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19 *The City of Santa Cruz, a municipal corporation,*
and on behalf of the People of the State of California

20 **SUPERIOR COURT OF THE STATE OF CALIFORNIA**
21 **IN AND FOR THE COUNTY OF SAN FRANCISCO**

22 COORDINATION PROCEEDING
SPECIAL TITLE [CRC 3.550(c)]

JUDICIAL COUNCIL COORDINATION
PROCEEDING NO. 5310

23 **FUEL INDUSTRY CLIMATE CASES**

Case No.: CJC-24-005310

24
25 **THIS CASE RELATES TO:**

26 *The City of Santa Cruz, a municipal*
27 *corporation, individually and on behalf of The*
28 *People of the State of California v. Chevron*
Corporation et al.,

FIRST AMENDED COMPLAINT FOR:

1. PUBLIC NUISANCE ON BEHALF OF THE PEOPLE OF THE STATE OF CALIFORNIA;
2. PUBLIC NUISANCE;

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County of Santa Cruz Superior Court,
Case No.: 17cv03243

THE CITY OF SANTA CRUZ, a municipal
corporation, individually and on behalf of THE
PEOPLE OF THE STATE OF CALIFORNIA,

Plaintiffs,

vs.

CHEVRON CORPORATION; CHEVRON
U.S.A. INC.; EXXONMOBIL
CORPORATION; EXXONMOBIL OIL
CORPORATION; BP P.L.C.; BP AMERICA,
INC.; SHELL PLC; SHELL USA, INC.,
SHELL OIL PRODUCTS COMPANY LLC;
CITGO PETROLEUM CORP.;
CONOCOPHILLIPS; CONOCOPHILLIPS
COMPANY; PHILLIPS 66; PHILLIPS 66
COMPANY; TOTAL E&P USA INC.; TOTAL
SPECIALTIES USA INC.; ENI S.p.A.; ENI
OIL & GAS INC.; ANADARKO
PETROLEUM CORP.; OCCIDENTAL
PETROLEUM CORP.; OCCIDENTAL
CHEMICAL CORP.; REPSOL S.A.; REPSOL
ENERGY NORTH AMERICA CORP.;
REPSOL TRADING USA CORP.;
MARATHON OIL COMPANY; MARATHON
OIL CORPORATION; MARATHON
PETROLEUM CORP.; HESS CORP.; DEVON
ENERGY CORP.; DEVON ENERGY
PRODUCTION COMPANY, L.P.; ENCANA
CORP.; APACHE CORP.; and DOES 1
through 100, inclusive,

Defendants.

- 3. STRICT LIABILITY – FAILURE TO WARN;
- 4. PRIVATE NUISANCE;
- 5. NEGLIGENCE;
- 6. NEGLIGENCE – FAILURE TO WARN; and
- 7. TRESPASS.

JURY TRIAL DEMANDED

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1 **I. INTRODUCTION**

2 1. Defendants, major corporate members of the fossil fuel industry, have known for
3 decades that unrestricted consumption of their fossil fuel products creates greenhouse gas pollution
4 that warms the planet and changes our climate. They have known for decades that those impacts
5 could be catastrophic and that only a narrow window existed to take action before the
6 consequences would become irreversible. They have nevertheless engaged in a coordinated, multi-
7 front effort to conceal and deny their own knowledge of those consequences, discredit the growing
8 body of publicly available scientific evidence connecting fossil fuel consumption to climate
9 change, and persistently create doubt in the minds of customers, consumers, the media, journalists,
10 teachers, and the public about the reality and severity of climate change. At the same time,
11 Defendants have promoted and profited from a massive increase in the consumption of oil, coal,
12 and natural gas, which has in turn caused an enormous, foreseeable, and avoidable increase in
13 global greenhouse gas pollution and a concomitant increase in the concentration of greenhouse
14 gases,¹ particularly carbon dioxide (“CO₂”) and methane, in the Earth’s atmosphere. Those
15 disruptions of the Earth’s otherwise balanced carbon cycle have substantially contributed to a wide
16 range of dire climate-related effects, including global warming, rising atmospheric and ocean
17 temperatures, ocean acidification, melting polar ice caps and glaciers, more extreme and volatile
18 weather, and sea level rise. Plaintiffs, the People of the State of California and the City of Santa
19 Cruz,² along with the City’s residents, taxpayers, and infrastructure, suffer the consequences.

20 2. Defendants are vertically integrated extractors, producers, refiners, manufacturers,
21 distributors, promoters, marketers, and sellers of fossil fuel products. Decades of scientific
22 research show that pollution from Defendants’ fossil fuel products plays a direct and substantial
23 role in the unprecedented rise in emissions of greenhouse gas pollution and increased atmospheric
24 CO₂ concentrations since the mid-20th century. This dramatic increase in atmospheric CO₂ and

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26 ¹ As used in this Complaint, “greenhouse gases” refers collectively to carbon dioxide, methane,
27 and nitrous oxide. Where a source refers to a specific gas or gases, or when a process relates only
28 to a specific gas or gases, this Complaint refers to them by name.

² As used in this Complaint, “Santa Cruz” and “City” refer to all areas within the geographic
boundaries of the City.

1 other greenhouse gases is the main driver of the gravely dangerous changes occurring to the global
2 climate.

