves as being aligned with solutions to the climate crisis, rather than continuing to be the problem.

143. Exxon misleadingly promotes itself to consumers as a "green" company through its alleged commitment to developing clean energy solutions. Exxon also has announced its ambition to achieve net-zero GHG emissions by 2050, and touts its commitment to helping society reach a lower-emissions future. Exxon has heavily promoted its investment in developing algae for use as a biofuel to reduce emissions and combat climate change. Exxon's advertising tells consumers that Exxon is working to decrease its carbon footprint and that its research is leading toward "A Greener Energy Future. Literally."

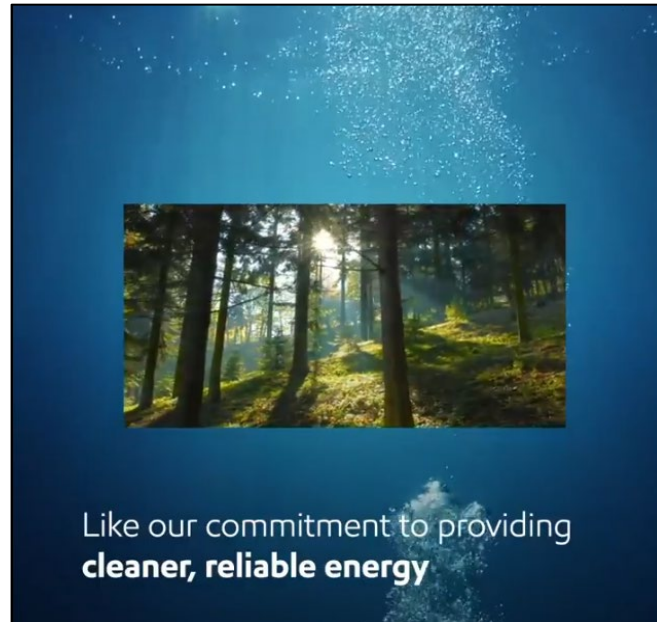
144. Exxon’s investment in potential renewable fuels, such as biofuels, and in other potential lower-emission fuels and technologies, has been miniscule compared to its overall profits and to its investments in developing and expanding its fossil fuels business. For example, one analysis comparing Exxon’s advertised goal of producing 10,000 barrels of biofuels per day by 2025 to Exxon’s fossil fuel refinery operations found that the goal for biofuel production would amount to only 0.2% of Exxon’s refinery capacity, as reported in 2019—in essence, a rounding error. Also, Exxon’s advertisements touting the development of biofuels from plant waste substantially overplayed the likely environmental benefits by failing to acknowledge the intensive energy required to process that plant waste, which would create substantial additional GHG emissions. As of late 2022, Exxon quietly abandoned its investments in developing algae as a biofuel, but Exxon continues to invest in its development of fossil fuels, as it has done for decades.

145. Exxon’s misleading advertisements have been published across California media outlets, among others. For example, in a video advertisement Exxon ran on *SFGate.com*<sup>143</sup> on at least November 3, 2020, Exxon claims: “In these **unprecedented times**, **the challenges** we face can seem daunting, but some things remain unchanged, like our commitment to providing **cleaner, reliable energy**.” The video shows this image of sun peeking through the branches of a pristine forest, all superimposed on a background of bubbles rising through clear blue water, to

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<sup>143</sup> *SFGate.com* is a news website based in San Francisco, California, which was formerly the digital home of the *San Francisco Chronicle*.

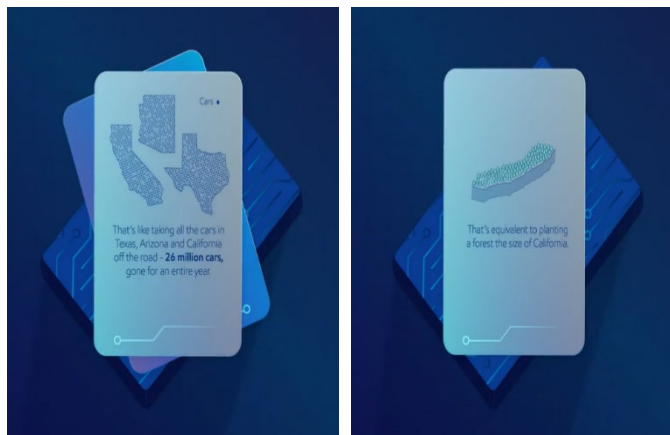
represent Exxon's apparent "commitment" to clean energy:



**Figure 10: ExxonMobil November 3, 2020  
SFGate Video Advertisement**

146. As another example, in a video advertisement Exxon ran on *The Sacramento Bee's* website in August 2021, a narrator asks the viewer to "imagine if 100 million metric tons of CO<sub>2</sub> could be captured and stored every year." The narrator then proclaims, "It's possible. ExxonMobil is working to advance climate solutions." The narrator does not explain that in 2021, Exxon's sales of fossil fuel products were responsible for 690 million metric tons of CO<sub>2</sub> emissions (much more than Exxon proposes to "capture"), or that, even if the plan at issue is approved and successful, 100 million metric tons would not be captured annually until 2040.

147. In a video posted on X (formerly Twitter) in 2022, Exxon states that it is the “first company to capture more than 120 million metric tons of CO<sub>2</sub>.” The company explains, “That’s like taking all the cars in Texas, Arizona and California off the road – 26 million cars, gone for an entire year.” The advertisement then states that removing 100 million metric tons of CO<sub>2</sub> would be “equivalent to planting a forest the size of California.”



**Figure 11: Exxon January 6, 2022 Social Media Advertisement (X, formerly Twitter)**

Exxon’s advertisement misleadingly implies that because of Exxon’s carbon capture efforts, CO<sub>2</sub> emissions equivalent to more than all of the cars driven in California for a year are “gone.” In fact, a significant amount of the captured CO<sub>2</sub> is used to extract more oil, which in turn produces more CO<sub>2</sub> emissions. Of the estimated 120 million metric tons of CO<sub>2</sub> captured at one of Exxon’s facilities, reportedly 95% was used to extract more oil.

148. In another video advertisement on *The Sacramento Bee's* website, Exxon proclaims that “risks associated with climate change must be managed” and then misleadingly asserts that “fracking is a proven and safe solution.” The advertisement then directs the viewer to learn more at [Exxchange.com](http://Exxchange.com), an Exxon website that falsely describes natural gas as “clean-burning.” In this advertisement, Exxon fails to explain that the production and combustion of natural gas produces potent GHGs, like methane, that contribute to climate change, and that natural gas is far from a “clean” energy source, let alone a solution to climate change. To the contrary, natural gas is a significant contributor to climate change: methane from natural gas is a GHG that exacerbates climate change, and methane emissions associated with natural gas exploration, development, and use are 28 to 84 times as powerful as CO<sub>2</sub> at trapping heat in the atmosphere.



**Figure 12: ExxonMobil December 6, 2021  
*Sacramento Bee* Video Advertisement**

149. Shell also falsely portrays itself to consumers as part of the climate solution. Shell claims that it aims to become a net-zero emissions<sup>144</sup> energy business by 2050, and that it is “tackling climate change.” For example, an advertisement ran as recently as November 18, 2022, on the mobile website of the *Whittier Daily News* suggesting—in neon green text—that Shell is “creating a net-zero world”:

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<sup>144</sup> “Net-zero” means achieving a balance between the carbon emitted into the atmosphere, and the carbon removed from it.





**Figure 13: Shell November 18, 2022 *Whittier Daily News* Online Display Advertisement**

150. However, in June 2023, Shell announced that it would no longer reduce annual oil and gas production through the end of the decade as previously announced, after selling off oil-producing assets and claiming the reduction in its own production as a reduction in emissions. Shell’s CEO told the BBC that cutting oil and gas production would be “dangerous and irresponsible.” In March 2024, Shell weakened its carbon reduction targets for 2030 and abandoned its 2035 carbon intensity target.

151. In advertisements in *The New York Times* and *The Washington Post*, Shell touts its investments in “lower-carbon transport fuels,” including natural gas. In “The Mobility Quandary,” under a “Finding Sustainable Solutions” banner, Shell singles out natural gas as “a critical component of a sustainable energy mix” and a “cleaner-burning fossil fuel.” In “The Making of Sustainable Mobility,” Shell describes natural gas as “a cleaner fossil fuel” with a “lighter carbon footprint.” Shell’s advertising fails to

acknowledge, however, that natural gas production and combustion produce potent GHGs, and the net GHG emissions of natural gas are on a par with—and sometimes higher than—the GHG emissions from other fossil fuels.

152. Moreover, Shell's investments in clean energy pale in comparison with its investments in fossil fuel production. In the first half of 2023, Shell reported \$11.6 billion in total spending, of which less than \$1 billion went to renewables and "energy solutions"—a category that also includes fossil fuel investments such as marketing and trading of pipeline gas. In 2018, speaking at the Oil and Money conference in the U.K., Shell's CEO, after acknowledging the challenge of climate change and referring to recent headlines about Shell's investments in the clean energy industry, such as acquiring the renewable electricity company First Utility, said, "even headlines that are true can be misleading. They might even make people think we have gone soft on the future of oil and gas. If they did think that, they would be wrong." Leaving no doubt about Shell's plans regarding clean, renewable energy, or lack thereof, he stated that "Shell's core business is, and will be for the foreseeable future, very much in oil and gas."

153. Using a remarkably similar playbook, Chevron claims that it "is committed to addressing climate change" and touts its intentions to invest billions of dollars in carbon reduction projects, as well as its net-zero "aspirations." And Chevron's director states in a 2021 report, "We believe the future of energy will be lower carbon, and we intend to be a leader in that future." Its CEO claims that Chevron's "work to create fuels of the future—like hydrogen, renewable diesel, and sustainable aviation fuel—

seeks to lower the carbon intensity of these products and support our customers' efforts to reduce their greenhouse gas emissions." Chevron representatives have even delivered public seminars at top educational institutions, deceptively claiming Chevron uses its "unique capabilities, assets and expertise to deliver progress" toward the global ambition of achieving net-zero carbon emissions.

154. Chevron's advertising touts the various measures it will take to reach net-zero in 2050. In one such online video advertisement that ran as recently as 2022, Chevron's Executive Vice President, Joe Geagea, proclaimed that Chevron "operate[s] the largest carbon capture and sequestration project in the world." Geagea also stated, "People think of us as an energy company, but at the heart of it we are a technology company."

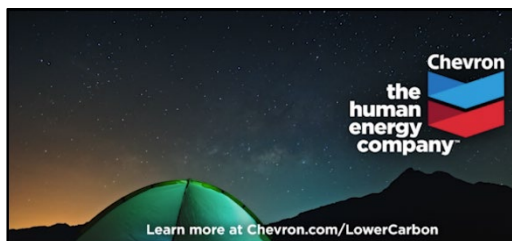
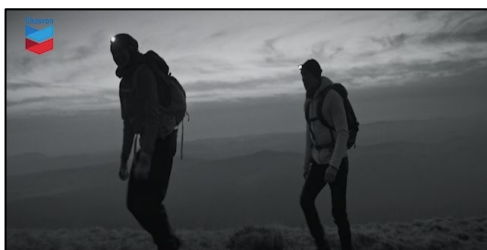


**Figure 14: Chevron January 8, 2022 Thomson Reuters Advertisement**

The advertisement fails to mention that as of early 2022, the carbon capture and sequestration project, located in Australia, had failed to meet its carbon capture targets since it began injecting CO<sub>2</sub> in 2019.

And as recently as 2023, the project has been operating at only one-third of its planned capacity.

155. Chevron has saturated the California media market with advertisements casting itself as a good environmental citizen. For example, advertisements show motivational images of individuals enjoying the environment—for example, hiking, stargazing, and camping. In those advertisements, the narrator reassures the viewer: “We believe the future of energy is lower carbon.” Below are stills from an example video advertisement that ran as recently as October 31, 2021, on the *San Francisco Examiner*’s website. This video touts Chevron’s investment in a nuclear fusion start-up.



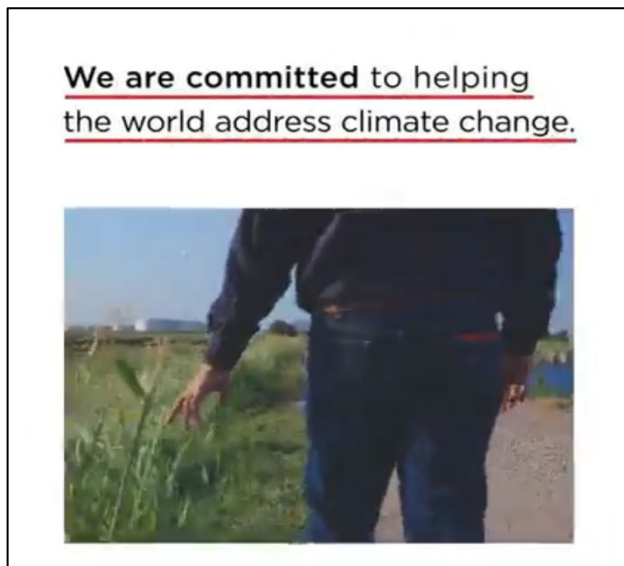
**Figure 15: Chevron October 31, 2021 *San Francisco Examiner* Video Advertisement**

156. Chevron announced investments in a nuclear fusion company in 2020, but did not disclose the amount invested. However, the total funding raised by that company from all investors through the date of the advertisement above was approximately \$34 million; even if Chevron had been the sole investor (which it was not), that amount would represent just 0.04% of Chevron's total investments in 2020 and 2021. Chevron's minimal efforts in the area of renewable and lower-carbon energy, coupled with its expansion of its fossil fuel business, belie its

statements suggesting that it is part of the climate change solution. From 2010 to 2018, according to one analysis, Chevron's investments in low-carbon energy sources were only 0.2% of Chevron's capital spending, compared to 99.8% in continuing its fossil fuel exploration and development. Chevron to this day continues to prioritize capital expenditures in its traditional fossil fuel business over its investments in renewable and low-carbon energy.

157. ConocoPhillips claims, similarly, that its "actions for [its] oil and gas operations are aligned with the aims of the Paris Agreement" and touts its actions and achievements toward the net-zero energy transition. But these claims are contradicted by the company's substantial investments in expanding its fossil fuel production and sales. For example, the company's new Willow Project in Alaska is expected to produce approximately 576 million barrels of oil, with associated indirect GHG emissions equivalent to 239 million tons of CO<sub>2</sub>. Moreover, ConocoPhillips reported that it spent \$150 million on emissions reductions and low-carbon opportunities in 2022—merely 1.5% of its capital investments that year.

158. Similarly, in a 2021 promotional video on Facebook, Phillips 66 proclaims that it is "committed to helping the world address climate change." The message is accompanied by an image of what appears to be a Phillips 66 refinery worker gently brushing some tall wild grass.



**Figure 16: Phillips 66 October 1, 2021 Social Media Advertisement (Facebook)**

The advertisement highlights Phillips 66's plans to invest in new technologies, support electric vehicle production, use renewable power in its operations, and produce "over 1.5 billion gallons of renewable fuels" annually by 2030. However, these investments are dwarfed by the scale of Phillips 66's investments in fossil fuel production. Even if Phillips 66 were to meet its goal of producing 1.5 billion gallons of renewable fuels, this would amount to just 5% of Phillips 66's annual refining capacity in 2023.

159. BP also has misleadingly portrayed itself, and continues to misleadingly portray itself, as a climate leader, claiming that it aims to be a net-zero company by 2050 or sooner and to help the world get there too. Further, BP emphasized in its "Possibilities Everywhere" campaign, which it ended in 2020, the

company's investments in renewable energy, such as solar and wind energy, and "cleaner" energy like natural gas. In its "Blade Runner" advertisement, BP claims that it is "one of the major wind energy businesses in the US." BP has run its misleading advertisements across California and in national media outlets. For example, in 2023 BP ran a series of advertisements touting its investments in offshore wind, electric vehicle chargers, and solar energy. These advertisements, featuring a bright blue and green color scheme, appeared on the websites of several different media outlets, including the *Los Angeles Times* and *ABC 7 San Francisco*.

160. In these advertisements, BP failed to mention that its investments in clean energy resources have been relatively meager. From 2010 to 2018, according to one analysis, BP only devoted 2.3% of its capital expenditures to clean energy development. BP also failed to mention that in 2019, at the time of its "Blade Runner" advertisement, BP only owned about 1% of the installed wind capacity in the U.S. Moreover, at a time of record-breaking profits, BP is scaling back its plan to lower emissions by 2030, and BP continues to make significant investments in fossil fuel production, refining, and sales.

161. API is also no stranger to misleading the public into believing that its and its members' actions are part of the solution, rather than the source of the problem. 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.” Tellingly, however, API’s strategy does not advocate for or even mention reduction in fossil fuel production as a strategy to protect the climate. Rather, it focuses on potential technical 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.” As discussed above, natural gas is far from a “clean” fuel, as API misleadingly claims, as natural gas production and use contributes substantially to climate change through the release of methane, an extremely potent greenhouse gas.

162. API delivers its messages to Californians through advertisements in California media outlets, among others. For example, in a video captured from *Coast News Group* (which covers Northern San Diego County) on February 14, 2020, API claims that “innovators in America’s natural gas and oil companies have teamed up with America’s brightest minds and reduced carbon emission levels to the lowest in a generation.” Viewers are shown images of joggers and hikers, as shown below. The message is clear (and false): Consumers need not worry and can consume fossil fuels as normal because the oil and gas industry has climate change under control.



**Figure 17: API February 14, 2020 *Coast News* Video Advertisement**

**H. Defendants' Concealments and Misrepresentations Regarding the Dangers of Fossil Fuel Products Encouraged Continued Use of Fossil Fuels and Discouraged Concerted Action on Greenhouse Gas Emissions**

163. As a result of Defendants' efforts to deny and undermine climate science and conceal the dangers of fossil fuel consumption, Defendants encouraged consumers to continue to use fossil fuels and to make investments in cars, appliances, and other major purchases that would commit them to consuming fossil fuels well into the future, and discouraged

policymakers from imposing regulations limiting the use of fossil fuels.

164. As a result of Defendants' sustained and widespread campaign of disinformation, many California consumers have been unaware of the strength of the scientific consensus about the relationship between consumption of fossil fuels and climate change, the magnitude of the threat posed by their own use of fossil fuels, or of the contribution their purchasing behavior makes to aggravating the effects of climate change.

165. By misleading California consumers about the climate impacts of using fossil fuel products, and by failing to disclose the climate risks associated with their purchase and use of those products, Defendants deprived consumers of information about the consequences of their purchasing decisions. This led to consumers using more fossil fuels, and using fossil fuels less efficiently, than they otherwise would have done in the absence of Defendants' deception.

166. As with cigarettes, history demonstrates that when consumers are made aware 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. More than 40 percent of adults in the United States smoked cigarettes in the early 1970s; recent data indicate that the current figure is 12 percent. 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 plastics in harming human health and the environment has spurred a growing market for plastic-free products and packaging. With access to information about health and environmental impacts,

consumers have demanded healthier choices, and the market has responded.

167. A consumer who received accurate information that fossil fuel use was a primary driver of climate change, and about the resultant dangers to the environment and to public health, might have decreased the consumer's use of fossil fuel products and/or demanded lower-carbon transportation options from policymakers. 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."<sup>145</sup> If consumers were aware of what the Defendants knew about climate change when the Defendants knew it, consumers might 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); or adopt any combination of these choices. In addition, informed consumers often attempt to contribute toward solving environmental problems by supporting companies that they perceive

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<sup>145</sup> The Conference Board, *Changes in Consumers' Habits Related to Climate Change May Require New Marketing and Business Models* (Oct. 26, 2022), available at <https://www.conference-board.org/topics/consumers-attitudes-sustainability/changes-in-consumer-habits-related-to-climate-change> (as of June 5, 2024).

to be developing “green” or more environmentally friendly products.<sup>146</sup>

168. As described herein, by casting doubt upon the scientific consensus on climate change, Defendants 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 knowledge about the climate and the public health effects of continued consumption of fossil fuels would have likely 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.

169. As described herein, Defendants’ campaign of deception was also aimed at discouraging policymakers and lawmakers from taking action on climate change. By downplaying the scientific consensus on climate change and emphasizing uncertainty, Defendants hoped to delay any regulatory action that might seek to reduce or control

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<sup>146</sup> See, e.g., Leiserwitz et al., Program on Climate Change Communication, Yale University, and Center for Climate Change Communication, George Mason University, Consumer Activism on Global Warming, September 2021 (2021), available at <https://climatecommunication.yale.edu/wp-content/uploads/2021/12/consumer-activism-on-global-warming-september-2021.pdf> (as of June 5, 2024). About a third of American consumers surveyed report “reward[ing] companies that are taking steps to reduce global warming by buying their products” and “punish[ing] companies that are opposing steps to reduce global warming by not buying their products.” (*Id.* at p. 3.)

GHG emissions, thereby threatening the industry's profits.<sup>147</sup>

170. By sowing doubt in the minds of consumers, the media, policymakers, and the public about the magnitude and the urgency of climate threats, Defendants delayed regulatory action on GHG emissions, exacerbating the climate crisis and causing significant harm to California and its residents.

### **I. The Effects of Defendants' Deceit Are Ongoing**

171. The consequences of Defendants' tortious misconduct—in the form of misrepresentations, omissions, and deceit—began decades ago, and continue to be felt to this day. As described above, Defendants, directly and/or through membership in other organizations, misrepresented their own activities, the fact that their products cause climate change, and the danger presented by climate change.

172. Defendants' collective goal was to ensure that “[a] majority of the American public, including industry leadership, recognizes that significant uncertainties exist in climate science, and therefore raises questions among those (e.g. Congress) who chart the future U.S. course on global climate change.”<sup>148</sup> In 2023, only 20% of Americans understand how strong the level of consensus is among scientists that human-caused global warming

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<sup>147</sup> See, e.g., *supra*, ¶¶ 51, 99.

<sup>148</sup> Joe Walker, email to Global Climate Science Team re Draft Global Climate Science Communications Plan (Apr. 3, 1998), available at <https://assets.documentcloud.org/documents/784572/api-global-climate-science-communications-plan.pdf> (as of June 5, 2024).

is happening, and 28% think climate change is caused mostly by natural changes in the environment.<sup>149</sup>

173. Defendants' misrepresentations, omissions, and deceit had a significant and long-lasting effect on how the public views climate change and the dangers of fossil fuel use that continues to the present day. By sowing doubt in the minds of the public, Defendants substantially altered the public discourse on climate change, and intentionally delayed action on climate change, ensuring that they would continue to earn immense revenues and profits.

174. If Defendants had been forthcoming about their own climate research and understanding of the dangers of fossil fuel products, consumers, policymakers, and the public could have made substantial progress in transitioning to a lower-carbon economy, at a much earlier time, potentially averting some of the effects of the climate crisis that California is experiencing today.

175. Moreover, by concealing the very fact of their campaign of deception, including by using front groups to obscure their own involvement in the deception, Defendants concealed their unlawful conduct from the public and the State, thereby preventing the State from discovering the facts underlying the claims alleged herein.

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<sup>149</sup> Leiserowitz et al., Program on Climate Change Communication, Yale University, and Center for Climate Change Communication, George Mason University, *Climate Change in the American Mind: Beliefs & Attitudes*, Spring 2023 (2023) pp. 3, 8, available at <https://climatecommunication.yale.edu/publications/climate-change-in-the-american-mind-beliefs-attitudes-spring-2023/> (as of June 5, 2024).

176. Due to Defendants' deceptive and misleading conduct, California is in the throes of a climate crisis—one that would have been avoidable in part had Defendants acted differently.

**J. The State Has Suffered, Is Suffering, and Will Suffer Injuries from Defendants' Wrongful Conduct**

177. Defendants' individual and collective conduct is a substantial factor in causing harms to California. This conduct includes, but is not limited to, their wrongful promotion of fossil fuel products, their concealment of the known hazards associated with the use of those products, and their public deception campaigns designed to obscure the connection between these products and climate change and its public health, environmental, physical, social, and economic consequences. Such consequences include, but are not limited to, the following: extreme heat; drought; wildfires; increased frequency and intensity of extreme weather events, including coastal and inland storms and associated flooding; habitat loss and species impacts; sea level rise and attendant flooding, erosion, damage to riparian lands and submerged lands, and loss of wetlands and beaches; ocean warming and acidification; and the cascading social, economic, health, and other consequences of these environmental changes. These adverse impacts will continue to increase in frequency and severity in California and disproportionately impact frontline communities.

178. As an actual and proximate result of Defendants' conduct, which was a substantial factor in bringing about the aforementioned environmental changes, the State has suffered and will continue to suffer severe harms and losses. These include, but are



not limited to, the following: increased costs associated with public health impacts, environmental impacts, and economic impacts; injury or destruction of state-owned or -operated facilities and property deemed critical for operations, utility services, and risk management, as well as other assets that are essential to community health, safety, and well-being; increased costs for responding to increasingly frequent natural disasters and increasingly intense weather events, including extreme heat, drought, wildfires, coastal and inland storms and associated flooding, and extreme precipitation events; and increased planning and preparation costs for community adaptation and resilience to climate change's effects.

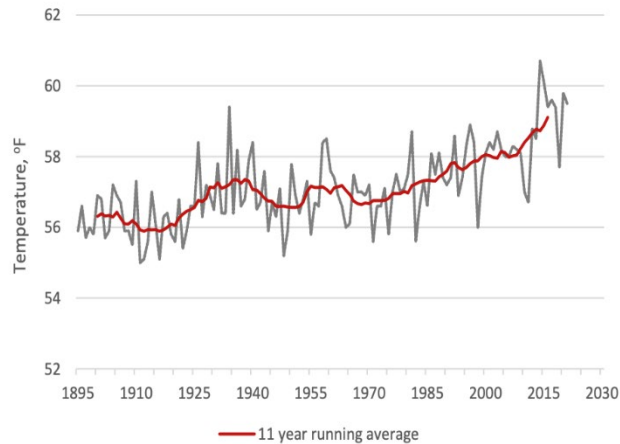
179. The State has incurred, and will foreseeably continue to incur, as a result of Defendants' deceptive conduct as described in this Complaint, injuries due to delays in taking action to mitigate or curtail the climate crisis. As a result of Defendants' wrongful conduct, California has experienced, is experiencing, and will continue to experience significant adverse impacts, including, but not limited to, those described below.

### **1. Extreme Heat**

180. California is being impacted and will continue to be impacted in years and decades to come by higher average temperatures and more frequent and severe heat waves. The last nine years have been the nine hottest on record, and that trend is only expected to continue. These changes will pose a risk to every region of the state. Severe harms from rising temperatures are already a reality in many frontline communities. Members of frontline communities tend to work in occupations with increased exposure to

extreme heat, such as the agricultural, construction, and delivery industries.

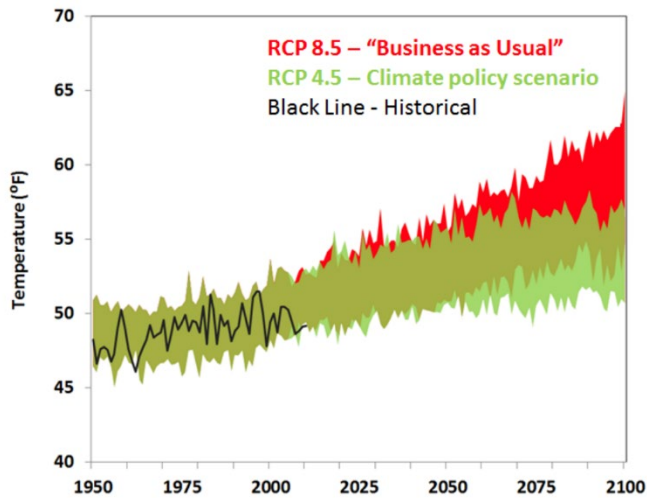
181. Globally, increased concentrations of carbon dioxide and other gases in the atmosphere are causing a continuing increase in the planet's average temperature. California temperatures have risen since records began in 1895, and the rate of increase is accelerating.



**Figure 18: Statewide Annual Average Temperatures**

182. Death Valley recorded the world's highest reliably measured temperature (130°F) in July 2021, breaking its own record (129°F) set in summer 2020. Meanwhile, the City of Fresno also broke one of its own records in 2021, with 64 days over 100°F that year. This is part of a trend: the daily maximum average temperature, an indicator of extreme temperature shifts, is expected to rise by 4.4°F to 5.8°F by 2050 and by 5.6°F to 8.8°F by 2100. Heat waves that result in public health impacts are also projected to worsen throughout California. By 2050, these heat-

related health events are projected to last two weeks longer in the Central Valley and occur four to ten times more often in the Northern Sierra region.



**Figure 19: Projected California Temperature Increases<sup>150</sup>**

183. Recent heat waves have broken heat records and caused serious illness across the state, and these events are becoming more frequent. Heat waves have a particularly high impact in Southern California, where they have become more intense and longer-lasting. In the past two years, Los Angeles recorded

<sup>150</sup> RCP in this graph refers to Representative Concentration Pathways, which are projections based on the emissions scenarios used by the IPCC's Fifth Assessment Report. There are four RCPs (2.6, 4.5, 6.0 and 8.5), and each RCP represents a family of possible underlying socioeconomic conditions, policy options, and technological considerations, from a low-end scenario (RCP 2.6) that requires significant emissions reductions to a high-end, "business-as-usual," fossil fuel-intensive emission scenario (RCP 8.5).

121°F, and the Coachella Valley had its hottest year ever, with temperatures reaching 123°F. In urbanized environments, pavement, cement, and other non-vegetated areas contribute to the “heat island” effect, in which built environments retain heat, causing daytime temperatures to be 1° to 6°F hotter than rural areas and nighttime temperatures to be as much as 22°F hotter. The heat island effect is inequitably distributed, and disproportionately affects frontline communities. Heat events exacerbate respiratory and cardiac illness and cause emergency room visits to soar. Young children, the elderly, people with preexisting health conditions, and African Americans are more vulnerable than the rest of the population to extreme heat events.

184. Heat ranks among the deadliest of all climate hazards in California, and heat waves in cities are projected to cause two to three times more heat-related deaths by mid-century. Frontline communities will experience the worst of these effects, as heat risk is associated and correlated with physical, social, political, and economic factors.

185. Heat events also lead to increased poultry and livestock mortality, which can lead to potentially adverse impacts to public health, animal health, and the environment, and resultant economic losses. Hotter weather can deteriorate the integrity of containment systems at toxic waste sites.

186. Extreme heat also threatens California’s natural systems. Increasing temperatures, for example, lead to exacerbated risk of wildfire; drought and its effects on the health of watersheds; and negative effects on plants and animals, including reduced fitness, increased stress, decreased reproduction, migration, death, and in some cases

extinction. These shifts result in significant cultural impacts to tribes, where plants and animals that have been used as traditional food, medicine, materials, or in ceremonies are no longer available.

## **2. Drought and Water Shortages**

187. Anthropogenic warming has increased the likelihood, frequency, and duration of extreme droughts in California.

188. Over the last three years, the State has earmarked more than \$8 billion to modernize water infrastructure and management, as part of planning for a potential loss of 10% of its water supplies by 2040 due to climate change.

189. California's five-year drought of 2012 to 2016 occurred in a setting of then-record statewide warmth and set numerous hydrologic and impact records, including lowest statewide snowpack, groundwater levels in many parts of California falling below previous historical lows, and severe resultant land subsidence. This event was soon followed by the 2020-2023 drought, which again set new hydrologic records.

190. Snowpack in the Sierra Nevada mountains serves as a vital water storage and supply system for California, supplying roughly 30% of the state's water needs in an average year. Warmer winter temperatures caused by climate change are reducing the fraction of precipitation falling as snow, and increased evaporation is reducing snowpack volume. Recent projections show that the Sierra snowpack could decline to less than two-thirds of its historical average by 2050, even if precipitation remains relatively stable.

191. Warmer temperatures in the spring and summer cause the snowpack to melt earlier and more

quickly. This rapid melting can result in flooding, and can reduce California's supplies of water stored in reservoirs.

192. Warmer average temperatures across California will increase moisture loss from soils, which leads to drier summers even if winter precipitation increases. Climate projections show that the seasonal summer dryness in California may start earlier in the spring due to earlier soil drying, and last longer into the fall and winter.

193. Droughts have significant environmental, social, and economic repercussions in California, and their impacts are widespread. The 2012-2016 and 2020-2022 droughts impacted most of California and required statewide responses. Future climate-exacerbated droughts are expected to harm the State and its people by, among other things, causing drinking water shortages, damaging the State's agricultural industry, depleting groundwater, devastating aquatic ecosystems, increasing the intensity and severity of wildfires, reducing the availability of hydroelectricity, and harming human health.

194. Drinking water shortages primarily affect small drinking water systems and domestic wells, which are often found in rural communities. In 2015, more than 100 small water systems experienced water shortages, and more than 2,000 domestic wells went dry. These vulnerable systems are located throughout California, and approximately half serve frontline communities. In the 2012-2016 drought, some rural frontline communities in the San Joaquin Valley relied on bottled water, interim tanks, and filling buckets and barrels with water from neighboring communities. From July 2021 to August 2023, the

State spent over \$100 million providing emergency bottled and hauled water to communities experiencing drinking water shortages.

195. California is the top agriculture-producing state in the nation, accounting for more than 60% of the country's production of vegetables and two-thirds of the country's fruit and nut crops. The state's agricultural industry accounts for 40% of total water use in an average year. Drought conditions can result in crop losses and decreased agriculture production, and future water shortages are expected to limit agricultural suitability for various crops. The resulting economic damages will be substantial—in 2016 alone, the impacts of drought on California's agriculture industry resulted in over \$600 million in direct economic damages and the loss of 4,700 jobs.

196. Reliance on groundwater increases during droughts, when surface water storage is depleted due to reduced precipitation and low snowpack. Overdraft of groundwater may cause land subsidence, which can impact infrastructure—including water conveyance systems, roads, railways, bridges—aquifer storage capacity, and land topography. Increased groundwater pumping during drought also worsens groundwater quality, causing increased contamination of drinking water supplies. Under the Sustainable Groundwater Management Act, which was passed in 2014, the State has spent more than \$300 million to fund Groundwater Sustainability Agencies to manage groundwater resources at the local level.

197. Drought harms aquatic ecosystems by causing low water flows, which, among other things, negatively impact water quality by affecting factors like temperature and salinity and increasing the

concentration of pollutants in water. As many as 18 California native fish species would have been at high risk of extinction if the 2012-2016 drought had continued. Drought has contributed to a precipitous decline in Chinook salmon populations in California and led to an economically devastating shutdown of California's salmon fishery in 2023. Drought also reduces water availability for California's managed wetlands, harming millions of migratory birds that rely on those wetlands by reducing food and habitat availability.

198. Dry conditions produced by droughts can lead to more intense and severe wildfires. A 2016 study found that climate-induced warming and drying have created a favorable environment for fires, doubling the area burned by forest fires over the area expected to burn from natural climate variability alone from 1984 to 2015. Several of the largest, most destructive, and deadliest wildfires in state history followed the 2012-2016 drought. The second largest in the State's history, the Dixie Fire, occurred during the 2021 drought year. For additional discussion of wildfire harms, see Section IV.J.3, *infra*.

199. Drought can also affect human health by increasing harmful algal blooms, altering patterns of certain vector-borne diseases, increasing the risk of water-borne diseases, and increasing air pollution from wildfires and dust storms.

200. The State has borne and will continue to bear the substantial costs associated with mitigating and responding to climate-exacerbated drought impacts.

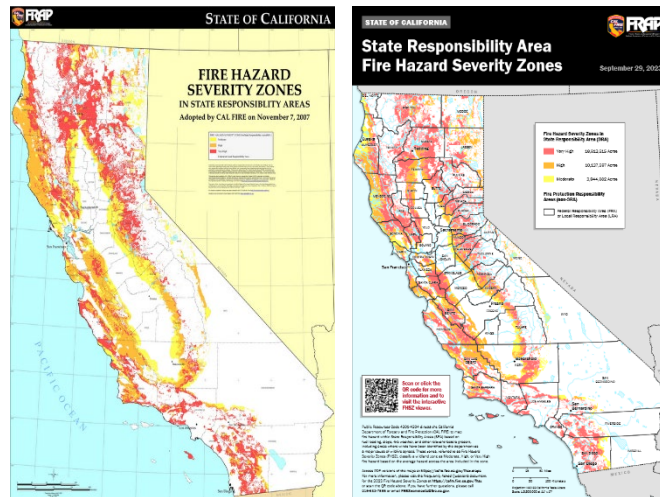
### **3. Extreme Wildfire**

201. Climate change has caused and will continue to cause an accelerated increase in the risk,



occurrence, and intensity of wildfires in California, resulting in wildfire-related injuries to the State and its residents.

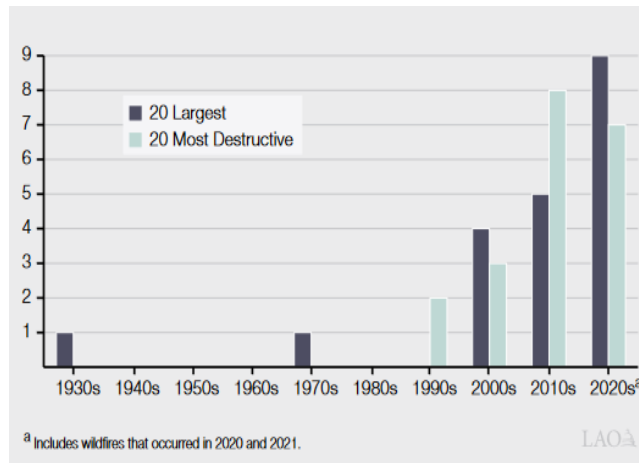
202. Wildfire has always been an essential element of California's ecology; however, climate change is leading to disruptions in the state's natural temperature and precipitation patterns that have helped maintain the healthy, balanced role of wildfire in California. The result is a wildfire crisis. Increasingly higher temperatures coupled with longer and more intense droughts have led to substantially drier vegetation and fuel loads across the state that are more easily ignitable during periods of hotter conditions, which are becoming more frequent and more intense in California under climate change. The wildfire season is beginning earlier in the year and ending later, and the footprint of wildfire in California has expanded due to climate change. More than 23 million acres of California wildlands, extended over half the state, are classified as under very high risk of fire, the highest fire hazard severity level. As demonstrated in the figures below, in 2023 compared to in 2007, more areas are at risk of fire, with increased severity of that risk in many areas.



**Figure 20: Fire Hazard Severity Zones, 2007 and 2023**

Similarly, summer forest burned area during 1996 to 2021 showed a fivefold increase compared to the years 1971 to 1995, and one recent study found that nearly all of the increase in burned area is due to anthropogenic climate change.