3 3. Anthropogenic (human-caused) greenhouse gas pollution, primarily in the form of
4 CO₂, is far and away the dominant cause of climate change and sea level rise.³ The primary source
5 of this pollution is the extraction, production and consumption of coal, oil, and natural gas, referred
6 to collectively in this Complaint as “fossil fuel products.”⁴

7 4. The rate at which Defendants have extracted and sold fossil fuel products has
8 exploded since the Second World War, as have emissions from those products. The substantial
9 majority of all greenhouse gas emissions in history has occurred since the 1950s, a period known
10 as the “Great Acceleration.”⁵ About three quarters of all industrial CO₂ emissions in history have
11 occurred since the 1960s,⁶ and more than half have occurred since the late 1980s.⁷ The annual rate
12 of CO₂ emissions from production, consumption, and use of fossil fuels has increased by more
13 than 60% since 1990.⁸

14 5. Defendants have known for more than 50 years that greenhouse gas pollution from
15 their fossil fuel products has a significant impact on the Earth’s climate and sea levels. Defendants’
16 awareness of the damaging consequences of their products’ ordinary use corresponds almost
17 exactly with the Great Acceleration, and with skyrocketing greenhouse gas emissions. Armed with
18

19 ³ See IPCC, 2014: Climate Change 2014: Synthesis Report. Contribution of Working Groups I,
20 II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change
21 [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, at 6,
22 Figure SMP.3, <https://www.ipcc.ch/report/ar5/syr/>.

22 ⁴ See C. Le Quéré et al., Global Carbon Budget 2016, *Earth Syst. Sci. Data* 8, 632 (2016),
23 <http://www.earth-syst-sci-data.net/8/605/2016/>. Cumulative emissions since the beginning of the
24 industrial revolution to 2015 were 413 GtC attributable to fossil fuels, and 190 GtC attributable
25 to land use change. Id. Global CO₂ emissions from fossil fuels and industry remained nearly
26 constant at 9.9 GtC in 2015, distributed among coal (41 %), oil (34 %), gas (19 %), cement
27 (5.6 %), and gas flaring (0.7 %). Id. at 629.

25 ⁵ Will Steffen et al., The Trajectory of the Anthropocene: The Great Acceleration (2015),
26 <http://journals.sagepub.com/doi/abs/10.1177/2053019614564785>.

26 ⁶ R.J. Andres et al., A synthesis of carbon dioxide emissions from fossil-fuel combustion,
27 *Biogeosciences*, 9, 1851 (2012), <http://www.biogeosciences.net/9/1845/2012/>.

27 ⁷ Id.

28 ⁸ Le Quéré et al. (2016), supra note 4, at 630.

1 that knowledge, Defendants took steps to protect their own assets from these threats through
2 immense internal investment in research, infrastructure improvements, and plans to exploit new
3 opportunities in a warming world.

4 6. But instead of warning consumers and the public about the dangers of fossil fuels,
5 Defendants mounted disinformation campaigns to undermine the burgeoning scientific consensus
6 on climate change; create doubt in the minds of consumers, the media, teachers, and the public
7 about the dire consequences of burning fossil fuels; and delay the necessary transition to a lower-
8 carbon future. Defendants’ climate deception campaigns, and their aggressive promotion of fossil
9 fuel products despite knowing of their dangers, had the purpose and effect of unduly and
10 substantially inflating and sustaining the market for fossil fuels. Defendants’ tortious and deceptive
11 conduct, both individually and collectively, drove fossil fuel consumption and delayed the
12 transition to a lower-carbon future. This caused an enormous, foreseeable, and avoidable increase
13 in anthropogenic greenhouse gas emissions and accelerated global warming, bringing devastating
14 consequences to the City and its people.

15 7. Extreme flooding events will more than double in frequency on California’s Pacific
16 coast by 2050.⁹ Flooding and storms will become more frequent and more severe, and average sea
17 level will rise substantially along California’s coast, including in the City of Santa Cruz.
18 Disruptions to weather cycles, extreme precipitation and drought, heatwaves, and associated
19 consequences—all due to anthropogenic global warming—will increase in the City of Santa Cruz.
20 The City, flanked on its entire southern boundary by the Pacific Ocean and otherwise surrounded
21 by a greenbelt of forested open space, is particularly vulnerable to sea level rise, water shortages,
22 and increased wildfire risks, and has already spent significant funds to study, mitigate, and adapt
23 to the effects of global warming. Climate change impacts already adversely affect Santa Cruz and

24 _____
25 ⁹ Sean Vitousek et al., Doubling of coastal flooding frequency within decades due to sea-level
26 rise, Scientific Reports, (May 18, 2017) (“Only 10 cm of SLR doubles the flooding potential in
27 high-latitude regions with small shape parameters, notably the North American west coast
28 (including the major population centers Vancouver, Seattle, San Francisco, and Los Angeles),
and the European Atlantic coast.”); USGS, In Next Decades, Frequency of Coastal Flooding Will
Double Globally (May 18, 2017), <https://www.usgs.gov/news/next-decades-frequency-coastal-flooding-will-double-globally>.

1 jeopardize the City’s utilities, beaches, roads, public transportation, water supply, other municipal
2 infrastructure and essential public services, its tourism and fisheries economies, precious
3 ecosystems and habitats, and the safety and well-being of its communities.

4 8. The City has engaged in several planning processes to prepare for the multitude of
5 impacts from climatic shifts, and has recognized increasingly severe consequences.

6 9. Defendants’ promotion, marketing, and sale of fossil fuel products, and their
7 simultaneous concealment of the known hazards of those products, substantially, actually, and
8 proximately caused Plaintiffs’ injuries.

9 10. Accordingly, the City brings a claim against Defendants for Public Nuisance on
10 behalf of the People of California as well as itself, and claims for Strict Liability for Failure to
11 Warn, Private Nuisance, Negligence, Negligent Failure to Warn, and Trespass on behalf of itself.