203. The evidence is unequivocal that both the severity and intensity of wildfires in California are increasing as a result of climate change. Most of the largest and most destructive fires in California's history have occurred since 2000, as illustrated by the following chart:



**Figure 21: Largest and Most Destructive Wildfires in California**

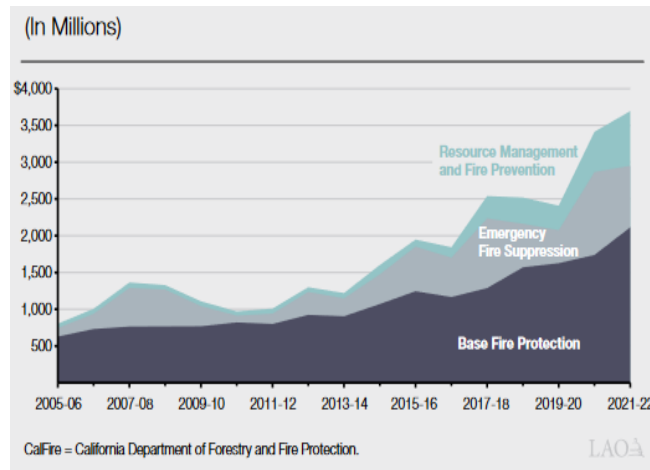
Nine of the 20 largest fires ever in California occurred in 2020 and 2021, after some of the driest and hottest years on record. California saw its largest wildfire season in 2020, when over 4.3 million acres burned (over 4% of the land within California, an area larger than the State of Rhode Island). In that season California also suffered its first gigafire, the August Complex Fire, which burned over a million acres through seven counties. The Camp Fire in 2018 burned fiercely and spread so rapidly that it destroyed the town of Paradise, California, in the fire's first four hours. The fire was the most destructive and costliest ever in the world, resulting in nearly 19,000 structures destroyed and over \$16 billion in property damage. The fire was also the deadliest in California's history, with 85 civilian fatalities.

204. Related climate change impacts drive the increased risk, occurrence, and intensity of wildfire in California by impairing the health of forests and

vegetation and creating conditions primed for megafires. Episodes of ever-more extreme drought are parching landscapes across California. Higher temperatures and diminishing quantities of available water create increasingly inhospitable conditions for trees at lower elevations and in hotter, drier southern regions. Consequently, new forest trees gravitate northward and upslope, leaving stressed and dying trees behind. Dead trees are more flammable than live trees, furthering California's wildfire risk. More frequent climate change-induced extreme weather events, such as extended periods of dry, hot, high winds and dry lightning storms, combine with the dangerous conditions on the ground not only to create more wildfires in California but also to fan their flames. In 2020, during one of California's worst periods of drought, a severe dry lightning storm followed by dry high winds passed through Central and Northern California and sparked hundreds of wildfires. These fires were so intense, expansive, and numerous that they became known as the 2020 Fire Siege. This was a perfect storm of conditions, driven by climate change, creating catastrophic fires.

205. These catastrophic, climate change-driven wildfires result in substantial losses to the State's financial resources. While the State only owns about 3% (approximately one million acres) of the forestlands within California's boundaries, the State is financially responsible for wildfire protection for about 40% (over 31 million acres) of California's wildlands (approximately 79 million acres), which include forestland, watershed, and rangeland. The State spends billions of dollars on wildfire response annually; however, the cost of fighting more extreme climate change-driven wildfires is increasing. The State budgets for its response to large wildfires in the

form of an emergency fund, which is funded each year based in part on the average costs of large wildfires over the previous five years. For the 2020-2021 fiscal year, the State budgeted \$373 million for the emergency fund, but spent over \$1.3 billion from the emergency fund during the 2020 Fire Siege. In 2011, the State spent only about \$90 million on emergency fire suppression, but has not spent as little since.



**Figure 22: State Spending on CAL FIRE**

206. Once suppressed, climate change-driven wildfires leave shattered communities in their wake, resulting in further financial loss to the State for wildfire recovery efforts. Increased wildfire smoke blankets these communities with ash that contains hazardous chemicals, such as the metals lead, cadmium, nickel, and arsenic; asbestos from older homes or other buildings; perfluorochemicals; flame retardants; caustic materials; and other debris, all of which must be removed before communities can rebuild. In addition to wildfire response, the State incurs further costs for wildfire recovery, including

removal of household hazardous waste and wildfire debris in areas impacted by wildfire.

207. In addition to suppression and disaster response and recovery costs incurred by the State, the total property loss from recent fire seasons has also climbed to several billions of dollars per year.

208. Further, the State has lost precious natural resources to catastrophic, climate change-driven wildfires. During the 2020 Fire Siege, for example, the CZU Lightning Complex Fire effectively destroyed the State's oldest state park, Big Basin Redwoods State Park, and the surrounding forest of primarily coastal redwoods. The park lost all of its historic structures, and the awe-inspiring landscape of towering old- and second-growth coastal redwoods was razed. While old-growth redwoods are known for fire resilience, and while many survived and are currently recovering, it is also becoming clear that changing climatic conditions such as hotter, drier summers and prolonged extreme drought will play a significant role in how the forest of Big Basin Redwoods State Park declines or recovers in the decades to come. The vast majority of the park remains closed indefinitely as it recovers from the damage.

209. Substantial natural resource costs from wildfire also extend beyond the forests. Destruction from wildfires deteriorates watersheds, which stresses municipal water supplies and treatment operations. Some smoke plumes from these megafires are so immense and hot that they form pyrocumulus clouds that create their own hazardous weather, such as lightning, hail, and tornadoes. These gigantic billows of smoke travel thousands of miles at both high and low elevations, severely compromising air quality and harming public health.

210. With the health of forests impaired and conditions worsening as the climate warms, the State has incurred costs and will incur further costs to manage forestlands to prevent future catastrophic, climate change-driven wildfires. Recently, the State has devoted \$2.7 billion over three years to address wildfire resiliency in California.

#### **4. Public Health Injuries**

211. Climate change has caused and will continue to cause significant public health-related injuries to the State and its residents.

212. Heat causes more reported deaths per year on average in the United States than any other weather hazard. Greater numbers of extreme heat events in California will result in increased risk of heat-related illnesses (from mild heat stress to fatal heat stroke). Certain groups are more vulnerable to heat exposure. These include the elderly, young children, people with pre-existing health conditions (such as heart or lung disease), and African Americans.<sup>151</sup> Workers who engage in vigorous physical activity, especially outdoors, are also at risk, including workers in construction, firefighting, and agriculture. Farmworkers die of heat-related causes at 20 times the rate of the rest of the U.S. civilian workforce. Since 2005, the first year California began tracking the number of heat-related fatalities, 36% of California's heat-related worker deaths have been of farmworkers. Similarly, although construction workers comprise

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<sup>151</sup> Heat deaths or illness are underreported or misclassified. Hence, the available data on heat-related illnesses and deaths likely underestimate the full health impact of exposure to periods of high temperatures.

only 6% of the national workforce, they account for 36% of heat-related deaths.

213. The rate of occupational heat-related deaths in California slightly exceeds the national average. In 2006, dramatic increases in many heat-related illnesses and deaths were reported following a record-breaking heat wave. Over 16,000 excess emergency room visits, over 1,100 excess hospitalizations, and at least 140 deaths occurred between July 15 and August 1, 2006. Projections for California estimate about a 10- to 20-fold increase in the number of extremely hot days by the mid-21st century, and about a 20- to 30-fold increase by the end of the century.

214. Californians already experience the worst air quality in the nation. Hotter temperatures lead to more smog, which can damage lungs, and increase childhood asthma, respiratory and heart disease, and death. Air quality is expected to deteriorate due to rising temperatures, as ground-level ozone and particulate matter concentrations rise. Ozone and particulate matter are associated with a wide range of harmful health effects in humans, including cardiovascular disease, cancer, and asthma.

215. The smoke from climate change-driven wildfires has also compromised and will further compromise California's air quality. Smoke from these fires has reached everywhere in California, clogging the skies, eclipsing the sun, and suffocating Californians' air. Wildfire smoke is a complex mixture of toxic gases, fine particulate matter, and other pollutants. Most of the state has experienced large increases in wildfire-driven air pollution when comparing air quality data from 2002-2013 with those from 2014-2020. During the 2020 Fire Siege, all of California was covered by wildfire smoke for over 45



days—and 36 counties for at least 90 days. Altogether, more than half of California’s population experienced approximately one month characterized by unhealthy, very unhealthy, or hazardous levels of wildfire smoke during the 2020 fire season. The five highest average daily air pollution readings ever recorded in California occurred in 2020.

216. The decline in air quality from wildfire smoke has had pernicious impacts on the State’s public health. Exposure to wildfire smoke has been linked to respiratory infections, cardiac arrests, low birth weight, mental health conditions, and exacerbated asthma and chronic obstructive pulmonary disease. Sensitive groups, such as children, pregnant people, and the elderly; those with underlying health conditions; and those whose occupations require working outdoors with greater exposure to wildfire smoke, such as agricultural workers, suffer an even greater risk of harmful health effects from wildfire smoke. Researchers from Stanford University estimated California wildfire smoke likely led to at least 1,200 and as many as 3,000 excess California deaths between August 1 and September 10, 2020 alone.

217. Heavy precipitation, sea level rise, and extreme weather events will lead to more frequent flooding, which causes death and injury in addition to secondary health risks such as damage to sanitation infrastructure, aggravation of chronic diseases, and contamination of drinking water, land, and property which jeopardizes human health and the State economy. As one example, the alternating cycle of heavy precipitation and heat attributed to climate change provides an ideal condition for fungal Valley Fever outbreaks. Sea level rise and increased flooding

are also expected to lead to increased risk of contamination and chemical exposure due to flooding of toxic sites. These risks are particularly acute for California because 68.5% of the state's population lives in the coastal areas. As pest seasons and ranges expand, vector-and tick-borne illnesses will increase in California's population. The State has borne, and will continue to bear, costs associated with mitigating and responding to these public health threats.

## **5. Extreme Storms and Flooding**

218. Much of California's winter precipitation arrives in the form of "atmospheric river" storms, which are fed by long streams of water vapor transported from the Pacific Ocean. These storms deliver extreme precipitation when their moisture-laden winds encounter California's coastal mountain ranges.

219. Atmospheric rivers and the heavy precipitation they bring are the major cause of historical floods in California, resulting significant damage to property and public infrastructure and substantial economic losses.

220. Studies uniformly show that atmospheric rivers are likely to become more frequent and more intense in the future, in part because warmer air allows atmospheric rivers to hold more moisture. In a warmer future climate, total precipitation in atmospheric river events is projected to increase by about 25% on average throughout the state, and maximum hourly precipitation rates may increase by 30%.

221. With the increased likelihood of extreme storms comes an increased risk of catastrophic flooding. Because warming temperatures will cause a

lower proportion of winter storms to fall as snow, the predicted 25% increase in total precipitation from atmospheric river events will result in 50% more runoff, posing significant flood risks. Additionally, higher hourly precipitation rates will result in short-duration bursts of intense precipitation, which pose a significant risk of flash flooding and related hazards, such as mudslides.

222. One recent study analyzed the likelihood that California would experience a “megaflood” in the future—a historically rare flood caused by 30 consecutive days of precipitation. Researchers found that the annual likelihood of a megaflood increases rapidly for each 1°C of global warming, and that warming as of 2022 has already doubled the annual likelihood of a megaflood. By 2060, megafloods—which historically occurred approximately once every two hundred years—may occur three times per century.

223. The State’s water infrastructure consists of dams, reservoirs, aqueducts, canals, spillways, levees, and pumping plants designed to store and transport water and reduce flood risk. Much of this infrastructure was designed to operate within historical ranges of precipitation and temperatures, not the more frequent and intense storms that the State will face in the warming future. The flood improvement investments needed in the Central Valley alone are expected to cost the State between \$1.8 and \$2.8 billion through 2027. In the winter of 2022 to 2023, California experienced a series of severe atmospheric river storms that broke precipitation records throughout the state, with some areas of the state receiving more than 200% of average precipitation. These storms had devastating effects

throughout California. More than 80 state park properties were fully or partially closed due to storm impacts. In March 2023, the Pajaro River breached a levee on the border of Monterey and Santa Cruz counties, triggering evacuation orders and warnings for more than 8,500 people, and leaving residents of the unincorporated community of Pajaro without safe drinking water for the next month. In the Central Valley, Tulare Lake—which was drained to support agriculture in the early 1900s and has been largely dry since—reappeared, flooding 168 square miles, and grew in size as the Sierra snowpack melted.

224. Floods can cause emergency conditions such as power, water, and gas outages; disrupt transportation routes and commercial supplies; damage homes, buildings, and roads; and cause severe environmental problems, including landslides and mudslides, which require response and recovery efforts by the State. Household, industrial, agricultural, and other wastes can contaminate floodwaters, creating chemical and biological public health risks to impacted communities. Flooding from storms often leads to increased sanitary sewer overflows. Drinking water supplies are often inundated with sewage and other contaminants from flood waters resulting in water use restrictions, including Boil Water Notices and Do Not Drink Orders, limiting or eliminating drinking water for communities. Burn scars from wildfires increase the risk of debris flows during episodes of increased precipitation. Locations downhill and downstream from burned areas are susceptible to flash flooding and debris flows, especially near steep terrain. Rainfall that would normally be absorbed will run off extremely quickly after a wildfire. As a result, after a wildfire, much less rainfall is required to produce a

flash flood. The force of the rushing water and debris can damage or destroy culverts, bridges, roadways, and buildings even miles away from the burned area.

225. In addition, extreme precipitation events can cause inundation of toxic waste sites, leading containment systems and structures not designed for extreme weather events to fail and release contamination.

226. The State has borne, and will continue to bear, the costs of constructing, maintaining, and upgrading water infrastructure, including flood management infrastructure, and otherwise responding to the damage caused by extreme storms and flooding.

## **6. Damage to Agriculture**

227. California is a global leader in the agricultural sector and produces more than 400 types of commodities. The state produces over a third of the country's vegetables and two-thirds of its fruits and nuts. California is the largest and most diverse agricultural state in the United States.

228. While California farmers and ranchers have always been affected by the natural variability of weather from year to year, the increased rate and scale of climate change is beyond the realm of experience for the agricultural community.

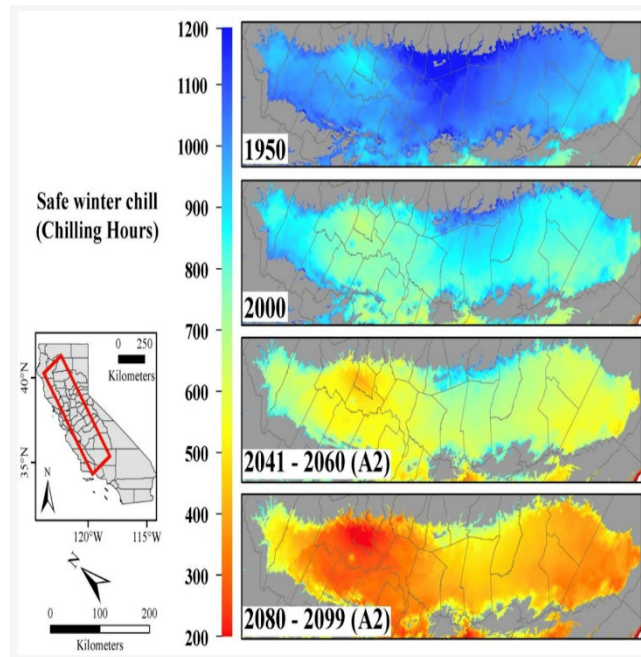
229. Agricultural production in California is highly sensitive to climate change. Changes in temperatures and in the amounts, forms, and distribution of precipitation, increased frequency and intensity of climate extremes, and water availability are a few examples of climate-related challenges to California's agriculture sector. Irrigated agriculture produces nearly 90% of the harvested crops in

California, and a decrease in water availability could reduce crop areas and yields. Drought can adversely affect agricultural crop production by slowing plant growth and causing severe crop yield losses. Lower stream flow and groundwater levels as a consequence of drought can harm plants by increasing the risk of wildfires when vegetation and soil surface dry out. Warmer environments can cause greater runoff caused by faster snowmelt. This, in turn, causes reservoirs to fill up earlier, increasing the odds of both winter flooding and summer water deficits. Increasing temperatures result in more flooding events, which greatly affect plant survival through a reduction in oxygen availability, root asphyxia, and an increase in disease and nitrogen losses.

230. Changes in California's climate are negatively influencing California's highly productive agricultural industry. Impacts on agriculture include low chill hour accumulations, crop yield declines, increased pest and disease pressure, increased crop water demands, altered phenology of annual and perennial cropping systems, and uncertain future sustainability of some highly vulnerable crops.

231. Permanent crops are among the most profitable commodities in California. They are most commonly grown for more than 25 years, which makes them more vulnerable to impacts of climate change. Most of the permanent crops in California require several years to reach maturity and profitable production. California has already observed a significant loss of winter chill hours, due to an increase in average winter temperatures. Winter chill hours are defined as the number of hours spent below 45°F, necessary for the flowers of fruits and nuts to bloom, and required by certain crops to achieve high

yields. According to University of California researchers, around the year 1950, growers in the Central Valley could rely on having between 700 and 1,200 chill hours annually. For chilling requirements of 500 hours (chestnut, pecan, and quince), only about 78% of the Central Valley will be suitable for production by the end of the 21st century. For chilling requirements of more than 700 hours (apricot, kiwifruit, peach, nectarine, plum, and walnut), only 23–46% of the valley remains suitable, and only 10% will remain suitable by 2080–2095. Only 4% of the area of the Central Valley was suitable in the year 2000 for species such as apples, cherries, and pears, which have annual chilling requirements of more than 1,000 hours; however, virtually no areas in California will remain suitable by 2041–2060 under any emissions scenario for these types of fruit crops.



**Figure 23: California Central Valley Winter Chill Hours in 1950, 2000, 2041–2060, and 2080–2099**

232. Increases in invasive pests, changes to plant and pest interactions, and increases in plant and animal diseases in agriculture are some additional potential impacts from climate change. University of California researchers have indicated that due to climate change, by 2050, yields are projected to decline by 40% for avocados and 20% for almonds, table grapes, oranges, and walnuts. In 2021, drought resulted in the fallowing of nearly 400,000 acres of fields. Direct crop revenue losses were approximately \$962 million, and total economic impacts were more than \$1.7 billion, with over 14,000 full- and part-time job losses. During the 2011–2017 drought, California’s agricultural industry suffered at least \$5 billion in



losses. Because California feeds not only its own residents, but the entire U.S. and other countries as well, production declines could lead to food shortages and higher prices.

### **7. Sea Level Rise, Coastal Flooding and Coastal Erosion**

233. Climate change causes sea level rise in two primary ways: (1) by causing the melting of ice sheets and glaciers, and (2) by warming seawater, which consequently expands. Sea level rise is already accelerating along the California coast and will continue to rise substantially over the twenty-first century, threatening coastal communities, natural resources, cultural sites, and infrastructure.

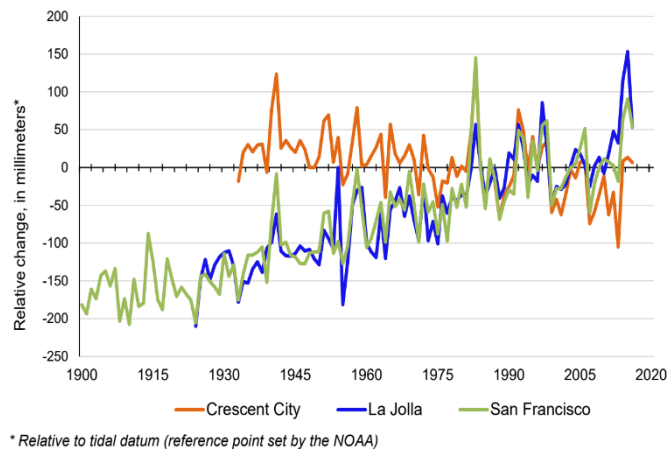
234. California has approximately 1,100 miles of coastline. California's 19 coastal counties are home to 68% of its people, 80% of its wages, and 80% of its GDP.<sup>152</sup> The sea level along California's coasts has risen nearly eight inches in the past century and is projected to rise by 3.5 feet, and as much as 6.6 feet under extreme scenarios, by the end of the century. As the Earth gradually warms, sea level rise will continue to threaten coastal communities and infrastructure through more frequent flooding (followed by permanent inundation of low-lying areas), and increased erosion of cliffs, bluffs, dunes, and beaches. Across California, accelerating sea level rise will cause an exponential increase in the frequency of coastal flooding events, doubling with approximately every two to four inches of sea level rise. Sea level rise could put 600,000 people at risk of flooding by the year 2100, and threaten \$150 billion in

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<sup>152</sup> California's gross domestic product, or GDP, is the value of all goods and services produced in California.

property and infrastructure, including roadways, buildings, hazardous waste sites, power plants, and parks and tourist destinations. Coastal erosion could have a significant impact on California's ocean-dependent economy, which is the nation's largest, and estimated to exceed \$45 billion per year. Critical infrastructure located on the shore, such as wastewater treatment plants, power stations, and transportation corridors, will also be affected. Sea level rise also pushes shallow groundwater closer to the surface, a process that may release contaminants buried in the soil.

235. Sea levels along the California coast have generally risen over the past century, except along the far north coast where uplift of the land surface has occurred due to the movement of the Earth's plates, as illustrated in the following chart.



**Figure 24: Annual Mean Sea Level Trends**

236. Coastal wave events and high tides, in combination with current and rising sea levels, will increase flood impacts on land, which will exacerbate the impact on coastal assets. Rising sea levels may

also contaminate coastal groundwater aquifers and raise groundwater tables, causing increased flooding leading to impacts that will, among other things, further damage buried and low-lying infrastructure.

237. Coastal recreation and tourism are vulnerable to repeated and increasing disruptions from sea level rise, flooding, and erosion. Accelerated erosion and flooding diminish the number and quality of beaches. Beach closures have already occurred in California because of erosion and high storm surges, and such closures impact tourism and result in natural resource damage. Areas including some state parks and beaches will suffer further erosion due to sea level rise.

238. Rising water levels and increased storm activity will increase coastal erosion, impacting beaches and cliffs throughout the state. For example, a projected 31–67% of Southern California beaches are projected to completely erode by the end of the century if adaptation actions are not implemented.

239. Billions of dollars' worth of real estate development, primarily residential properties, line the California seashore. All of California's low-lying communities, as well as developments on cliffs, bluffs, dunes, or the beach itself, and their associated infrastructure, are vulnerable to the impacts of a rising sea. King tides, and/or storm events—often accompanied by the simultaneous arrival of large waves—have already impacted many of these areas repeatedly.

240. Saltwater intrusion from sea level rise is also expected to impair water quality in coastal groundwater aquifers, as well as surface water supplies, as the salt front moves upstream. Water

quality will also be degraded as rising sea levels submerge sewer discharge points, allowing contaminants to move into waterways and the surrounding environment. Industrial sites located in coastal areas will be at a greater risk of pollutant discharge into the State's waters.

241. Rising seas will inundate coastal infrastructure, including wastewater treatment plants and toxic cleanup sites where contaminants may be mobilized and risk spreading contamination to nearby vulnerable communities. Hundreds of such sites in the state are potentially vulnerable to impacts from sea level rise.

242. Sea level rise in California not only threatens coastal communities, but also threatens the health of the Sacramento-San Joaquin Delta, the heart of the California water supply system, the source of water for 25 million Californians and millions of acres of prime farmland, and essential habitat for imperiled native wildlife. Sea level rise in California could lead to flooding of low-lying areas, loss of coastal wetlands, saltwater contamination of drinking water, impacts on roads and bridges, and increased stress on levees. It may also require increased flows to prevent saltwater intrusion into the Bay-Delta system.

### **8. Ecosystem, Habitat, and Biodiversity Disruption**

243. California is one of the most biologically diverse regions of the world, with the highest number of unique plant and animal species of all 50 states, and the greatest number of endangered species. Moreover, due to its diverse topographic, geologic, and climate conditions, California is one of 25 global biodiversity hotspots, where exceptional concentrations of endemic

species are experiencing significant habitat loss. California's diverse climates are closely linked to the State's biodiversity; climate change is therefore expected to directly and indirectly impact California's terrestrial and marine habitats and species—and indeed already is impacting them.

244. Healthy ecosystems and biodiversity provide a plethora of direct and indirect benefits to Californians and the State's economy, such as clean air, clean water, crop pollination, and recreational opportunities such as hunting, fishing, and wildlife viewing. These "ecosystem services" are tied to biodiversity and will therefore be negatively impacted by climate change.

245. Climate change can affect biodiversity in many ways. For example, species can be directly impacted, like salmon being exposed to warming stream temperatures that threaten their survival. Species can also be affected indirectly, through climate-induced changes in food, water, and habitat availability. Since ecosystems are highly interconnected, impacts to individual species often have consequences for other species within the system.

246. As a result of climate change, California has seen, and will continue to see, the following impacts on its ecosystems: shifts in species abundance and distributions; shifts in the timing of important life-cycle events such as pollination, flowering, breeding, and migration; the spread of invasive species and pests, which pose a threat to the survival of native species and usually disrupt ecosystem processes; and habitat loss and species extinctions. Throughout California, these types of changes have been observed

across terrestrial, freshwater, estuarine, and marine ecosystems.

247. More specifically, some of the effects of climate change on habitat and biodiversity in California will include the following:

a. *Physiological stress on species due to changes in temperature and precipitation.* Warming temperatures, declining snowpack, and earlier spring snowmelt runoff create stresses on vegetation. This stress will cause shifts in geographic ranges, and will facilitate the spread of invasive species, pests (such as the bark beetle), pathogens, and diseases that affect ecosystems and species, and generally cause population declines. For example, tree deaths have increased dramatically in California since the 2012-2016 drought; approximately 129 million trees died in California between 2012 and 2017. Higher temperatures and decreased water availability made the trees more vulnerable to insects and pathogen attacks. Some of the most heavily impacted vegetation regions are predicted to be the Sierra Nevada foothills; the south coast, including Los Angeles and San Diego; the deserts; and potentially the coast ranges north of the San Francisco Bay Area. Similarly, in three study regions of the Sierra Nevada, the habitat ranges of almost 75% of the small mammalian species and over 80% of the bird species surveyed were observed to have shifted compared to a century ago.

b. *Impacts to timing of species' lifecycle phases due to shifting timing of climatic events.* Changes in temperature, precipitation, food sources, competition for prey, and other physical or biological elements may cause detrimental alterations in the timing of key life cycle events for plants and animals, harming population health and further shifting the ranges

where these plants and animals can survive. For example, some butterfly species emerge at the same time that their host plants flower. Warming temperatures are linked with earlier flowering times, and if butterflies and host plants are not able to adapt to a shifting climate at the same rate, butterflies may have insufficient food, and the host plants may lack pollinators. As another example, shifts in suitable climatic conditions for seedling establishment for two common California oak species have caused significant decreases in seedling “establishment windows,” which is likely to bring about future population declines.

c. *Aquatic ecosystem and marine habitat impacts.* Shifts anticipated and already observed in precipitation and water flow patterns have negatively impacted water quality (e.g., due to sedimentation or algal blooms) and habitat suitability. As one example, harmful algal blooms are becoming more frequent and more intense across California as waters warm. These blooms, which result from the overgrowth of algae, caused 18 human illnesses and 444 animal illnesses in California in 2021 alone. Further, shifts in quantities of sediment in waterways have significant consequences, including declining water quality due to increases in contaminants such as pesticides, herbicides, nutrients, and mercury. Under current GHG emissions trajectories, 82% of native California freshwater fishes have an increased probability of becoming extinct by 2100; these include many species that are already at risk and listed as species of special concern or species that are endangered, including salmon and steelhead trout. In contrast, non-native species are thriving in the increasingly warm waters of California’s rivers and reservoirs, taking the place of many native fishes. Further, ocean acidification and

warming have a broad variety of effects, negatively impacting everything from copepods at the base of the food chain to Chinook salmon and sea lion pup births.

248. The State has incurred damages as a direct and proximate result of Defendants' conduct. The State has planned and is planning, at significant expense, adaptation and mitigation strategies to address climate change-related impacts in order to preemptively mitigate and/or prevent injuries to itself and its residents.

249. The scale of transformation needed over this decade to avoid the worst impacts of climate change is extraordinary. The State has made investments of a historic scale to advance the all-of-government approaches necessary to avert the worst impacts of climate change. For example, California's \$52.2 billion Climate Change Commitment for 2021 through 2027 includes \$10 billion for zero-emission vehicles, \$2.1 billion for clean energy investments, \$13.8 billion for programs that reduce emissions from the transportation sector, such as improving public transportation while also funding walking, biking, and adaptation projects, and \$13.2 billion for wildfire risk reduction, drought mitigation, extreme heat resilience, and nature-based solutions.

250. The State has spent tens of billions of dollars to adapt to climate change and address the damages climate change has caused so far, and the State will need to spend multiples of that figure in the years to come.

251. Defendants' tortious and deceptive conduct was a substantial factor in bringing about these and other climate-related injuries suffered by the State, including harms to its infrastructure, environment,



socioeconomic condition, and public health, that it has endured, and foreseeably will endure, due to the climate crisis. Moreover, the brunt of these injuries and harms will fall on frontline communities, as climate change exacerbates existing public health and environmental disparities.

252. Defendants' tortious and deceptive conduct as described herein is therefore an actual, direct, and proximate substantial-factor cause of the State's climate crisis-related injuries and brought about or helped to bring about those injuries. Such injuries include, but are not limited to, harms due to delayed responses to climate change caused by Defendants' behavior.

## **V. CAUSES OF ACTION**

### **FIRST CAUSE OF ACTION**

#### **PUBLIC NUISANCE**

(Civil Code Sections 3479, 3480, and 3494)

(Against All Defendants)

253. Plaintiff re-alleges and incorporates by reference the allegations in each of the preceding paragraphs as though fully set forth herein.

254. Under Civil Code section 3479, a "nuisance" is "anything which is injurious to health," including, but not limited to, "an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property," or anything which "unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin, or any public park, square, street, or highway."

255. Under Civil Code section 3480, a “public nuisance” is “one which affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.”

256. Pursuant to Civil Code section 3494, a “public nuisance may be abated by any public body or officer authorized thereto by law.” As courts have recognized, the Attorney General is such a public officer authorized to bring an action in the name of the People of the State of California to abate a public nuisance.

257. Defendants, individually and in concert with each other, by their affirmative acts and omissions, have created, contributed to, and assisted in creating harmful climate-related conditions throughout California, including extreme heat, drought, increased wildfire risk, air pollution, flooding, damage to agriculture, sea level rise, coastal erosion, habitat destruction, and loss of ecosystems, with compounding effects in frontline communities. These climate-related harms are injurious to health, indecent and offensive to the senses, and obstruct the free use of property, so as to interfere with the comfortable enjoyment of life and property, and therefore constitute a nuisance.

258. Defendants, and each of them, created, caused, contributed to, and assisted in the creation of these and other climate-related harms in California by, among other things, affirmatively promoting the sale and use of fossil fuel products in California which Defendants knew would cause or exacerbate climate change and its impacts, including, without limitation extreme heat, drought, increased wildfire risk, public health injuries, extreme weather, and sea level rise.

259. The climate-related harms that Defendants created, caused, contributed to, and assisted in the creation of, have substantially and unreasonably interfered with the exercise of rights common to the public, including the public health, the public safety, the public peace, the public comfort, and the public convenience. These interferences with public rights include, among other things, affirmatively promoting the sale and use of fossil fuel products in California, which Defendants knew would cause or exacerbate climate change and its impacts, including without limitation extreme heat, drought, increased wildfire risk, public health injuries, extreme weather, and sea level rise.

260. The climate-related harms that Defendants created, caused, contributed to, and assisted in the creation of, have substantially and unreasonably interfered with the exercise of rights common to the public, including the public health, the public safety, the public peace, the public comfort, and the public convenience. These interferences with public rights include, among other things:

a. Extreme heat events, which increase the risk of injury or death from dehydration, heat stroke, heart attack, and respiratory problems;

b. Frequent and severe droughts, which can result in drinking water shortages and land subsidence due to groundwater depletion;

c. Catastrophic wildfires, which destroy California's natural resources and residents' homes, while also emitting dangerous pollutants into the air and severely compromising air quality;

d. Increased smog from hotter temperatures, which damages lungs and increases rates of childhood

asthma, respiratory and heart disease, and death, and which reduces visibility and obstructs scenic views;

e. Extreme winter storms, which cause flooding that can damage public infrastructure, obstructing the free passage and use of property;

f. Damage to agriculture, including reduced crop yields that could lead to food shortages;

g. Sea level rise, coastal inundation, and groundwater changes, which obstruct the free passage and use of roads and property, impair water quality in groundwater aquifers, damage critical public infrastructure such as power plants and airports, and lead to unprecedented and dangerous storm surges that can cause injury or even deaths; and

h. Significant disruptions to California's ecosystems and biodiversity, including the spread of invasive species and pests and the risk of extinction for California's native species.

261. The harms caused by Defendants' nuisance-creating conduct are extremely grave, and far outweigh the social utility of that conduct.

262. The climate-related harms that Defendants created, caused, contributed to, and assisted in the creation of are present throughout California, and therefore affect a considerable number of persons in California.

263. The climate-related harms that Defendants created, caused, contributed to, and assisted in the creation of continue to harm to the State and its people into the present day, and will continue to harm the State and its people many years into the future.

264. As a direct and proximate result of Defendants' acts and omissions, the State will be

required to expend significant public resources to mitigate the impacts of climate-related harms throughout California.

265. As a direct and proximate result of Defendants' acts and omissions, Californians have sustained and will sustain injuries to public health, safety, and welfare; the loss of use and enjoyment of natural resources; and obstruction to the free use of property, harms for which Defendants are jointly and severally liable.

266. Defendants' acts and omissions have caused or threaten to cause injuries to people, properties, and natural resources in California that are indivisible.

267. The State seeks abatement of the public nuisance caused by Defendants.

268. The State requests that this Court order Defendants, and each of them jointly and severally, to abate the nuisance, including by making payments into an abatement fund to address the public nuisance.

## **SECOND CAUSE OF ACTION**

### **ACTION FOR EQUITABLE RELIEF FOR POLLUTION, IMPAIRMENT, AND DESTRUCTION OF NATURAL RESOURCES**

(Government Code Section 12607)

(Against All Defendants)

269. Plaintiff re-alleges and incorporates by reference the allegations in each of the preceding paragraphs as though fully set forth herein.

270. Government Code section 12607 authorizes the Attorney General to "maintain an action for equitable relief in the name of the People of the State

of California against any person for the protection of the natural resources of the state from pollution, impairment, or destruction.”

271. “Natural resource” is defined to include “land, water, air, minerals, vegetation, wildlife, silence, historic or aesthetic sites, or any other natural resource which, irrespective of ownership contributes, or in the future may contribute, to the health, safety, welfare, or enjoyment of a substantial number of persons, or to the substantial balance of an ecological community.” (Gov. Code, § 12605.)

272. As a result of Defendants’ misconduct, climate-related conditions are polluting, impairing, and destroying the State’s natural resources.

273. As a result of Defendants’ misconduct, climate-related conditions are polluting, impairing, and destroying “other natural resources” as described in the statute which, “irrespective of ownership contribute, or in the future may contribute, to the health, safety, welfare, or enjoyment of a substantial number of persons, or to the substantial balance of an ecological community.” (Gov. Code, § 12605.)

274. This pollution, impairment, and destruction of natural resources, including water, wildlife, and other natural resources, is continuing in nature.

275. Defendants, and each of them, have engaged in and continue to engage in, conduct that caused or contributed to the pollution, impairment, and destruction of natural resources, including water resources, wildlife, and other natural resources. The acts and practices engaged in by Defendants that polluted, impaired, and destroyed natural resources include the following:

a. affirmatively and knowingly promoting the sale and use of fossil fuel products in California which Defendants knew would cause or exacerbate climate change and its impacts, including extreme heat, drought, extreme weather, and sea level rise;

b. affirmatively and knowingly concealing the hazards that Defendants knew would result from the use of their fossil fuel products by misrepresenting and casting doubt on the integrity of scientific information related to climate change;

c. affirmatively promoting fossil fuel products for uses that Defendants knew would be dangerous and cause harm to consumers, the public, and the State;

d. disseminating and funding the dissemination of information intending to mislead customers, consumers, lawmakers, and the public regarding the known and foreseeable risks of climate change and its consequences that follow from the normal, intended use of fossil fuel products;

e. delaying the development of viable clean energy alternatives by preventing customers, the media, policymakers, and the public from having access to full and accurate information material to their energy purchasing decisions, thereby causing the emission of vast quantities of greenhouse gases into the atmosphere;

f. failing to warn the public about the hazards associated with the use of fossil fuel products; and

g. deceptively marketing their products as environmentally beneficial or benign when in reality those products contribute to climate change and are harmful to the health of the planet and its people.

276. Defendants' acts and omissions have caused pollution, impairment, and destruction of California's natural resources, including water, wildlife, and other natural resources that are indivisible.

277. Pursuant to Government Code section 12607, the State requests that this Court grant temporary and permanent equitable relief and impose such conditions upon Defendants as are required to protect the natural resources of California from pollution, impairment, or destruction.

278. Pursuant to Government Code section 12610, the State requests that this Court grant any and all temporary and permanent equitable relief needed to prevent further pollution, impairment and destruction of the natural resources of California, including the imposition of such conditions upon the Defendants as are required to protect the natural resources of California from pollution, impairment, or destruction.

### **THIRD CAUSE OF ACTION**

#### **UNTRUE OR MISLEADING ADVERTISING**

(Business and Professions Code Section 17500)

(Against All Defendants)

279. Plaintiff re-alleges and incorporates by reference the allegations in each of the preceding paragraphs as though fully set forth herein.

280. Defendants, and each of them, have engaged in and continue to engage in acts or practices that constitute violations of the False Advertising Law, Business and Professions Code section 17500 et seq.

281. Defendants, with the intent to induce members of the public to purchase and utilize fossil fuel products, made or caused to be made and/or



disseminated misleading statements concerning the fossil fuels, which Defendants knew, or by the exercise of reasonable care should have known, were untrue or misleading at the time they were made. Such misrepresentations include, but are not limited to:

a. Deceptively marketing fossil fuel products claimed to be “low carbon,” “emissions-reducing,” “clean” and/or “green,” or otherwise environmentally beneficial or benign, when in reality those products contribute to climate change and are harmful to the health of the planet and its people;

b. Deceptively promoting natural gas as a climate-friendly or environmentally friendly fuel, and/or as “clean” or “cleaner” than other fossil fuels, when in reality natural gas contributes to climate change and is harmful to the health of the planet and its people;

c. Deceptively marketing their companies and their products as contributing to solutions to climate change when in reality their investments in clean energy and alternative fuels pale in comparison to their investments in expanding fossil fuel production, and those alternative fuels, such as natural gas, contribute to climate change; and

d. Misleadingly promoting their companies as being in alignment with international goals to reduce carbon emissions and reach net-zero emissions, when in reality they are investing in maintaining and/or expanding their fossil fuel businesses.

**FOURTH CAUSE OF ACTION**  
**MISLEADING ENVIRONMENTAL**  
**MARKETING**

(Business and Professions Code Section 17580.5)

(Against All Defendants)

282. Plaintiff re-alleges and incorporates by reference the allegations in each of the preceding paragraphs as though fully set forth herein.

283. Defendants, and each of them, have made environmental marketing claims that are untruthful, deceptive, and/or misleading, whether explicitly or implicitly, in violation of Business and Professions Code section 17580.5.

284. Such misleading environmental marketing claims include, but are not limited to, such deceptive representations as:

a. Deceptively marketing fossil fuel products claimed to be “low carbon,” “emissions-reducing,” “clean” and/or “green,” or otherwise environmentally beneficial or benign, when in reality those products contribute to climate change and are harmful to the health of the planet and its people;

b. Deceptively promoting natural gas as a climate-friendly or environmentally friendly fuel, and/or as “clean” or “cleaner” than other fossil fuels, when in reality natural gas contributes to climate change and is harmful to the health of the planet and its people;

c. Deceptively marketing their companies and their products as contributing to solutions to climate change when in reality their investments in clean energy and alternative fuels pale in comparison to

their investments in expanding fossil fuel production, and those alternative fuels, such as natural gas, contribute to climate change; and

d. Misleadingly promoting their companies as being in alignment with international goals to reduce carbon emissions and reach net-zero emissions, when in reality they are investing in maintaining and/or expanding their fossil fuel businesses.

### **FIFTH CAUSE OF ACTION**

#### **UNLAWFUL, UNFAIR, OR FRAUDULENT BUSINESS PRACTICES**

(Business and Professions Code Section 17200)

(Against All Defendants)

285. Plaintiff re-alleges and incorporates by reference the allegations in each of the preceding and following paragraphs as though fully set forth herein.

286. Defendants have engaged in and continue to engage in unlawful, unfair, or fraudulent business acts or practices and unfair, deceptive, untrue, or misleading advertising that constitutes unfair competition as defined in the Unfair Competition Law, Business and Professions Code section 17200 et seq.

287. Defendants committed unlawful acts in violation of the Unfair Competition Law by, among other things:

a. Affirmatively promoting the use of fossil fuels while knowing that fossil fuels would lead to devastating consequences on the climate, and affirmatively misleading the public and casting doubt on climate science, thereby creating or assisting in the creation of a public nuisance, as alleged in the First Cause of Action;

b. Engaging in conduct that caused or contributed to the pollution, impairment, and destruction of natural resources in violation of Government Code section 12607, as alleged in the Second Cause of Action;

c. Disseminating untrue and misleading statements to the public in violation of Business and Professions Code section 17500, as alleged in the Third Cause of Action;

d. Making misleading environmental marketing claims in violation of Business and Professions Code section 17580.5, as alleged in the Fourth Cause of Action; and

e. Failing to warn consumers of the known risks of fossil fuel use in violation of common law, as alleged in the Sixth and Seventh Causes of Action, which follow and which Plaintiff incorporates by reference herein.

### **SIXTH CAUSE OF ACTION**

#### **STRICT PRODUCTS LIABILITY**

(Failure to Warn)

(Against All Fossil Fuel Defendants)

288. Plaintiff re-alleges and incorporates by reference the allegations in each of the preceding paragraphs as though fully set forth herein.

289. At all relevant times the Fossil Fuel Defendants, and each of them, extracted, refined, formulated, designed, packaged, manufactured, merchandised, advertised, promoted, and/or sold fossil fuel products, which were intended by the Fossil Fuel Defendants to be combusted for energy, refined into petrochemicals, and refined and/or incorporated into

petrochemical products including fuels and plastics. The Fossil Fuel Defendants placed these fossil fuel products into the stream of commerce.

290. The Fossil Fuel Defendants, and each of them, heavily marketed, promoted, and advertised fossil fuel products and their derivatives, which were sold or used by their respective affiliates and subsidiaries. The Fossil Fuel Defendants received direct financial benefit from their affiliates' and subsidiaries' sales of fossil fuel products. The Fossil Fuel Defendants' roles as promoters and marketers were integral to their respective businesses and a necessary factor in bringing fossil fuel products and their derivatives to the consumer market, such that the Fossil Fuel Defendants had control over, and a substantial ability to influence, the manufacturing and distribution processes of their affiliates and subsidiaries.

291. Throughout the times at issue, the Fossil Fuel Defendants individually and collectively knew or should have known that fossil fuel products, whether used as intended or used in a foreseeable manner, release greenhouse gases into the atmosphere, inevitably causing, among other things, global warming, heat waves, more frequent and extreme droughts, precipitation events, sea level rise, and the associated consequences of those physical and environmental changes.

292. Throughout the times at issue and continuing today, fossil fuel products presented, and still present, a substantial danger to the State and its people through the climate harms described herein, whether used as intended or used in a reasonably foreseeable manner.

293. Throughout the times at issue, the ordinary consumer would not recognize that the use of fossil fuel products causes global and localized changes in climate, and consequent injuries to California, its communities, and its resources, as described herein.

294. Throughout the times at issue, the Fossil Fuel Defendants individually and in concert widely disseminated false, and misleading marketing materials; cast doubt upon the consensus on climate change within the scientific community at the time; advanced pseudo-scientific theories of their own; and developed public relations campaigns and materials that prevented reasonable consumers from recognizing the risk that fossil fuel products would cause grave climate harms, including those described herein.

295. Notwithstanding the Fossil Fuel Defendants' superior knowledge of the risks posed by their fossil fuel products, the Fossil Fuel Defendants, and each of them, failed to adequately warn customers, consumers, elected officials, and regulators of the known and foreseeable risks of climate change and the consequences that inevitably follow from the normal, intended use of the Fossil Fuel Defendants' fossil fuel products.

296. Any warnings that the Fossil Fuel Defendants might have disseminated were rendered ineffective and inadequate by their false and misleading public statements about the dangers of their fossil fuel products, and their widespread and longstanding efforts to conceal and misrepresent the dangers inherent in the use of their fossil fuel products.

297. Had the Fossil Fuel Defendants provided adequate warnings, their fossil fuel products would not have had widespread acceptance in the marketplace, and alternatives to fossil fuel products would have been developed sooner. In addition, if the Fossil Fuel Defendants had adequately warned of the adverse impacts to public health and the environment caused by the ordinary and foreseeable use of their fossil fuel products, the State and its residents would have taken measures to avoid or lessen those impacts in California.

298. The Fossil Fuel Defendants' acts and omissions as alleged herein are indivisible causes of the State's injuries as alleged herein.

299. The Fossil Fuel Defendants' wrongful conduct was oppressive, malicious, and fraudulent, in that their conduct was willful, intentional, and in conscious disregard for the rights of others. Defendants' conduct was so vile, base, and contemptible that it would be looked down upon and despised by reasonable people, justifying an award of punitive and exemplary damages, in an amount subject to proof.

300. As a direct and proximate result of the Fossil Fuel Defendants' failure to warn, their fossil fuel products caused the State to sustain the injuries and damages set forth in this Complaint, and will cause future injuries and damages to State as set forth in this Complaint, including, without limitation, damage to State property, State infrastructure, and natural resources. The State seeks compensatory damages for these injuries in an amount subject to proof.

**SEVENTH CAUSE OF ACTION**  
**NEGLIGENT PRODUCTS LIABILITY**

(Failure to Warn)

(Against All Fossil Fuel Defendants)

301. Plaintiff re-alleges and incorporates by reference the allegations in each of the preceding paragraphs as though fully set forth herein.

302. At all relevant times the Fossil Fuel Defendants, and each of them, extracted, refined, formulated, designed, packaged, manufactured, merchandised, advertised, promoted, and/or sold fossil fuel products, which were intended by the Fossil Fuel Defendants to be combusted for energy, refined into petrochemicals, and refined and/or incorporated into petrochemical products including fuels and plastics. The Fossil Fuel Defendants placed these fossil fuel products into the stream of commerce.

303. The Fossil Fuel Defendants, and each of them, heavily marketed, promoted, and advertised fossil fuel products and their derivatives, which were sold or used by their respective affiliates and subsidiaries. The Fossil Fuel Defendants received direct financial benefit from their affiliates' and subsidiaries' sales of fossil fuel products. The Fossil Fuel Defendants' roles as promoters and marketers were integral to their respective businesses and a necessary factor in bringing fossil fuel products and their derivatives to the consumer market, such that the Fossil Fuel Defendants had control over, and a substantial ability to influence, the manufacturing and distribution processes of their affiliates and subsidiaries.



304. Throughout the times at issue, the Fossil Fuel Defendants individually and collectively knew or should have known that fossil fuel products, whether used as intended or in a foreseeable manner, release greenhouse gases into the atmosphere, inevitably causing, among other things, global warming, more frequent and extreme heat waves, more frequent and extreme droughts, injuries to public health, more frequent and extreme precipitation events, sea level rise, and the associated consequences of those physical and environmental changes.

305. Throughout the times at issue and continuing today, fossil fuel products presented and still present a substantial danger to the State and its people through the climate effects described herein, whether used as intended or in a reasonably foreseeable manner.

306. Throughout the times at issue, the ordinary consumer would not recognize that the use of fossil fuel products causes global and localized changes in climate, and consequent injuries to California, its communities, and its resources, as described herein.

307. Throughout the times at issue, the Fossil Fuel Defendants individually and in concert widely disseminated false and misleading marketing materials; cast doubt in the public's mind about the consensus on climate change within the scientific community at the time; advanced pseudo-scientific theories of their own; and developed public relations campaigns and materials that prevented reasonable consumers from recognizing the risk that fossil fuel products would cause grave climate changes, including those described herein.

308. Notwithstanding the Fossil Fuel Defendants' superior knowledge of the risks posed by their fossil fuel products, the Fossil Fuel Defendants, and each of them, failed to adequately warn customers, consumers, elected officials, and regulators, including in California, of the known and foreseeable risks of climate change and the consequences that inevitably follow from the normal, intended use of the Fossil Fuel Defendants' fossil fuel products.

309. Given the grave dangers caused by normal or foreseeable use of fossil fuel products as described herein, a reasonable extractor, refiner, formulator, designer, manufacturer, merchandiser, advertiser, promoter, or seller responsible for introducing fossil fuel products into the stream of commerce, would have warned of those known and inevitable climate effects.

310. Any warnings that the Fossil Fuel Defendants might have disseminated were rendered ineffective and inadequate by their false and misleading public statements about the dangers of their fossil fuel products, and their widespread and longstanding efforts to conceal and misrepresent the dangers inherent in the use of their fossil fuel products.

311. Had the Fossil Fuel Defendants provided adequate warnings, their fossil fuel products would not have had widespread acceptance in the marketplace, and alternatives to fossil fuel products would have been developed sooner. In addition, if the Fossil Fuel Defendants had adequately warned of the adverse impacts to public health and the environment caused by the ordinary and foreseeable use of their fossil fuel products, the State and its residents would have taken measures to avoid or lessen those impacts in California.

312. The Fossil Fuel Defendants' acts and omissions as alleged herein are indivisible causes of the State's injuries as alleged herein.

313. The Fossil Fuel Defendants' wrongful conduct was oppressive, malicious, and fraudulent, in that their conduct was willful, intentional, and in conscious disregard for the rights of others. Defendants' conduct was so vile, base, and contemptible that it would be looked down upon and despised by reasonable people, justifying an award of punitive and exemplary damages in an amount subject to proof.

314. As a direct and proximate result of the Fossil Fuel Defendants' failure to warn, their fossil fuel products caused the State to sustain the injuries and damages set forth in this Complaint, and will cause future injuries and damages to State as set forth in this Complaint, including, without limitation, damage to State property, State infrastructure, and natural resources. The State seeks compensatory damages for these injuries in an amount subject to proof.

## **VI. PRAYER FOR RELIEF**

WHEREFORE, the State respectfully requests that the Court enter judgment in favor of the State and against Defendants, jointly and severally, as follows:

1. Compelling Defendants to abate the ongoing public nuisance their conduct has created in California, including by establishing and contributing to an abatement fund to pay the costs of such abatement;

2. Granting any and all temporary and permanent equitable relief and imposing such conditions upon the Defendants as are required to protect and/or prevent further pollution, impairment

and destruction of the natural resources of California, including the imposition of such conditions upon the Defendants as are required to protect the natural resources of California from pollution, impairment, or destruction, pursuant to Government Code sections 12607 and 12610;

3. Pursuant to Business and Professions Code section 17535, entering all orders necessary to prevent Defendants, along with Defendants' successors, agents, representatives, employees, and all persons who act in concert with Defendants, from making any false or misleading statements in violation of Business and Professions Code section 17500 or 17580.5;

4. Pursuant to Business and Professions Code section 17203, entering all orders necessary to prevent Defendants, along with Defendants' successors, agents, representatives, employees, and all persons who act in concert with Defendants, from engaging in any act or practice that constitutes unfair competition in violation of Business and Professions Code section 17200;

5. Pursuant to Business and Professions Code section 17535, entering all orders or judgments as may be necessary to restore to any person in interest any money or other property that Defendants may have acquired by violations of Business and Professions Code section 17500 or 17580.5;

6. Pursuant to Business and Professions Code section 17203, entering all orders or judgments as may be necessary to restore to any person in interest any money or other property that Defendants may have acquired by violations of Business and Professions Code section 17200;

7. Pursuant to Business and Professions Code section 17536, assessing a civil penalty of two thousand five hundred dollars (\$2,500) against Defendants for each violation of Business and Professions Code section 17500, as proved at trial;

8. Pursuant to Business and Professions Code section 17536, assessing a civil penalty of two thousand five hundred dollars (\$2,500) against Defendants for each violation of Business and Professions Code section 17580.5, as proved at trial;

9. Pursuant to Business and Professions Code section 17206, assessing a civil penalty of two thousand five hundred dollars (\$2,500) against Defendants for each violation of Business and Professions Code section 17200, as proved at trial;

10. Pursuant to Government Code section 12527.6, awarding disgorgement in an amount according to proof;

11. Awarding compensatory damages in an amount according to proof;

12. Awarding punitive and exemplary damages in an amount according to proof;

13. Awarding to the Attorney General all costs of investigating and prosecuting the public nuisance cause of action pursuant to Civil Code section 3494 and Government Code section 12607 cause of action, including expert fees, reasonable attorney's fees, and costs in an amount according to proof pursuant to Code of Civil Procedure section 1021.8;

14. Ordering that the State recover its costs of suit, including costs of investigation;

15. Ordering that the State receive all other relief to which it is legally entitled; and

16. Awarding such other relief that the Court deems just, proper, and equitable.

17. Notwithstanding the foregoing, the Counties of San Mateo, Marin, and Santa Cruz, the Cities of Richmond, Imperial Beach, Santa Cruz, Oakland, and the City and County of San Francisco (collectively, Local Entities) have filed pending actions against various fossil fuel industry defendants for creating, contributing to, and/or assisting in the creation of climate change-related harms within their respective jurisdictions (collectively, Pending Local Actions)<sup>153</sup>. The geographic areas covered by any claim or theory of recovery asserted by any Local Entity in the Pending Local Actions are excluded from, and not subsumed by, this action, except as to state-owned property and assets, and except as to harms or violations for which the State has exclusive authority to recover damages or obtain injunctive relief. Nothing herein shall be construed as abrogating the State's

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<sup>153</sup> The Pending Local Actions are as follows: *People of the State of California & County of San Mateo v. Chevron et al.* (San Mateo Super. Ct., No. 17-CIV-03222); *People of the State of California & County of Marin v. Chevron et al.* (Marin Super. Ct., No. CIV1702586); *People of the State of California & City of Imperial Beach v. Chevron et al.* (Contra Costa Super. Ct., No. MSC17-01227); *People of the State of California & City of Santa Cruz v. Chevron et al.* (Santa Cruz Super. Ct., No. 17CV03243); *People of the State of California & County of Santa Cruz v. Chevron et al.* (Santa Cruz Super. Ct., No. 17CV03242); *People of the State of California & City of Richmond v. Chevron et al.* (Contra Costa Super. Ct., No. MSC18-00055); *People of the State of California by and through the City Attorney for the City and County of San Francisco & City and County of San Francisco v. BP et al.* (S.F. Super. Ct., No. CGC-17-561370); and *People of the State of California by and through the City Attorney for the City of Oakland & City of Oakland v. BP et al.* (Alameda Super. Ct., No. RG17875889)

jurisdiction, duties, or obligations as a trustee of state resources, or permitting and regulatory authority under existing law over lands located within or outside the Local Entities' geographic limits.

**VII. REQUEST FOR JURY TRIAL**

Plaintiff respectfully requests that all issues presented by the above Complaint be tried by a jury, with the exception of those issues that, by law, must be tried before the Court.

Dated: June 10, 2024

Respectfully submitted,

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**APPENDIX B**

DOCKET NO: HHD-CV20-6132568-S

STATE OF CONNECTICUT  
V.  
EXXON MOBIL CORPORATION

RETURN DATE: October 13, 2020

SUPERIOR COURT

J.D. OF HARTFORD  
AT HARTFORD

NOVEMBER 20, 2023

**FIRST AMENDED COMPLAINT**

**I. INTRODUCTION**

1. Climate change poses an existential threat to humanity.
2. For several decades the Exxon Mobil Corporation (“ExxonMobil” or “Defendant”) has misled and deceived Connecticut consumers about the

negative effects of its business practices on the climate.

3. As far back as the 1950s, ExxonMobil's corporate executives, scientists, and other representatives and agents knew that fossil fuel combustion contributed to global warming.

4. In the 1970s and 1980s, ExxonMobil conducted research confirming that atmospheric carbon dioxide released in fossil fuel exploration, refinement, and combustion contributed to climate change.

5. In the late 1980s, when climate change gained increased public attention, ExxonMobil had the opportunity to responsibly contribute to public understanding of climate change and its potentially catastrophic consequences.

6. ExxonMobil instead began a systematic campaign of deception to undermine public acceptance of the scientific facts and methods relied upon by climate scientists who knew that anthropogenic (human-caused) climate change was real and dangerous to humanity.

7. ExxonMobil executed this unfair and deceptive campaign in order to maximize profits by selling more oil and gasoline than consumers would have purchased had the reality of climate change been disclosed.

8. The campaign of deception ExxonMobil implemented was similar to the infamous disinformation campaign used by tobacco companies to conceal their products' deadly effects.

9. ExxonMobil's campaign of deception was wide-ranging, including targeting consumers to

spread and reinforce doubt about established climate science.

10. Over the last several decades dozens of ExxonMobil advertorials (paid advertisements appearing similar to editorial content) published in newspapers, including but not limited to *The New York Times*, contained misleading and deceptive statements about the relationship between ExxonMobil's business practices and climate change.

11. ExxonMobil's strategy to create uncertainty about climate science successfully kept consumers purchasing ExxonMobil products by deceiving consumers about the serious harm caused by ExxonMobil's industry and business practices.

12. ExxonMobil continues its campaign of deception to this day in greenwashed advertising (advertising falsely claiming or implying that ExxonMobil's corporate actions are beneficial to the environment).

13. ExxonMobil's greenwashed advertising deceives consumers by downplaying ExxonMobil's contributions to climate change and falsely portraying ExxonMobil as a corporation committed to seriously combatting climate change.

14. ExxonMobil, however, continues to be a major contributor to climate change.

15. ExxonMobil's decades-long campaign of deceiving Connecticut consumers includes numerous violations of the Connecticut Unfair Trade Practices Act.

16. ExxonMobil's campaign of deception has allowed it to continue to inflict decades of avoidable harm on Connecticut's natural environment,

including but not limited to its lands, waters, coastlines, infrastructure, fish and wildlife, natural resources and critical ecosystems.

17. ExxonMobil's campaign of deception has contributed to myriad negative consequences in Connecticut, including but not limited to sea level rise, flooding, drought, increases in extreme temperatures and severe storms, decreases in air quality, contamination of drinking water, increases in the spread of diseases, and severe economic consequences.

18. Despite ExxonMobil finally admitting publicly that combustion of fossil fuels contributes to climate change, its decades-long campaign of deception has been so successful that many consumers still do not believe the scientific facts that climate change is real, is caused primarily by fossil fuel combustion, and is having and will have devastating consequences for Connecticut and all of humanity.

19. The success of ExxonMobil's campaign of deception has helped to ensure that the people of the State of Connecticut will continue to experience the catastrophic consequences of climate change for the foreseeable future.

20. ExxonMobil must be held accountable for its campaign of deception.

## **II. OVERVIEW**

21. This lawsuit seeks appropriate redress for the unfair, deceptive, unethical, oppressive, immoral, and/or unscrupulous practices by ExxonMobil of systematically, knowingly, and routinely misrepresenting the extent of the harmful climatic effects of its fossil fuel products and its industry as a whole, research conducted about the relationship between climate change and fossil fuels, conclusions

reached regarding the climatic effects of its fossil fuel products, and actions taken to address the negative climatic effects of its fossil fuel products.

22. Climate change is a change in global or regional climate patterns. As used herein, the term climate change refers to the shift in worldwide weather patterns associated with an increase in average global temperature. This phenomenon is also sometimes referred to as global warming.

23. The negative effects of climate change have already been felt by the residents of Connecticut, and climate change will continue to have increasingly serious, life-threatening, and financially burdensome impacts on the people of Connecticut and the lands, waters, coastline, species, natural resources, critical ecosystems, infrastructure and other assets owned by the State and its political subdivisions.

24. Human activity has contributed, and continues to contribute, to climate change.

25. The most significant way in which human activity has contributed to climate change is through the extraction, refinement, and combustion of fossil fuels.

26. ExxonMobil is a corporation whose primary trade and commercial interest is the extraction, refinement, and sale of fossil fuels, and it is one of the largest and most profitable corporations in the world as a result of its trade.

27. ExxonMobil has contributed to climate change by causing the sale of fossil fuel and petroleum products, in Connecticut and elsewhere, that emit large quantities of greenhouse gases responsible for trapping atmospheric heat that causes global warming.

28. ExxonMobil knew decades ago that the release of greenhouse gases, including carbon dioxide (“CO<sub>2</sub>”), when fossil fuels are combusted, was a substantial factor in causing global warming.

29. ExxonMobil used and continues to use its knowledge about the reality and effects of climate change to make business decisions, including but not limited to exploration strategies.

30. ExxonMobil’s stated position is that it will continue to explore for new fossil fuel reserves and that it does not anticipate a reduction in fossil fuel consumption for the next forty years.

31. In the 1950s and 1960s, ExxonMobil was aware of research—some of it by its own employees—correlating the combustion of fossil fuels and climate change. In the late 1970s, scientists in its employ drafted internal memoranda confirming the general scientific consensus that humans were impacting the climate by burning fossil fuels.

32. In the early 1980s, ExxonMobil scientists accurately predicted the concentration of carbon dioxide in the atmosphere and the corresponding temperature increase for the year 2020. The Defendant was able to accurately predict the severity of climate change because, beginning in the late 1970s, it had invested significant resources aimed at understanding the science of climate change.

33. Notwithstanding ExxonMobil’s knowledge of the risks posed by continuing to find, extract, refine, and sell its fossil fuel products, the Defendant continuously advertised and sold those products at multiple locations in Connecticut to the consumers of Connecticut throughout the 1970s, 1980s, 1990s, 2000s, and up to and including the present day.

34. Rather than adjust its business practices to account for the knowledge it had about its industry contributing to climate change, ExxonMobil instead began to engage in a campaign of deception intended to mislead consumers.

35. Beginning in the late 1980s, ExxonMobil began a campaign to deceive the consumers of Connecticut about the harmful climatic effects of its fossil fuel products by misrepresenting and omitting material facts about how the use of its fossil fuel products significantly increased CO<sub>2</sub> and other heat-trapping emissions that ExxonMobil knew contributed to climate change.

36. Each time Connecticut consumers purchased—and continue to purchase—ExxonMobil's fossil fuel products at service stations and elsewhere, ExxonMobil knowingly deceived and deceives the consumers of Connecticut by failing to disclose highly material information concerning the harmful climatic effects of its products. This deception has occurred in millions of transactions in Connecticut over the last five decades.

37. In advertisements, public speeches, articles, media statements and published writings during the last five decades, ExxonMobil has knowingly deceived consumers by systematically and routinely misrepresenting and/or omitting information about its products' effects on the climate, its knowledge about the effect of its products on the climate, and scientific consensus about the effects of ExxonMobil's products on the climate.

38. ExxonMobil also deceived consumers by funding and/or collaborating with third party groups, including but not limited to the American Petroleum

Institute, the Global Climate Coalition, and others, to assist in spreading disinformation about the effects of its products on the climate.

39. ExxonMobil's strategy to profit from its business that it knew caused harmful climatic impacts was based on a comprehensive campaign of deception that used several tactics, including, as set forth in a 1988 memorandum authored by Exxon spokesperson Joseph M. Carlson, "emphasiz[ing] uncertainty in scientific conclusions regarding the potential enhanced greenhouse effect." The Defendant emphasized uncertainty through serial misrepresentations and omissions regarding facts that would have been important to reasonable purchasers making their purchasing decisions.

40. ExxonMobil has also engaged in a corporate promotion and branding campaign—referred to herein as "greenwashing"—that misrepresents its business' environmental impacts and deceives consumers.

41. ExxonMobil's campaign of deception was and is unfair, deceptive, unethical, oppressive, immoral, and/or unscrupulous. The Defendant's affirmative misrepresentations, omissions of material fact, and half-truths had and have a tendency to mislead Connecticut consumers regarding their purchase of ExxonMobil's fossil-fuel-based products.

42. ExxonMobil's campaign of deception has enabled it to substantially increase its profits by simultaneously deceiving Connecticut consumers about the causal link between climate change and every purchase of an ExxonMobil fossil-fuel-based product and by helping to slow—for decades—a transition to energy sources that do not cause an existential threat to humanity. Its campaign of



deception has undermined and delayed the creation of alternative technologies, driven by informed consumer choice, which could have avoided the most devastating effects of climate change, and it has stifled an open marketplace for renewable energy, thereby leaving consumers unable to reasonably avoid the detrimental consequences of fossil fuel combustion.

43. ExxonMobil's campaign of deception has contributed and continues to contribute significantly to harmful climate change in Connecticut. The Defendant's unfair, deceptive, unethical, oppressive, immoral, and/or unscrupulous conduct has been a substantial factor in causing the avoidable release of billions of tons of greenhouse gases that now sit in the Earth's atmosphere and cause, *inter alia*, sea-level rise on Connecticut's shoreline, wildlife degradation on Connecticut's lands, and property devaluation and damage for Connecticut's residents.

44. By intentionally and knowingly misrepresenting and/or omitting material facts about the extent of the harmful climatic effects of its fossil-fuel-based products, the research it conducted, the conclusions it reached regarding the climatic effects of its fossil fuel products, and the nature of its business's impacts on the environment and climate, ExxonMobil offered and continues to offer a materially deceptive representation of its business practices to consumers with the goal of maximizing profits.

45. ExxonMobil's conduct as described herein constitutes deceptive, unfair and illegal business practices in violation of the Connecticut Unfair Trade Practices Act ("CUTPA"). Pursuant to Conn. Gen. Stat. § 42-110m, the Connecticut Attorney General, in the name of the State of Connecticut, seeks restitution, disgorgement, civil penalties, and other

injunctive and equitable relief commensurate with the past and future harm caused by these unfair, deceptive, and illegal business practices.

### **III. PARTIES**

46. Plaintiff State of Connecticut, represented by William Tong, Attorney General of the State of Connecticut, brings this action in its sovereign enforcement capacity pursuant to Conn. Gen. Stat. § 42-110m and at the request of Michelle H. Seagull, Commissioner of the Department of Consumer Protection for the State of Connecticut.

47. Defendant Exxon Mobil Corporation is a multinational energy and chemicals company incorporated in the State of New Jersey and has its principal place of business at 5959 Las Colinas Boulevard, Irving, Texas. It is registered to do business in Connecticut as a foreign corporation and maintains a registered agent for service of process, Corporation Service Company, 100 Pearl Street, Hartford, Connecticut.

48. Exxon Mobil Corporation is the parent company of numerous wholly owned subsidiaries, including but not limited to ExxonMobil Oil Corporation, and is liable for the unlawful actions of those subsidiaries.

49. Exxon Mobil Corporation controls and has controlled companywide decisions related to all aspects of all allegations contained herein, including but not limited to decisions regarding advertising, public communications, and climate change research.

50. Exxon Mobil Corporation was formed on November 30, 1999, by the merger of Exxon Corporation (“Exxon”) and Mobil Oil Corporation (“Mobil”). Exxon Mobil Corporation is liable for its own

conduct as well as the conduct of any prior corporate entities that eventually became, or became owned by, Exxon Mobil Corporation (including but not limited to Exxon, Mobil, Exxon Research and Engineering Company, Standard Oil of New Jersey, Standard Oil of New York, Vacuum Oil, Socony-Vacuum Oil Company, and Humble Oil & Refining Company) as well as activities conducted while operating under any alternative trade names (including but not limited to Exxon, Mobil, ExxonMobil Research and Engineering Company, Enco and Esso).

51. As used in this Complaint, “ExxonMobil” refers collectively to Exxon Mobil Corporation and its predecessors, subsidiaries, affiliates, and divisions.

52. Whenever reference is made in this complaint to any act or practice of ExxonMobil, such allegation shall be deemed to mean that the principals, officers, directors, employees, agents, or representatives of ExxonMobil did, or authorized, such act or practice on behalf of ExxonMobil while actively engaged in the scope of their duties.

53. ExxonMobil is a vertically integrated oil and gas company that locates, extracts, refines, transports, markets and sells fossil-fuel-based products.

54. According to its public filings with the Securities and Exchange Commission, ExxonMobil’s “principal business is energy, involving exploration for, and production of, crude oil and natural gas, manufacture of petroleum products and transportation and sale of crude oil, natural gas and petroleum products. ExxonMobil is a major manufacturer and marketer of commodity petrochemicals, including olefins, aromatics,

polyethylene and polypropylene plastics and a wide variety of specialty products. Affiliates of ExxonMobil conduct extensive research programs in support of these businesses.”

55. According to ExxonMobil’s website, it is committed to being the world’s premier petroleum and chemical manufacturing company.

56. ExxonMobil claims a commitment to enhancing the long-term value of the investment dollars entrusted to it by its shareholders. ExxonMobil is committed to running its business profitably and expects superior returns for its shareholders.

57. ExxonMobil is one of the largest and most profitable corporations in the world. In 2022, the Forbes Global 2000 list of the world’s largest public companies ranked ExxonMobil 15<sup>th</sup>, with a market value of over \$359 billion. That year, ExxonMobil reported profits of approximately \$58 billion. ExxonMobil has remained highly profitable for the last five decades concentrating its business on global oil and gas production, refining, distribution, and wholesale and retail sales.

58. A significant portion of ExxonMobil’s profits over the past several decades was derived from its campaign of deception, which has deceived the public, kept consumers buying ExxonMobil fossil-fuel-based products, and prevented a transition to alternative sources of energy.

59. For decades, ExxonMobil has regularly transacted business in the State of Connecticut and derived substantial revenue from its business within the State of Connecticut. ExxonMobil’s products have been sold within the State of Connecticut by company-owned gas stations and Branded Wholesalers, and

ExxonMobil's deceptive advertisements at issue in this complaint have been repeatedly viewed and relied upon by Connecticut consumers.

60. ExxonMobil has extensive contacts with the State of Connecticut, including but not limited to the following. Upon information and belief, from 1973 until 2007, ExxonMobil maintained a chemical plant at 495 Lordship Boulevard, Stratford, Connecticut. ExxonMobil also maintains a branding agreement with Alliance Energy, LLC, to maintain the Mobil brand name for 88 petroleum-products retail stations located in Connecticut. Upon information and belief, ExxonMobil operated numerous additional petroleum-products retail stations located in Connecticut through 1999, when ExxonMobil divested of those stations as a result of a settlement with the Federal Trade Commission. Exxon continues to maintain branded franchises throughout the State of Connecticut.

61. ExxonMobil has engaged in national advertising campaigns that have deliberately targeted consumers throughout the United States, including Connecticut, in order to increase its sales and enhance its reputation. ExxonMobil has purposely availed itself of Connecticut's marketplace through nationwide advertising that it knew would reach the consumers of Connecticut.

#### **IV. EXXONMOBIL KNEW ITS PRODUCTS CAUSED CLIMATE CHANGE**

62. The scientific consensus that climate change is a real phenomenon, caused in part by human activity, has been growing for decades.

63. The following paragraphs are a partial compilation of events and/or documents that

demonstrate the alignment of the Defendant's internal research and knowledge about climate change with the scientific consensus that climate change was and is a serious threat to humanity and our environment.

64. In 1957, H.R. Brannon of Humble Oil (now ExxonMobil) published research correlating increased fossil fuel combustion with increased atmospheric CO<sub>2</sub>.

65. In 1959, renowned physicist Edward Teller delivered the earliest known warning of the dangers of global warming to the petroleum industry, speaking before the American Petroleum Institute ("API"). The following year he formally published his warnings about the dangers of global climate change.

66. In 1965, President Lyndon B. Johnson's Science Advisory Committee predicted that fossil fuel combustion could cause significant climatic changes by the end of the 20<sup>th</sup> Century.

67. In 1965, Frank Ikard, President of API, delivered a presentation at API's Annual Meeting, informing API's membership of the findings of the Presidential Science Advisory Committee. Representatives from ExxonMobil were in attendance at that meeting.

68. In the 1970s, ExxonMobil invested millions of dollars and hired scientists and other personnel to design projects specifically to further its understanding of climate science. ExxonMobil's 1970s-era research was later championed by then-CEO Lee Raymond, who stated in 2000 that "[f]or more than two decades, Exxon Mobil Corporation has carefully studied and worked to increase

understanding of the issue of global climate change, often referred to as global warming.”

69. In 1978, Exxon scientist Henry Shaw sent a letter to Exxon leadership describing two proposed scientific initiatives, including a project to monitor atmospheric and oceanic CO<sub>2</sub> levels (“the tanker project”), to address Exxon’s “need to assess the possible impact of the greenhouse effect on Exxon’s business” based on researchers attributing the increase in atmospheric CO<sub>2</sub> to fossil fuel burning. During this time ExxonMobil also invested significant resources in researching climate modeling.

70. In 1978, senior Exxon scientist James F. Black warned the Exxon Corporation Management Committee in writing of the “Greenhouse Effect” caused by CO<sub>2</sub> in the Earth’s atmosphere. His memorandum stated that CO<sub>2</sub> concentration was increasing in the Earth’s atmosphere, CO<sub>2</sub> emissions were attributable to fossil fuels, and CO<sub>2</sub> emissions would cause climate variations including a mean temperature increase. The memorandum stated: “Present thinking holds that man has a time window of five to ten years before the need for hard decisions regarding changes in energy strategies might become critical.”

71. In 1979, scientists from Exxon gave a presentation to the National Oceanic and Atmospheric Association stating that Exxon’s rationale for researching “the greenhouse effect” was “to assess the possible impact of the greenhouse effect on Exxon business” and assemble a “responsible team that can credibly carry bad news, if any, to the corporation.”

72. In 1979, an internal Exxon memorandum stated that the most widely held theory about climate

change was that the “increase [in CO<sub>2</sub> concentration] is due to fossil fuel combustion,” “[i]ncreasing CO<sub>2</sub> concentration will cause a warming of the earth’s surface,” and the “present trend of fossil fuel consumption will cause dramatic environmental effects before the year 2050.” With a doubling of CO<sub>2</sub> concentration (using 1860 as a baseline), the study predicted that “ocean levels would rise four feet” and the “Arctic Ocean would be ice free for at least six months each year, causing major shifts in weather patterns in the northern hemisphere.”

73. In 1979, Exxon scientist Henry Shaw advocated for research on the greenhouse effect in order to combat potential environmental controls that could negatively impact Exxon’s business. He opined that this “aggressive defensive program” be initiated before the government made “the public aware of pollution problems.”

74. In 1979, an internal Exxon memorandum recommended that a study on atmospheric CO<sub>2</sub> not receive priority as an emerging issue because society will be able to cope with “whatever problems ensue such as some increase in ocean level, due to polar ice cap melting, [and] the main concern that crop-growing regions would shift northward to Siberia and Canada, leaving central regions too warm for food production.”

75. In a 1980 draft statement to the National Commission on Air Quality CO<sub>2</sub> Workshop, Exxon opined that the consequences of climate change would be “adverse to the stability of human and natural communities” and that action delayed until the increase in atmospheric CO<sub>2</sub> is discernible would likely occur “too late to be effective.”



76. In 1980, an Exxon report stated that the observable growth in atmospheric CO<sub>2</sub> had been coincident with the start of the Industrial Revolution and that a doubling of CO<sub>2</sub> in the atmosphere could occur sometime between 2035 and 2065. The report predicted that the rise in temperature associated with the increase in atmospheric CO<sub>2</sub> would cause a “dramatic impact on soil moisture, and in turn, on agriculture.” It also predicted that one effect of climate change—the melting of the Antarctic ice sheet—could raise sea level by 5 meters.

77. In 1980, a subsidiary of Exxon prepared an internal memorandum, which stated: “There is no doubt that increases in fossil fuel usage and decreases in forest cover are aggravating the potential problem of increased CO<sub>2</sub> in the atmosphere.”

78. In 1980, Dr. John Laurman, a consultant and recognized expert in the field of CO<sub>2</sub> and climate, presented to the API Task Force on Climate Change on “The CO<sub>2</sub> Problem.” He identified the “scientific consensus on the potential for large future climatic response to increased CO<sub>2</sub> levels” as a reason for concern, stated that there was “strong empirical evidence” that climate change was caused by fossil fuel combustion, and warned that the “likely impacts” of climate change were “major economic consequences” by 2038 and “globally catastrophic effects” by 2067. Henry Shaw, a member of the Task Force, represented Exxon at the meeting.

79. In 1981, Exxon scientist Henry Shaw wrote that a doubling of CO<sub>2</sub> would result in a 3°C increase in average global temperature and a 10°C increase at the poles, causing major shifts in rainfall and agriculture and melting of polar ice.

80. In 1981, Roger Cohen, director of Exxon's Theoretical and Mathematical Sciences Laboratory, critiqued a draft memorandum from a colleague that stated that the effects of climate change in 2030 would be "well short of catastrophic." This characterization, Cohen wrote, "may be too reassuring."

81. In 1981, an internal Exxon memorandum revealed that the Defendant considered implementation of a comprehensive high-impact program studying atmospheric CO<sub>2</sub>. However, Exxon decided not to pursue that program after concluding that "energy conservation or shifting to renewable energy sources" were "the only options that make sense" to combat increases in atmospheric CO<sub>2</sub>.