12 11. Plaintiffs do not seek relief as to state-owned property and assets. Plaintiffs do not
13 seek any remedy for harms or violations for which the State or State agencies have exclusive
14 authority to recover damages or obtain injunctive relief.

15 12. Plaintiffs hereby disclaim injuries arising on federal property and those arising from
16 Defendants’ provision of non-commercial, specialized fossil fuel products to the federal
17 government for military and national defense purposes. Plaintiffs seek no recovery or relief
18 attributable to these injuries.

19 13. Plaintiffs do not seek to impose liability on Defendants for their direct emissions of
20 greenhouse gases and do not seek to restrain Defendants from engaging in their business
21 operations.

22 14. By this action, Plaintiffs seek to ensure that the parties responsible for causing and
23 exacerbating climate change-related harms to the City bear the costs of its impacts, rather than
24 Plaintiffs, local taxpayers, or residents.

25 **II. PARTIES**

26 **A. Plaintiffs**

27 15. Plaintiff, the People of the State of California (“the People”), by and through the
28 City Attorney for the City of Santa Cruz, brings this suit pursuant to Code of Civil Procedure

1 section 731, and Civil Code sections 3479, 3480, 3491, and 3494, to abate the nuisance caused by
2 the effects of climate change in the City’s jurisdiction.

3 16. Plaintiff the City of Santa Cruz (“the City” or “Santa Cruz”), a municipal
4 corporation, is a political subdivision of the State of California. It is a city located in Santa Cruz
5 County.

6 17. The City is bordered by the Pacific Ocean to the South and surrounded by a
7 greenbelt of open space.

8 18. Santa Cruz is already experiencing sea level rise and associated impacts. The City
9 will experience significant additional sea level rise over the coming decades through at least 2150.

10 19. The sea level rise impacts on the City associated with an increase in average mean
11 sea level height include, but are not limited to, increased inundation and flooding in natural and
12 built environments with higher tides and intensified wave and storm surge events; aggravated wave
13 impacts, including erosion, damage, and destruction of built structures, as well as natural features
14 like cliffs, beaches and dunes, with consequent landslides; changes in sediment supply that could
15 alter or destroy natural coastal habitats like beaches and wetlands, which would otherwise naturally
16 mitigate sea level rise impacts; saltwater intrusion on groundwater and infrastructure; and
17 magnification of other climate change impacts, due to the superimposition on sea level rise on
18 shifts in precipitation patterns that result in more rain and attendant flooding; increased frequency
19 and severity of storms that cause erosion, flooding, and temporary sea level rise increases; and
20 others. Compounding these environmental impacts are cascading social and economic impacts,
21 which are secondary and tertiary injuries that arise out of physical sea level rise injuries to the City.

22 20. In addition, Santa Cruz is and will continue to be impacted by disruptions to the
23 hydrologic cycle and extreme temperatures. The City is already experiencing a climatic and
24 meteorological shift toward hotter, dryer, and longer summers, with more extreme precipitation
25 events; increased ambient temperature; and increasingly frequent and severe drought. These
26 changes have led to increased water shortages, impacts to biodiversity, impacts to public health,
27 and economic injuries. The City will also experience public health harms disproportionately borne
28 by communities made vulnerable by geographic, racial, or income disparities, including, but not

1 limited to, illness and injury from extreme heat, extreme weather, air quality impacts from wildfire
2 smoke, and increased vector borne illnesses. The City must expend substantial funds to plan for
3 and respond to these phenomena, and to mitigate their secondary and tertiary impacts.

4 21. Compounding these environmental impacts are cascading social and economic
5 impacts, that cause injuries to the City that will arise out of localized climate change-related
6 conditions.

7 22. Municipal assets in the City that will be impacted by climate change and consequent
8 sea level rise and disruption of the hydrologic cycle include, but are not limited to, housing and
9 schools, water supply, wastewater infrastructure, stormwater infrastructure, transportation
10 infrastructure, flood management infrastructure, energy infrastructure, solid waste/hazardous
11 materials management, parks, natural areas, and ecosystems, some of which have already suffered
12 damage from rising sea levels and hydrologic regime shifts, and/or will suffer increasing damage
13 in the future through rising sea levels and through the exacerbation of natural climate-driven
14 phenomena such as drought, and coastal erosion.

15 **B. Defendants**

16 23. When reference in this complaint is made to an act or omission of the Defendants,
17 unless specifically attributed or otherwise stated, such references should be interpreted to mean
18 that the officers, directors, agents, employees, or representatives of the Defendants committed or
19 authorized such an act or omission, or failed to adequately supervise or properly control or direct
20 their employees while engaged in the management, direction, operation or control of the affairs of
21 Defendants, and did so while acting within the scope of their employment or agency.

22 24. **Chevron Entities: Chevron Corporation and Chevron U.S.A. Inc.**

23 a. Defendant **Chevron Corporation** is a multinational, vertically integrated
24 energy and chemicals company incorporated in Delaware, with its global headquarters and
25 principal place of business in San Ramon, California. Chevron Corporation, through its
26 predecessor Standard Oil Company of California, has been registered to do business in California
27 since 1926. Chevron Corporation was formerly known as, did or does business as, and/or is the
28

1 successor in liability to Standard Oil Company of California (also known as “Socal”), Texaco Inc.,
2 and ChevronTexaco Corporation.