82. In 1982, Exxon began to scale back its research on CO<sub>2</sub> and climate change. It canceled the tanker project, and several years later it stopped researching climate modeling. Meanwhile, however, Exxon continued to learn about the potentially devastating consequences of its products.

83. In 1982, Roger Cohen summarized the findings of Exxon's research in climate modeling, stating that "over the past several years a clear scientific consensus has emerged regarding the expected climatic effects of increased atmospheric CO<sub>2</sub>." Cohen acknowledged that Exxon shared the views of the mainstream scientific community, stating that 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," and that Exxon's findings were "consistent with the published predictions of more complex climate models" and "in accord with the scientific consensus on the effect of increased atmospheric CO<sub>2</sub> on climate."

84. In 1982, an API report, which was largely critical of the accuracy of climate modeling, conceded that “all climate model studies indicate that a doubling of CO<sub>2</sub> will produce a significant increase in the global and annual mean temperature of the Earth.” The report noted that the warming predicted by the scientific consensus “can have serious consequences for man’s comfort and survival since patterns of aridity and rainfall can change, the height of the sea level can increase considerably and the world food supply can be affected.”

85. In 1982, a corporate primer given “wide circulation to Exxon management” concluded that “there is time for further study and monitoring before specific action need be taken,” but it noted that “once the effects [of climate change] are measurable, they might not be reversible.” The report stated that the effects are “potentially catastrophic” and included famine, migration, “stress on renewable resource production,” and sea level rise that would cause “flooding on much of the U.S. East Coast.” The report predicted a doubling of CO<sub>2</sub> concentrations (above pre-industrial levels) by 2060 and increased temperatures of 2-4°C (above 1982 levels) by the end of the 21st century. According to the report, “[m]itigation of the ‘greenhouse effect’ would require major reductions in fossil fuel consumption.”

86. In 1982 remarks, the President of Exxon’s Research and Engineering Company acknowledged that “fossil fuels, and liquid chemical fuels, are really the heart of the energy and CO<sub>2</sub> problem” and emphasized the need to adopt conservation technologies to address the “profound issues posed by the CO<sub>2</sub> buildup” in the atmosphere.

87. At all times mentioned herein before the two companies merged, Mobil and Exxon had similar knowledge about climate change as it related to their products. In addition to having access to publicly available information and information shared between corporations in the petroleum industry—including, but not limited to, information shared through API—Mobil conducted its own research on climate change that aligned with scientific consensus.

88. For example, in 1983, a Mobil Status Report on Environmental and Toxicology Issues summarized the scientific consensus on the greenhouse effect and the possibility that a temperature rise of 3°F to 6°F may occur and cause drought and fifteen to twenty feet of sea level rise, “inundating many of the world’s coastal cities.”

89. In 1984, Exxon scientist Henry Shaw gave a presentation that highlighted the disparities in some climate modeling, but nonetheless concluded that humankind “can either adapt our civilization to a warmer planet or avoid the problem by sharply curtailing the use of fossil fuels.” He listed some of the effects of global warming as: sea-level rise, redistribution of rainfall, changes in agricultural productivity, accelerated growth of pests and weeds, detrimental health effects, and population migration.

90. By the mid-1980s, the Defendant knew that anthropogenic climate change was real, scientific consensus was that continued expulsion of CO<sub>2</sub> into the atmosphere would cause catastrophic consequences for humanity, and that the only meaningful way to curtail climate change was to curtail combustion of fossil fuels.

91. In 1988, National Aeronautics and Space Administration (“NASA”) scientist Dr. James Hansen testified before Congress that global warming is ascribable to the greenhouse effect, and that global warming was—at that time—”begin[ning] to effect the probability of occurrence of extreme events such as summer heat waves.”

92. Less than six weeks after Dr. Hansen’s testimony, Exxon spokesperson Joseph M. Carlson circulated an internal draft memorandum acknowledging the scientific consensus that atmospheric CO<sub>2</sub> concentrations were increasing and could double in 100 years, that the combustion of fossil fuels was emitting five billion tons of CO<sub>2</sub> per year, and that the “principal greenhouse gases are by-products of fossil fuel combustion.” He advised that the “[g]reenhouse effect may be one of the most significant environmental issues for the 1990s.”

93. The 1988 Carlson memorandum stated that Exxon “has not modified its energy outlook or forecasts to account for possible changes in fossil fuel demand or utilization due to the Greenhouse effect.”

94. In 1990, the First Assessment Report of the Intergovernmental Panel on Climate Change (“IPCC”) was completed. It concluded that human activity caused the release of greenhouse gases—including CO<sub>2</sub> and methane—which enhanced the greenhouse effect and caused additional warming to the Earth’s surface.

95. In 1995, the IPCC issued its Second Assessment Report, which concluded that “the balance of evidence, from changes in global mean surface air temperature and from changes in geographical, seasonal and vertical patterns of atmospheric

temperature, suggests a discernible human influence on global climate.” Consistent with previous reports, scientific consensus was that climate change was occurring, the combustion of fossil fuels was a significant contributor to climate change, and climate change could have devastating impacts on humanity and the environment. The IPCC has since published four more assessment reports, in 2001, 2007, 2014-2015, and 2021-2023. These reports detail continued scientific consensus on the causes and effects of global climate change, and predict worsening damage compared to the conclusions in the Second Assessment Report. The 2021 IPCC assessment report states that “it is unequivocal that human influence has warmed the atmosphere, ocean, and land.”

## **V. EXXONMOBIL DECEIVED CONSUMERS**

96. Despite public scientific consensus and years of internal scientific research concluding that climate change resulted from burning fossil fuels and would have devastating consequences, the Defendant engaged in a campaign to deceive the public about these conclusions.

97. Exxon’s 1988 Carlson memorandum, which was drafted weeks after Dr. Hansen’s Congressional testimony, stated that the Defendant’s public position would be to “[e]mphasize the uncertainty in scientific conclusions regarding the potential enhanced Greenhouse effect” and “resist overstatement and sensationalization of potential Greenhouse effect which could lead to noneconomic development of nonfossil fuel resources.”

98. Emphasizing claimed uncertainty about climate change has been a common tactic in Defendant’s campaign of deception.

99. The Defendant executed the strategy of deceiving the public with the intent of increasing its product sales.

100. ExxonMobil's campaign of deception spread disinformation in several ways, including but not limited to investment brochures, research papers, books, speeches, presentations, and interviews.

101. In addition to spreading disinformation directly, the Defendant also provided funding to—and continues to provide funding to—many individuals and organizations for the purpose of disseminating disinformation to foster doubt about climate change. Some of the funding of this disinformation campaign came from the ExxonMobil Foundation, which was provided significant funding by, and operated under the control of, Exxon Mobil Corporation.

102. Much like how ExxonMobil created and spread disinformation in various ways, ExxonMobil's deceptive advertisements have evolved over time.

103. As described in more detail below, ExxonMobil's deceptive advertising took the form of advertorials containing false, misleading, and/or deceptive information for decades. More recently—and currently—ExxonMobil's deception in advertising is often in the form of "greenwashing."

104. Greenwashing is a practice that refers to deceptive or misleading public communications on the environmental impact of a company.

105. The Defendant's campaign of deception about the risks associated with burning fossil fuels and climate change has delayed the needed transition to clean energy in Connecticut, the United States, and around the world.

106. The Defendant's practices and a resultant delay in shifting to alternative sources of energy have had and will have a significant negative financial impact on the people of the State of Connecticut.

107. The Defendant engaged in a campaign of deception in order to facilitate its continuing sales of fossil fuels and to continue to profit from those sales.

108. Each manner in which the Defendant executed its campaign of deception was within its primary line of business and in furtherance of its objective to sell product in Connecticut's marketplace.

**A. ExxonMobil Systematically and Routinely Used Disinformation as Part of its Campaign of Deception.**

109. The Defendant disseminated disinformation both directly and through other organizations, including but not limited to the specific instances in the following paragraphs.

110. The Defendant was a longstanding and continuous Board Member of API, and API received funding and direction from the Defendant.

111. In 1996, API published a book titled "Reinventing Energy: Making the Right Choices," which falsely stated that "there is no persuasive basis for forcing Americans to dramatically change their lifestyles to use less oil." The book falsely denied the human connection to climate change, 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."

112. In or around 1998, the Defendant joined with API and other parties to create the Global Climate



Science Communications Team (“GCSCT”), a small group of prominent representatives of fossil fuel companies, public relations firms, and industry front groups with the mission of undermining the global scientific consensus that climate change was real and human caused.

113. An agent of the Defendant was a member of the GCSCT. Through its membership, the Defendant directed and participated in the activities of the GCSCT. The Defendant had the authority to control the activities of the GCSCT and knowledge of material representations made by the GCSCT.

114. In 1998, the GCSCT developed a plan to launch a multi-million-dollar, multi-year “national media relations program to inform the media about uncertainties in climate science; to generate national, regional and local media on the scientific uncertainties, and thereby educate and inform the public, stimulating them to raise questions with policymakers.”

115. In 1998, the GCSCT prepared a memorandum outlining “strategies and tactics” to affect public opinion about climate change. The memorandum stated that “Victory will be achieved when average citizens ‘understand’ (recognize) uncertainties in climate science” and the “recognition of uncertainties becomes part of the ‘conventional wisdom.’”

116. The 1998 GCSCT memorandum advocated implementing: (1) a “National Media Relations Program” to “inform the media about uncertainties in climate science;” (2) a “Global Climate Science Information Source” with the goal of “undercutting the ‘prevailing scientific wisdom’”; and (3) a “National Direct Outreach and Education” effort “to inform and

educate members of Congress, state officials, industry leadership, and school teachers/students about uncertainties in climate science.”

117. In addition to planning and executing a disinformation campaign with API and other API members, the Defendant was a member of other organizations that disseminated disinformation as part of its campaign of deception.

118. For example, Exxon and Mobil were members of the Global Climate Coalition (“GCC”), which defined itself as “an organization of business trade associations and private companies . . . to coordinate business participation in the scientific and policy debate on the global climate change issue.”

119. In 1995, Mobil drafted a paper for the GCC critiquing the IPCC’s conclusion that human activity had impacted global climate. The paper acknowledged that “[t]he potential for a human impact on climate is based on well-established scientific fact and should not be denied” and that “contrarian theories raise interesting questions about our total understanding of climate process, but they do not offer convincing arguments against the conventional model of greenhouse gas emission-induced climate change.” Nevertheless, the paper falsely concluded that “[c]laims that human activities have already impacted climate are currently unjustified.” The paper also provided a list of talking-point counterarguments to the positions of scientific consensus.

120. Contrary to GCC’s purported mission of “contribut[ing] to a balanced debate on global climate change,” the organization took a hardline stance against scientific consensus, as evidenced by its 1996 statement that “the scientific community has not yet

met the ‘burden of proof’ that greenhouse gas emissions are likely to cause serious climatic impacts.”

121. In addition to working with and through other organizations, the Defendant disseminated disinformation directly to the public.

122. In 1996, Exxon’s then-CEO, Lee Raymond, authored several articles stating that fossil fuels’ effect on the Earth’s climate was an “unproven theory” and that “scientific evidence remains inconclusive as to whether human activities affect global climate.” An accompanying piece authored by Exxon went on to assert that “[t]here is still a tremendous amount of uncertainty about how the climate will change in the 21<sup>st</sup> century” and whether global warming was good or bad.

123. In 1996, Lee Raymond gave remarks to the Economic Club of Detroit and stated: “Currently, the scientific evidence is inconclusive as to whether human activities are having a significant effect on the global climate.” Similarly, he stated in remarks on a European trip later that year that “evidence remains inconclusive as to whether human activities, including the burning of fossil fuels, are affecting global climate.” These remarks, as well as urging opposition to efforts to reduce fossil fuel use, were reiterated in a speech to API later in 1996.

124. The purpose of Lee Raymond’s remarks at the Economic Club of Detroit was to improve the reputation of the petroleum industry and advertise industry products for the listeners. Comments included promotion of oil’s non-energy related uses, a discussion about contemporaneous global supply levels, and a comparison between oil products and alternative sources of energy. Similarly, the European

trip remarks were aimed at advertising and burnishing the Defendant's business and products. Comments included a discussion of the Defendant's finances, its global operations, and planned future activities, as well as its anticipated future revenue.

125. In 1997, Lee Raymond gave a speech at the World Petroleum Conference in which he criticized climate modelling as "notoriously inaccurate," questioned whether global warming was occurring, and stated that "[i]t is highly unlikely that the temperature in the middle of next century will be significantly affected whether policies are enacted now or 20 years from now." He also falsely stated that "the earth is cooler today than it was 20 years ago."

126. In 1997, Mobil published an "educational" booklet in which it falsely stated that "[s]cientists cannot tell us with certainty how much and where temperatures will increase—or if they will increase at all. Neither can they tell us what impact such increases would have or what positive impact the proposed remedies will have."

127. The booklet encouraged readers to discuss the statements contained within with their friends, family and lawmakers. The booklet was promulgated for the purpose of influencing public opinion regarding Mobil and its impact on climate change, and it contained deceptive misrepresentations about the scientific consensus about climate change as well as statements and imagery designed to create the impression that Mobil was operating in an environmentally-friendly manner.

128. In 1998, the Defendant published a brochure for the public titled "Global Climate Change: everyone's debate" in which the Defendant falsely

claimed that based on “our analysis . . . the current state of climate science is too uncertain to provide clear answers to many key questions about global climate change,” including whether it is “a threat” and whether “the tiny portion of greenhouse gases caused by burning fossil fuels have a measurable effect on worldwide climate.”

129. In 2000, ExxonMobil published a brochure titled “A Better Path Forward” stating: “We agree that the potential for climate change caused by increases in carbon dioxide and other greenhouse gases may pose a legitimate long-term risk. However, we do not now have a sufficient scientific understanding of climate change to make reasonable predictions and/or justify drastic measures.”

130. These brochures, upon information and belief, promulgated for the purpose of influencing public opinion regarding ExxonMobil and its impact on climate change, contained deceptive misrepresentations about the scientific consensus about climate change as well as statements and imagery designed to create the impression that ExxonMobil was operating in an environmentally-friendly manner.

131. In a 2001 article in *Fortune* magazine, ExxonMobil’s then-CEO, Lee Raymond, stated that “[ExxonMobil’s] geologists show you how over the last 100,000 years, the temperatures had huge swings that didn’t have anything to do with man-made burning of fossil fuels, because no one was burning them . . . . So how do you distinguish that phenomenon, which we don’t understand, from what’s going on now?” He also dismissed the idea of renewable energy alternatives, stating that “[e]ven if there were significant changes in technology that none of us see now, by the time you

get [alternative energy sources] developed on a commercial scale and get it implemented, it's ten, 15, 20 years." The *Fortune* article noted that other oil and gas companies, such as BP Amoco, "at least acknowledge that temperatures may in fact be rising in the long term."

132. ExxonMobil published a number of materials—both annually and on a one-time basis—as part of its campaign of deception, including but not limited to Corporate Citizen Reports, Sustainability Reports, and Outlooks for Energy. Many of these reports were misleading to the public given what the Defendant knew at the time.

133. In response to a 2005 Corporate Citizenship Brochure, the Royal Society—an independent scientific academy in the United Kingdom—wrote a letter to ExxonMobil to express "disappointment at the inaccurate and misleading view of the science of climate change" expressed in the widely distributed materials.

134. Each aforementioned example of disinformation was disseminated after the 1995 IPCC report concluded that climate change was real, human-caused and attributable to the combustion of fossil fuels and the Defendant's own aforementioned internal research revealed the same.

135. All of ExxonMobil's disinformation was tied to trade or commerce intimately associated with Connecticut, specifically ExxonMobil's business of selling oil and gas to Connecticut consumers. ExxonMobil's disinformation impacted and injured Connecticut consumers.

**B. ExxonMobil Systematically and Routinely Used Deceptive Advertisements as Part of its Campaign of Deception.**

136. The Defendant purchased advertising—in the form of “advertorials”—to influence consumers about climate change with the goal of selling more of its product.

137. The Defendant purchased advertorials in *The New York Times* starting in or about 1970 and continued to purchase advertorials until at least 2007. Between 1972 and 2001, the advertorials were published nearly every Thursday and occasionally on other days of the week.

138. *The New York Times* is a national newspaper that has historically targeted and continues to specifically target the tri-state (Connecticut, New York, New Jersey) area; notably, it has and continues to publish specific sections (e.g., Metro) tailored only to the tri-state area.

139. During the time when the advertorials were published in *The New York Times*, *The New York Times* had a circulation of tens of thousands of readers in Connecticut.

140. The Defendant published advertorials in other publications—including but not limited to *The Washington Post*, *National Journal*, *USA Today*, and *The Financial Times*—that were read by Connecticut consumers.

141. By placing advertisements in national publications, the Defendant knowingly availed itself of Connecticut’s marketplace.

142. In speeches in the 1970s, Mobil’s then-Chairperson Rawleigh Warner, Jr. called the

advertorials “quarter-page advertisement[s]” and “advocacy advertising.” A Mobil document detailing its public affairs programs during the 1970s and early 1980s referred to the advertorials as a “useful new ad format.”

143. Paying money to newspapers to print advertorials was an act and practice in the conduct of the Defendant’s primary line of business—selling oil, gas, and petroleum products.

144. Some of the advertorials, including but not limited to those described herein, deceptively discussed climate change as part of the Defendant’s campaign of deception. The following advertorials are representative of a larger number of advertorials that were deceptive to consumers in many ways, including but not limited to unjustifiably emphasizing claimed uncertainty of climate science, omitting and/or misrepresenting known facts and/or scientific consensus on climate change, and reflecting only the doubt—as opposed to the confidence—of ExxonMobil’s mixed internal dialogue on climate change:

a. In 1984, a Mobil advertorial in the *New York Times* titled “Lies they tell our children” stated that “a greenhouse effect” that could “melt the polar ice caps and devastate U.S. coastal cities” was a “lie” and a “myth of the 1960s and 1970s.”

b. In 1993, a Mobil advertorial in the *New York Times* titled “Apocalypse no” asserted that the “dire predictions of global warming catastrophes” and “media hype proclaiming that the sky was falling did not properly portray the consensus of the scientific community.” It cited the “lack of scientific data” as justification to delay action to address climate change.



c. In 1996, a Mobil advertorial in the *New York Times* titled “With climate change, what we don’t know can hurt us” warned that acting quickly to curb emissions would “create an unwarranted sense of crisis” and urged instead a “gradual approach.”

d. In 1996, a Mobil advertorial in the *New York Times* titled “Less heat, more light on climate change” stated that “a number of the scientists believe we have the time and resources to avert a crisis.”

e. In 1997, a Mobil advertorial in the *New York Times* titled “Reset the alarm” stated: “Let’s face it: The science of climate change is too uncertain to mandate a plan of action that could plunge economies into turmoil. . . . Scientists cannot predict with certainty if temperatures will increase, by how much and where changes will occur. We still don’t know what role man-made greenhouse gases might play in warming the planet.”

f. In 1997, a Mobil advertorial in the *New York Times* titled “Climate Change: a prudent approach” stated: “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 the Earth’s temperature.” However, the advertorial then described the “precautionary [and] voluntary” ways in which Mobil is “reducing emissions at the source and removing carbon dioxide from the atmosphere [by] supporting research and technology efforts, curtailing our own greenhouse gas emissions and helping customers scale back their emissions of carbon dioxide.”

g. In 1997, a Mobil advertorial in the *New York Times* titled “Climate change: where we come out”

stated that “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.”

h. In 1997, a Mobil advertorial in the *New York Times* titled “Stop, look and listen before we leap” cautioned consumers that the international efforts to combat climate change were borne out of “speculation,” not in line with the “underlying science . . . [that] continue[s] to signal caution,” and could “wreak havoc” on “U.S. prosperity.”

i. In 2000, an ExxonMobil advertorial in the *New York Times* titled “Unsettled Science” displayed a chart with the Sargasso Sea temperature lowering over time, and it stated that “climate and greenhouse gas levels experience significant natural variability for reasons having nothing to do with human activity” and “little if any warming” had occurred in the last 20 years, characterized the impacts of climate change as “positive or negative,” and warned that the position that “the science debate is settled [was] empty rhetoric.” The scientist whose research formed the basis of the chart in the advertorial subsequently wrote a letter to ExxonMobil stating that “ExxonMobil has been misleading in its use of the Sargasso Sea data.”

j. In 2002, an ExxonMobil advertorial in the *New York Times* titled “Do No Harm” warned of the damage to the United States’ economy and way of life if policies were enacted to address climate change. The advertorial characterized the climate change “debate” as balanced, proposed that climate change may be “trivial” and the future impacts “beneficial,” and

juxtaposed climate science with unpredictable local weather.

k. In 2002, an ExxonMobil advertorial in the *New York Times* titled “A responsible path forward on climate” announced that ExxonMobil was funding the Global Climate and Energy Project at Stanford University to conduct “research on ways to address climate and energy issues.” The advertorial championing this initiative also stated that “many of today’s suggested alternative energy approaches are not as . . . environmentally beneficial . . . as competing fossil fuels.”

l. In 2004, an ExxonMobil advertorial in the *New York Times* titled “Weather and climate” explained that unordinary weather events were unrelated to climate change and that “scientific uncertainties continue to limit our ability to make objective, qualitative determinations regarding the human role in recent climate change or the degree and consequences of future change.”

145. Professor Martin Hoffert, a former New York University physicist who researched climate change as an Exxon consultant in the 1980s, stated the following in sworn testimony before Congress: “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. This was immoral

and has greatly set back efforts to address climate change.”

146. The deception contained in the aforementioned advertorials—along with many others—was explained in a letter from a Senior Scientist at the Office of U.S. Global Change Research Program to ExxonMobil’s then-CEO Lee Raymond, detailing several ways in which an August 10, 2000 ExxonMobil advertorial in the *Washington Post* titled “Political cart before a scientific horse” was deceptive. That letter criticized characterizing a draft report of the *U.S. National Assessment of the Potential Consequences of Climate Variability and Change* as a “political document” when the “report was prepared by a panel of experts having no political connections and had been very carefully reviewed by technical experts to ensure objectivity.”

147. A common tactic in ExxonMobil’s campaign of deception has been to falsely characterize scientific evidence as political.

148. The aforementioned letter criticizing the characterization of scientific evidence as political described several other tactics ExxonMobil commonly used when communicating publicly about climate change in the conduct of selling oil and gas, including but not limited to: (1) advocating for doing more research to understand the problem of climate change while also arguing that it would be too expensive to deal with the problem; (2) using recommendations for more research as a substitute for taking affirmative steps on climate change when the scientific consensus recommended pursuing both simultaneously; (3) mischaracterizing scientific conclusions by changing the scientific basis of the conclusion (e.g., arguing that climate models cannot accurately make *predictions*

when climate models are intended to make *projections* not predictions); (4) portraying two sides of a debate as evenly balanced when one side has the great weight of authority; and (5) claiming that the science failed to meet a benchmark that it did not intend or need to meet in order to be credible. The letter indicated that there were also other ways in which ExxonMobil's advertorials and other forms of disinformation were deceptive.

149. ExxonMobil's advertising has also deceptively promoted ExxonMobil products and practices as environmentally beneficial.

150. Despite the overwhelming evidence that fossil fuels contribute to climate change, ExxonMobil has engaged in "greenwashing" by claiming that certain of its products reduce carbon dioxide emissions and are environmentally sound.

151. ExxonMobil has used greenwashing as a deceptive means of corporate promotion and advertising since the 1970s, but ExxonMobil increased its use of greenwashing after it discontinued its purchase of *New York Times* advertorials.

152. ExxonMobil has engaged in greenwashing while failing to disclose that the development, production, refining and use of its fossil fuel products contributes to climate change.

153. Upon information and belief, misleading advertising by ExxonMobil that portrays ExxonMobil products as environmentally sound has intentionally reached Connecticut consumers through print, television, radio and online platforms including social media.

154. ExxonMobil's greenwashing advertisements include, but are not limited to, the following

marketing campaigns: “Protect Tomorrow. Today;” “Energy Solutions;” “Energy Lives Here;” “That’s Unexpected Energy;” and “The Future of Energy.”

155. An example of such a greenwashing advertisement—titled “Growing Fuel”—is a 30 second commercial that aired frequently on television and social media and can be easily found online. In it, a narrator claims that ExxonMobil is “farming” to grow “algae for biofuels that could one day power planes, propel ships, and fuel trucks and cut their greenhouse gas emissions in half.” The narration is accompanied by images of crops growing in a field, green pools, green spheres representing young algae, and the Earth.

156. ExxonMobil has made similar claims and used similar language regarding the use of algae as an example of its innovation in the development of alternative fuels in other advertising—including but not limited to an advertorial in the electronic edition of *The New York Times* titled, “The Future of Energy? It May Come From Where You Least Expect: How scientists are tapping algae and plant waste to fuel a sustainable energy future” and a marketing video on YouTube titled, “School of ExxonMobil: Algae Biofuel.”

157. As part of these greenwashed advertisements, ExxonMobil claims that it is “working to decrease our overall carbon footprint.”

158. At the same time that ExxonMobil is attempting to convince consumers to purchase its products with greenwashed advertising, ExxonMobil is simultaneously devoting resources to expanding exploration of potential new oil and gas reserves, which if used, will do irreparable harm to the climate. For example, ExxonMobil has announced its plans to

develop three fossil fuel production projects at sites off Guyana by 2025 in addition to two projects it recently began operating in 2022. ExxonMobil has further indicated plans for expanding drilling and production in Argentina, Brazil, Santa Barbara County, as well as increasing well operations in the Permian basin.

159. The publication of greenwashed advertisements deceives reasonable consumers into believing that purchasing ExxonMobil products is a responsible choice because ExxonMobil is addressing climate change by investing in alternative energy sources.

160. While ExxonMobil was airing “Growing Fuel” and similar greenwashed advertisements, the vast majority of ExxonMobil’s research and development continued to be spent on finding, refining, and producing oil and gas that will eventually enter the market, be burned, and contribute to climate change. This practice continues today.

161. Online, ExxonMobil claims that its goal is to be able to produce 10,000 barrels of algae biofuel per day by 2025.

162. Even if ExxonMobil met its goal and produced 10,000 barrels a day of algae biofuel in 2025, that would be approximately 0.2 percent of its current refinery capacity.

163. ExxonMobil spends less than one percent of its annual revenue on alternative energy research. As a consequence, ExxonMobil provides no more than nominal resources to alternative energy research.

164. ExxonMobil’s advertising that emphasizes its purported commitment to developing low carbon fuels does not mention that the low carbon fuels would—even in a best-case scenario—only be a small fraction

of ExxonMobil product, and many of the alternative fuels ExxonMobil is pursuing are many years away from being usable.

165. ExxonMobil also engages in greenwashing by advertising that certain of its fossil-fuel-based products can help consumers reduce greenhouse gas emissions and improve fuel economy.

166. Advertisements claiming that certain ExxonMobil products are environmentally sound have falsely given reasonable consumers the impression that purchasing ExxonMobil's products is an environmentally sound decision and that ExxonMobil is supportive of ambitious action to address climate change.

167. Through advertisements over the past four decades—and continuing today—ExxonMobil has deprived Connecticut consumers of accurate information about their purchasing decisions. Initially these tactics mostly focused on disinformation about climate science, whereas more recent advertising has sought to falsely induce purchases and brand affinity by portraying ExxonMobil as a company working on a solution to climate change through selling “green” products. These tactics have had a material effect on Connecticut consumers.

## **VI. THE REALITY OF CLIMATE CHANGE IN CONNECTICUT**

168. The pre-industrial concentration of carbon dioxide in the atmosphere was approximately 280 parts per million (“ppm”). In 2022, the concentration exceeded 420 ppm.

169. Average global air temperature has risen approximately 1 degree Celsius above its pre-industrial level.



170. In 2018, the IPCC concluded that the Earth will experience 1.5 degrees Celsius warming between 2030 and 2052 if the current pace of greenhouse gas emissions continues.

171. The increase in temperature and CO<sub>2</sub> in the atmosphere is attributable to human activity, including the burning of fossil fuels.

172. Credible scientific evidence indicates—especially considering recent extreme weather events—that the catastrophic effects of climate change are occurring sooner than anticipated.

173. Climate change has negatively impacted, is negatively impacting, and will continue to negatively impact Connecticut's people, lands, waters, coastline, infrastructure, fish and wildlife, natural resources, critical ecosystems, and other assets owned by or held in the public trust by the state of Connecticut and/or its municipalities.

174. Climate change has caused, is causing, and will cause sea level rise, flooding, drought, an increase in extreme temperatures, a decrease in air quality, an increase in severe storms, contamination of drinking water, and an increase in certain disease-transmitting species.

175. As a result of the negative impacts on Connecticut's environment, climate change has caused, is causing, and will cause an increase in illness, infectious disease and death.

176. As a result of the negative impacts on Connecticut's environment, climate change has caused, is causing, and will cause serious damage to existing infrastructure, including but not limited to coastal and inland development, roadways, railways, dams, water and sewer systems, and other utilities.

177. As a result of the negative impacts on Connecticut's environment, climate change has caused, is causing, and will cause serious detrimental economic impacts on the State of Connecticut, its people, businesses and municipalities, including but not limited to heat-related productivity losses, increased energy cost and consumption, and agriculture, tourism, and recreation losses.

178. Even if the Earth continues at its current rate of warming, the State of Connecticut would have to expend at billions of dollars to adapt to the consequences of global warming.

179. ExxonMobil's stated plans to continue exploring for new fossil fuel reserves and not to plan for a reduction in fossil fuel consumption for the next forty years will result in more greenhouse gases being emitted into the atmosphere and will cause more severe health, economic and environmental consequences to the State of Connecticut.

180. ExxonMobil's business practices over at least the last thirty years have prevented or helped to slow the transition to cleaner alternative fuels through a campaign of deception and misleading consumers about the science of climate change, despite ExxonMobil's knowledge of the consequences associated with continuing to use its products.

181. The State of Connecticut, its people, and its municipalities will have to expend billions of dollars to adapt and implement resilience measures to partially combat the ongoing negative effects of climate change.

**COUNT ONE*****ExxonMobil's Campaign of Deception Violated  
Conn. Gen. Stat. § 42-110b.***

1-181. Paragraphs 1 through 181 of the Complaint are hereby repeated and realleged as Paragraphs 1 through 181 of this First Count as if fully set forth herein.

182. At all times relevant to this Complaint, ExxonMobil was engaged in the conduct of trade or commerce by selling oil and gasoline through retailers and/or branded wholesalers located in Connecticut.

183. By engaging in the acts and practices alleged herein, ExxonMobil made or caused to be made to Connecticut consumers, directly or indirectly, explicitly or by implication, representations which are material and false or likely to mislead consumers when reasonably interpreted, including, but not limited to, the following:

a. that ExxonMobil was uncertain that climate change was real, occurring or would occur in the future;

b. that ExxonMobil was uncertain that human activity, including the combustion of fossil fuels, contributed to climate change;

c. that there was time to wait before taking action;

d. that there was a balanced debate amongst scientists about whether climate change was occurring, its relationship to human activity, and whether its effects would be positive or negative;

e. that ExxonMobil's research supported the assertions in (a) – (d).

184. By engaging in acts and practices alleged herein, ExxonMobil made deceptive omissions and/or asserted deceptive half-truths about scientific facts and the scientific consensus regarding climate change in order to mislead Connecticut consumers about its knowledge regarding climate change and the industry, including, but not limited to, the following:

a. that scientists employed by ExxonMobil knew that human activity, including the combustion of fossil fuels, contributed to climate change;

b. that climate change has potentially catastrophic effects;

c. that use of ExxonMobil products contributes to climate change;

d. that ExxonMobil decided to emphasize the uncertainty as part of its disinformation campaign as a way to continue to profit off the sale of oil and gasoline;

e. that ExxonMobil knew that reduction of fossil fuel combustion was the primary realistic course of action to address climate change; and

f. that there was scientific consensus, including from ExxonMobil's own scientists, that the combustion of fossil fuels was contributing to climate change and that the effects could be devastating.

185. The advertorials and disinformation in the Defendant's campaign of deception constituted a sophisticated public relations campaign for the purpose of increasing its sales and profits.

186. The acts and practices alleged herein, when interpreted reasonably, were and are likely to affect Connecticut consumers' decisions or conduct.

187. Through the conduct alleged herein, ExxonMobil achieved revenues, profits, and gains which it otherwise would not have.

188. ExxonMobil violated Conn. Gen. Stat. § 42-110b by making false and/or misleading statements about its business practices and their environmental impact that were and are likely to deceive Connecticut consumers.

### **COUNT TWO**

#### ***ExxonMobil's Conduct in Count One was Willful.***

1-188. Paragraphs 1 through 188 of the First Count are hereby repeated and realleged as Paragraphs 1 through 188 of this Second Count as if fully set forth herein.

189. ExxonMobil engaged in the acts and practices alleged herein when it knew or should have known that its conduct was deceptive, in violation of Conn. Gen. Stat. § 42-110b (a), and, therefore, is liable for civil penalties of up to \$5,000 per willful violation pursuant to Conn. Gen. Stat. § 42-110o (b).

### **COUNT THREE**

#### ***ExxonMobil's Campaign of Deception Constitutes Unfair Trade Practices in Violation of Conn. Gen. Stat. § 42-110b.***

1-188. Paragraphs 1 through 188 of the First Count are hereby repeated and realleged as Paragraphs 1 through 188 of this Third Count as if fully set forth herein.

189. ExxonMobil's unfair acts and practices were in contravention of Connecticut's public policy, including but not limited to the policy set forth in

General Statutes § 22a-1, which states that “human activity must be guided by and in harmony with the system of relationships among the elements of nature. . . . [T]he policy of the state of Connecticut is to conserve, improve and protect its natural resources and environment and to control air, land, and water pollution in order to enhance the health, safety and welfare of the people of the state.” The statute also provides that the state has a “responsibility as trustee of the environment for the present and future generations.”

190. ExxonMobil’s unfair acts and practices were in contravention of Connecticut’s public policy promoting truth in advertising.

191. ExxonMobil’s unfair acts and practices—including, but not limited to, the following—were immoral, unethical, oppressive and/or unscrupulous:

a. deceiving Connecticut consumers about the catastrophic health, safety, economic, and environmental effects of burning fossil fuels; and

b. undermining and delaying the creation of alternative technologies, driven by informed consumer choice, which could have avoided the most devastating effects of climate change.

192. ExxonMobil’s unfair acts and practices have directly and proximately caused substantial injury to consumers within the State of Connecticut.

193. The substantial injury caused to consumers by ExxonMobil’s unfair acts and practices is not outweighed by any countervailing benefits, but rather resulted in the stifling of an open marketplace for renewable energy, thereby leaving consumers unable to reasonably avoid the detrimental consequences of fossil fuel combustion.

194. ExxonMobil's false and/or misleading statements about its business practices and their environmental impact constitute an unfair trade practice in violation of Conn. Gen. Stat. § 42-110b.

#### **COUNT FOUR**

##### ***ExxonMobil's Conduct in Count Three was Willful.***

1-194. Paragraphs 1 through 194 of the Third Count are hereby repeated and realleged as Paragraphs 1 through 194 of this Fourth Count as if fully set forth herein.

195. ExxonMobil engaged in the acts and practices alleged herein when it knew or should have known that its conduct was unfair, in violation of Conn. Gen. Stat. § 42-110b (a), and, therefore, is liable for civil penalties of up to \$5,000 per willful violation pursuant to Conn. Gen. Stat. § 42-110o (b).

#### **COUNT FIVE**

##### ***ExxonMobil's Deceptive Greenwashing Campaigns Violated Conn. Gen. Stat. § 42-110b.***

1-181. Paragraphs 1 through 181 of the Complaint are hereby repeated and realleged as Paragraphs 1 through 181 of this Fifth Count as if fully set forth herein.

182. At all times relevant to this Complaint, ExxonMobil was engaged in the conduct of trade or commerce by selling oil and gasoline through retailers and/or branded wholesalers located in Connecticut.

183. ExxonMobil has engaged in deceptive greenwashing campaigns to portray the company as environmentally conscious as part of the company's

marketing strategy to sell oil and gasoline to Connecticut consumers.

184. As part of these “greenwashing” campaigns, ExxonMobil has engaged in deceptive conduct, including but not limited to, the following:

a. made false and/or misleading statements regarding ExxonMobil’s activities and their effect on the climate and/or the environment;

b. failed to disclose that the continued use of fossil fuels will have a negative impact on the climate;

c. created an impression that the company is expending far more resources toward developing sustainable energy solutions than it actually is;

d. failed to disclose that the amount of resources ExxonMobil is devoting to research and development of “green” technologies, including but not limited to algae production, is far exceeded by the amount of resources it is expending on exploration, extraction and refinement of oil;

e. created a false impression that ExxonMobil is meaningfully addressing climate change through development of alternative energy resources;

f. used words and imagery to give the appearance that ExxonMobil products are not environmentally harmful; and

g. asserted half-truths about its products and practices and their environmental impact.

185. ExxonMobil’s “greenwashing” advertisements were and are a sophisticated public relations campaign for the purpose of increasing its sales and profits.



186. The acts and practices alleged herein, when interpreted reasonably, were and are likely to affect Connecticut consumers' decisions or conduct.

187. Through the conduct alleged herein, ExxonMobil achieved revenues, profits, and gains which it otherwise would not have.

188. ExxonMobil violated Conn. Gen. Stat. § 42-110b by conducting false and misleading Greenwashing Campaigns likely to deceive Connecticut consumers.

### **COUNT SIX**

#### ***ExxonMobil's Conduct in Count Five was Willful.***

1-188. Paragraphs 1 through 188 of the Fifth Count are hereby repeated and realleged as Paragraphs 1 through 188 of this Sixth Count as if fully set forth herein.

189. ExxonMobil engaged in the acts and practices alleged herein when it knew or should have known that its conduct was deceptive, in violation of Conn. Gen. Stat. § 42-110b (a), and, therefore, is liable for civil penalties of up to \$5,000 per willful violation pursuant to Conn. Gen. Stat. § 42-110o (b).

### **COUNT SEVEN**

#### ***ExxonMobil's Deceptive Greenwashing Campaigns Constitute Unfair Trade Practices in Violation of Conn. Gen. Stat. § 42-110b.***

1-188. Paragraphs 1 through 188 of the Fifth Count are hereby repeated and realleged as Paragraphs 1 through 188 of this Seventh Count as if fully set forth herein.

189. ExxonMobil's unfair acts and practices were in contravention of Connecticut's public policy, including but not limited to the policy set forth in General Statutes § 22a-1, which states that "human activity must be guided by and in harmony with the system of relationships among the elements of nature. . . . [T]he policy of the state of Connecticut is to conserve, improve and protect its natural resources and environment and to control air, land, and water pollution in order to enhance the health, safety and welfare of the people of the state." The statute also provides that the state has a "responsibility as trustee of the environment for the present and future generations."

190. ExxonMobil's unfair greenwashing acts and practices were in contravention of Connecticut's public policy promoting truth in advertising.

191. ExxonMobil's unfair greenwashing acts and practices—including, but not limited to, the following—were immoral, unethical, oppressive and/or unscrupulous:

a. deceiving Connecticut consumers about the catastrophic health, safety, economic, and environmental effects of burning fossil fuels; and

b. undermining and delaying the creation of alternative technologies, driven by informed consumer choice, which could have avoided the most devastating effects of climate change.

192. ExxonMobil's unfair acts and practices have directly and proximately caused substantial injury to consumers within the State of Connecticut.

193. The substantial injury caused to consumers by ExxonMobil's unfair acts and practices is not outweighed by any countervailing benefits, but rather

resulted in the stifling of an open marketplace for renewable energy thereby leaving consumers unable to reasonably avoid the detrimental consequences of fossil fuel combustion.

194. ExxonMobil's false and misleading Greenwashing Campaigns constitute unfair trade practices in violation of Conn. Gen. Stat. § 42-110b.

### **COUNT EIGHT**

#### ***ExxonMobil's Conduct in Count Seven was Willful.***

1-194. Paragraphs 1 through 194 of the Seventh Count are hereby repeated and realleged as Paragraphs 1 through 194 of this Eighth Count as if fully set forth herein.

195. ExxonMobil engaged in the acts and practices alleged herein when it knew or should have known that its conduct was unfair, in violation of Conn. Gen. Stat. § 42-110b (a), and, therefore, is liable for civil penalties of up to \$5,000 per willful violation pursuant to Conn. Gen. Stat. § 42-110o (b).

### **VII. PRAYER FOR RELIEF**

WHEREFORE, the State of Connecticut requests the following relief:

1. A finding that by the acts alleged herein, ExxonMobil engaged in unfair and deceptive acts and practices in the course of engaging in trade or commerce within the State of Connecticut in violation of the Connecticut Unfair Trade Practices Act;
2. An injunction pursuant to Conn. Gen. Stat. § 42-110m enjoining ExxonMobil from engaging in any acts that violate the Connecticut Unfair Trade Practices

Act, including, but not limited to, the deceptive acts and practices alleged herein;

3. An order pursuant to Conn. Gen. Stat. § 42-110o directing ExxonMobil to pay a civil penalty for \$5,000 for each and every willful violation of the Connecticut Unfair Trade Practices Act;

4. An order that ExxonMobil disclose all research and studies in its possession, including such research and studies previously conducted directly or indirectly by it, its respective agents, affiliates, servants, officers, directors, employees, and all persons acting in concert with them, that relates to the issue of climate change;

5. An order that ExxonMobil fund a corrective education campaign to remedy the harm inflicted by decades of disinformation, to be administered and controlled by the State or such other independent third party as the Court may deem appropriate;

6. An order for equitable relief pursuant to Conn. Gen. Stat. § 42-110m for past and ongoing deceptive acts and practices associated with climate change, including but not limited to relief for mitigation, adaptation, and resiliency;

7. An order for any and all other equitable relief authorized under Conn. Gen. Stat. § 42-110m, including but not limited to restitution and disgorgement, that is appropriate to rectify the unlawful behavior complained of herein;

8. An order pursuant to Conn. Gen. Stat. § 42-110m directing ExxonMobil to pay reasonable attorney's fees to the State of Connecticut;

9. Costs of suit; and

10. Such other relief as this Court deems just and equitable.

PLAINTIFF  
STATE OF CONNECTICUT

By: /s/ Matthew I. Levine  
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Attorney General  
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DOCKET NO: HHD-CV20-6132568-S

STATE OF CONNECTICUT

V.

EXXON MOBIL CORPORATION

RETURN DATE: October 13, 2020

SUPERIOR COURT

J.D. OF HARTFORD

AT HARTFORD

NOVEMBER 20, 2023

**STATEMENT OF AMOUNT IN DEMAND**

The Plaintiff states that the amount in demand is greater than Fifteen Thousand Dollars (\$15,000), exclusive of interest and costs.

PLAINTIFF  
STATE OF CONNECTICUT

By: /s/ Matthew I. Levine  
WILLIAM M. TONG  
Juris No. 440323  
Attorney General  
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**APPENDIX C**

STATE OF MINNESOTA  
DISTRICT COURT  
SECOND JUDICIAL DISTRICT  
COUNTY OF RAMSEY  
Case Type: Civil (Consumer Protection)

Court File No. \_\_\_\_\_

Filed June 24, 2020

State of Minnesota,  
by its Attorney General, Keith Ellison,

Plaintiff,

vs.

American Petroleum Institute, Exxon Mobil  
Corporation, ExxonMobil Oil Corporation, Koch  
Industries, Inc., Flint Hills Resources LP, Flint Hills  
Resources Pine Bend,

Defendants.

**COMPLAINT**



The State of Minnesota, by its Attorney General, Keith Ellison, for its Complaint against Defendants alleges as follows:

### INTRODUCTION

1. Minnesota is in the midst of a climate-change crisis. The world has already warmed approximately two degrees Fahrenheit (F) due to human-caused climate change; Minnesota has warmed even more. Warming will continue with devastating economic and public-health consequences across the state and, in particular, disproportionately impact people living in poverty and people of color.

2. The economic devastation and public-health impacts from climate change were caused, in large part, by a campaign of deception that Defendants orchestrated and executed with disturbing success.

3. Previously unknown internal documents were recently discovered that confirm that Defendants well understood the devastating effects that their products would cause to the climate, including Minnesota, dating back to the 1970s and 1980s. But Defendants did not ever disclose to the public—or to Minnesotans—their actual knowledge that would confirm the very science they sought to undermine. Instead, Defendants, both directly and through proxies, engaged in a public-relations campaign that was not only false, but also highly effective. This campaign was intended to, and did, target and influence the public, and consumers, including in Minnesota.

4. During the period when Defendants and their proxies were deliberately misleading Minnesotans about the consequences of using their products, Defendants realized massive profits through largely

unabated and expanded extraction, production, promotion, marketing, and sale of their fossil-fuel products. For example, ExxonMobil earned approximately \$775 billion in profits during this period.<sup>1</sup> And by 2017, while the foundations they funded were denying legitimate climate science, Charles and David Koch of Koch Industries, Inc., were worth a combined \$84 billion.<sup>2</sup> The six largest oil and gas companies reported an excess of \$55 billion in combined profits in 2019 alone. Just these six companies have generated \$2.4 trillion in profits since 1990.<sup>3</sup>

5. And during the same period, Minnesota and Minnesotans suffered the devastating effects of climate change. Minnesota has already experienced billions of dollars of economic harm due to climate change since Defendants began their deceptive campaign, and, without serious mitigation, will continue to suffer billions of dollars of damage through midcentury.

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<sup>1</sup> Matthew Tyler & Jillian Ambrose, *Revealed: big oil's profits since 1990 total nearly \$2tn: BP, Shell, Chevron and Exxon accused of making huge profits while "passing the buck" on climate change*, The Guardian (Feb. 12, 2020), <https://www.theguardian.com/business/2020/feb/12/revealed-big-oil-profits-since-1990-total-nearly-2tn-bp-shell-chevron-exxon> [https://perma.cc/GML4-AME4].

<sup>2</sup> Christopher Leonard, *Kochland: The secret history of Koch Industries and corporate power in America*, Simon & Schuster (2019).

<sup>3</sup> *Padding Big Oil's Profits: Companies bank trillions, taxpayers get the bill*, Taxpayers for Common Sense (Feb. 2019), <https://www.taxpayer.net/energy-natural-resources/padding-bigoils-profits/> [https://perma.cc/2UTW-JH4B].

6. If Defendants had not misled the public to pad their own pockets, Minnesota would not have already incurred such large costs because of climate change and would not be facing such dramatic future costs.

7. The State seeks to ensure that the parties who have profited from avoiding the consequences and costs of dealing with global warming and its physical, environmental, social, and economic consequences, bear the costs of those impacts, rather than Minnesota taxpayers, residents, or broader segments of the public.

8. This action seeks to hold Defendants accountable for deliberately undermining the science of climate change, purposefully downplaying the role that the purchase and consumption of their products played in causing climate change and the potentially catastrophic consequences of climate change, and for failing to fully inform the consumers and the public of their understanding that without swift action, it would be too late to ward off the devastation.

9. Defendants' unlawful actions in Minnesota contributed to the harm Minnesota is currently suffering, and will continue to suffer, and they must be held responsible.<sup>4</sup>

## **PARTIES**

11. When reference in this Complaint is made to an act or omission of the Defendants, unless specifically attributed or otherwise stated, such references should be interpreted to mean that the

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<sup>4</sup> This Complaint disclaims injuries arising on federal property and those that arose from Defendants' provision of fossil fuel products to the federal government for military and national defense purposes.

officers, directors, agents, employees, or representatives of the 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 scope of their employment or agency.

### PLAINTIFF

12. **Keith Ellison, the Attorney General of the State of Minnesota**, is authorized to bring this action and seek the relief requested pursuant to his authority in Minnesota Statutes Chapter 8 to sue for injunctive relief, equitable relief, civil penalties, and damages, together with costs and disbursements including costs of investigation and reasonable attorney fees, for violations of the law of this state respecting unfair, discriminatory and other unlawful practices in business, commerce, or trade. The Attorney General also has common law authority, including *parens patriae* authority, to bring this action to enforce Minnesota's laws, to vindicate the State's sovereign and quasi-sovereign interests, and to remediate all harm arising out of—and provide full relief for—violations of Minnesota's laws.

### DEFENDANTS

#### AMERICAN PETROLEUM INSTITUTE

13. **Defendant American Petroleum Institute (API)** is a nonprofit corporation registered to do business in Minnesota. The American Petroleum Institute was created in 1919 to represent the American petroleum industry as a whole. With more than 600 members, API is the country's largest oil trade association. API asserts that it "speak[s] for the

oil and gas industry to the public, Congress and the Executive Branch, state governments and the media.”<sup>5</sup> It claims that it “negotiate[s] with regulatory agencies, represent[s] the industry in legal proceedings, participate[s] in coalitions and work[s] in partnership with other associations to achieve [its] members’ public policy goals.”<sup>6</sup> API’s purpose is to advance the individual members’ collective business interests, which includes increasing consumers’ consumption of oil and gas to Defendants’ financial benefit. Among other functions, API coordinates among members of the petroleum industry and gathers information of interest to the industry and disseminates that information to its members.

14. Member companies participate in API strategy, governance, and operation through membership dues and by contributing company officers and other personnel to API boards, committees, and task forces. ExxonMobil and/or its predecessors-in-interest is, or has been, a core API member at times relevant to this litigation and has had executives serving on the API Executive Committee and as API Chairman, which is akin to serving as a corporate officer. For example, ExxonMobil’s CEO served on API’s Executive Committee almost continuously for over 20 years (1991, 1996-97, 2001, and 2005-2016).

15. Relevant information was shared among API, its members, and their predecessors-in-interest through: (a) distribution of information held by API to its members; and (b) participation of officers and other

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<sup>5</sup> *About API*, American Petroleum Institute, <https://www.api.org/about> [<https://perma.cc/XS58GKUY>].

<sup>6</sup> *Id.*

personnel of fossil-fuel companies on API boards, committees, and task forces. API has been a member of at least five organizations that have promoted disinformation about fossil-fuel products to consumers, including the Global Climate Coalition, Partnership for a Better Energy Future, Coalition for American Jobs, Alliance for Energy and Economic Growth, and Alliance for Climate Strategies. These front groups were formed to provide climate disinformation and advocacy from a seemingly objective source, when, in fact, they were financed and controlled by ExxonMobil and other sellers of fossil-fuel products. Defendants benefited from the spread of this disinformation.

16. API's stated mission includes "influenc[ing] public policy in support of a strong, viable U.S. oil and natural gas industry," which includes increasing consumers' consumption of oil and gas to Defendants' financial benefit. Through Executive Committee roles, API board membership, and/or budgetary funding of API, ExxonMobil and other fossil-fuel companies collectively wielded control over the policies and trade practices of API. In addition, ExxonMobil and other fossil-fuel companies directly supervised and participated in API's misleading messaging regarding climate change. API and its members disseminated misleading messaging regarding climate change to further their shared goal of influencing consumer demand, including in Minnesota, for fossil-fuel products through long-term advertising and communications campaigns centered on climate-change denialism. These campaigns were directed nationally and in Minnesota, targeting Minnesota consumers. API continues to participate and/or direct misleading campaigns about the dangers of fossil fuels

intended to reach consumers, policy makers, and others, including in Minnesota.

**EXXON ENTITIES – EXXON MOBIL  
CORPORATION AND EXXONMOBIL OIL  
CORPORATION**

17. **Defendant Exxon Mobil Corporation** is a multinational, vertically integrated energy and chemicals company incorporated in the State of New Jersey with a principal place of business at 5959 Las Colinas Boulevard, Irving, Texas, 75039. In 2018, ExxonMobil reported nearly \$21 billion in profits.<sup>7</sup>

18. Exxon Mobil Corporation is the ultimate parent company for numerous subsidiaries, and is liable for the unlawful actions of those subsidiaries. Exxon Mobil Corporation is the corporation formed on November 30, 1999 by the merger of Exxon (formerly the Standard Oil Company of New Jersey) and Mobil (formerly the Standard Oil Company of New York). Exxon Mobil Corporation was formerly known as, did or does business as, and/or is the successor in liability to 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., Exxon Corporation, and Mobil Corporation.

19. **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 incorporated in the state of New York with its principal place of

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<sup>7</sup> 2018 *Financial & Operating Review*, ExxonMobil at 89 (hereinafter Exxon Annual Report).

business at 5959 Las Colinas Boulevard, Irving, Texas, 75039. ExxonMobil Oil Corporation was formerly known as, did or does business as, and/or is the successor in liability to Mobil Oil Corporation.

20. Defendants Exxon Mobil Corporation and ExxonMobil Oil Corporation are liable for the unlawful actions of Exxon, Mobil, and other corporate ancestors. Exxon Mobil Corporation has provided significant funding to ExxonMobil Foundation in furtherance of the unlawful actions described in this Complaint.

21. Exxon Mobil Corporation controls and has controlled companywide decisions about the quantity and extent of fossil-fuel production and sales, including those of its subsidiaries. Exxon Mobil Corporation recently represented 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, including diversification among types and locations of [its] projects.”<sup>8</sup> Exxon Mobil Corporation determines whether and to what extent its holdings market, produce, and/or distribute fossil-fuel products.

22. Exxon Mobil Corporation controls and has controlled companywide decisions related to marketing, advertising, climate change and greenhouse-gas emissions from its fossil-fuel products, and communications strategies concerning climate change and the link between fossil-fuel use and impacts on the environment and communities from climate change, including those of its subsidiaries. Exxon Mobil Corporation’s Board, or an individual/sub-set of the Board, or another committee

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<sup>8</sup> Exxon Mobil Corporation, *Form 10-K* (2017).



appointed by the Board, holds the highest level of direct responsibility for climate-change policy within the company. Exxon Mobil Corporation's Chairman of the Board and Chief Executive Officer, its President and the other members of its Management Committee are actively engaged in discussions relating to greenhouse-gas emissions and the risks of climate change on an ongoing basis. Exxon Mobil Corporation requires its subsidiaries to provide an estimate of greenhouse-gas-related emissions costs in their economic projections when seeking funding for capital investments.

23. Exxon Mobil Corporation and ExxonMobil Oil Corporation (a wholly-owned subsidiary of Exxon Mobil Corporation) are registered to do business in Minnesota as foreign business corporations and maintain a registered agent for service of process at 2345 Rice Street, Suite 230, Roseville, Minnesota, 55113. ExxonMobil Oil Corporation is a licensed distributor of petroleum products in Minnesota.<sup>9</sup>

24. Exxon Mobil Corporation, ExxonMobil Oil Corporation and their subsidiaries explore, develop, and produce oil and gas worldwide. Exxon Mobil Corporation is one of the largest integrated refiners and marketers of fuels and lube basestocks, as well as the leading manufacturer of petroleum products and finished lubricants.<sup>10</sup>

25. As used in this Complaint, "Exxon" or "ExxonMobil" collectively refers to Defendants Exxon

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<sup>9</sup> Minn. Dept. of Revenue, *Petroleum Licensed Distributors*, <http://www.revenue.state.mn.us/petroleum-licensed-distributors-information> (follow "licensed distributors") (hereinafter Minnesota Petroleum Distributors).

<sup>10</sup> Exxon Annual Report at 27.

Mobil Corporation and ExxonMobil Oil Corporation and their predecessors, successors, parents, subsidiaries, affiliates, and divisions.

26. ExxonMobil has and continues to tortiously market, advertise, promote, and supply its fossil-fuel products in Minnesota, with knowledge that those products have caused and will continue to cause climate-crisis-related injuries in Minnesota, including the State's injuries. Exxon's statements in and outside of Minnesota made in furtherance of its campaign of deception and denial, and its chronic failure to warn consumers of global-warming-related hazards when it marketed, advertised, and sold its products both in and outside of Minnesota, were intended to conceal and mislead the public, including the State and its residents, about the serious adverse consequences from continued use of ExxonMobil's products. That conduct was intended to reach and influence the State, as well as its residents, to continue unabated use of Defendants' fossil-fuel products in and outside Minnesota, resulting in the State's injuries.

27. A substantial portion of ExxonMobil's fossil-fuel products are or have been transported, traded, distributed, promoted, marketed, manufactured, sold, and/or consumed in Minnesota, from which ExxonMobil derives and has derived substantial revenue. For example, ExxonMobil directly and through its subsidiaries and/or predecessors-in-interest supplied substantial quantities of fossil-fuel products, including, but not limited to, crude oil, to Minnesota during the period relevant to this litigation. ExxonMobil conducts and controls, either directly or through franchise agreements, retail fossil-fuel sales at over 80 gas station locations throughout Minnesota, at which it promotes, markets, and

advertises its fossil-fuel products under its Exxon and/or Mobil brand names. During the period relevant to this Complaint, ExxonMobil sold a substantial percentage of all retail gasoline in Minnesota. Additionally, ExxonMobil distributes, markets, promotes, and provides its Mobil 1 products for sale at well over 150 locations throughout the state of Minnesota, including, but not limited to, auto body and repair shops, Costco, Sam's Club, and Walmart locations. ExxonMobil historically directed its fossil-fuel product advertising, marketing, and promotional campaigns to Minnesotans, including maps of Minnesota identifying the locations of its service stations. ExxonMobil continues to market and advertise its fossil-fuel products in Minnesota to Minnesota residents by maintaining an interactive website available to prospective customers by which it directs Minnesota residents to ExxonMobil's nearby retail service stations and lubricant distributors. Further, ExxonMobil promotes its products in Minnesota by regularly updating and actively promoting its mobile device application, "Exxon Mobil Rewards+," throughout the state of Minnesota, encouraging Minnesota users to consume fuel at its stations in Minnesota in exchange for rewards on every fuel purchase.

**KOCH ENTITIES - KOCH INDUSTRIES, INC.,  
FLINT HILLS RESOURCES LP, AND FLINT  
HILLS RESOURCES PINE BEND, LLC**

28. **Defendant Koch Industries, Inc.** (Koch) is an American multinational corporation based in Wichita, Kansas. Koch is the second largest private

company in the United States and earned more than \$113 billion in revenue in 2019.<sup>11</sup>

29. Koch is the ultimate parent company for numerous subsidiaries involved in the manufacturing, refining, and distribution of petroleum products. Koch is liable for the unlawful actions of those subsidiaries.

30. Koch also supports numerous foundations including the Charles G. Koch Charitable Foundation, the David H. Koch Charitable Foundation, the Koch Institute, and the Claude R. Lambe Charitable Foundation. Koch expects the foundations that it supports to fund groups that further its financial interests. Koch constructively controls how the foundations that it supports direct their philanthropic activities.

31. Koch, along with many of its subsidiaries and affiliates, is registered to do business in Minnesota. Defendants **Flint Hills Resources LP and Flint Hills Resources Pine Bend, LLC** (both subsidiaries of Koch) are licensed distributors of petroleum products in Minnesota.<sup>12</sup>

32. Koch subsidiaries (Koch Pipe Lines and Minnesota Pipe Line Company LLC) import crude oil from Canada to a terminal in Clearbrook, Minnesota, which is owned and operated by Koch. From there, the oil is piped to the Flint Hills Resources Pine Bend Refinery via other Koch-Industries-owned pipelines.<sup>13</sup>

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<sup>11</sup> *America's Largest Private Companies, 2019 Ranking*, Forbes, <https://www.forbes.com/largest-private-companies/list/#tab:rank> [<https://perma.cc/4PXZ-L7N4>].

<sup>12</sup> Minnesota Petroleum Distributors.

<sup>13</sup> *Minnesota's Petroleum Infrastructure: Pipelines, Refineries*,  
(continued...)

33. Koch's Flint Hills Resources' Pine Bend Refinery is located in Minnesota and can process 392,000 barrels of crude oil per day. This refinery handles one quarter of all Canadian tar sands crude entering the U.S. The Pine Bend Refinery supplies about half of Minnesota's motor fuel and 40 percent of Wisconsin's, as well as the bulk of the jet fuel for the Minneapolis St. Paul International Airport.<sup>14</sup>

34. As used in this Complaint, "Koch" collectively refers to Defendants Koch Industries, Inc., Flint Hills Resources, LP, and Flint Hills Resources Pine Bend, LLC, as well as their predecessors, successors, parents, subsidiaries, affiliates, and divisions.

35. Defendants direct and have directed substantial fossil-fuel-related business in Minnesota and throughout the United States. A substantial portion of Defendants' fossil-fuel products are or have been refined, transported, traded, distributed, marketed, promoted, manufactured, sold, and/or consumed in Minnesota, from which Defendants have derived significant revenue.

36. Minnesota plays an outsized role in America's oil market:

As a state with no indigenous oil supply situated in a relatively remote and sparsely populated region, Minnesota would not be expected to be more than a minor component of North America's oil supply system.

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*Terminals*, Research Department Minnesota House of Representatives (Oct. 2018), <https://www.house.leg.state.mn.us/hrd/pubs/petinfra.pdf> [https://perma.cc/Z3GK-MTRX] (hereinafter Minnesota's Petroleum Infrastructure).

<sup>14</sup> *Id.*

However, the state's strategic location between the oilfields of western Canada and North Dakota and the refining centers of the Midwest, the Gulf of Mexico, and the eastern coasts of the United States and Canada, has greatly magnified the role it plays in meeting America's demand for petroleum products.<sup>15</sup>

37. Flint Hills Resources' Pine Bend Refinery refines the majority of the motor gasoline consumed in Minnesota. Koch earns significant profits from the Pine Bend refinery.

38. Approximately 85% of the crude oil processed by the Pine Bend Refinery originates in Alberta, Canada from the Alberta tar sands. The rest originates in North Dakota.

39. The Alberta tar sands resource is being developed, in part, by ExxonMobil and Koch. ExxonMobil and Koch earn a portion of their substantial profits from the development of Canadian oil that is eventually refined and consumed in Minnesota. In 2014, Koch was reported to be the largest non-Canadian leaseholder of Canada's oil sands.<sup>16</sup>

40. The North Dakota Bakken oil resource is being developed, in part, by ExxonMobil. ExxonMobil earns a portion of its substantial profits from the development of North Dakota oil that is eventually refined and consumed in Minnesota.

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<sup>15</sup> *Id.*

<sup>16</sup> Steven Mufson & Juliet Eilperin, *The biggest foreign lease holder in Canada's oil sands isn't Exxon Mobil or Chevron. It's the Koch brothers*, Washington Post (Mar. 20, 2014).

41. Koch owns and operates portions of the pipeline system in Minnesota delivering crude oil to the Pine Bend Refinery. A portion of Koch's profits are from the ownership and operation of this pipeline system.

#### **AGENCY**

42. At all times herein mentioned, each of the Defendants was the agent, servant, partner, aider and abettor, co-conspirator, and/or joint venturer of each of the remaining Defendants herein and was at all times operating and acting within the purpose and scope of said agency, service, employment, partnership, conspiracy, and joint venture and rendered substantial assistance and encouragement to the other Defendants, knowing that their conduct was wrongful and/or constituted a breach of duty.

#### **JURISDICTION AND VENUE**

43. This Court has jurisdiction over the subject matter of this action and to grant the relief requested pursuant to Minnesota Statutes sections 484.01, 325F.67, 325F.69 and 325D.44, and common law.

44. This Court has personal jurisdiction over Defendants pursuant to the Minnesota long-arm statute, Minnesota Statute section 543.19, because Defendants transact business and cause harm in Minnesota, and the cause(s) of action arises out of and relates to Defendants' business here.

45. Venue lies in this Court pursuant to Minnesota Statute section 542.09.

**FACTS****THE CAUSES AND EFFECTS OF CLIMATE CHANGE**

46. Human-caused warming of the Earth is unequivocal. As a result, the atmosphere and oceans are warming, sea level is rising, snow and ice cover is diminishing, oceans are acidifying, and hydrologic systems have been altered, among other environmental changes.

47. The mechanism by which human activity causes global warming and climate change is well established: ocean and atmospheric warming is overwhelmingly caused by anthropogenic greenhouse-gas emissions.<sup>17</sup>

48. Greenhouse gases are largely byproducts of humans combusting fossil fuels to produce energy and using fossil fuels to create petrochemical products.

49. Prior to World War II, most anthropogenic CO<sub>2</sub> emissions were caused by land-use practices, such as forestry and agriculture, which altered the ability of the land and global biosphere to absorb CO<sub>2</sub> from the atmosphere; the impacts of such activities on Earth's climate were relatively minor. Since that time, however, both the annual rate and total volume of anthropogenic CO<sub>2</sub> emissions have increased enormously following the advent of major uses of oil, gas, and coal.

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<sup>17</sup> As used in this Complaint, the term "greenhouse gases" refers collectively to carbon dioxide (CO<sub>2</sub>), methane, and nitrous oxide. Where a cited source refers to a specific gas or gases, or when a process relates only to a specific gas or gases, this Complaint refers to each gas by name.



50. Defendants sell—or are in the business of promoting and protecting the sales of—fossil-fuel products, including in Minnesota.

51. Fossil-fuel products release greenhouse gases when consumed. More than half of all industrial emissions of CO<sub>2</sub> have occurred since 1988.<sup>18</sup>

52. Because of the increased burning of fossil-fuel products, concentrations of greenhouse gases in the atmosphere are now at a level unprecedented in at least 3 million years.<sup>19</sup>

53. As greenhouse gases accumulate in the atmosphere, the Earth radiates less energy back to space. This accumulation and associated disruption of the Earth's energy balance have myriad environmental and physical consequences.

54. Without Defendants' exacerbation of global warming caused by their conduct as alleged herein, the current physical and environmental changes caused by global warming would have been far less than those observed to date. Similarly, effects that will occur in the future would also be far less.<sup>20</sup>

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<sup>18</sup> Peter C. Frumhoff et al., *The climate responsibilities of industrial carbon producers*, *Climatic Change* 132:157-171 (2015) (hereinafter Frumhoff 2015).

<sup>19</sup> *More CO<sub>2</sub> than ever before in 3 million years, shows unprecedented computer simulation*, *Science Daily* (Apr. 3, 2019); see also *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, 4 (2014) (hereinafter IPCC 5th Assessment).

<sup>20</sup> Peter U. Clark, et al., *Consequences of Twenty-First-Century Policy for Multi-Millennial Climate and Sea-Level Change*, *Nature Climate Change* 6, 365 (“Our modelling suggests that the human  
(continued...)”)

**BY THE EARLY 1980S, DEFENDANTS KNEW THAT THEIR PRODUCTS CAUSED CLIMATE CHANGE, THAT CLIMATE CHANGE WOULD HAVE SEVERE ENVIRONMENTAL AND SOCIAL CONSEQUENCES, AND THAT URGENT ACTION WAS NECESSARY**

55. In the middle of the 20<sup>th</sup> century, scientists began to understand that burning fossil fuels releases additional greenhouse gases, driving up the atmospheric concentration. For example, in 1954, scientists from the California Institute of Technology submitted a research proposal to API to study the changing carbon ratio in the atmosphere and whether it could be explained by “industrialization and the consequent burning of large quantities of coal and petroleum.”<sup>21</sup>

Perhaps the most interesting effect concerning carbon in trees which we have thus far observed is a marked and fairly steady increase in the  $C^{12}/C^{13}$  ratio with time. Since 1840 the ratio has clearly increased markedly. This effect can be explained on the basis of a changing carbon dioxide concentration in the atmosphere resulting from industrialization and the consequent burning of large quantities of coal and petroleum. If this explanation were correct, the carbon dioxide content of the atmosphere today would be about 5% greater than it was a century ago.

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carbon footprint of about [470 billion tons] by 2000 . . . has already committed Earth to a [global mean sea level] rise of ~1.7m (range of 1.2 to 2.2 m).”).

<sup>21</sup> Benjamin Franta, *Early oil industry knowledge of CO<sub>2</sub> and global warming*, Nature Climate Change (2018) (hereinafter Franta 2018).

56. During the 1950s, scientists were also beginning to make the connection between the growing concentration of greenhouse gases in the atmosphere and a changing climate. For example, in 1957, H. R. Brannon of Humble Oil (predecessor-in-interest to ExxonMobil) measured an increase in atmospheric CO<sub>2</sub>, and communicated this information to API. Brannon published his results in the scientific literature, which was available to Defendants and/or their predecessors-in-interest.<sup>22</sup>

57. In 1959, physicist Edward Teller warned petroleum industry leaders, including high-level representatives of Defendants, of the potential for global temperature increases and resultant sea level rise at an event organized by API.<sup>23</sup>

58. This awareness that began in the 1950s continued into the 1960s. For example, in 1965, President Lyndon Johnson's Science Advisory Committee (SAC) issued a 110-page report entitled *Restoring the Quality of our Environment* that included an Appendix on "Atmospheric Carbon Dioxide" explaining, in part, how fossil-fuel combustion could lead to changes in the CO<sub>2</sub> concentration of the atmosphere. This report noted that burning of fossil fuels "may be sufficient to produce measurable and perhaps marked changes in climate" by the year 2000.<sup>24</sup>

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<sup>22</sup> H. R. Brannon, Jr., et al., *Radiocarbon evidence on the dilution of atmospheric and oceanic carbon by carbon from fossil fuels*, American Geophysical Union Transactions 38, 643-50 (1957).

<sup>23</sup> See Franta 2018 (citing E. Teller, *Energy patterns of the future*, Energy and Man: A Symposium 53-72 (1960)).

<sup>24</sup> Environmental Pollution Panel of the President's Science  
(continued...)

59. The contents of the SAC report were not widely reported to the general public. Only a limited number of scientists and government officials at this time were familiar with the contents of the report. But API members heard about the SAC report. At their 1965 annual meeting, then-API-president Frank Ikard gave the following address:

This report unquestionably will fan emotions, raise fears, and bring demands for action. The substance of the report is that there is still time to save the world's peoples from the catastrophic consequence of pollution, but time is running out.

One 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. The report further states, and I quote: ". . . 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."<sup>25</sup>

60. Thus, by 1965, Defendants and their predecessors-in-interest were aware that the scientific community had found that fossil-fuel products, if used

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Advisory Committee, *Restoring the Quality of Our Environment*, at 126-27 (1965).

<sup>25</sup> Frank Ikard, *Meeting the Challenges of 1966*, 13 (1965), <http://www.climatefiles.com/tradegroup/american-petroleum-institute/1965-api-president-meeting-the-challenges-of-1966>.

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

61. In 1968, API received a report from the Stanford Research Institute (SRI), which it had hired to assess the state of research on environmental pollutants, including CO<sub>2</sub>.<sup>26</sup> The assessment endorsed the findings of President Johnson's SAC from three years prior, stating, "Significant temperature changes are almost certain to occur by the year 2000, and . . . 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 CO<sub>2</sub> are detailed and seem to explain adequately the present state of CO<sub>2</sub> in the atmosphere." What was missing, the scientists said, was work on "air pollution technology and . . . systems in which CO<sub>2</sub> emissions would be brought under control."<sup>27</sup>

62. In 1969, SRI delivered a supplemental report on air pollution to API, projecting with alarming particularity that atmospheric CO<sub>2</sub> concentrations would reach 370 ppm by 2000<sup>28</sup>—almost exactly what it turned out to be (369 ppm).<sup>29</sup> The report explicitly

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<sup>26</sup> Elmer Robinson & R.C. Robbins, *Sources, Abundance, and Fate of Gaseous Atmospheric Pollutants*, Stanford Research Institute (Feb. 1968).

<sup>27</sup> *Id.*

<sup>28</sup> Elmer Robinson & R.C. Robbins, *Sources, Abundance, and Fate of Gaseous Atmospheric Pollutants Supplement*, Stanford Research Institute (June 1969).

<sup>29</sup> NASA Goddard Institute for Space Studies, *Global Mean CO<sub>2</sub> Mixing Ratios (ppm): Observations*, <https://data.giss.nasa.gov/modelforce/ghgases/Fig1A.ext.txt>.

connected the rise in CO<sub>2</sub> levels to the combustion of fossil fuels, finding it “unlikely that the observed rise in atmospheric CO<sub>2</sub> has been due to changes in the biosphere.”

63. By virtue of their membership and participation in API at that time, ExxonMobil received or should have received the SRI reports and was on notice of their conclusions.

64. Recently uncovered internal documents from ExxonMobil and other fossil-fuel companies show that industry scientists became instrumental in researching the greenhouse effect on the heels of this early science. For example, in 1969, a research project that involved the Esso Production Research Company (now ExxonMobil) acknowledged the possible connection between hurricane intensity and a warming climate.<sup>30</sup>

65. In 1972, API members 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 Defendants', on the environment, including global warming and attendant consequences. ExxonMobil's predecessors-in-interest that received this report include, but were not limited to: Esso Research, Ethyl (formerly affiliated with Esso, which was subsumed by

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<sup>30</sup> Center for International Environmental Law, *Smoke and Fumes: The Legal and Evidentiary Basis for Holding Big Oil Accountable for the Climate Crisis*, 2017 at 10 (hereinafter *Smoke and Fumes*) (citing M.M. Patterson (Shell Development Co.), *An Ocean Data Gathering Program for the Gulf of Mexico*, Society of Petroleum Engineers (1969)).

ExxonMobil), Getty, Humble Standard of New Jersey, Mobil, Skelly, and Colonial Pipeline.<sup>31</sup>

66. According to recently uncovered documents, by the 1970s, executives were being urged by their own scientists during this time to consider the industry's role in advancing the science of and solutions to climate change. For example, in 1978, Exxon (now ExxonMobil) scientist Harold Weinberg proposed to colleagues that Exxon become the leader in trying to define and counteract the "CO<sub>2</sub> problem."<sup>32</sup>

67. The need to act quickly was also becoming clear during this period. In 1977, Exxon scientist James Black communicated to the Exxon Corporation Management Committee that "[p]resent thinking holds that man has a time window of five to ten years before the need for hard decisions regarding changes in energy strategies might become critical."<sup>33</sup> Black also reported that "current scientific opinion overwhelmingly favors attributing atmospheric carbon dioxide increase to fossil fuel consumption," and that doubling atmospheric CO<sub>2</sub>, according to the best climate model available, would "produce a mean temperature increase of about 2° C[elsius] to 3° C[elsius] over most of the earth," with double to triple

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<sup>31</sup> American Petroleum Institute, *Environmental Research, A Status Report*, Committee for Air and Water Conservation (Jan. 1972).

<sup>32</sup> H.N. Weinberg, *Interoffice Correspondence to E.J. Gornowski: CO<sub>2</sub>* (Mar. 7, 1978), <http://www.climatefiles.com/exxonmobil/1978-exxon-memo-proposing-a-worldwide-effort-toanswer-co2-problem>.

<sup>33</sup> James F. Black, *Interoffice Correspondence to Frank G. Turpin: The Greenhouse Effect* (June 6, 1978), <http://www.climatefiles.com/exxonmobil/1978-exxon-memo-on-greenhouse-effect-forexon-corporation-management-committee>.

as much warming at the poles. And in 1982 it was pointed out to Exxon management that “once the effects [of global warming] are measurable, they might not be reversible.”<sup>34</sup>

68. Throughout the 1970s, it was becoming increasingly clear that climate change could have serious implications for Exxon’s business model. In 1977, Exxon scientist Henry Shaw circulated a memo to colleagues pointing out that the climatic effects of rising CO<sub>2</sub> “may be the primary limiting factor on energy production from fossil fuels over the next few centuries.”<sup>35</sup> In a 1979 memorandum to Weinberg, Shaw wrote: “It behooves us to start a very aggressive defensive program in the indicated areas of atmospheric science and climate because there is a good probability that legislation affecting our business will be passed.”<sup>36</sup> And a 1979 letter from Exxon’s director of research, Edward David, to senior vice president George T. Piercy states that Exxon’s ongoing research “could well influence Exxon’s view about the

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<sup>34</sup> M.B. Glaser, *Memorandum to Distribution List: CO<sub>2</sub> “Greenhouse” Effect* (Nov. 12, 1982), <http://www.climatefiles.com/exxonmobil/1982-memo-to-exxon-management-about-co2greenhouse-effect/> (hereinafter Glaser Memo 1982).

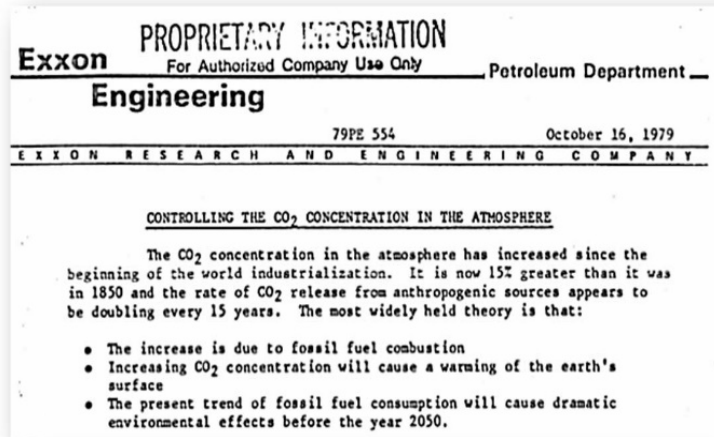
<sup>35</sup> Henry Shaw, *Interoffice Correspondence to John W. Harrison: Environmental Effects of Carbon Dioxide* (Oct. 31, 1977), <http://www.climatefiles.com/exxonmobil/1977-exxon-memoabout-doe-environmental-advisory-committee-subgroup-studying-co2-effects>.