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

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

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

19 e. Defendant **Chevron U.S.A. Inc.** is a wholly owned subsidiary of Chevron
20 Corporation that acts on Chevron Corporation’s behalf and is subject to Chevron Corporation’s
21 control. Chevron U.S.A. Inc. is a Pennsylvania corporation, with its principal place of business in
22 San Ramon, California. Through its predecessors, Chevron U.S.A. Inc. has been registered to do
23 business in California since 1965. Chevron U.S.A. Inc. was formerly known as, did or does
24 business as, and/or is the successor in liability to Gulf Oil Corporation, Gulf Oil Corporation of
25 Pennsylvania, Chevron Products Company, Chevron Chemical Company, and Chevron Chemical
26 Company LLC.

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28

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

4 g. Plaintiffs’ claims against Chevron arise out of and are related to the acts and
5 omissions of Chevron in California and elsewhere that caused and will cause injuries in California,
6 including in Santa Cruz.

7 h. Chevron has purposefully directed its tortious conduct toward California by
8 distributing, marketing, advertising, promoting, and supplying its fossil fuel products in California,
9 with knowledge that the intended use of those products for combustion has caused and will
10 continue to cause climate change-related harms in Santa Cruz, including Plaintiffs’ injuries.
11 Chevron’s statements in California and elsewhere made in furtherance of its campaign of deception
12 about and denial of climate change, and Chevron’s affirmative promotion of its fossil fuel products
13 as safe with knowledge of how the intended use of those products would cause climate change-
14 related harms, were designed to conceal and mislead consumers and the public, including Santa
15 Cruz and its residents, about the serious adverse consequences that would result from continued
16 use of Chevron’s products. That conduct was purposefully directed to reach Santa Cruz and
17 obscure the dangers of Chevron’s fossil fuel products from Santa Cruz and its residents such that
18 use of Chevron’s fossil fuel products in Santa Cruz would not decline.

19 i. Over the last several decades and continuing to the present day, Chevron
20 spent millions of dollars on radio, television, online, social media, and outdoor advertisements in
21 the California market related to its fossil fuel products. Since at least 1970, and continuing to the
22 present day, Chevron has advertised in print publications circulated widely to California
23 consumers, including but not limited to the following: The Atlantic, Life, National Geographic,
24 The New York Times, Sports Illustrated, Time Magazine, The Wall Street Journal, and The
25 Washington Post. As further detailed herein, these include advertisements containing false or
26 misleading statements, misrepresentations, and/or material omissions obfuscating the connection
27 between the production and use of Chevron’s fossil fuel products and climate change, and/or
28 misrepresenting Chevron’s products or Chevron itself as environmentally friendly.

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

12 k. Chevron historically directed its fossil fuel product advertising, marketing,
13 and promotional campaigns to California, including through maps that identified the locations of
14 its service stations in California. Chevron markets and advertises its fossil fuel products in
15 California to California residents by maintaining an interactive website available to prospective
16 customers by which it directs California residents to Chevron’s nearby retail service stations.
17 Chevron markets and sells engine lubricants and motor oils to California customers under its Delo,
18 IsoClean, Techron, and Havoline brand names at retail outlets. Chevron offers a proprietary credit
19 card known as the “Chevron Techron Advantage Credit Card,” which allows consumers in
20 California to pay for gasoline and other products at Chevron-branded service stations, and which
21 encouraged California consumers to use Chevron-branded service stations by offering various
22 rewards, including discounts on gasoline purchases at Chevron service stations and cash rebates.
23 Chevron further maintains two smartphone applications known as the “Chevron App” and the
24 “Texaco App,” both part of the “Chevron Texaco Rewards” program. The program offers
25 California consumers a cashless payment method for gasoline and other products at Chevron- and
26 Texaco-branded service stations. California consumers utilize the payment method by providing
27 their credit card information through the application. California consumers can also receive
28 rewards, including discounts on gasoline purchases, by registering their personal identifying

1 information in the apps and by using the applications to identify and activate gas pumps at Chevron
2 and Texaco service stations during a purchase.

3 25. **Exxon Entities: Exxon Mobil Corporation and ExxonMobil Oil Corporation**

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

13 b. Defendant **ExxonMobil Oil Corporation** is a wholly owned subsidiary of
14 Exxon Mobil Corporation, acts on Exxon Mobil Corporation’s behalf, and is subject to Exxon
15 Mobil Corporation’s control. ExxonMobil Oil Corporation is a New York corporation
16 headquartered in Spring, Texas, and has been registered to do business in California since 1959.
17 ExxonMobil Oil Corporation was formerly known as, did or does business as, and/or is the
18 successor in liability to Mobil Oil Corporation. ExxonMobil Oil Corporation is engaged in the
19 business of oil and natural gas production, refining, marketing, and distribution.

20 c. Exxon Mobil Corporation controls and has controlled group-wide decisions
21 about the quantity and rate of fossil fuel production and sales, including those of its subsidiaries.
22 Exxon Mobil Corporation’s 2022 Form 10-K filed with the United States Securities and Exchange
23 Commission (“SEC”) represents that its success, including its “ability to mitigate risk and provide
24 attractive returns to shareholders, depends on [its] ability to successfully manage [its] overall
25 portfolio, including diversification among types and locations of [its] projects, products produced,
26 and strategies to divest assets.” Exxon Mobil Corporation determines whether and to what extent
27 its subsidiaries market, produce, and/or distribute fossil fuel products. For example, on October
28

1 11, 2023, Exxon Mobil Corporation announced its acquisition of Pioneer Natural Resources in a
2 press release that referred to the corporate family generally as “ExxonMobil.”