<sup>36</sup> Henry Shaw, *Interoffice Correspondence to H.N. Weinberg: Research in Atmospheric Science* (Nov. 19, 1979), <http://www.climatefiles.com/exxonmobil/1979-exxon-memo-on-atmospheric-science-research-to-influence-legislation>.



long-term attractiveness of coal and synthetics relative to nuclear and solar energy.”<sup>37</sup>

69. An Exxon internal document from 1979 summarizes the state of the science at that time, reaching the damning conclusion that the present trend of fossil-fuel consumption would cause dramatic effects before 2050:<sup>38</sup>



70. In 1979, API and its members, including Defendants, convened a Task Force to monitor and share cutting edge climate research among the oil industry. The group was initially called the CO<sub>2</sub> and Climate Task Force, but in 1980 changed its name to the Climate and Energy Task Force (hereinafter

<sup>37</sup> Edward David, *Proprietary Memorandum to George Piercy* (Nov. 9, 1979), <https://insideclimatenews.org/documents/letters-senior-vps-1980>.

<sup>38</sup> R.L. Mastracchio & L.E. Hill, *Proprietary Memorandum to R. L. Hirsch: Controlling Atmospheric CO<sub>2</sub>* (Oct. 16, 1979), <http://www.climatefiles.com/exxonmobil/1979-exxon-memoon-potential-impact-of-fossil-fuel-combustion>.

referred to as “API CO<sub>2</sub> Task Force”). Membership included senior scientists and engineers from nearly every major U.S. and multinational oil-and-gas company, including Exxon and Mobil (ExxonMobil), among others. The Task Force was charged with monitoring government and academic research, evaluating the implications of emerging science for the petroleum and gas industries, and identifying where reductions in greenhouse-gas emissions from Defendants’ fossil-fuel products could be made.

71. In 1979, API prepared a background paper on CO<sub>2</sub> and climate for the API CO<sub>2</sub> Task Force, stating that CO<sub>2</sub> concentrations were rising steadily in the atmosphere, and predicting when the first clear effects of global warming might be detected. The API reported to its members that although global warming would occur, it would likely go undetected until approximately the year 2000, because, the API believed, its effects were being temporarily masked by a natural cooling trend. However, this cooling trend, the API warned its members, would reverse around 1990, adding to the warming caused by CO<sub>2</sub>.

72. In 1980, the API CO<sub>2</sub> Task Force invited Dr. John Laurmann, “a recognized expert in the field of CO<sub>2</sub> and climate,” to present to its members.<sup>39</sup> 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 CO<sub>2</sub> buildup, impact on society, methods of modeling and their consequences, uncertainties, policy implications, and conclusions

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<sup>39</sup> Jimmie J. Nelson, *American Petroleum Institute, The CO<sub>2</sub> Problem; Addressing Research Agenda Development* (Mar. 18, 1980), <https://www.industrydocuments.ucsf.edu/docs/gffl0228>.

that can be drawn from present knowledge.” Representatives from Exxon and API were present, and the minutes of the meeting were distributed to the entire API CO<sub>2</sub> Task Force. Laurmann informed the Task Force of the “scientific consensus on the potential for large future climatic response to increased CO<sub>2</sub> levels” and that there was “strong empirical evidence that [the carbon dioxide] rise [was] caused by anthropogenic release of CO<sub>2</sub>, mainly from fossil fuel burning.” Unless fossil-fuel production and use were controlled, atmospheric CO<sub>2</sub> would be twice preindustrial levels by 2038, with “likely impacts” along the following trajectory:

‘ LIKELY IMPACTS:

1° C RISE (2005): BARELY NOTICEABLE

2.5° C RISE (2038): MAJOR ECONOMIC CONSEQUENCES, STRONG REGIONAL DEPENDENCE

5° C RISE (2067): GLOBALLY CATASTROPHIC EFFECTS

73. The 1980s revealed an established consensus among scientists. A 1980 memorandum from the Exxon Research and Engineering Company states that “[t]here is *little doubt* that these observations indicate a growth in atmospheric CO<sub>2</sub>. It is also believed that the growth of atmospheric CO<sub>2</sub> has been occurring since the middle of the past century i.e., coincident with the start of the Industrial Revolution.”<sup>40</sup> And a 1982 internal Exxon document

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<sup>40</sup> Henry Shaw, *General 7A Memorandum to T.K. Kett: CO<sub>2</sub> Greenhouse Effect* (Dec. 18, 1980) (emphasis added),  
(continued...)

(the “Cohen/Levine Memo”) explicitly declares that the science was “unanimous” and that climate change would “bring about significant changes in the earth’s climate”:

[O]ver the past several years *a clear scientific consensus has emerged* regarding the expected climatic effects of increased atmospheric CO<sub>2</sub>. The *consensus* is that a doubling of atmospheric CO<sub>2</sub> from its pre-industrial revolution value would result in an average global temperature rise of (3.0 + 1.5)° C. . . . 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.<sup>41</sup>

74. In 1980, Imperial Oil Limited (a Canadian ExxonMobil subsidiary) reported to managers and environmental staff at multiple affiliated Esso and Exxon companies that there was “no doubt” that fossil fuels were aggravating the build-up of CO<sub>2</sub> in the atmosphere.<sup>42</sup> Imperial noted that “Technology exists to remove CO<sub>2</sub> from stack gases but removal of only

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<http://www.climatefiles.com/exxonmobil/1980-exxon-memo-on-the-co2greenhouse-effect-and-current-programs-studying-the-issue>.

<sup>41</sup> Roger Cohen & Duane Levine, *Memorandum to A.M. Natkin* (Aug. 25, 1982) (emphasis added), <http://www.climatefiles.com/exxonmobil/1982-exxon-memo-summarizing-climatemodeling-and-co2-greenhouse-effect-research>.

<sup>42</sup> Imperial Oil Ltd, *Review of Environmental Protection Activities for 1978-1979* (Aug. 6, 1980), <http://www.documentcloud.org/documents/2827784-1980-Imperial-Oil-Review-ofEnvironmental.html#document/p2>.

50% of the CO<sub>2</sub> would double the cost of power generation.”

75. In addition to the recognition of a scientific consensus about climate-change science, the 1980s brought increasingly dire warnings about the potential consequences of its impact. For example, in 1981, Roger Cohen, an Exxon researcher, circulated a memorandum in which he disagreed that climate change would be “well short of catastrophic”:<sup>43</sup>

GENERAL - 194-1-19 INTER-OFFICE CORRESPONDENCE		DATE August 18, 1981
TO	W. Glass	REFERENCE
FROM	R. W. Cohen	SUBJECT

I have looked over the draft of the EED reply to the request from O'Loughlin. The only real problem I have is with the second clause of the last sentence in the first paragraph: "but changes of a magnitude well short of catastrophic..." I think that this statement may be too reassuring. Whereas I can agree with the statement that our best guess is that observable effects in the year 2030 are likely to be "well short of catastrophic", it is distinctly possible that the CPD scenario will later produce effects which will indeed be catastrophic (at least for a substantial fraction of the earth's population). This is because the global ecosystem in 2030 might still be in a transient, headed for much more significant effects after time lags perhaps of the order of decades. If this indeed turns out to be case, it is very likely that we will unambiguously recognize the threat by the year 2000 because of advances in climate modeling and the beginning of real experimental confirmation of the CO<sub>2</sub> effect. The effects of such a recognition on subsequent fossil fuel combustion are unpredictable, but one can say that predictions based only on our knowledge of availability and economics become hazardous.

I would feel more comfortable if the first paragraph concluded with a statement to the effect that future developments in global data gathering and analysis, along with advances in climate modeling, may provide strong evidence for a delayed CO<sub>2</sub> effect of a truly substantial magnitude, a possibility which increases the uncertainty surrounding the post-2000 CPD scenario.

<sup>43</sup> Roger Cohen, *Interoffice Correspondence to W. Glass* (Aug. 18, 1981) <http://www.climatefiles.com/exxonmobil/1981-exxon-memo-on-possible-emissionconsequences-of-fossil-fuel-consumption>.

76. 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."<sup>44</sup> The primer was "restricted to Exxon personnel and not to be distributed externally." The primer warned of "uneven global distribution of increased rainfall and increased evaporation," that "disturbances in the existing global water distribution balance would have dramatic impact on soil moisture, and in turn, on agriculture," and that the American Midwest would dry out. In addition to effects on global agriculture, the report stated, "there are some potentially catastrophic effects that must be considered." Melting of the Antarctic ice sheet could result in global sea level rise of five meters, which would "cause flooding on much of the U.S. East Coast, including the State of Florida and Washington, D.C." Weeds and pests would "tend to thrive with increasing global temperature." The primer warned of "positive feedback mechanisms" in polar regions, which could accelerate global warming, such as deposits of peat "containing large reservoirs of organic carbon" becoming "exposed to oxidation" and releasing their carbon into the atmosphere. "Similarly," the primer warned, "thawing might also release large quantities of carbon currently sequestered as methane hydrates" on the sea floor. "All biological systems would be affected," and "the most severe economic effects could be on agriculture." The report 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

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<sup>44</sup> Glaser Memo 1982.

famine or migration[.]” The report 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.”<sup>45</sup> To avoid such impacts, the report discussed an analysis from the Massachusetts Institute of Technology and Oak Ridge National Laboratory, 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.”<sup>46</sup> The primer also noted that other greenhouse gases related to fossil-fuel production, such as methane, could contribute significantly to global warming, and that concerns over CO<sub>2</sub> could be reduced if fossil-fuel use were decreased due to “high price, scarcity, [or] unavailability.” “Mitigation of the ‘greenhouse effect’ would require major reductions in fossil fuel combustion,” the primer stated. The primer was widely distributed to Exxon leadership.

77. Professor Martin Hoffert, a former New York University physicist who researched climate change as an Exxon consultant in the 1980s, later stated the following in 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

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<sup>45</sup> For 2018 Gross National Product, see Federal Reserve Bank of St. Louis, *Gross National Product*, <https://fred.stlouisfed.org/series/GNPA>.

<sup>46</sup> Glaser Memo 1982.

anything, adverse climate change from elevated CO<sub>2</sub> is proceeding faster than the average of the prior IPCC [Intergovernmental Panel on Climate Change] mild projections and fully consistent with what we knew back in the early 1980s 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.<sup>47</sup>

78. Ken Croasdale, a senior ice researcher for Exxon's subsidiary Imperial Oil, stated to an audience of engineers in 1991 that greenhouse gases are rising “due to the burning of fossil fuels. Nobody disputes this fact.”<sup>48</sup>

79. During the 1980s, the API, including the API CO<sub>2</sub> Task Force, provided a forum for fossil-fuel companies to share their research efforts and corroborate their findings related to anthropogenic

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<sup>47</sup> Statement of Martin Hoffert, *Examining the Oil Industry's Efforts to Suppress the Truth About Climate Change*, Hearing Before the Committee on Oversight and Reform, U.S. House of Representatives (Oct. 23, 2019), <https://oversight.house.gov/legislation/hearings/examining-the-oil-industry-s-efforts-to-suppress-the-truth-about-climate-change>.

<sup>48</sup> Ronald C. Kramer, *Carbon Criminals, Climate Crimes* (1st ed. 2020).



greenhouse-gas emissions.<sup>49</sup> “The group’s members included senior scientists and engineers from nearly every major U.S. and multinational oil and gas company[.]”<sup>50</sup>

80. Koch also understood climate-change science, the connection to sales of its fossil-fuel products, and the potential for catastrophic consequences before the science was widely understood by the general public.

81. The late 1980s and early 1990s also marked a turning point. Climate change began to be more widely recognized and publicly discussed. In 1988, James Hansen, a National Aeronautics Space Administration scientist, asserted at a congressional hearing “with 99% confidence” that global warming was already occurring.<sup>51</sup> The same year, the United Nations formed the IPCC and members of U.S. Congress introduced “The National Energy Policy Act of 1988,” which intended to “establish a national energy policy that will quickly reduce the generation of carbon dioxide and [other] trace gases as quickly as is feasible in order to slow the pace and degree of atmospheric warming . . . to protect the global environment.”<sup>52</sup> In 1992, the United Nations held its

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<sup>49</sup> Neela Banerjee, *Exxon’s Oil Industry Peers Knew About Climate Dangers in the 1970s, Too*, Inside Climate News (Dec. 22, 2015), <https://insideclimatenews.org/news/22122015/exxon-mobil-oil-industry-peers-knew-about-climate-change-dangers-1970s-american-petroleum-institute-api-shell-chevron-texaco> [<https://perma.cc/QB22-KP6G>].

<sup>50</sup> *Id.*

<sup>51</sup> Amy Lieberman & Susanne Rust, *Big Oil braced for global warming while it fought regulations*, Los Angeles Times (Dec. 31, 2015) (hereinafter Lieberman & Rust 2015).

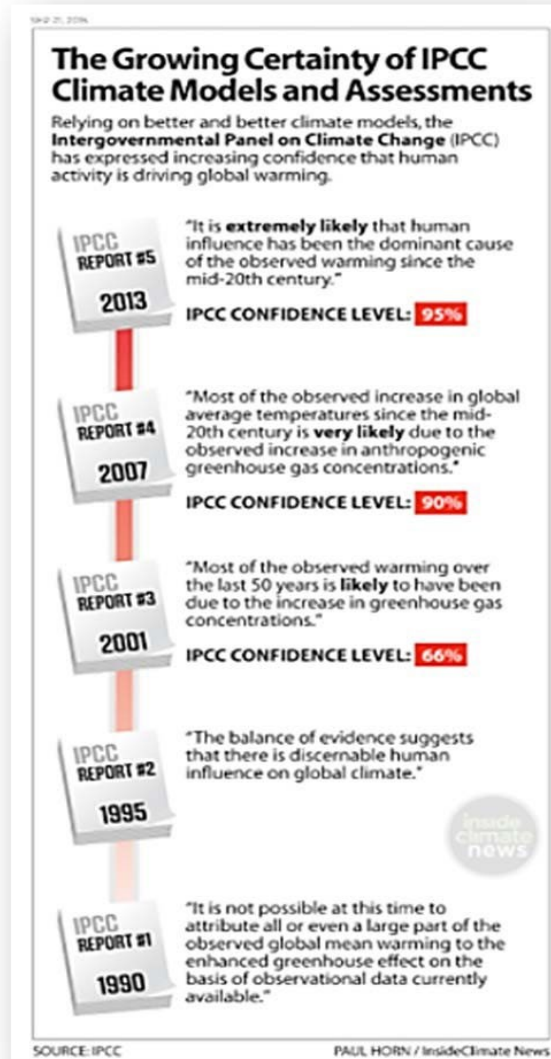
<sup>52</sup> Frumhoff 2015.

Earth Summit in Rio de Janeiro and adopted the United Nations Framework Convention on Climate Change (UNFCCC), which is an international treaty with the aim of stabilizing the concentration of greenhouse gases to avoid the most catastrophic impacts of climate change. By 1997, the UNFCCC had adopted the Kyoto Protocol, which put the obligation to reduce greenhouse-gas emissions on developed countries on the basis that they are historically responsible for the rising levels of greenhouse gases in the atmosphere.

82. Between 1990 and 2013, the IPCC expressed increasing confidence about the link between human activity and climate change.<sup>53</sup> Yet during this time, Defendants worked to undermine the public's perception of the growing scientific consensus around climate change:

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<sup>53</sup> Lisa Song et al., *Exxon Confirmed Global Warming Consensus in 1982 with In-House Climate Models*, Inside Climate News (Sept. 22, 2015), <https://insideclimatenews.org/news/18092015/exxon-confirmed-global-warming-consensus-in-1982-with-in-house-climate-models> [<https://perma.cc/93KF-SG3J>].



83. The onset of the public awareness of climate change and its consequences thus marked the beginning of Defendants' campaign of deception. As described below, Defendants began a purposeful, coordinated public-relations campaign to magnify and

exaggerate the scientific uncertainty surrounding climate science, to dissuade mitigation efforts, and to avoid any meaningful changes to their ability to continue earning profits under their business-as-usual approach. This campaign was intended to and did reach and influence Minnesota consumers, along with consumers elsewhere.

**DEFENDANTS MADE MISLEADING  
STATEMENTS ABOUT CLIMATE CHANGE  
SCIENCE, WITHHELD THEIR SUPERIOR  
KNOWLEDGE, AND FAILED TO WARN THE  
PUBLIC OF THE CONSEQUENCES OF  
CONTINUING TO CONSUME DEFENDANTS'  
PRODUCTS**

84. Despite their superior understanding of climate change science, the potentially catastrophic impacts of climate change, and the need to act swiftly, Defendants did not disseminate this information to the public or consumers. Instead, they engaged in a conspiracy to misrepresent the scientific understanding of climate change, the role of Defendants' products in causing climate change, the potential harmful consequences of climate change, and the urgency of action required to mitigate climate change. This conspiracy was intended to, and did, target and influence the public and consumers, including in Minnesota.

85. Defendants had a duty to disclose their superior information to the public because it was not otherwise known or available to the general public.

86. In addition, once Defendants chose to speak on the subject of climate change, they had a duty to do so in a way that was not misleading.

87. Instead, they engaged in a campaign of deception.

88. The campaign involved Defendants making misleading statements in advertising and other public materials directed at consumers and the general public, paying outside organizations to make misleading statements in advertising and other public materials directed at consumers and the general public, and paying scientists to produce misleading materials that were then cited and promoted by Defendants and outside organizations to lend credibility to their misleading statements. They did this all while failing to inform consumers, including those in Minnesota, and the general public of their superior knowledge to the contrary.

89. This deliberate campaign of deception and half-truths is described, in part, by internal strategy documents:

- A 1988 ExxonMobil internal document states that Exxon “is providing leadership through API in developing the petroleum industry position” on “the greenhouse effect” and goes on to describe the “Exxon Position.” The Exxon Position was to:
  - “Emphasize the uncertainty in scientific conclusions regarding the potential enhanced Greenhouse effect.
  - Urge a balanced scientific approach.
  - Due to current scientific uncertainty, Exxon is not conducting specific impact studies with respect to particular company operations or geographic regions.

- Exxon has not modified its energy outlook or forecasts to account for possible changes in fossil fuel demand or utilization due to the Greenhouse effect.
- Resist overstatement and sensationalization of potential Greenhouse effect which could lead to noneconomic development of nonfossil fuel resources.”<sup>54</sup>
- A 1991 internal strategy document for the Information Council for the Environment (ICE—a front group created by the coal industry) describes its strategy as one to “reposition global warming as theory (not fact).”<sup>55</sup> The group planned to particularly target younger, lower-income women with its deceptive messages, noting that:

These women are more receptive than other audience segments to factual information concerning evidence for global warming. They are likely to be ‘green’ consumers, to believe the earth is warming, and to think the problem is serious. However, they are also likely to soften their support for federal

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<sup>54</sup> Joseph M. Carlson, *Memorandum on The Greenhouse Effect* (Aug. 3, 1988), <http://www.climatefiles.com/exxonmobil/566>.

<sup>55</sup> Bill Brier, *Correspondence to O. Mark De Michele* (May 6, 1991), <http://www.climatefiles.com/denial-groups/ice-ad-campaign>.

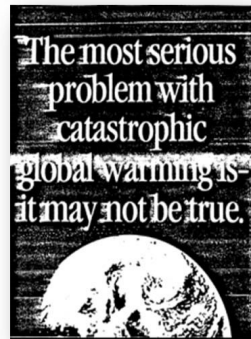
legislation after hearing new information on global warming.<sup>56</sup>

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 and induce political inertia to address it.<sup>57</sup>

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<sup>56</sup> *Id.*

<sup>57</sup> Union of Concerned Scientists, *Deception Dossier #5: Coal's "Information Council on the Environment" Sham* (July 2015), <https://www.ucsusa.org/sites/default/files/attach/2015/07/The-Climate-Deception-Dossiers.pdf> & [http://www.ucsusa.org/sites/default/files/attach/2015/07/Climate-Deception-Dossier-5\\_ICE.pdf](http://www.ucsusa.org/sites/default/files/attach/2015/07/Climate-Deception-Dossier-5_ICE.pdf) 47-49.



- A 1998 internal strategy document written by a team convened by API describes the plan to defeat the UNFCCC's Kyoto protocol by emphasizing that "it is not known for sure whether (a) climate change actually is occurring, or (b) if it is, whether humans really have any influence on it."<sup>58</sup>

<sup>58</sup> Joe Walker, *Global Climate Science Communications Plan* (Apr. 3, 1998), <http://www.climatefiles.com/trade-group/american-petroleum-institute/1998-global-climate-science-communications-team-action-plan/>.



The memo states that “victory” would be achieved when average citizens and the media were convinced that uncertainties existed in climate science and were then “stimulat[ed] . . . to raise questions with policy makers.”<sup>59</sup> Ultimately, Defendants sought to:

raise such serious questions about the Kyoto treaty’s scientific underpinnings that American policy-makers not only will refuse to endorse it, they will seek to prevent progress toward implementation at the Buenos Aires meeting in November or through other ways. Informing teachers/students about uncertainties in climate science will begin to erect a barrier against further efforts to impose Kyoto-like measures in the future.<sup>60</sup>

- A 2006 memorandum from the Intermountain Rural Electric Association outlines a strategy to combat climate change “alarmists” through a campaign focused on science, information dissemination, and politics.<sup>61</sup> The memorandum describes, *inter alia*, strategies undertaken by Koch:

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<sup>59</sup> *Id.*

<sup>60</sup> *Id.*

<sup>61</sup> Stanley R. Lewandowski, Jr., *IREA Memorandum* (July 17, 2006), <https://assets.documentcloud.org/documents/4519366/2006-Intermountain-Rural-Electric-AssocIREA-Memo.pdf>.

There are other groups that are interested in the issue of global warming and the concerns about its costs. Koch Industries is working with other large corporations, including AEP and the Southern Company, on possibly financing a film that would counteract *An Inconvenient Truth*. Koch has also decided to finance a coalition that very likely will be administered through the National Association of Manufacturers. The Competitive Enterprise Institute (CEI) has been running two ads in ten states that were financed by General Motors and the Ford Motor Company. CEI has a director on climate change and other employees working on the issue. We have met with Koch, CEI and Dr. Michaels, and they meet among themselves periodically to discuss their activities.

90. In furtherance of the strategies described in these memoranda, Defendants made misleading statements about climate change, the relationship between climate change and their 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 Minnesota, including national publications such as the New York Times, Wall Street Journal, and Washington Post. Examples of misleading statements made by Defendants include:

- In 1996, then-Chairman of Exxon Corporation Lee Raymond misleadingly wrote in an internal publication that “taking drastic action immediately is unnecessary since many scientists agree there’s ample time to better understand the climate system.” Raymond also misleadingly implied that climate change was an “unproven theory”: “[A] multinational effort, under the auspices of the United Nations, is underway to cut the use of fossil fuels, based on the unproven theory that they affect the earth’s

climate.”<sup>62</sup> He did not warn of Exxon’s contrary scientific findings, such as those documented in the 1982 Cohen/Levine Memo.

- In another article in the same internal publication, Exxon misleadingly failed to acknowledge the potentially catastrophic consequences of climate change, instead insisting that the greenhouse effect is “definitely a good thing.” Exxon misleadingly stated 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.”<sup>63</sup> The article did not warn of Exxon’s earlier conclusion that significant sea level rise would cause catastrophic flooding.
- API published an extensive report in 1996 warning against concern over CO2 buildup and any need to curb consumption or regulate the fossil-fuel industry. The introduction stated that “there is no persuasive basis for forcing Americans to dramatically change their lifestyles to use less oil.” The authors discouraged the further development of certain alternative

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<sup>62</sup> Lee Raymond, *Climate change: don’t ignore the facts* (Fall 1996), <http://www.climatefiles.com/exxonmobil/global-warming-who-is-right-1996>.

<sup>63</sup> Johnathan H. Adler, *Global warming: What to think? What to do?* (Fall 1996), <http://www.climatefiles.com/exxonmobil/global-warming-who-is-right-1996>.

energy sources, writing that “government agencies have advocated the increased use of ethanol and the electric car, without the facts to support the assertion that either is superior to existing fuels and technologies” and that “policies that mandate replacing oil with specific alternative fuel technologies freeze progress at the current level of technology, and reduce the chance that innovation will develop better solutions.” The paper also denied the human connection to climate change, by falsely stating that no “scientific evidence exists that human activities are significantly affecting sea levels, rainfall, surface temperatures or the intensity and frequency of storms.” The report’s message was false but clear: “Facts don’t support the arguments for restraining oil use.”<sup>64</sup>

- At a 1997 gathering of energy executives at the World Petroleum Congress in Beijing, Raymond falsely claimed that the impact of climate change was uncertain, and misleadingly asserted that the problem was not urgent: “It is highly unlikely that the temperature in the middle of the next century will be affected whether policies are enacted now or 20 years from now.” He stated, “Many people—politicians and the public alike—believe that global warming is a rock-solid certainty, but it’s not.” He also

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<sup>64</sup> Sally Brain Gentile et al., *Reinventing Energy: Making the Right Choices*, American Petroleum Institute (1996), <http://www.climatefiles.com/trade-group/american-petroleum/institute/1996-reinventing-energy>.

falsely stated that “[t]he earth is cooler today than it was 20 years ago.”<sup>65</sup> He did not warn of the contrary findings from the Cohen/Levine Memo or any of the other contrary findings by Exxon and industry scientists.

- In 1997, Mobil (now ExxonMobil) misleadingly implied in a *New York Times* advertorial (a paid advertisement published alongside a newspaper’s editorials and designed to appear as if it were an editorial itself) that the science of climate change was too uncertain to try to reduce emissions and that it was not determined what role fossil fuels play in causing climate change:

Let’s face it: The science of climate change is too uncertain to mandate a plan of action that could plunge economies into turmoil . . . . Scientists cannot predict with certainty if temperatures will increase, by how much and where changes will occur. We still don’t know what role man-made greenhouse gases might play in warming the planet . . . . Let’s not rush to a decision at Kyoto. Climate change is complex, the science is

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<sup>65</sup> Lee Raymond, *Energy—key to growth and a better environment for Asia-Pacific nations* (Oct. 13, 1997), <http://www.climatefiles.com/exxonmobil/1997-exxon-lee-raymond-speech-at-world-petroleum-congress/>.

not conclusive, the economics could be devastating.<sup>66</sup>

The advertisement was intended to ensure that consumers continued to purchase fossil-fuel products, and failed to warn of the contrary findings by the industry's own scientists.

- In 1997, in a *New York Times* advertorial directed to consumers and purchasers (among others), Mobil misleadingly exaggerated the level of uncertainty in climate science and implied a lack of consensus among scientists:

[T]here is a high degree of uncertainty over the timing and magnitude of the potential impacts that man-made emissions of greenhouse gases have on climate . . . . To address the scientific uncertainty governments, universities and industry should form global research partnerships to fill in the knowledge gap, with the goal of achieving a consensus view on critical issues within a defined time frame[.]<sup>67</sup>

The advertorial was intended to ensure that consumers continued to purchase fossil-fuel products, and failed to warn of the contrary findings by the industry's own scientists.

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<sup>66</sup> Mobil, *Reset the alarm*, New York Times (Oct. 30, 1997).

<sup>67</sup> Mobil, *Climate Change: a degree of uncertainty*, New York Times (Dec. 4, 1997).

- In 1998, Mobil misleadingly stated in a *New York Times* advertorial that: “Credible economic studies have pointed out that mandating emission targets and timetables now will have an enormous negative impact on many national economies.”<sup>68</sup> This advertorial did not disclose the enormous negative impact that Mobil had already determined climate change would cause.
- In 1999, Mobil misleadingly implied that unabated climate change might not be harmful: “We don’t know whether [climate] stabilization is necessary and, if so, at what level.”<sup>69</sup> This statement did not warn of its findings to the contrary.
- In 1999, Raymond misleadingly suggested at an annual meeting that future climate “projections are based on completely unproven climate models, or, more often, on sheer speculation.”<sup>70</sup> The “unproven” models were the same ones that ExxonMobil was using internally to study how climate change would affect its business. Using these models, in fact, ExxonMobil had accurately predicted (before 1992) that the Beaufort Sea’s open water season—when drilling and exploration occurred—would lengthen from two months to three or possibly

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<sup>68</sup> Mobil, *Post Kyoto, what’s next?*, *New York Times* (Jan. 29, 1998) (emphasis in original).

<sup>69</sup> Mobil, *Scenarios for Stabilization*, *New York Times* (Aug. 12, 1999).

<sup>70</sup> Sara Jerving et al., *What Exxon knew about the Earth’s melting Arctic*, *Los Angeles Times* (Oct. 9, 2015) (hereinafter Jerving 2015).

five months.<sup>71</sup> Raymond did not disclose his company's use of those same internal models when he made this statement at the annual meeting.

- In 2000, an ExxonMobil advertisement in the *Washington Post* misleadingly implied that climate models (such as those it relied on internally) were unreliable: "Today's global models simply don't work at a regional level." It went on to claim that the National Assessment Synthesis Report (on climate change) "is written as a political document, not an objective summary of the underlying science."<sup>72</sup> The advertisement failed to disclose what ExxonMobil's own internal documents had already confirmed: that burning fossil fuels would result in catastrophic climate change.
- In 2000, an ExxonMobil advertorial in the *New York Times* misleadingly declared that consequences of climate change could be beneficial: "Just as changeable as your local weather forecast, views on the climate change debate range from seeing the issue as serious or trivial, and from seeing the possible future impacts as harmful or beneficial." The advertorial went on to state that while climate-change science remained uncertain, the negative impacts of climate policies were fully understood: "[T]here is not enough information to justify harming economies and forcing the world's population to endure unwarranted

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<sup>71</sup> *Id.*

<sup>72</sup> ExxonMobil, *Political cart before a scientific horse*, *Washington Post* (2000).



lifestyle changes by dramatically reducing the use of energy now,” but “we know with certainty that climate change policies, unless properly formulated, will restrict life itself.”<sup>73</sup> This advertorial did not disclose that Exxon’s own internal documents had already determined that climate change leading to a rise in sea level of five meters could cause catastrophic flooding.

- In 2004, an ExxonMobil newspaper advertisement continued to blatantly and falsely exaggerate the uncertainty of climate science: “Scientific uncertainties continue to limit our ability to make objective, quantitative determinations regarding the human role in recent climate change or the degree and consequence of future change.”<sup>74</sup> This advertisement failed to disclose that ExxonMobil had already determined that climate change was both anthropogenic and severe.
- In 2010, David Koch of Koch Industries was credited with claiming that global warming is good news. “Lengthened growing seasons in the northern hemisphere, he says, will make up for any trauma caused by the slow migration of people away from disappearing coastlines. “The Earth will be able to support enormously more people because a far greater land area will be available to produce food,’ he says.”<sup>75</sup>

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<sup>73</sup> ExxonMobil, *Do No Harm*, Washington Post (Mar. 16, 2000).

<sup>74</sup> ExxonMobil, *Weather and climate*, New York Times (Jan. 22, 2004).

<sup>75</sup> Andrew Goldman, *The Billionaire’s Party*, New York Magazine (July 23, 2010).

- ExxonMobil’s 2018 public statement on climate change was misleading because it stressed uncertainty by saying the “current scientific understanding provides limited guidance on the likelihood, magnitude, or time frame of these events,” and promoted a false choice between climate solutions and economic development.<sup>76</sup> It failed to disclose that decades earlier, ExxonMobil had already known that climate change would have devastating effects as soon as 2050.
- Defendants continue to run misleading advertising campaigns highlighting their commitment to renewable energy.

These statements were intended to, and did, reach and influence the public and consumers, including in Minnesota.

91. Peer-reviewed research concludes that ExxonMobil deliberately misled the American public about climate change.<sup>77</sup> Researchers “present an empirical document-by-document textual content analysis and comparison of 187 climate change communications from ExxonMobil, including peer-reviewed and non-peer reviewed publications, internal company documents, and paid, editorial-style advertisements (‘advertorials’) in *The New York*

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<sup>76</sup> Union of Concerned Scientists, *The 2018 Climate Accountability Scorecard: Insufficient Progress from Major Fossil Fuel Companies*, 7 (2018), <https://www.ucsusa.org/sites/default/files/attach/2018/10/gw-accountability-scorecard18-report.pdf> [<https://perma.cc/R2DA-JW5J>].

<sup>77</sup> Geoffrey Supran & Naomi Oreskes, *Assessing ExxonMobil’s climate change communications (1977-2014)*, 2017 Environ. Res. Lett. 12.

*Times.*” The researchers “conclude that ExxonMobil contributed to advancing climate science—by way of its scientists’ academic publications—but promoted doubt about it in advertorials. Given this discrepancy, [they] conclude that ExxonMobil misled the public.”<sup>78</sup>

92. Defendants have spent millions of dollars on advertising and public relations campaigns, including in Minnesota, in order to mislead consumers and the general public about scientists’ certainty regarding climate change, the role of fossil fuels in creating the problem, the potential consequences of climate change, and the urgency of the need to take action.<sup>79</sup> Defendants spent millions on advertising and public relations because they understood that an accurate understanding of climate change would affect their ability to continue to earn profits by conducting business as usual.

93. Defendants’ misleading statements were part of a conspiracy to defraud consumers and the general public, including consumers and the public in Minnesota, about climate change and the role of fossil-fuel products in climate change.

94. Defendants’ websites contain misleading statements about climate science, the role of fossil-fuel products in contributing to climate change, the consequences of climate change and/or the need to take swift action to mitigate climate change, and the harms that it would bring. These websites are and

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<sup>78</sup> *Id.*

<sup>79</sup> See, e.g., Kate Yoder, *Big Oil spent \$3.6 billion to clean up its image, and it’s working*, *Grist* (Dec. 24, 2019), <https://grist.org/energy/big-oil-spent-3-6-billion-on-climate-ads-and-its-working/> [<https://perma.cc/2HM4-8HB6>] (hereinafter Yoder 2019).

were accessible to Minnesotans, and were intended to reach and influence Minnesotans, at times relevant to this Complaint.

95. The misleading statements chronicled here were directed at consumers, including in Minnesota. Defendants intended that consumers would rely on their statements in justifying decisions to not change their fossil-fuel consumption habits.

96. ExxonMobil knows that information about the environmental impact of using its fossil-fuel products is material to consumers because, for example, it has commissioned surveys and gathered and analyzed data to evaluate consumer perceptions to inform the Company's fossil-fuel marketing.

97. Recently, efforts are being made to warn consumers at the gas pump of the extreme dangers of the routine consumer use of fossil fuels like gasoline. There are now various initiatives in the United States and other countries, including in Cambridge, Massachusetts; Berkeley, Santa Monica, and San Francisco, California; Seattle, Washington; Canada; and Sweden, to require climate-change warning labels on gas pumps based on the principle that consumers will change their purchasing decisions when they have direct access to accurate information about the connection between their consumption of fossil fuels and climate change. Similar to health warning labels on tobacco products, which aim to educate consumers, and thereby reduce a population's health risks and medical costs, fossil-fuel warning labels that accurately relay risk can educate consumers and thereby reduce the risks and costs associated with climate change. Here, however, Defendants did not warn consumers of the harms Defendants knew their

fossil fuel products posed, and instead misled consumers regarding those harms and their causes.

**DEFENDANTS PAID OUTSIDE  
ORGANIZATIONS TO MAKE MISLEADING  
STATEMENTS ABOUT CLIMATE CHANGE  
SCIENCE, ITS CONSEQUENCES AND THE  
URGENCY OF THE PROBLEM**

98. In addition to making misleading statements themselves, Defendants have also funneled hundreds of millions of dollars to organizations with the intent that these organizations would make misleading statements about climate change, including in Minnesota, and with the intent that these statements would promote and allow for the continued unfettered sales of their products. For example, between 1998 and 2017, ExxonMobil spent more than \$36 million funding organizations that misrepresented the scientific consensus that Defendants' fossil-fuel products were causing climate change.<sup>80</sup> These organizations were intended to, and did, target and influence the public and consumers, including in Minnesota. Although ExxonMobil publicly declared that it would stop funding climate-denial organizations in 2008, more than \$13 million of this funding was transmitted to "denial organizations" between 2008 and 2017.<sup>81</sup> In fact, in 2017 alone, ExxonMobil still contributed more than \$1.5 million to

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<sup>80</sup> Union of Concerned Scientists, *ExxonMobil Foundation & Corporate Giving to Climate Denier & Obstructionist Organizations*, <https://www.ucsusa.org/sites/default/files/attach/2019/ExxonMobil-Worldwide-Giving-1998-2017.pdf?ga=2.84739161.1384563456.15481706821610477837.1510330963> [<https://perma.cc/TG98-G3CJ>].

<sup>81</sup> *Id.*

climate-change denial organizations.<sup>82</sup> Similarly, between 1997 and 2017, Koch-controlled foundations gave more than \$127 million to groups that obfuscated climate science.<sup>83</sup>

99. The web of “front groups” and denial organizations supported exclusively or in part by Defendants is vast. Network analysis published in *Nature Climate Change* in 2015 identified at least 4,556 individuals and 164 organizations in the global web of climate-change denial.<sup>84</sup> These organizations engaged in a conspiracy with Defendants to discredit the science of climate change in order to protect fossil-fuel sales, including in Minnesota, and Defendants’ ability to continue to profit from their business-as-usual model. A small sample of these seemingly independent groups and their misleading or false statements are highlighted in paragraphs 100-117.

100. In the 1990s, Defendants formed and/or funded one such outside organization, called the Global Climate Coalition (GCC). Defendants funded and orchestrated the GCC’s operations both directly through their own membership and through proxy GCC members, including API. Defendant ExxonMobil, among others, was a core member of and substantial financial contributor to the GCC, including holding leadership positions on its board,

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<sup>82</sup> *Id.*

<sup>83</sup> Greenpeace, *Koch Industries: Secretly Funding the Climate Denial Machine*, <https://www.greenpeace.org/usa/global-warming/climate-deniers/koch-industries/> [https://perma.cc/J8FJ-88PX].

<sup>84</sup> Justin Farrell, *Corporate funding and ideological polarization about climate change*, Proc. Nat’l Acad. Sci. U.S.A. 1, 113 (Jan. 5, 2016).

and received ongoing information about its activities. The GCC spent millions on lobbying and public relations efforts, including distributing a video to hundreds of journalists, the White House, and several Middle Eastern oil-producing countries that misleadingly suggested that higher levels of CO<sub>2</sub> would be beneficial for crop production, and could be the solution to world hunger.<sup>85</sup>

101. As part of Defendants' long-term campaign to influence consumers' demand for oil and gas through mass disinformation, Defendants ensured that the GCC implemented public advertising and outreach campaigns to discredit climate science and cast doubt on the dangerous consequences of climate change. These campaigns were national and extended to Minnesota.

They were intended to and did influence the public and consumers, including in Minnesota. Defendants exerted control over the GCC's deceptive marketing in the form of funding, supervision, facilitation, and direct participation. Defendants also benefited financially from the GCC's misleading campaigns, which helped to ensure a thriving consumer market for Defendants' fossil-fuel products.

102. In a 1994 report, the GCC stated that "observations have not yet confirmed evidence of global warming that can be attributed to human activities," that "[t]he claim that serious impacts from climate change have occurred or will occur in the future simply has not been proven," and "[c]onsequently, there is no basis for the design of

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<sup>85</sup> Lieberman & Rust 2015.

effective policy action that would eliminate the potential for climate change.”<sup>86</sup>

103. In 1995, the GCC created an internal climate-change primer that included the statements that “the scientific basis for the greenhouse effect and the potential impact of human emissions of greenhouse gases such as CO<sub>2</sub> on the climate is well-established and cannot be denied” and that “contrarian theories” about climate change do not “offer convincing arguments against the conventional model of greenhouse gas emission-induced climate change.” But the GCC removed this second statement from a more widely circulated version of its primer in an effort to mislead readers. The excised section also dismissed the claims of contrarian research on the role of solar radiation as an explanation for global warming.<sup>87</sup> The GCC also misleadingly implied that scientists disputed the likelihood of sea-level rise as a result of climate change: “There has been a great deal of speculation about a potential sea level rise, [but] most scientists question the predictions of dangerous melting of Greenland or Antarctic ice caps.”<sup>88</sup>

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<sup>86</sup> GCC, *Issues and Options: Potential Global Climate Change* (1994), <http://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1994-potentialglobal-climate-change-issues>.

<sup>87</sup> Union of Concerned Scientists, *Climate Deception Dossier #7: The Global Climate Coalition’s 1995 Primer on Climate Change Science*, at 25-28 (July 2015), <https://www.ucsusa.org/sites/default/files/attach/2015/07/The-Climate-Deception-Dossiers.pdf> [<https://perma.cc/JL2V-XYGL>] & [https://www.ucsusa.org/sites/default/files/attach/2015/07/Climate-Deception-Dossier-7\\_GCC-Climate-Primer.pdf](https://www.ucsusa.org/sites/default/files/attach/2015/07/Climate-Deception-Dossier-7_GCC-Climate-Primer.pdf) (hereinafter *Dossier #7—GCC Primer*).

<sup>88</sup> Lieberman & Rust 2015.



104. Also 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 actually occur.”<sup>89</sup> Defendants knew and approved of the dissemination of this document.

105. These GCC advertisements were intentionally misleading. GCC’s members, including Defendants, knew that climate change was real and ongoing, and that its impacts increasingly were posing serious risks to the public and the world. Defendants supported, approved, and furthered these misleading advertisements because they were consistent with Defendants’ goal of influencing consumer demand for their fossil-fuel products and assisted them in maintaining profits.

106. In 1997, William O’Keefe, GCC Chairman and API Executive Vice President, falsely stated in an op-ed published in the *Washington Post*, “Climate scientists don’t say that burning oil, gas and coal is steadily warming the earth.” This false statement contradicted long-established science, as well as Defendants’ own knowledge. Yet Defendants nevertheless supported and approved the publication of this op-ed.

107. By funding and actively participating in the GCC and other similar organizations that published disinformation about the risks of climate change,

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<sup>89</sup> GCC, *Climate Change: Your Passport to the Facts* (1995), <http://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1995-climate-change-facts-passport>.

Defendants directly contributed to and helped coordinate the deception of consumers in Minnesota and the broader public about the risks of climate change and the harmful consequences associated with the sale and use of Defendants' fossil-fuel products.

108. The GCC disbanded in 2002, after then-President Bush rejected the Kyoto Protocol, stating that it had “achieved what [it] wanted to accomplish with the Kyoto Protocol.”<sup>90</sup>

109. A similar pattern of activities was undertaken in the 1990s by a group known as the “Greening Earth Society” (GES), which was funded by a consortium of U.S. coal corporations, rural electric cooperatives, and municipal electric utilities. GES was headed by Fred Palmer, who now has a position with the Heartland Institute.<sup>91</sup> In 1998, GES produced a video, *The Greening of Planet Earth Continues*, which is a sequel to *The Greening of Planet Earth* released by the Western Fuels Association, and that is still being promoted today by the Center for the Study of CO<sub>2</sub> and Global Change. The description of the video misleadingly states that CO<sub>2</sub> emissions are beneficial: “expert scientists assert that CO<sub>2</sub> is not a pollutant, but a nutrient to life on earth.” The video is claimed to have been distributed to more than 30,000 people worldwide.<sup>92</sup> In 1999, GES published the “State of the Climate Report” with essays from notable climate

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<sup>90</sup> Dossier #7—GCC Primer.

<sup>91</sup> Desmog: Clearing the PR Pollution that clouds climate science, *Greening Earth Society*, <https://www.desmogblog.com/greening-earth-society> [<https://perma.cc/J3ES-ADF4>].

<sup>92</sup> *Id.*

change deniers, such as Patrick Michaels, who has ties to Koch.<sup>93</sup>

110. Defendants and their foundations have given and continue to give the American Enterprise Institute (AEI) millions of dollars to further their campaign of deception. AEI has made and continues to make misleading statements about climate change. For example, on January 21, 2020, AEI published an online article entitled “Six facts about the non-problem of global warming.” The six “facts” listed are:

- (1) The earth’s temperature has been rising at a microscopically slow pace. . . .
- (2) A warmer earth saves lives. . . .
- (3) While the earth’s temperature has risen, the number of natural disaster deaths has been sharply declining. . . .
- (4) The global air pollution death rate has fallen by almost 50% since 1990. . . .
- (5) Any impact on the economy is likely to be minimal. . . .
- (6) Restricting carbon emissions to attempt to stop global warming is the wrong path—even the most severe restrictions will have almost zero impact on the earth’s temperature.<sup>94</sup>

The conclusion, according to AEI, is that “[g]lobal warming has not been harmful and presents no danger to future generations.” ExxonMobil gave AEI

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<sup>93</sup> New Hope Environmental Services, *State of the Climate Report: Essays on Global Climate Change* (1999), <http://www.climatefiles.com/deniers/patrick-michaels-collection/1999-greening-earth-society-climate-report-2>.

<sup>94</sup> Mark Perry, *Six facts about the non-problem of global warming*, American Enterprise Institute (Jan. 21, 2020), <https://www.aei.org/carpe-diem/six-facts-about-the-non-problem-of-global-warming/>.

\$160,000 in 2017 and almost \$4,500,000 between 1998 and 2017. The Charles G. Koch Charitable Foundation gave AEI over \$2 million between 2004 and 2017 and AEI received \$750,000 from the Claude R. Lambe Charitable Foundation between 2005 and 2007. API gave AEI \$110,000 between 2008 and 2013.

111. ExxonMobil has served or currently serves as corporate leadership of the American Legislative Exchange Council (ALEC) and/or ALEC's Energy, Environmental and Agriculture Task Force. ALEC's current website misleadingly characterizes climate change as "a historical phenomenon" for which "the debate will continue on the significance of natural and anthropogenic contributions."<sup>95</sup> ALEC continues to question the scientific consensus on climate change, contrary to evidence, and has regularly given climate deniers a speaking platform at its annual meeting. Defendants and their foundations have given and continue to give ALEC millions of dollars to further these misleading statements. ExxonMobil gave ALEC \$60,000 in 2017 and almost \$2 million between 1998 and 2017. The Charles G. Koch Charitable Foundation gave ALEC more than \$2.4 million between 1997 and 2017. The Charles Koch Institute gave ALEC \$137,089 between 2014 and 2017, and the Claude R. Lambe Charitable Foundation gave ALEC \$720,000 between 1993 and 2012. API gave ALEC \$88,000 between 2008 and 2010.

112. The Center for the Study of CO<sub>2</sub> and Global Change produces a weekly newsletter that has a veneer of scientific credibility but misleadingly states that additional CO<sub>2</sub> in the atmosphere will be

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<sup>95</sup> ALEC, *Energy Principles*, <https://www.alec.org/model-policy/alec-energy-principles/> [<https://perma.cc/X7WK-W9W9>].

beneficial.<sup>96</sup> In addition, the Center’s website offers a book for sale entitled “The Many Benefits of Atmospheric CO<sub>2</sub> Enrichment: How humanity and the rest of the biosphere will prosper from this amazing trace gas that so many have wrongfully characterized as a dangerous pollutant!”<sup>97</sup> The book misleadingly “describes a host of real-world benefits that the controversial atmospheric trace gas [CO<sub>2</sub>] provides, first to earth’s plants and then to the people and animals that depend upon them for their sustenance.”<sup>98</sup> Defendants have funded the activities of the Center in order to advance misleading and false ideas. The Center received \$85,000 from ExxonMobil between 1998 and 2003. The Center also received \$85,000 from the Claude R. Lambe Charitable Foundation between 2004 and 2007.

113. The George C. Marshall Institute (GMI) has been funded by Defendants and affiliated foundations to perpetuate, *inter alia*, the false claim that there is no scientific consensus about the science of climate change. In 1997, for example, GMI orchestrated a sham petition that claimed to have 17,000 signatories arguing against man-made climate change. The “petition” included a cover letter from Fred Seitz, a tobacco scientist and climate denier, and a fake “research paper” entitled: *Environmental Effects of Increased Atmospheric Carbon Dioxide*. The National

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<sup>96</sup> See, e.g., Center for the Study of Carbon Dioxide and Global Change, *Volume 23: February 2020*, <http://www.co2science.org/index.php> [<https://perma.cc/QJL4-GNTD>].

<sup>97</sup> Craig D. Idso & Sherwood B. Idso, *The Many Benefits of Atmospheric CO<sub>2</sub> Enrichment: How humanity and the rest of the biosphere will prosper from this amazing trace gas that so many have wrongfully characterized as a dangerous pollutant!* (2011).

<sup>98</sup> *Id.*

Academy of Science issued a statement that “[t]he Petition project was a deliberate attempt to mislead scientists and rally them in an attempt to undermine support for the Kyoto Protocol. The petition was not based on a review of the science of global climate change, nor were its signers experts in the field of climate science.”<sup>99</sup> Although it was exposed as a sham,<sup>100</sup> for many years thereafter the petition continued to be relied upon to make false and misleading statements about climate change. For example, the petition was cited in a U.S. Senate press release to counter criticism that was raised at a hearing claiming that GMI represented the views of only a few scientists.<sup>101</sup> GMI received \$570,000 from ExxonMobil Foundation between 1999 and 2005, and \$260,000 from ExxonMobil Corporation between 2002 and 2007. GMI received \$200,000 from the Charles G. Koch Charitable Foundation between 2013 and 2015 and \$420,000 from the Claude R. Lambe Charitable Foundation between 2004 and 2012.

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<sup>99</sup> Desmog: Clearing the PR Pollution that clouds climate science, *George C. Marshall Institute*, <https://www.desmogblog.com/george-c-marshall-institute> [https://perma.cc/XX3Q-R6FS] (hereinafter Desmog Marshall Institute).

<sup>100</sup> H. Josef Hebert, *Jokers Add Fake Names to Warming Petition*, *Seattle Times* (May 1, 1998) (noting that the petition was signed by fictitious characters and pop stars); Kevin Grandia, *The 30,000 Global Warming Petition Is Easily-Debunked Propaganda*, *HuffPost* (Aug. 22, 2009), [https://www.huffpost.com/entry/the-30000-global-warming\\_b\\_243092](https://www.huffpost.com/entry/the-30000-global-warming_b_243092) [https://perma.cc/4EJT-XF86].

<sup>101</sup> *Inhofe Questions Science Behind Arctic Report*, U.S. Senate Committee on Environment & Public Works (Nov. 16, 2004), <https://www.epw.senate.gov/public/index.cfm/2004/11/post-b505f565-f2db-4dab-8c76-c6209e5b3d7c> [https://perma.cc/KHZ7-TJRW].

114. GMI's Climate Change program became the "CO<sub>2</sub> Coalition" in 2015.<sup>102</sup> The CO<sub>2</sub> Coalition continues to promote the false assertion that increased atmospheric concentrations of CO<sub>2</sub> will be beneficial to our lives and the economy. Its mission

is to demonstrate with science-based facts that: CO<sub>2</sub> is a nutrient that is essential to life. CO<sub>2</sub> at current levels and higher enables plants, trees and crops to grow faster and more efficiently. It is essential for life. Just as we require oxygen for life, our economy requires energy, often described as the oxygen or lifeblood of the economy. Energy must be abundant, reliable, and reasonably priced for an economy to achieve robust and sustained growth.<sup>103</sup>

On December 3, 2019, at a presentation at UNFCCC's 25<sup>th</sup> Conference of the Parties climate summit in Madrid, at an event titled "Rebutting the United Nation's Climate Delusion," and in collaboration with the Heartland Institute, the Committee for a Constructive Tomorrow, and the European Institute for Climate and Energy, the director of the CO<sub>2</sub> Coalition (William Happer) referred to climate change as a phony and bizarre "environmental cult":

We are here, though, on false pretenses, wasting our time talking about a nonexistent climate emergency. And it's hard to understand how much further the shrillness can go, as this started out as global warming, then it was climate change or global weirding,

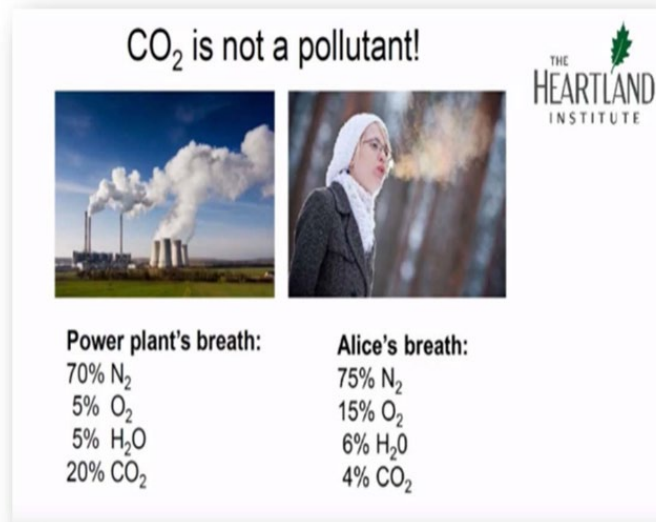
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<sup>102</sup> Desmog Marshall Institute.

<sup>103</sup> CO<sub>2</sub> Coalition, *CO<sub>2</sub> Fundamentals*, <https://co2coalition.org/co2-fundamentals/> [<https://perma.cc/4VHB-U739>].

climate crisis, climate emergency . . . what next? But stick around, it will happen. I hope sooner or later enough people will recognize the phoniness of this bizarre environmental cult and bring it to an end.<sup>104</sup>

Happer's talk also included the following deceptive image:<sup>105</sup>



The Coalition received \$364,985 from GMI in 2015. The Coalition received \$9,126 from the Charles G Koch Charitable foundation in 2016, and \$46,409 from the Charles Koch Institute between 2016 and 2017.

115. The Heartland Institute promotes itself as “[t]he world’s most prominent thinktank promoting

<sup>104</sup> *Trump Adviser William Happer Talks Climate Alarmism During COP25 in Madrid*, The Heartland Institute (Dec. 3, 2019), <https://www.youtube.com/watch?v=j8KxVQFoyT0>.

<sup>105</sup> *Id.*



skepticism about man-made climate change.”<sup>106</sup> Heartland has received funding from Defendants in the past, although ExxonMobil has attempted to distance itself from the organization in recent years.<sup>107</sup> The Heartland Institute advances the false claims that there is no consensus about the causes, effects, or future rate of global warming; that global warming is primarily a natural phenomenon; and that the benefits of warming are likely to outweigh the costs. Heartland also claims responsibility for defeating cap and trade, a regulatory mechanism designed to curb harmful emissions: “You may also know us from our work exposing the shoddy science and missing economics behind the global warming delusion. Our videos, books, studies, and international conferences changed the debate and led to the defeat of ‘cap and trade.’”<sup>108</sup>

116. Heartland disseminates this false and misleading information to educators in Minnesota. For example, Heartland sent Minnesota educators, for free, a book offered for sale on Heartland’s website entitled “Why Scientists Disagree About Global Warming: The NIPCC Report on Scientific

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<sup>106</sup> *Arthur B. Robinson Center on Climate and Environmental Policy*, The Heartland Institute, <https://www.heartland.org/Center-Climate-Environment/index.html> [<https://perma.cc/R5QY-MNQF>].

<sup>107</sup> See, e.g., David Adam, *Exxon to cut funding to climate change denial groups*, *The Guardian* (May 28, 2008), <https://www.theguardian.com/environment/2008/may/28/climate-change.fossil-fuels> [<https://perma.cc/CXH2-WXD6>].

<sup>108</sup> Joseph L. Bast, *Message from the President*, <https://www.webcitation.org/6dHrecCkT> [<https://perma.cc/L3NZ-HA2V>].

Consensus.”<sup>109</sup> The book was authored by well-known climate deniers, including Craig Idso. The first “Key Finding” of the book is: “The most important fact about climate science, often overlooked, is that scientists disagree about the environmental impacts of the combustion of fossil fuels on the global climate.” Most of the “findings” of the book are repeated from other Heartland Institute publications by the so-called “Nongovernmental International Panel on Climate Change,” which consists of the same well-worn climate change deniers such as Idso.<sup>110</sup>

117. Other groups that have received funding from Defendants as part of the conspiracy to deceive the public about climate change include, but are not limited to: Americans for Prosperity, Cato Institute, Competitive Enterprise Institute, Center of the American Experiment, Hoover Institute, Institute for Energy Research, Heritage Foundation, Manhattan Institute, Reason Foundation, and U.S. Chamber of Commerce.

118. The scope and extent of Defendants’ support for these climate denial groups is not fully understood. One or more Defendants directed funds to outside organizations engaged in the campaign of deception conspiracy by funneling money through one or more intermediate organizations such as DonorsTrust and Donors Capital Fund. Between 1998 and 2017, DonorsTrust gave more than \$150 million to climate

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<sup>109</sup> Craig Idso et al., *Why Scientists Disagree About Global Warming: The NIPCC Report on Scientific Consensus*, The Heartland Institute (2d ed. 2016).

<sup>110</sup> *Lead Authors*, Nongovernmental International Panel on Climate Change, <http://climatechangereconsidered.org/lead-authors/> [<https://perma.cc/XD8Y-9NT6>].

denial groups and Donors Capital Fund gave nearly \$200 million to these groups during the same time frame.

119. Defendants paid for, expected, and then used the misleading materials produced by these outside organizations in furtherance of their strategy to exaggerate scientific uncertainty and avoid a clear understanding of the need to address greenhouse-gas emissions and climate change.

120. The websites of outside organizations funded by Defendants in order to deceive the public about climate science, the role of their products in contributing to climate change, the consequences of climate change, and/or the need to take swift action to mitigate climate change and the harms that it would bring are and were accessible to Minnesotans at times relevant to this Complaint. These websites contain and have contained misleading and deceptive information.

121. The payments from Defendants to these outside organizations were part of a conspiracy to defraud consumers and the public about climate change and the role of Defendants' products in climate change. Defendants intended for these outside organizations to use the funding provided to them to disseminate misleading statements about climate change, which is what the outside organizations did.

122. Defendants intended for the misleading statements made by outside organizations to be directed at consumers of their products. Defendants intended that consumers, including Minnesotans, would rely on misleading statements by outside organizations to justify decisions to not change their fossil-fuel-consumption habits.

123. Defendants also intended that the misleading statements made by outside organizations would be relied on by the public in justifying decisions not to, *inter alia*, demand regulation, taxation, or otherwise require abatement of the harmful greenhouse-gas emissions that are the byproducts of burning fossil fuels.

124. Creating a false sense of disagreement in the scientific community (despite the consensus that Defendants' own scientists, experts, and managers had previously acknowledged) has had an evident impact on public opinion. A 2007 Yale University-Gallup poll found that while 71 percent of Americans personally believed global warming was happening, only 48 percent believed that there was a consensus among the scientific community, and 40 percent believed there was a lot of disagreement among scientists over whether global warming was occurring.<sup>111</sup>

**DEFENDANTS FUNDED FRAUDULENT  
SCIENTIFIC RESEARCH WITH THE INTENT  
THAT IT WOULD CREATE UNCERTAINTY  
WHERE THERE WAS NONE AND LEND FALSE  
CREDIBILITY TO THE MISLEADING  
STATEMENTS THEY AND OUTSIDE  
ORGANIZATIONS WERE MAKING**

125. In furtherance of their goals to exaggerate scientific uncertainty and avoid a clear understanding of the need to address greenhouse-gas emissions and climate change and as part of a conspiracy,

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<sup>111</sup> *American Opinions on Global Warming: A Yale/Gallup/Clearvision Poll*, Yale Program on Climate Change Communication (July 31, 2007), <http://climatecommunication.yale.edu/publications/american-opinions-on-global-warming>.

Defendants secretly paid scientists to produce research that supported their campaign of deception.

126. For example, one purportedly independent research scientist, Wei-Hock “Willie” Soon, received more than \$1.2 million in research funding between 2001 and 2012 from fossil-fuel interests including ExxonMobil, API, and the Charles Koch Foundation. The source of Soon’s funding was discovered in 2015 pursuant to a Freedom of Information Act request. The documents received from that request revealed a disturbing relationship between Soon’s research and the fossil-fuel industry. These documents showed that the fossil-fuel industry paid for Soon’s *entire* salary and research budget. Contracts between Soon and his funders demonstrated that the industry paying him had the right to review his research before it was published, and the Smithsonian, that housed Soon, agreed not to disclose the funding arrangement without the permission of the fossil-fuel funders.<sup>112</sup> Defendants and their proxies intended Soon to produce exactly the sort of “research” that he did—the arrangement and its outcome is not a coincidence.

127. William Happer is also on the payroll of Defendants.<sup>113</sup> Happer served for a year on the Trump

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<sup>112</sup> Union of Concerned Scientists, *Climate Deception Dossier #1: Dr. Wei-Hock Soon’s Smithsonian Contracts*, (July 2015), <https://www.ucsusa.org/sites/default/files/attach/2015/07/The-Climate-Deception-Dossiers.pdf> [<https://perma.cc/JL2V-XYGL>] & [https://s3.amazonaws.com/ucs-documents/global-warming/Climate-Deception-Dossier-1\\_Willie-Soon.pdf](https://s3.amazonaws.com/ucs-documents/global-warming/Climate-Deception-Dossier-1_Willie-Soon.pdf) (hereinafter Dossier #1—Soon Contracts).

<sup>113</sup> Happer and Frank Clemente were exposed by an undercover operation as agreeing to produce research in exchange for payments to his organization, the CO<sub>2</sub> Coalition. *See* Suzanne (continued...)

administration's national security council and has been asked to serve as an expert witness on climate change, despite never having published a peer-reviewed article on the topic. In contrast to his lack of peer-reviewed climate-change articles, Happer has published numerous articles in non-peer-reviewed publications arguing that climate change is due to natural forces and additional CO<sub>2</sub> will be beneficial for humankind. In 2013, as one example, Happer, the then-head of the GMI, stated in an opinion piece in the *Wall Street Journal*, a national newspaper with substantial circulation in Minnesota,

[T]he conventional wisdom about carbon dioxide is that it is a dangerous pollutant. That's simply not the case. Contrary to what some would have us believe, increased carbon dioxide in the atmosphere will benefit the increasing population on the planet by increasing agricultural productivity.<sup>114</sup>

And in November 2019, as another example, Happer told the *Washington Examiner*, in an article published on its website with national reach, including to Minnesota, that climate change was invented by paranoid scientists.<sup>115</sup> Defendants and their proxies

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Goldenberg, *Greenpeace exposes sceptics hired to cast doubt on climate science*, The Guardian (Dec. 8, 2015), <https://www.theguardian.com/environment/2015/dec/08/greenpeace-exposes-sceptics-cast-doubt-climate-science> [<https://perma.cc/N4SQ-WXFD>].

<sup>114</sup> William Happer & Harrison Schmitt, *In Defense of Carbon Dioxide*, Wall Street Journal Opinion (May 8, 2013) (“[I]t’s a wonder that humanitarians aren’t clamoring for more atmospheric carbon dioxide. Instead, some are denouncing it.”).

<sup>115</sup> Josh Siegel, *Former Trump official says climate change is* (continued...)

intended Happer to produce exactly the sort of articles that he did—the arrangement and its outcome is not a coincidence.

128. These examples are part of a pattern of using manufactured or questionable science to further business goals. Additional examples include Koch Industries-owned Georgia Pacific generating misleading scientific research as a result of liability for asbestos injuries.<sup>116</sup>

129. Defendants misleadingly cite and have cited to research by these scientists as if it were independent research, without revealing that they paid for it to be produced, and without revealing that their own science runs contrary to its conclusions.

130. The payments from Defendants to these scientists (either directly or through various front organizations) were part of a conspiracy to defraud consumers and the public about climate change and the role of Defendants' products in causing climate change. Defendants intended for these scientists to use the funding provided to them to publish misleading research about climate change, which is what the scientists did.

131. Defendants intended for the research of scientists they funded to be distributed to and relied on by consumers when buying Defendants' products, including by consumers in Minnesota.

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*“imaginary threat” invented by “insular and paranoid” scientists,* Washington Examiner (Nov. 5, 2019).

<sup>116</sup> See, e.g., Union of Concerned Scientists, *The Disinformation Playbook, How Business Interests Deceive, Misinform, and Buy Influence at the Expense of Public Health & Safety* (May 18, 2018), <https://ucsusa.org/resources/disinformation-playbook> [<https://perma.cc/HGW7-2Z5B>].

**DEFENDANTS' FRAUD ONLY RECENTLY  
BECAME DISCOVERABLE**

132. To determine whether Defendants engaged in consumer fraud and failure to warn by giving a misleading impression and failing to disclose material information about climate change, it is necessary to know what Defendants knew about that topic and in what timeframe. We only now know that the information that Defendants and their proxies provided to the public was known to be incomplete and untrue at the times those statements were made.

133. The information about what Defendants knew about climate change leading up to and during their campaign of deception was recently uncovered by investigations of journalists at the Energy and Environment Reporting Project at Columbia University's Graduate School of Journalism, *InsideClimate News*, and *The Guardian*. There were concurrent investigations by the non-governmental organizations Center for International Environmental Law and Union of Concerned Scientists as well.

134. In July 2015, the Union of Concerned Scientists published *The Climate Deception Dossiers*, revealing (among other facts) that the fossil-fuel industry, which had long pointed to Dr. Soon's research to support its positions, had actually fully funded the allegedly independent research.<sup>117</sup>

135. Later in 2015, journalists at *InsideClimate News* reported the fact that ExxonMobil had superior knowledge of the causes and potential consequences of climate change and the role its products played in

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<sup>117</sup> Dossier #1—Soon Contracts.



causing climate change as far back as the 1970s.<sup>118</sup> These journalists uncovered ExxonMobil's superior knowledge through an exhaustive investigation of thousands of archived documents and through interviews with former ExxonMobil employees.

136. Also in 2015, several journalists at the Energy and Environment Reporting Project at Columbia University's Graduate School of Journalism and the *Los Angeles Times* also exposed the fact that ExxonMobil and others had superior knowledge of the causes and potential consequences of climate change and the role their products played in causing climate change as far back as the 1970s.<sup>119</sup> These journalists uncovered ExxonMobil's superior knowledge through an exhaustive investigation of archived documents, through interviews with former ExxonMobil employees, and through a review of scientific journals.

137. In 2017, the Center for International Environmental Law issued a report that revealed that Defendants, including API, had superior knowledge of the causes and potential consequences of climate change and the role their products played in causing climate change.<sup>120</sup>

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<sup>118</sup> *InsideClimate News* published a series of nine articles between September and December 2015 following an eight-month investigation. *Exxon, The Road Not Taken*, InsideClimate News, <https://insideclimatenews.org/content/Exxon-The-Road-Not-Taken> [<https://perma.cc/5VTL-PZGH>].

<sup>119</sup> The *Los Angeles Times* published a series of three articles between October and December 2015: Katie Jennings et al., *How Exxon went from leader to skeptic on climate change research*, *Los Angeles Times* (Oct. 23, 2015); Jerving 2015; Lieberman & Rust 2015.

<sup>120</sup> *Smoke and Fumes*.

138. These reports revealed, for the first time, that Defendants had superior knowledge of climate-change science, the role their products played in climate change, the consequences of climate change, and the need for urgent action at times when they were making or perpetrating misleading statements about the same.

## **MINNESOTA HAS SUFFERED HARM DUE TO CLIMATE CHANGE**

### ***Rising Temperatures***

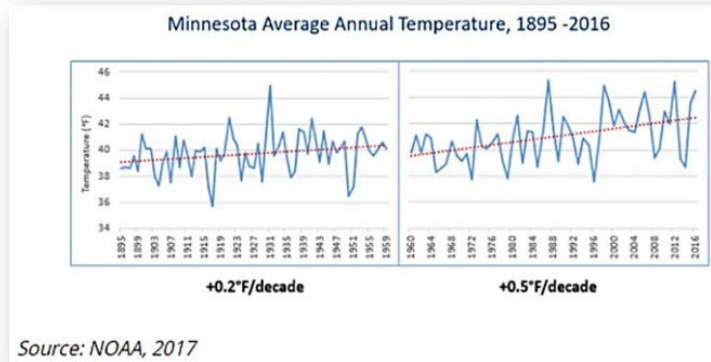
139. Minnesota is warming rapidly. In Minneapolis and St. Paul, Minnesota's largest cities, annual average temperatures increased by 3.2° F from 1951 to 2012, which was faster than both national and global rates of increase.<sup>121</sup> Statewide, temperatures have increased 1° to 3° F.<sup>122</sup> Winter temperatures have been warming 13 times faster than summer temperatures.<sup>123</sup> The graph below shows that temperatures in recent decades have been rising even more quickly.

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<sup>121</sup> Minn. Pollution Control Agency, *Effects of climate change in Minnesota*, <https://www.pca.state.mn.us/air/effects-climate-change-minnesota> [<https://perma.cc/Q4LY-4UT6>] (hereinafter MPCA climate effects).

<sup>122</sup> *Id.*

<sup>123</sup> Minn. Dept. of Nat. Res., *Climate trends: Cold weather warming*, [https://www.dnr.state.mn.us/climate/climate\\_change\\_info/climate-trends.html](https://www.dnr.state.mn.us/climate/climate_change_info/climate-trends.html) [<https://perma.cc/TH43-26JT>].



140. Extreme heat in urban centers like Minneapolis and St. Paul can cause dangerous living conditions.<sup>124</sup> Data from the Minnesota Department of Health show that between 2000 and 2017 there were over 12,000 emergency department visits<sup>125</sup> and nearly 60 deaths<sup>126</sup> directly attributable to heat exposure. Those living in poverty and people of color are particularly vulnerable to extreme heat events.<sup>127</sup> Additionally, “[p]regnant women exposed to high temperatures or air pollution are more likely to have

<sup>124</sup> David Hondula et al., *Geographic dimensions of heat-related mortality in seven U.S. cities*, *Environ. Res.* 138, 439-52 (2015).

<sup>125</sup> Minn. Dept. of Health, *Heat-related illness emergency department visits*, [https://data.web.health.state.mn.us/web/mndata/heat\\_ed](https://data.web.health.state.mn.us/web/mndata/heat_ed) [<https://perma.cc/W9WX-9UAV>].

<sup>126</sup> Minn. Dept. of Health, *Heat-related deaths*, [https://data.web.health.state.mn.us/web/mndata/heat\\_deaths](https://data.web.health.state.mn.us/web/mndata/heat_deaths) [<https://perma.cc/U4N9-H5Q2>].

<sup>127</sup> Minn. Dept. of Health, *Minnesota Climate Change Vulnerability Assessment Summary*, <https://www.health.state.mn.us/communities/environment/climate/docs/mnclimvulnsummary.pdf> [<https://perma.cc/94UG-5LGZ>] (hereinafter Vulnerability Assessment).

children who are premature, underweight or stillborn, and African-American mothers and babies are harmed at a much higher rate than the population at large[.]”<sup>128</sup>

141. High temperatures can also lead to crop damage. Corn, in particular, is the number one crop grown in Minnesota (by acreage) and accounts for an estimated \$4.6 billion in production value alone.<sup>129</sup> Yet corn can be irreparably damaged when temperatures are at or above 95° F for one or more days.<sup>130</sup>

### ***Precipitation and Flooding***

142. Dew points have also risen due to climate change, which contributes to increased humidity and average annual precipitation.<sup>131</sup> The graph below shows that precipitation in recent decades has been rising even more quickly.

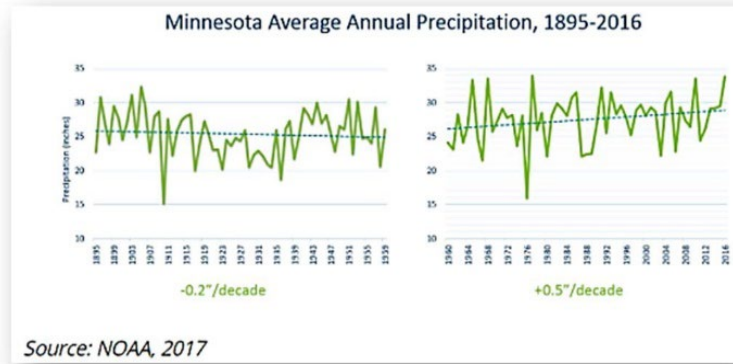
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<sup>128</sup> Christopher Flavelle, *Climate Change Tied to Pregnancy Risks, Affecting Black Mothers Most*, New York Times (June 18, 2020).

<sup>129</sup> U.S. Dept. of Agriculture, *2019 State Agriculture Overview: Minnesota*, [https://www.nass.usda.gov/Quick\\_Stats/Ag\\_Overview/stateOverview.php?state=MINNESOTA](https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=MINNESOTA) [<https://perma.cc/8R9Z-WJEM>].

<sup>130</sup> MPCA climate effects.

<sup>131</sup> Minn. Dept. of Health, *Climate & Health in Minnesota*, <https://www.health.state.mn.us/communities/environment/climate/climate101.html> [<https://perma.cc/Y7C8-AJRU>].



143. Statewide, Minnesota experienced a 42% increase in the heaviest rainfall events (top one percent) between 1901 and 2016.<sup>132</sup> Minnesota had 10 “Mega-Rain” events between 2000 and 2016.<sup>133</sup> A Mega-Rain event is an event “in which six inches of rain covers more than 1000 square miles and the core of the event topped eight inches.”<sup>134</sup> “[T]he 20 years from 2000-2019 have seen 2.5 times as many mega-rains as the 27 years spanning 1973-1999.” This has led to increased and more damaging flooding. Those living in poverty and people of color are especially vulnerable to flooding.<sup>135</sup>

<sup>132</sup> U.S. Global Change Research Program, Fourth National Climate Assessment at Ch. 2: Our Changing Climate, fig. 2.6 (2018), <https://nca2018.globalchange.gov/> (hereinafter Fourth National Climate Assessment).

<sup>133</sup> Minn. Dept. of Nat. Res., *Historic Mega-Rain Events in Minnesota*, [https://www.dnr.state.mn.us/climate/summaries\\_and\\_publications/mega\\_rain\\_events.html](https://www.dnr.state.mn.us/climate/summaries_and_publications/mega_rain_events.html) [https://perma.cc/Z9XE-ANXG].

<sup>134</sup> *Id.*

<sup>135</sup> Vulnerability Assessment.

144. In 2007, 24 counties in Minnesota sought drought designation,<sup>136</sup> while others were declared flood disasters. Minnesota had never seen simultaneous drought and flood declarations before.<sup>137</sup> This was repeated in 2012 when 11 counties declared flood emergencies while 55 received drought designations.<sup>138</sup>

145. The 1997 Red River of the North flood in Minnesota, North Dakota, and Southern Manitoba was the most severe flood of that river since 1826, with damages to the region estimated at \$3.5 billion. The State of Minnesota and communities in Minnesota paid for portions of the damage relief not covered by federal disaster relief.

146. In 2007, Minnesota provided \$165 million in disaster relief due to flooding; in 2010 the State paid \$80 million, in 2012, \$160 million, and in 2013, another \$4.5 million.<sup>139</sup> In 2014, the legislature created a disaster contingency account to more quickly provide disaster relief funding.<sup>140</sup> The legislature has

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<sup>136</sup> The Climate Reality Project, *How the climate crisis is affecting Minnesota* (May 7, 2019), <https://www.climaterealityproject.org/blog/how-climate-crisis-affecting-minnesota> [<https://perma.cc/XQ2B-YVET>].

<sup>137</sup> Minnesota et al., *Clean Power Plan Repeal Comments, Appendix A, Climate Change Impacts* A-31 (Oct. 31, 2018).

<sup>138</sup> *Id.*

<sup>139</sup> Bill Salisbury & Doug Belden, *Minnesota Legislature OKs \$4.5M in disaster relief in one-day session*, Pioneer Press (Sept. 8, 2013).

<sup>140</sup> Minn. House of Representatives, *Division OKs \$30 million to replenish the state's disaster contingency account* (Feb. 24, 2020), <https://www.house.leg.state.mn.us/sessiondaily/Story/14095> [<https://perma.cc/TJ7L-D4YU>].

appropriated \$82 million into the fund since its creation, but “[b]etween 2018 and 2019 the state received three federal disaster declarations and had 16 gubernatorial disaster declarations,” and the fund now has a projected deficit.<sup>141</sup>

147. In addition to money spent in response to flooding, since 1987, the Minnesota Flood Hazard Mitigation Grant Assistance Program has appropriated \$510 million of state funds to help local governments implement 365 flood-risk reduction programs.<sup>142</sup> Local governments also contribute to the costs of these projects. The funds have greatly increased since 1997.

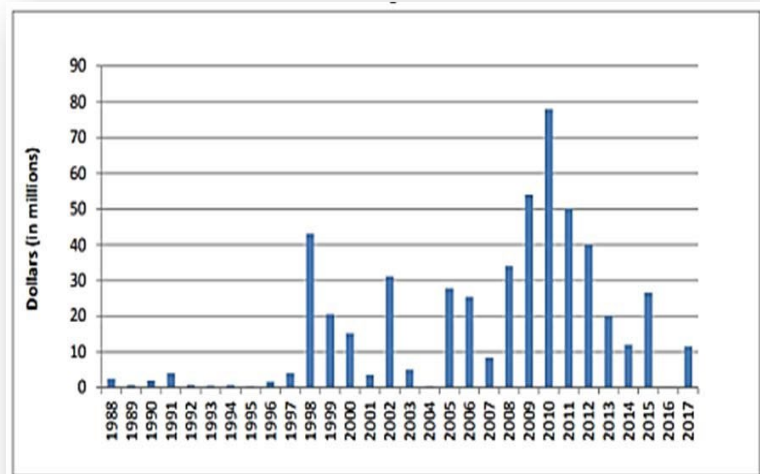


Figure 2: State of Minnesota Funding of the Flood Hazard Mitigation Grant Assistance Program

<sup>141</sup> *Id.*

<sup>142</sup> Minn. Dept. of Nat. Res., *Minnesota’s Flood Hazard Mitigation Grant Assistance Program* (2018).