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

14 e. Defendants Exxon Mobil Corporation, ExxonMobil Oil Corporation, and
15 their predecessors, successors, parents, subsidiaries, affiliates, and divisions, are collectively
16 referred to herein as “Exxon.”

17 f. Plaintiffs’ claims against Exxon arise out of and are related to the acts and
18 omissions of Exxon in California and elsewhere that caused and will cause injuries in California,
19 including in Santa Cruz.

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

25 h. Exxon has purposefully directed its tortious conduct toward California by
26 distributing, marketing, advertising, promoting, and supplying its fossil fuel products in California,
27 with knowledge that the intended use of those products for combustion has caused and will
28 continue to cause climate change-related harms in Santa Cruz, including Plaintiffs’ injuries.

1 Exxon's statements in California and elsewhere made in furtherance of its campaign of deception
2 about and denial of climate change, and Exxon's affirmative promotion of its fossil fuel products
3 as safe with knowledge of how the intended use of those products would cause climate change-
4 related harms, were designed to conceal and mislead consumers and the public, including Santa
5 Cruz and its residents, about the serious adverse consequences that would result from continued
6 use of Exxon's products. That conduct was purposefully directed to reach Santa Cruz and obscure
7 the dangers of Exxon's fossil fuel products from Santa Cruz and its residents such that use of
8 Exxon's fossil fuel products in Santa Cruz would not decline.

9 i. Over the past several decades and continuing to the present day, Exxon
10 spent millions of dollars on radio, television, online, social media, and outdoor advertisements in
11 the California market related to its fossil fuel products. Since at least 1972, and continuing to the
12 present day, Exxon has advertised its fossil fuel products in print publications circulated widely to
13 California consumers, including but not limited to: The Atlantic, Life, National Geographic, The
14 New York Times, People, Sports Illustrated, Time, The Wall Street Journal, and The Washington
15 Post. As further detailed herein, these include advertisements containing false or misleading
16 statements, misrepresentations, and/or material omissions designed to hide the connection between
17 the production and use of Exxon's fossil fuel products and climate change, and/or misrepresenting
18 Exxon's products or Exxon itself as environmentally friendly.

19 j. Significant quantities of Exxon's fossil fuel products are or have been
20 transported, traded, distributed, promoted, marketed, manufactured, sold, and/or consumed in
21 California, from which activities Exxon derives and has derived substantial revenue. Exxon owns
22 and operates a petroleum storage and transport facility in the San Ardo Oil Field in San Ardo,
23 California. Exxon and its predecessors owned and operated an oil refinery in Torrance, California
24 from 1966 to 2016, shortly after an explosion disabled the refinery. Exxon Co. USA, an
25 ExxonMobil subsidiary, operated a petroleum refinery in Benicia, California, from 1968 to 2000.
26 Exxon also—both directly and through its subsidiaries and/or predecessors-in-interest—has
27 supplied substantial quantities of fossil fuel products to California during the period relevant to
28 this Complaint. Currently, Exxon promotes, markets, and sells gasoline and other fossil fuel

1 products to California consumers through approximately 600 Exxon- and Mobil-branded
2 petroleum service stations in California. During the period relevant to this Complaint, Exxon sold
3 a substantial percentage of all retail gasoline in California. Exxon also markets and sells petroleum
4 products, including engine lubricants and motor oils sold under the “Mobil 1” brand name, to
5 California customers through local retailers.

6 k. Exxon historically directed its fossil fuel product advertising, marketing,
7 and promotional campaigns to California residents, including through maps that identify the
8 locations of its service stations in California. To this day, Exxon continues to market and advertise
9 its fossil fuel products in California to California residents by maintaining an interactive website
10 available to prospective customers that directs California residents to Exxon’s nearby retail service
11 stations and lubricant distributors. Further, Exxon promotes its products in California by regularly
12 updating and actively promoting its mobile device application, “Exxon Mobil Rewards+,”
13 throughout California, which encourages California users to consume fuel at Exxon stations in
14 California in exchange for rewards on every fuel purchase.

15 26. **BP Entities: BP P.L.C. and BP America Inc.**

16 a. Defendant **BP P.L.C.** is a multinational, vertically integrated energy and
17 petrochemical public limited company, registered in England and Wales with its principal place of
18 business in London, England. BP P.L.C. consists of three main operating segments: (1) exploration
19 and production, (2) refining and marketing, and (3) “gas and low-carbon energy.” BP P.L.C. is the
20 ultimate parent company of numerous subsidiaries, referred to collectively as the “BP Group,”
21 which explore for and extract oil and gas worldwide; refine oil into fossil fuel products such as
22 gasoline; and market and sell oil, gasoline, other refined petroleum products, and natural gas
23 worldwide. BP P.L.C.’s subsidiaries explore for oil and natural gas under a wide range of licensing,
24 joint arrangement, and other contractual agreements.

25 b. BP P.L.C. controls and has controlled group-wide decisions about the
26 quantity and rate of fossil fuel production and sales, including those of its subsidiaries. BP P.L.C.
27 is the ultimate decisionmaker on fundamental decisions about the BP Group’s core business, i.e.,
28 the volume of group-wide fossil fuels to produce and market, including among BP P.L.C.’s

1 subsidiaries. For instance, BP P.L.C. reported that, in 2016–17, it brought online thirteen major
2 exploration and production projects. These contributed to a 12% increase in the BP Group’s overall
3 fossil fuel product production. These projects were carried out by BP P.L.C.’s subsidiaries. Based
4 on these projects, BP P.L.C. expects the BP Group to deliver to customers 900,000 barrels of new
5 product per day by 2021. BP P.L.C. further reported that in 2017 it sanctioned three new
6 exploration projects in Trinidad, India, and the Gulf of Mexico.