148. The economic fallout from heightened flood risk in the Midwest is projected to be at least \$500 million (in 2015 dollars) annually by 2050.<sup>143</sup> Flooding can result in mass evacuations, damage to buildings, drinking water contamination, injury, and death.<sup>144</sup> Long after flood waters recede, flooded buildings, including homes, can experience mold growth that can trigger asthma attacks and allergies during cleanup efforts.<sup>145</sup>

149. Minnesotans in flooded areas also suffer from mental health issues. Mental stress during flooding events can cause substantial health impacts, including sleeplessness, anxiety, depression, and post-traumatic stress disorder.<sup>146</sup>

### ***Infrastructure***

150. Minnesota has an aging transportation infrastructure<sup>147</sup> that is further stressed by increases in heavy precipitation events and changes in the State's average annual precipitation.<sup>148</sup> The expected

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<sup>143</sup> U.S. Evtl. Protection Agency, *Multi-Model Framework for Quantitative Sectoral Impacts Analysis: A Technical Report for the Fourth National Climate Assessment* 240 (2017) (hereinafter EPA 2017 Technical Report).

<sup>144</sup> Terry Brennan et al., *Report to the U.S. Environmental Protection Agency on Guidance Documents to Safely Clean, Decontaminate, and Reoccupy Flood-Damaged Houses* (2018).

<sup>145</sup> *Id.*

<sup>146</sup> Carla Stanke et al., *The effects of flooding on mental health: Outcomes and recommendations from a review of the literature*, PLOS Currents Disasters (May 30, 2012).

<sup>147</sup> Minn. Dept. of Trans., *Minnesota's Aging Infrastructure*, [http://minnesotago.org/application/files/2215/2181/1386/Aging\\_Infrastructure\\_final\\_2018.pdf](http://minnesotago.org/application/files/2215/2181/1386/Aging_Infrastructure_final_2018.pdf) [<https://perma.cc/D3WD-969E>].

<sup>148</sup> Fourth National Climate Assessment, Ch. 21: Midwest.



continued increase in the frequency and severity of heavy precipitation events will affect access to roads, the viability of bridges, and the safety of pipelines.<sup>149</sup> In addition, heavy rainstorms can result in the temporary closure of roadways and contribute to substantial economic disruptions.

151. Faster water flow caused by extreme rains can erode the bases of bridges, a condition known as scour.<sup>150</sup> Scour may leave bridges vulnerable to damage and failure during flooding by undermining bridge foundations or removing the protection from the abutment slopes.<sup>151</sup> The Minnesota Department of Transportation allocates resources to address bridge scour through multiple efforts;<sup>152</sup> those costs will increase due to climate change. The Environmental Protection Agency (EPA) estimates the annual cost of maintaining current levels of service on Midwestern bridges from scour damage from climate change at about \$400 million per year in 2050.<sup>153</sup>

152. EPA estimates that higher temperatures associated with unmitigated climate change would result, by 2090, in U.S. annual road maintenance costs increasing by over \$6 billion (in 2015 dollars) each year.<sup>154</sup> Minnesotans would be responsible for in-state costs.

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<sup>149</sup> *Id.* Ch. 12: Transportation.

<sup>150</sup> *Id.*

<sup>151</sup> *Id.*

<sup>152</sup> *See, e.g.,* Minn. Dept. of Trans., *Bridge Scour*, <http://dot.state.mn.us/bridge/hydraulics/scour.html> [<https://perma.cc/YM9T-DMDY>].

<sup>153</sup> EPA 2017 Technical Report.

<sup>154</sup> *Id.*

153. Increased average annual rainfall and the increase in the severity of extreme precipitation events will damage stormwater and sewer systems.<sup>155</sup> Many wastewater systems in the State are located in floodplains to take advantage of gravity-fed flows.<sup>156</sup> Increased flooding will more frequently exceed infrastructure capacity, overwhelming and submerging infrastructure, including pipelines, wastewater pumping stations, and treatment systems.<sup>157</sup> Treatment systems and pumping stations will require upgrades to withstand future conditions. In 2020, Governor Walz requested \$293 million in the state bonding bill for water infrastructure upgrades needed because of climate change.<sup>158</sup>

154. Increased rain intensity can contribute to increased water flows and can cause overflow of stormwater and wastewater systems and discharge of untreated sewage into waterways.<sup>159</sup> Beach closures

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<sup>155</sup> Fourth National Climate Assessment Ch. 12: Transportation.

<sup>156</sup> Metropolitan Council, *Wastewater System Plan*, 50, <https://metro council.org/METC/files/be/bed2d5b4-9026-485a-a70f-6dfec3559755.pdf> [<https://perma.cc/Y8DT-NTKU>].

<sup>157</sup> Fourth National Climate Assessment Ch. 12: Midwest.

<sup>158</sup> Tim Pugmire, *Walz: \$293M needed to make water infrastructure more resilient to climate change*, MPR News (Jan. 10, 2020), <https://www.mprnews.org/story/2020/01/10/walz-293-million-needed-to-make-water-infrastructure-more-resilient-to-climate-change> [<https://perma.cc/3GTE-PTP6>].

<sup>159</sup> Metropolitan Council, *2016 Inflow & Infiltration Task Force Report*, (hereinafter 2016 I/I Task Force Report); see also Metropolitan Council, *Local Planning Handbook*, <http://metro council.org/Handbook/Plan-Elements/Reilience.aspx> [<https://perma.cc/WNF9-QY47>] (“A failure to effectively manage capacity for stormwater conveyance systems may lead to sewer overflows and flooding at wastewater treatment facilities.”).

in Minneapolis reached a record high during the summer of 2019, which was exceptionally rainy, due to E. coli and related illnesses.<sup>160</sup> Between 2007 and 2015, the Metropolitan Council spent \$205 million on improvements to reduce the inflow and infiltration of groundwater and stormwater into wastewater systems.<sup>161</sup>

155. The electricity system is also affected by climate change. One of the most direct energy-security impacts of major storm events is power outages.<sup>162</sup> Power outages result in indirect costs, such as lost business and tax revenue that would otherwise accrue to the State, and health impacts from the loss of electricity and air conditioning.<sup>163</sup> Minnesota's more frequent storms as a result of climate change will increase these costs.

156. Increased extreme heat days also put stress on the State's electricity grid, by requiring increased air conditioning. State agencies are playing key roles in overseeing energy assurance and resiliency in Minnesota; climate change will increase the cost to provide these assurances.

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<sup>160</sup> Miguel Otárola, *E. coli leads to record number of beach closures in Minneapolis*, Minneapolis StarTribune (Aug. 14, 2019).

<sup>161</sup> 2016 I/I Task Force Report at 11.

<sup>162</sup> Alyson Kenward & Urooj Raja, *Blackout: Extreme Weather, Climate Change and Power Outages*, Climate Central (2014).

<sup>163</sup> *Id.*; see also Christine Dominianni et al, *Power Outage Preparedness and Concern among Vulnerable New York City Residents*, 95 J. Urban Health 716 (2018).

### ***Public Health***

157. Increased air temperatures and changes to the hydrologic cycle associated with climate change have resulted and will result in public-health impacts for Minnesota. Minnesota has incurred and will continue to incur expenses in planning, preparing for, and treating the public-health impacts associated with climate change. Health impacts of climate change, and associated harms and costs, include impacts from extreme heat, increased challenges with allergies and pollen, asthma, and vector-borne diseases.<sup>164</sup>

158. U.S. asthma rates have been trending upwards since 2001.<sup>165</sup> Warmer temperatures due to climate change are predicted to increase ground-level ozone, which contributes to breathing problems.<sup>166</sup> Climate change is also predicted to result in increased wildfires and an increase in the pollen season.<sup>167</sup> These factors, especially a combination of heat and

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<sup>164</sup> IPCC 5<sup>th</sup> Assessment, *Human health: impacts, adaptation, and co-benefits*.

<sup>165</sup> Centers for Disease Control & Prevention, *Asthma Prevalence*, [https://www.cdc.gov/asthma/data-visualizations/prevalence.htm#anchor\\_1569598046502](https://www.cdc.gov/asthma/data-visualizations/prevalence.htm#anchor_1569598046502) [<https://perma.cc/98SJ-9G9W>].

<sup>166</sup> Yale Climate Connections, *Climate Change is making ground-level ozone pollution worse*, <https://www.yaleclimateconnections.org/2019/04/climate-change-makes-air-pollution-worse/> [<https://perma.cc/E8NS-V4WE>].

<sup>167</sup> Centers for Disease Control & Prevention, *Climate Change Decreases the Quality of the Air We Breathe*, [https://www.cdc.gov/climateandhealth/pubs/AIR-QUALITY-Final\\_508.pdf](https://www.cdc.gov/climateandhealth/pubs/AIR-QUALITY-Final_508.pdf) [<https://perma.cc/SF6N-JKWL>].

high pollen, are predicted to increase the number of asthma hospitalizations.<sup>168</sup>

159. Asthma disproportionately impacts children, women, African-Americans, and people with low incomes.<sup>169</sup> Data from the Minnesota Department of Health's Asthma Program show one in 14 children and one in 13 adults currently have asthma.<sup>170</sup> In Minnesota in 2014, asthma cost an estimated \$669.3 million, including \$614.9 million in direct medical expenses and \$54.3 million in lost work days.<sup>171</sup> In 2016, there were 18,200 Emergency Room visits and 1,900 hospitalizations for asthma across Minnesota.<sup>172</sup> In 2017, there were 55 deaths due to asthma.<sup>173</sup>

160. The heat waves and hot weather caused by climate change also exacerbate air pollution.<sup>174</sup> Across Minnesota, data from the Minnesota Pollution Control Agency in 2013 showed that roughly 2,000 to

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<sup>168</sup> Sabit Cakmak et al., *Does air pollution increase the effect of aeroallergens on hospitalization for asthma?* 129 *J. Allergy Clin. Immunol.* 228-31 (2012).

<sup>169</sup> Minn. Dept. of Health, *Asthma in Minnesota*, <https://data.web.health.state.mn.us/asthma> [<https://perma.cc/RT6S-ZTV2>].

<sup>170</sup> Minn. Dept. of Health, *Asthma Quick Facts*, [https://www.health.state.mn.us/diseases/asthma/data/quick\\_facts.html](https://www.health.state.mn.us/diseases/asthma/data/quick_facts.html) [<https://perma.cc/8WNE-G6NR>].

<sup>171</sup> *Id.*

<sup>172</sup> *Id.*

<sup>173</sup> *Id.*

<sup>174</sup> Rebecca Hersher, *Climate change undercuts air pollution improvements*, *MPR News* (Apr. 21, 2020), <https://www.mprnews.org/story/2020/04/21/npr-climate-change-undercuts-air-pollution-improvements> [<https://perma.cc/9ANL-8CM5>].

4,000 deaths, 500 additional hospital stays, and 800 emergency room visits were partly attributable to air pollution from ozone and particulate matter.<sup>175</sup>

161. Vulnerable populations such as the disabled, the elderly, children, people who live alone, people of color, and less-resourced communities are more likely to suffer health effects from higher air temperatures, flooding, and air pollution.<sup>176</sup>

162. Climate change is expected to shift the geographic range and the distribution of disease-carrying insects and pests, exposing more Minnesotans to ticks that carry Lyme disease and mosquitoes that transmit viruses such as West Nile.<sup>177</sup> Incidence of tick-borne illness (Lyme, babesiosis, and human anaplasmosis) in Minnesota increased 742% over a 16-year period, from 278 cases in 1996 to 2,063 cases in 2011.<sup>178</sup> In Minnesota, increasing temperatures and the expected accompanying changes in seasonal patterns are expected to result in earlier seasonal tick activity and an expansion in tick habitat range, increasing the risk of human exposure to ticks.<sup>179</sup>

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<sup>175</sup> David Bael & Kathy Raleigh, *Life and Breath: How Air Pollution Affects Health in Minnesota* (June 2019).

<sup>176</sup> IPCC 5<sup>th</sup> Assessment at 717.

<sup>177</sup> Fourth National Climate Assessment Ch. 21: Midwest, at 899.

<sup>178</sup> Stacie J. Robinson et al., *Disease Risk in a Dynamic Environment: The Spread of Tick-borne Pathogens in Minnesota, USA*, 12 *Ecohealth* 152-63 (2015).

<sup>179</sup> Igor Domic & Edson Severnini, *Ticking Bomb: The Impact of Climate Change on the Incidence of Lyme Disease*, *Can. J. Infect. Dis. Med. Microbiol.* 1-10 (2018).

163. West Nile virus is the leading cause of mosquito-borne disease in the United States.<sup>180</sup> Climate change will impact the incidence of this potent virus.<sup>181</sup> The Minnesota Department of Health details the fluctuating course of West Nile Virus disease with 821 cases from 2002 to 2018.<sup>182</sup> According to the projections of the Fourth National Climate Assessment:

Annual national cases of West Nile neuroinvasive disease are projected to more than double by 2050 due to increasing temperatures, among other factors, resulting in approximately \$1 billion per year in hospitalization costs and premature deaths under a higher [emissions] scenario []. In this same scenario, an additional 3,300 cases and \$3.3 billion in costs (in 2015 dollars) are projected each year by the end of the century. Approximately half of these cases and costs would be avoided under a lower [emissions] scenario [].<sup>183</sup>

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<sup>180</sup> Centers for Disease Control and Prevention, *West Nile Virus*, <https://www.cdc.gov/westnile/index.html> [https://perma.cc/Z96D-8U3Q].

<sup>181</sup> Charles B. Beard et al., U.S. Global Change Research Program, *Ch. 5: Vectorborne Diseases*, at fig. 5.3, West Nile Virus, <http://dx.doi.org/10.7930/J0765C7V> [https://perma.cc/VN8T-4FVK].

<sup>182</sup> Minn. Dept. of Health, *Reported Cases of West Nile Virus Disease in Minnesota by Year, 2002-2018 (n=821)*, <https://www.health.state.mn.us/diseases/westnile/casesyear.pdf> [https://perma.cc/7KUR-9MZY].

<sup>183</sup> Fourth National Climate Assessment Chapter 14: Human Health.

### *Ecosystem Harm*

164. Minnesota contains large acreages of state forests<sup>184</sup> and state parks<sup>185</sup> that provide significant economic, ecological, and recreation benefits to the State's population.<sup>186</sup> These forest resources are being and will continue to be impacted by climate change.<sup>187</sup> Climate-change-driven shifts in precipitation patterns, altered disturbance regimes, and increased frequency of late-season moisture stress amplify the effects of existing forest stressors such as invasive species, insect pests, and plant diseases.<sup>188</sup>

165. As just one example, "As of 2017, the Minnesota Department of Natural Resources Forest Health Unit reported that more than 440,000 acres of tamarack were in some stage of infestation by the eastern larch beetle."<sup>189</sup>

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<sup>184</sup> Minn. Dept. of Nat. Res., *State Forest Map*, [https://www.dnr.state.mn.us/state\\_forests/map.html](https://www.dnr.state.mn.us/state_forests/map.html) [<https://perma.cc/Q6Q2-NW6N>].

<sup>185</sup> Minn. Dept. of Nat. Res., *State Park Map*, [https://www.dnr.state.mn.us/state\\_parks/map.html](https://www.dnr.state.mn.us/state_parks/map.html) [<https://perma.cc/JW9H-NB83>].

<sup>186</sup> Minn. State Parks, Strategic Plan 2006-2011, 7.

<sup>187</sup> Lee Frelich, *Climate Change Impacts in Minnesota: Biological Resources*, slides 39-54 (Jan. 17, 2019), <https://www.house.leg.state.mn.us/comm/docs/4eb2e359-1009-4739-ba16-e601b83d0921.pdf> [<https://perma.cc/PW42-ECKM>].

<sup>188</sup> Chris Swanston et al., *Vulnerability of forests of the Midwest and Northeast United States to climate change*, 146 *Climatic Change* 103-16 (2018).

<sup>189</sup> Jess Hartshorn, *Eastern Larch Beetle Outbreak Keeps Going When Winter's Not So Cold*, *Entomology Today* (2018), <https://entomologytoday.org/2018/04/18/eastern-larch-beetle-outbreak-keeps-going-winter-not-cold/> [<https://perma.cc/5Y5R-RGW2>].



The absence of an obligatory overwintering period, combined with longer growing seasons brought by warming temperatures, may allow for multiple generations per year on a consistent basis. This switch in life history results in faster spread and increased tree mortality. Warmer winters are also presumably causing less winter mortality for overwintering beetles. In addition to the exploding populations of beetles, warmer winters mean less access for loggers to manage tamarack stands, which typically require frozen ground to operate machinery.<sup>190</sup>

### ***Planning Costs***

166. Minnesota's natural resource managers are incorporating climate adaptation into land management, taking steps such as increasing the diversity of trees and introducing species suitable for a sustainable climate.<sup>191</sup> But planning and implementation actions come at significant cost to the State.<sup>192</sup>

167. The Minnesota Department of Health is planning for the likelihood that more Minnesotans will be seeking emergency help on hotter days.<sup>193</sup> The

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<sup>190</sup> *Id.*

<sup>191</sup> Minn. Dept. of Nat. Res., *What DNR is Doing*, [https://www.dnr.state.mn.us/climate/climate\\_change\\_info/what-dnr-doing.html](https://www.dnr.state.mn.us/climate/climate_change_info/what-dnr-doing.html) [<https://perma.cc/B5GE-N579>].

<sup>192</sup> Todd Ontl et al., *Adaptation pathways: ecoregion and land ownership influences on climate adaptation decision-making in forest management*, 146 *Climatic Change* 75-88 (2018).

<sup>193</sup> Minn. Dept. of Health, *Extreme Heat Toolkit: Preparing Minnesota for Extreme Heat Events* 3-9 (continued...)

State of Minnesota, through the Minnesota Department of Health and local health agencies, has provided public education to some vulnerable communities about central cooling centers where people could go for relief, and has incurred costs educating the public about what to do in extreme heat.<sup>194</sup>

168. Minnesota is undertaking extensive planning efforts across state agencies, as well as funding independent research efforts, to assess the State's vulnerability to a broad range of climate change-related impacts and to develop adaptation and resilience strategies.<sup>195</sup>

169. Since 2009, 15 state departments and agencies have been collaborating on climate adaptation through the Interagency Climate Adaptation Team, including sharing information on the hundreds of agency research and planning projects that help Minnesota evaluate, analyze, mitigate, and adapt to climate change.<sup>196</sup>

170. According to a survey completed by the Minnesota Pollution Control Agency in 2016, 17.5% of state agencies, local units of government, and tribal

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[https://www.health.state.mn.us/communities/environment/climate/docs/toolkit\\_chapter3.pdf](https://www.health.state.mn.us/communities/environment/climate/docs/toolkit_chapter3.pdf) [<https://perma.cc/XT6E-3QSW>].

<sup>194</sup> Minn. Dept. of Health, *Extreme Heat Events*, <https://www.health.state.mn.us/communities/environment/climate/extremeheat.html>.

<sup>195</sup> Minn. Pollution Control Agency, *Adapting to Climate Change in Minnesota* (2017).

<sup>196</sup> *Id.*

governments have at least one type of plan or planning effort that addresses climate adaptation.<sup>197</sup>

171. By mid-century, without mitigation, the Midwest is projected to experience substantial loss of life, worsened health conditions, and economic impacts estimated in the billions of dollars as a result of climate change.<sup>198</sup>

**DEFENDANTS' CAMPAIGN OF DECEPTION  
LED TO INCREASED PURCHASE AND  
CONSUMPTION OF FOSSIL FUELS, AND  
EXACERBATED THE COSTS OF ADAPTING  
TO AND MITIGATING THE ADVERSE  
IMPACTS OF THE CLIMATE CRISIS, WHICH  
HAS HARMED MINNESOTA**

172. By 1982, Defendants recognized that there was broad consensus among scientists that human-caused climate change had the potential for catastrophic consequences. Defendants knew that burning fossil fuels was the primary cause of increasing concentrations of greenhouse gases in the atmosphere and they knew that reduction of greenhouse-gas emissions had to occur quickly in order to mitigate these catastrophic consequences. Defendants did not publicize this knowledge and instead affirmatively concealed it by publishing contradictory statements.

173. Consumers and the public typically rely on the type of information disseminated by Defendants (either directly or through outside organizations) when making decisions about purchasing or

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<sup>197</sup> *Id.*

<sup>198</sup> Fourth National Climate Assessment Ch. 21: Midwest.

demanding regulation of potentially harmful products.

174. Defendants' efforts to deceive regarding the consequences of the normal use of their fossil-fuel products; their efforts to conceal the hazards of those products from consumers; their promotion of their fossil-fuel products despite knowing the dangers associated with those products; their dogged campaign against regulation of those products based on falsehoods, omissions, and deceptions; and their failure to pursue less hazardous alternative products available to them unduly inflated the market for fossil-fuel products. Consequently, substantially more greenhouse gases have been emitted to the environment than would have been absent that conduct.

175. Defendants' conduct caused a substantial portion of global atmospheric greenhouse-gas concentrations, and the attendant historical, projected, and committed disruptions to the environment—and consequent injuries to Minnesota—associated therewith.

176. Delayed efforts to curb anthropogenic greenhouse-gas emissions have increased environmental harms and increased the magnitude and cost to address harms, including to Minnesota, that have already occurred or are locked in by previous emissions. As greenhouse-gas pollution accumulates in the atmosphere, some of which does not dissipate for potentially thousands of years (namely CO<sub>2</sub>), climate changes and consequent adverse environmental changes compound, and their frequencies and magnitudes increase. As those adverse environmental changes compound and their frequencies and magnitudes increase, so too do the

physical, environmental, economic, and social injuries resulting therefrom.

177. Therefore, Defendants' campaign to obscure the science of climate change so as to protect and expand the use of fossil fuels greatly increased and continues to increase the harms and rate of harms suffered by Minnesota and its residents. Defendants, individually and together, have substantially contributed to Minnesota's climate crisis-related injuries.

178. Despite Defendants' knowledge of the foreseeable, measurable, and significant harms associated with the unabated consumption and use of their fossil-fuel products, and despite Defendants' knowledge of technologies and practices that could have helped to reduce the foreseeable dangers associated with their fossil-fuel products, Defendants continued to wrongfully market and promote heavy fossil-fuel use and mounted a campaign to obscure the connection between their fossil-fuel products and the climate crisis, dramatically increasing the cost of abatement, including in Minnesota.

179. Despite their knowledge of the foreseeable harms associated with the consumption of Defendants' fossil-fuel products, and despite the existence and fossil-fuel industry knowledge of opportunities that would have reduced the foreseeable dangers associated with those products, Defendants wrongfully and falsely promoted, campaigned against regulation of, and concealed the hazards of use of their fossil-fuel products.

180. As a result of Defendants' campaign of deception, consumers did not change fossil-fuel consumption behavior in the same manner that they

would have if Defendants had not obfuscated the scientific consensus, the potential for catastrophic consequences, the role of Defendants' products, and the need to act quickly.

181. If consumer behavior had changed sooner, fewer greenhouse gases would have been emitted through the use of Defendants' products. These additional greenhouse gases have accelerated the rate of climate change.

182. The consequences of climate change would have been delayed and/or reduced if consumers and the public had not been deceived about the true harms posed by consuming fossil-fuel products.

183. This accelerated rate of climate change has led to more harm suffered by Minnesota. Defendants' misleading statements and deceptive practices, directly and through other organizations, have contributed to and exacerbated Minnesota's climate-change injuries.

### **CLAIMS FOR RELIEF**

#### **COUNT I: PREVENTION OF CONSUMER FRAUD ACT VIOLATION (AGAINST ALL DEFENDANTS)**

184. Minnesota realleges and incorporates by reference paragraphs 1-183 of this Complaint.

185. Minnesota Statutes, section 325F.69, subdivision 1, provides:

The act, use, or employment by any person of any fraud, false pretense, false promise, misrepresentation, misleading statement or deceptive practice, with the intent that others rely thereon in connection with the sale of any merchandise, whether or not any person has

in fact been misled, deceived, or damaged thereby, is enjoined as provided in section 325F.70.

186. Defendants are “persons” within the meaning of Minn. Stat. § 325F.69.

187. Fossil fuels are “merchandise” within the meaning of Minn. Stat. § 325F.69.

188. Defendants repeatedly violated Minnesota Statutes, section 325F.69, subd. 1, by using fraud, false pretense, false promise, misrepresentation, misleading statements, or deceptive practices in the connection with the sale of fossil fuels in Minnesota.

189. Defendants also repeatedly violated Minnesota Statutes, section 325F.69, subd. 1, by omitting material information in the course of marketing and selling their products in Minnesota such that their failures to sufficiently disclose such material information constituted deceptive and fraudulent practices.

190. Defendants made these fraudulent, false, and misleading statements and omissions with the intent that others rely on them in connection with the sale of fossil fuels.

191. Fossil-fuel consumers are “others” within the meaning of Minn. Stat. § 325F.69.

192. The general public are “others” within the meaning of Minn. Stat. § 325F.69.

193. Regulators and policy makers are “others” within the meaning of Minn. Stat. § 325F.69.

194. There is a causal nexus between Defendants’ deceptive and fraudulent conduct, representations,

and material omissions described in this Complaint and the harm incurred by the State and its residents.

195. Defendants' conduct, practices, actions, and material omissions described in this Complaint constitute multiple, separate violations of Minnesota Statutes, section 325F.69.

196. Defendants engaged in a civil conspiracy with each other, with organizations not directly engaged in the sale of fossil-fuel products, and with individuals to mislead the public and decision makers about the consequences of using their products. Defendants are jointly and severally liable, along with other co-conspirators, for that conspiratorial conduct and for the resulting harm suffered by the State as a result of their conspiracy.

197. The State and Minnesotans have conferred a benefit upon Defendants by paying for the costs of the harms caused by Defendants' improper and unlawful practices. Defendants knowingly accepted and retained such benefits. Further, Defendants have failed to pay for the consequences of their unlawful conduct.

198. Because of the conduct, practices, actions, and material omissions described in this Complaint, Defendants obtained enrichment they would not otherwise have obtained. The enrichment was without justification and the State lacks an adequate remedy provided by law.

**COUNT II: FAILURE TO WARN – STRICT AND  
NEGLIGENT LIABILITY  
(AGAINST ALL DEFENDANTS EXCEPT  
AMERICAN PETROLEUM INSTITUTE)**

199. Minnesota realleges and incorporates by reference paragraphs 1-183 of this Complaint.



200. A manufacturer has a duty to warn end users of a dangerous product if it is reasonably foreseeable that an injury could occur in its use. Where the manufacturer has actual or constructive knowledge of danger to users, the manufacturer has a duty to give warning of such dangers.

201. The injuries that Minnesotans and the state of Minnesota are experiencing—and will experience—were well known to the Defendants because Defendants' own scientists predicted them decades ago. Defendants had actual knowledge of the danger that continuing to consume fossil fuels would have for climate change, the catastrophic effects of climate change, and the need to act urgently to address it or lose the ability to prevent the consequences from coming about.

202. Given Defendants' actual knowledge of the injury that would result from the use of fossil fuels, it was not *merely* reasonably foreseeable that an injury could occur. Instead, the injuries that Minnesota and Minnesotans are experiencing now are the types of injuries that Defendants knew the use of their products would bring about.

203. Given their knowledge of the likelihood of injury from the use of their products, Defendants had a duty to give warning of the injuries they knew their products were going to cause. Yet they did not.

204. Defendants instead worked to undermine any warning by affirmatively misrepresenting the hazardous nature of their products by fraud, false and misleading statements, and omission. Defendants affirmatively took steps to undermine legitimate science highlighting the danger of purchasing and consuming their products, thereby engaging in a

conspiracy to deceive consumers and the public about the certainty of the science of climate change, the role that their products play in causing climate change, the consequences of continued unabated fossil-fuel emissions, and the need to act quickly.

205. When they opted to speak, Defendants took on the additional duty of speaking truthfully and fully, such as by warning consumers of the harms that they knew their products posed. They did not speak truthfully, and they did not warn of the known hazards that their products posed to consumers.

206. Defendants engaged in a civil conspiracy with each other, with organizations not directly engaged in the sale of fossil-fuel products, and with individuals to mislead the public and decision makers about the consequences of using their products. Defendants are jointly and severally liable, along with other co-conspirators, for that conspiratorial conduct and for the resulting harm suffered by the State as a result of their conspiracy designed to prevent warnings to consumers.

207. Defendants failed to exercise ordinary care after discovering the hazards that their products presented to the public, and their repeated attempts to obfuscate the science were not the result of honest misjudgment.

208. Defendants' failure to exercise ordinary care by warning the public of the hazard that burning fossil fuels would cause is the proximate cause of climate-change injury to Minnesotans and the State.

209. Defendants' acts constitute deliberate disregard for the rights or safety of others. Defendants had actual knowledge of the facts and intentionally disregarded them, creating a high probability of injury

to the rights of others. They deliberately proceeded to act in conscious or intentional disregard of, or with indifference to, the rights of others.

210. The State and Minnesotans have conferred a benefit upon Defendants by paying for the costs of the harms caused by Defendants' improper and unlawful practices. Defendants knowingly accepted and retained such benefits. Further, Defendants have failed to pay for the consequences of their unlawful conduct.

211. Because of the conduct, practices, actions, and material omissions described in this Complaint, Defendants obtained enrichment they would not otherwise have obtained. The enrichment was without justification and the State lacks an adequate remedy provided by law.

**COUNT III: FRAUD AND  
MISREPRESENTATION  
(AGAINST ALL DEFENDANTS)**

212. Minnesota realleges and incorporates by reference paragraphs 1-183 of this Complaint.

213. Defendants made misrepresentations of material facts about the certainty and consensus about the science of climate change, the role their products played in causing climate change, the consequences of climate change, and the need to act quickly to mitigate climate change and the harms that it would bring.

214. Defendants knew or should have known that the science of climate change was certain and that there was a scientific consensus about the science and the role of fossil fuels as early as 1982, that the consequences of climate change could be catastrophic,

and that we needed to act quickly to mitigate the worst injuries from climate change.

215. Minnesota consumers, regulators, policy makers, and the public relied on these misrepresentations, allowing for the purchase of more fossil-fuel products than otherwise would have occurred.

216. Consumers', regulators', policy makers', and the public's reliance on Defendants' misrepresentations in continuing to purchase and use Defendants' fossil-fuel products was reasonable because Defendants held themselves out as experts and failed to disclose financial relationships with seemingly independent experts.

217. Minnesota suffered harm and loss of money because of Defendants' misrepresentations.

218. Minnesota did not, and could not have, understood the intentional and deceptive nature of Defendants' statements about climate change until Defendants' superior knowledge during earlier timeframes was revealed by journalists in 2015 and later.

219. Defendants engaged in a civil conspiracy with each other, with organizations not directly engaged in the sale of fossil-fuel products, and with individuals to mislead the public and decision makers about the consequences of using their products. Defendants are jointly and severally liable, along with other co-conspirators, for this conspiratorial conduct and the resulting harm suffered by the State as a result of their conspiracy.

220. The State and Minnesotans have conferred a benefit upon Defendants by paying for the costs of the harms caused by Defendants' improper and unlawful

practices. Defendants knowingly accepted and retained such benefits. Further, Defendants have failed to pay for the consequences of their unlawful conduct.

221. Because of the conduct, practices, actions and material omissions described in this Complaint, Defendants obtained enrichment they would not otherwise have obtained. The enrichment was without justification and the State lacks an adequate remedy provided by law.

**COUNT IV: DECEPTIVE TRADE PRACTICES  
(AGAINST ALL DEFENDANTS)**

222. Minnesota realleges and incorporates by reference paragraphs 1-183 of this Complaint.

223. Minnesota Statutes section 325D.44, subdivision 1 reads in pertinent part:

A person engages in a deceptive trade practice when, in the course of business, vocation, or occupation, the person:

. . .

(5) represents that goods or services have sponsorship, approval, characteristics, ingredients, uses, benefits, or quantities that they do not have;

(7) represents that goods or services are of a particular standard, quality, or grade . . . if they are of another;

(13) engages in any other conduct which similarly creates a likelihood of confusion or of misunderstanding.

224. Defendants are “persons” within the meaning of this statute.

225. In the course of their business, vocation, or occupation, Defendants have repeatedly violated Minnesota Statutes section 325D.44, subdivision 1 by engaging in the deceptive trade practices described in this Complaint. Defendants' deceptive acts and practices have the tendency or capacity to deceive and/or mislead the State and its residents and therefore constitute multiple separate deceptive trade practices.

226. Defendants engaged in conduct that created a likelihood of confusion or misunderstanding about their products by, among other things, engaging in a conspiracy to deceive consumers and the general public about the certainty of the science of climate change, the role that their products play in causing climate change, the consequences of continued unabated fossil-fuel emissions, and the need to act quickly.

227. Defendants also repeatedly violated Minnesota Statutes section 325D.44, subdivision 1 by, among other things, omitting material information in the course of marketing and selling their fossil-fuel products that caused a likelihood of confusion or misunderstanding by failing to sufficiently disclose that consuming their products caused climate change.

228. Defendants' deceptive practices have exacerbated the harms that the State and its citizens have suffered due to climate change. These harms will continue into the future.

229. Given the nature and quality of the representations that Defendants made, the actual and special knowledge they had, and the other circumstances described in this Complaint, Defendants had a duty to sufficiently disclose all

material facts to potential consumers in connection with the sale and marketing of their fossil-fuel products to Minnesotans. Defendants' failure to disclose this material information constitutes additional deceptive trade practices in violation of Minnesota Statutes section 325D.44, subdivision 1.

230. There is a causal nexus between Defendants' deceptive and fraudulent conduct, representations, and material omissions described in this Complaint and the harm incurred by the State and its residents.

231. Defendants' conduct, practices, actions, and material omissions described in this Complaint constitute multiple, separate violations of Minnesota Statutes section 325D.44.

232. Defendants engaged in a civil conspiracy with each other, with organizations not directly engaged in the sale of fossil-fuel products, and with individuals to mislead the public and decision makers about the consequences of using their products. Defendants are jointly and severally liable, along with other co-conspirators, for this conspiratorial conduct and for the resulting harm suffered by the State as a result of their conspiracy.

233. The State and Minnesotans have conferred a benefit upon Defendants by paying for the costs of the harms caused by Defendants' improper and unlawful practices. Defendants knowingly accepted and retained such benefits. Further, Defendants have failed to pay for the consequences of their unlawful conduct.

234. Because of the conduct, practices, actions, and material omissions described in this Complaint, Defendants obtained enrichment they would not otherwise have obtained. The enrichment was without

justification and the State lacks an adequate remedy provided by law.

**COUNT V: VIOLATION OF FALSE  
STATEMENT IN ADVERTISING ACT  
(AGAINST ALL DEFENDANTS)**

235. Minnesota realleges and incorporates by reference paragraphs 1–183 of this Complaint.

236. The False Statement in Advertising Act (FSAA) provides:

Any person, firm, corporation, or association who, . . . with intent to increase the consumption [of any merchandise, securities, or service] . . . makes, publishes, disseminates, circulates, or places before the public, or causes, directly or indirectly, to be made, published, disseminated, circulated, or placed before the public, in this state . . . an advertisement of any sort regarding merchandise . . . or anything so offered to the public, for use, consumption, purchase, or sale, which advertisement contains any material assertion, representation, or statement of fact which is untrue, deceptive, or misleading, shall, whether or not pecuniary or other specific damage to any person occurs as a direct result thereof, be guilty of a misdemeanor, and any such act is declared to be a public nuisance and may be enjoined as such.

Minn. Stat. § 325F.67.

237. Fossil fuels are “merchandise” within the meaning of Minnesota Statutes section 325F.67.



238. Defendants repeatedly violated Minnesota Statutes, section 325F.67 by making, publishing, disseminating, circulating, and/or placing before the public advertisements regarding fossil fuels containing material assertions, representations, and/or statements of facts which were untrue, deceptive, and or misleading.

239. Defendants made the aforementioned advertisements with the intent to increase the consumption of fossil fuels.

240. Defendants' conduct, practices, actions, and material omissions described in this Complaint constitute multiple, separate violations of Minnesota Statutes section 325F.67.

241. Defendants engaged in a civil conspiracy with each other, with organizations not directly engaged in the sale of fossil-fuel products, and with individuals to mislead the public about the consequences of using their products. Defendants are jointly and severally liable, along with other co-conspirators, for this conspiratorial conduct and for the resulting harm suffered by the State as a result of their conspiracy.

242. Because of the conduct, practices, actions, and material omissions described in this Complaint, Defendants obtained enrichment they would not otherwise have obtained. The enrichment was without justification and the State lacks an adequate remedy provided by law.

#### **REQUEST FOR RELIEF**

WHEREFORE, the State of Minnesota, by its Attorney General, Keith Ellison, respectfully asks this Court to award judgment against Defendants as follows:

243. Determine that Defendants' acts described in this Complaint constitute common law fraud, strict and negligent failure to warn, and multiple separate violations of Minnesota Statutes sections 325D.44, 325F.67, and 325F.69;

244. Enjoin Defendants and their employees, officers, directors, agents, successors, assignees, affiliates, merged or acquired predecessors, parent or controlling entities, subsidiaries, and all other persons acting in concert or participation with them from engaging in conduct that violates Minnesota Statutes sections 325D.44, 325F.67, or 325F.69;

245. Order Defendants to disclose, disseminate, and publish all research previously conducted directly or indirectly by themselves or their respective agents, affiliates, servants, officers, directors, employees, and all persons acting in concert with them that relates to the issue of climate change;

246. Order Defendants to fund a corrective public education campaign in Minnesota relating to the issue of climate change, administered and controlled by an independent third party;

247. Award judgment against Defendants for maximum civil penalties pursuant to Minnesota Statutes section 8.31, subdivision 3 for each separate violation of Minnesota law;

248. Award judgment against Defendants for restitution pursuant to Minnesota Statutes section 8.31, Minnesota common law, the *parens patriae* doctrine, and the general equitable powers of this Court to remedy the great harm and injury to the State resulting from Defendants' unlawful conduct;

249. Order ExxonMobil and Koch to disgorge all profits made as a result of their unlawful conduct;

250. Award Minnesota the costs of investigation and this action, attorneys' fees, expert consultant and expert witness fees, and all other costs and disbursements as authorized by Minnesota Statute section 8.31, subd. 3a; and

251. Grant such additional relief as the Court deems just and proper.

**JURY DEMAND**

The State demands a jury trial for all issues pled herein that are triable by a jury.

Dated: June 24, 2020

KEITH ELLISON  
MINNESOTA ATTORNEY GENERAL

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ATTORNEYS FOR STATE OF MINNESOTA

**MINN. STAT. § 549.211**

**ACKNOWLEDGMENT**

The party on whose behalf the attached document is served acknowledges through its undersigned counsel that sanctions, including reasonable attorney fees and other expenses, may be awarded to the opposite party or parties pursuant to Minn. Stat. § 549.211 (2020).

Dated: June 24, 2020

/s/ Leigh Currie

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