7 c. BP P.L.C. controls and has controlled group-wide decisions, including
8 those of its subsidiaries, related to marketing, advertising, climate change, and greenhouse gas
9 emissions from its fossil fuel products, as well as communications strategies concerning climate
10 change and the link between fossil fuel use and climate-related impacts on the environment and
11 humans. BP P.L.C. makes decisions on production and use of fossil fuel reserves for the entire BP
12 Group based on factors including climate change. BP P.L.C.’s Board of Directors is the company’s
13 highest decision-making body, with direct responsibility for the BP Group’s policies concerning
14 climate change policies. BP P.L.C.’s chief executive is responsible for maintaining the BP Group’s
15 system of internal control that governs the BP Group’s business conduct. BP P.L.C.’s senior
16 leadership directly oversees a carbon steering group, which manages climate-related matters and
17 consists of two committees—both overseen directly by the board—focused on climate-related
18 investments.

19 d. Defendant **BP America Inc.** is a wholly owned subsidiary of BP P.L.C. that
20 acts on BP P.L.C.’s behalf and is subject to BP P.L.C.’s control. BP America Inc. is a vertically
21 integrated energy and petrochemical company incorporated in the state of Delaware with its
22 headquarters and principal place of business in Houston, Texas. BP America Inc. is registered to
23 do business in California. BP America Inc. consists of numerous divisions and affiliates in all
24 aspects of the fossil fuel industry, including exploration for and production of crude oil and natural
25 gas; manufacture of petroleum products; and transportation, marketing, and sale of crude oil,
26 natural gas, and petroleum products. BP America Inc. was formerly known as, did or does business
27 as, is or was affiliated with, and/or is the successor in liability to Amoco Oil Company; Amoco
28 Production Company; ARCO Products Company; BP Exploration & Oil, Inc.; BP Products North

1 America Inc.; BP Amoco Corporation; BP Oil, Inc.; BP Oil Company; Sohio Oil Company;
2 Standard Oil of Ohio (SOHIO); Standard Oil (Indiana); and Atlantic Richfield Company (a
3 Pennsylvania Corporation) and its division, the Arco Chemical Company.

4 e. Defendants BP P.L.C. and BP America, Inc., together with their
5 predecessors, successors, parents, subsidiaries, affiliates, and divisions, are collectively referred to
6 herein as “BP.”

7 f. Plaintiffs’ claims against BP arise out of and are related to the acts and
8 omissions of BP in California and elsewhere that caused or will cause injuries in California,
9 including in Santa Cruz.

10 g. BP has purposefully directed its tortious conduct toward California by
11 distributing, marketing, advertising, promoting, and supplying its fossil fuel products in California,
12 with knowledge that the intended use of those products for combustion have caused and will
13 continue to cause climate change-related harms in Santa Cruz, including Plaintiffs’ injuries. BP’s
14 statements in California and elsewhere made in furtherance of its campaign of deception about and
15 denial of climate change, and BP’s affirmative promotion of its fossil fuel products as safe with
16 knowledge of how the intended use of those products would cause climate change-related harms,
17 were designed to conceal and mislead consumers and the public, including Santa Cruz and its
18 residents, about the serious adverse consequences that would result from continued use of BP’s
19 products. That conduct was purposefully directed to reach Santa Cruz and obscure the dangers of
20 BP’s fossil fuel products from Santa Cruz and its residents such that use of BP’s fossil fuel products
21 in Santa Cruz would not decline.

22 h. Over the last several decades and continuing to the present day, BP—
23 especially BP p.l.c.—spent millions of dollars on radio, television, online, social media, and
24 outdoor advertisements in the California market related to its fossil fuel products. Since at least
25 1988 and continuing to the present day, BP has advertised in print publications circulated widely
26 to California consumers, including but not limited to the following: The Atlantic, Life, National
27 Geographic, The New York Times, People, Sports Illustrated, Time, The Wall Street Journal, and
28 The Washington Post. As further detailed herein, these include advertisements containing false or

1 misleading statements, misrepresentations, and/or material omissions obfuscating the connection
2 between the production and use of BP's fossil fuel products and climate change, and/or
3 misrepresenting BP's products or BP itself as environmentally friendly.

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

15 j. BP also markets and sells other fossil fuel products, including engine
16 lubricant and motor oils, to Santa Cruz and California consumers under its Castrol brand name.

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

23 l. By BP's own description, its "retail stations in California serve more than
24 640,000 customers every day."¹⁰ BP claims to support 3,000 jobs in California, including at least
25 1,400 BP employees, and has invested over \$100 million through vendors in California.

26
27
28 ¹⁰ BP, Bp in California, https://www.bp.com/content/dam/bp/country-sites/en_us/united-states/home/documents/where-we-operate/states/bp%20in%20California.pdf.

1 27. **Shell Entities: Shell plc, Shell USA, Inc., and Shell Oil Products Company LLC**

2 a. Defendant **Shell plc** (formerly Royal Dutch Shell PLC) is a vertically
3 integrated multinational energy and petrochemical company. Shell plc is incorporated in England
4 and Wales, with its headquarters and principal place of business in The Hague, Netherlands. Shell
5 plc is the ultimate parent company of numerous divisions, subsidiaries, and affiliates, referred to
6 collectively as the “Shell Group,” that engage in all aspects of fossil fuel production, including
7 exploration, development, extraction, manufacturing and energy production, transport, trading,
8 marketing, and sales.

9 b. Shell plc controls and has controlled group-wide decisions about the
10 quantity and extent of fossil fuel production and sales, including those of its subsidiaries. Shell
11 plc’s Board of Directors determines whether and to what extent Shell subsidiary holdings around
12 the globe produce Shell-branded fossil fuel products.

13 c. Shell plc controls and has controlled group-wide decisions, including those
14 of its subsidiaries, related to marketing, advertising, greenhouse gas emissions and climate change
15 resulting from the company’s fossil fuel products, and communications strategies concerning
16 climate change and the link between fossil fuel use and climate-related impacts on the environment
17 and humans. Overall accountability for climate change within the Shell Group lies with Shell plc’s
18 Chief Executive Officer and Executive Committee. For instance, at least as early as 1988, Shell
19 plc, through its predecessors and subsidiaries, was researching company-wide CO2 emissions and
20 concluded that the Shell Group accounted for 4% of the CO2 emitted worldwide from combustion,
21 and that climatic changes could compel the Shell Group, as controlled by Shell plc, to examine the
22 possibilities of expanding and contracting its business accordingly.

23 d. Defendant **Shell USA, Inc.** (formerly Shell Oil Company) is a wholly
24 owned subsidiary of Shell plc that acts on Shell plc’s behalf and is subject to Shell plc’s control.
25 Shell USA, Inc. is incorporated in Delaware, with its principal place of business in Houston, Texas.
26 Shell USA, Inc. has been registered to do business in California since 1949. Shell USA, Inc. was
27 formerly known as, did or does business as, and/or is the successor in liability to Shell Oil
28 Company; Shell Oil; Deer Park Refining LP; Shell Oil Products US; Shell Chemical LP; Shell

1 Trading (US) Company; Shell Energy Resources Company; Shell Energy Services Company,
2 L.L.C.; The Pennzoil Company; and Pennzoil-Quaker State Company.

3 e. Defendant **Shell Oil Products Company LLC** is a wholly owned
4 subsidiary of Shell USA, Inc., that acts on Shell USA, Inc.’s behalf and is subject to Shell USA,
5 Inc.’s control. Shell Oil Products Company LLC is incorporated in Delaware, with its principal
6 place of business in Houston, Texas, and has been registered to do business in California since
7 2001. Shell Oil Products Company LLC was formerly known as, did or does business as, and/or
8 is the successor in liability to Shell Oil Products Company, which was a Delaware corporation that
9 converted to a limited liability company in 2001.

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

13 g. Plaintiffs’ claims against Shell arise out of and are related to the acts and
14 omissions of Shell in California and elsewhere that caused and will cause injuries in California,
15 including in Santa Cruz.

16 h. Shell has purposefully directed its tortious conduct toward California by
17 distributing, marketing, advertising, promoting, and supplying its fossil fuel products in California,
18 with knowledge that the intended use of those products for combustion has caused and will
19 continue to cause climate change-related harms in Santa Cruz, including Plaintiffs’ injuries. Shell’s
20 statements in California and elsewhere made in furtherance of its campaign of deception about and
21 denial of climate change, and Shell’s affirmative promotion of its fossil fuel products as safe with
22 knowledge of how the intended use of those products would cause climate change-related harms,
23 were designed to conceal these harms and mislead consumers and the public, including Santa Cruz
24 and its residents, about the serious adverse consequences that would result from continued use of
25 Shell’s products. That conduct was purposefully directed to reach Santa Cruz and obscure the
26 dangers of Shell’s fossil fuel products from Santa Cruz and its residents such that use of Shell’s
27 fossil fuel products in Santa Cruz would not decline.

1 i. Over the last several decades and continuing to the present day, Shell spent
2 millions of dollars on radio, television, online, social media, and outdoor advertisements in the
3 California market related to its fossil fuel products. Since at least 1970, and continuing to the
4 present day, Shell has advertised its fossil fuel products in print publications circulated widely to
5 California consumers, including but not limited to the following: The Atlantic, Life, National
6 Geographic, The New York Times, People, Sports Illustrated, Time, The Wall Street Journal, and
7 The Washington Post. As further detailed herein, these include advertisements containing false or
8 misleading statements, misrepresentations, and/or material omissions obfuscating the connection
9 between the production and use of Shell's fossil fuel products and climate change, and/or
10 misrepresenting Shell's products or Shell itself as environmentally friendly.

11 j. Significant quantities of Shell's fossil fuel products are or have been
12 transported, traded, distributed, promoted, marketed, manufactured, sold, and/or consumed in
13 California, from which activities Shell derives and has derived substantial revenue. Shell conducts
14 and controls, either directly or through franchise agreements, retail fossil fuel sales at gas station
15 locations throughout California, at which locations it promotes, advertises, and sells its fossil fuel
16 products under its Shell brand name. Shell operates over 1,000 Shell-branded petroleum service
17 stations in California. During the period relevant to this Complaint, Shell sold a substantial
18 percentage of all retail gasoline sold in California. Shell also supplies, markets, and promotes its
19 Pennzoil line of lubricants at retail and service stations throughout California. From 1924 to 1992,
20 Shell owned and operated an oil refinery in Carson, California, where it now owns and operates
21 the property as a distribution facility for petroleum and petroleum products throughout Southern
22 California. From 1915 to 2020, Shell owned and operated an oil refinery in Martinez, California.
23 From 1998 to 2007, Shell owned and operated an oil refinery in Wilmington, California. From
24 1998 to 2005, Shell owned and operated an oil refinery in Bakersfield, California.

25 k. Shell historically directed its fossil fuel product advertising, marketing, and
26 promotional campaigns to California, including through maps that identified the locations of its
27 service stations in California. Shell markets and advertises its fossil fuel products in California to
28 California residents by maintaining an interactive website available to prospective customers by

1 which it directs California residents to Shell’s nearby retail service stations. Shell offers a
2 proprietary credit card known as the “Shell Fuel Rewards Card,” which allows consumers in
3 California to pay for gasoline and other products at Shell-branded service stations, and which
4 encourages consumers to use Shell-branded gas stations by offering various rewards, including
5 discounts on gasoline purchases. Shell further maintains a smartphone application known as the
6 “Shell US App” that offers California consumers a cashless payment method for gasoline and other
7 products at Shell-branded service stations. California consumers utilize the payment method by
8 providing their credit card information through the application. California consumers can also
9 receive rewards, including discounts on gasoline purchases, by registering their personal
10 identifying information in the Shell US App and using the application to identify and activate gas
11 pumps at Shell service stations during a purchase.

12 28. **Citgo Petroleum Corporation (“Citgo”)**

13 a. Citgo is a direct, wholly owned subsidiary of PDV America, Incorporated,
14 which is a wholly owned subsidiary of PDV Holding, Incorporated. These organizations’ ultimate
15 parent is Petroleos de Venezuela, S.A. (“PDVSA”), an entity wholly owned by the Republic of
16 Venezuela that plans, coordinates, supervises and controls activities carried out by its subsidiaries.
17 Citgo is incorporated in the State of Delaware and maintains its headquarters in Houston, Texas.

18 b. Citgo and its subsidiaries are engaged in the refining, marketing, and
19 transportation of petroleum products including gasoline, diesel fuel, jet fuel, petrochemicals,
20 lubricants, asphalt, and refined waxes.

21 c. Citgo is registered to do business in the State of California and has
22 designated an agent for service of process in California. Citgo further does substantial fossil fuel
23 product-related business in California, and a substantial portion of its fossil fuel products are
24 extracted, refined, transported, traded, distributed, marketed, and/or sold in California. For
25 instance, Citgo sells significant volumes of fossil-fuel derived consumer motor oils and automobile
26 lubricants through retail and wholesale distributors. Citgo further sells a wide variety of greases
27 and oils for use in construction, mining, agricultural, and metalworking machinery and vehicles,
28 and in many other industrial and commercial settings, through licensed distributors in California.

1 29. **ConocoPhillips Entities: ConocoPhillips, ConocoPhillips Company,**
2 **Phillips 66, and Phillips 66 Company**

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

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

21 c. ConocoPhillips optimizes the ConocoPhillips group’s oil and gas portfolio
22 to fit ConocoPhillips’s strategic plan. For example, ConocoPhillips’ 10-K in 2022 summarizes the
23 “continued development of onshore assets” in the United States and new exploration activities in
24 Alaska, Canada, the North Sea, and elsewhere. Similarly, in November 2016, ConocoPhillips
25 announced a plan to generate \$5 billion to \$8 billion of proceeds over two years by optimizing its
26 business portfolio, including its fossil fuel product business, to focus on low cost-of-supply fossil
27 fuel production projects that strategically fit its development plans.

1 d. ConocoPhillips controls and has controlled group-wide decisions, including
2 those of its subsidiaries, related to marketing, advertising, climate change and greenhouse gas
3 emissions from its fossil fuel products, and communications strategies concerning climate change
4 and the link between fossil fuel use and climate-related impacts on the environment and
5 communities. For instance, ConocoPhillips's board has the highest level of direct responsibility
6 for climate change policy within the company. ConocoPhillips has developed and purportedly
7 implements a corporate Climate Change Action Plan to govern climate change decision-making
8 across all entities in the ConocoPhillips group.

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

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

19 g. Defendant **Phillips 66 Company** is a wholly owned subsidiary of Phillips
20 66 that acts on Phillips 66's behalf and is subject to Phillips 66's control. Phillips 66 Company is
21 incorporated in Delaware, with its principal place of business in Houston, Texas, and has been
22 registered to do business in California since 2011. Phillips 66 Company had been registered since
23 1964 under a different name, Phillips Chemical Company, which was a wholly owned subsidiary
24 of the Phillips Petroleum Company. Phillips Chemical Company changed its name to Phillips 66
25 Company in 1985, and that iteration of Phillips 66 Company was terminated in 1991. Phillips 66
26 Company was formerly known as, did or does business as, and/or is the successor in liability to
27 Phillips Petroleum Company; Phillips Chemical Company; Conoco, Inc.; Tosco Corporation; and
28 Tosco Refining Co.

1 h. Defendants ConocoPhillips, ConocoPhillips Company, Phillips 66, and
2 Phillips 66 Company, as well as their predecessors, successors, parents, subsidiaries, affiliates, and
3 divisions, are collectively referred to herein as “ConocoPhillips.”

4 i. Plaintiffs’ claims against ConocoPhillips arise out of and are related to the
5 acts and omissions of ConocoPhillips in California and elsewhere that caused and will cause
6 injuries in California, including in Santa Cruz.

7 j. ConocoPhillips has purposefully directed its tortious conduct toward
8 California by distributing, marketing, advertising, promoting, and supplying its fossil fuel products
9 in California, with knowledge that the intended use of those products for combustion has caused
10 and will continue to cause climate change-related harms in Santa Cruz, including Plaintiffs’
11 injuries. ConocoPhillips’s statements in California and elsewhere made in furtherance of its
12 campaign of deception about and denial of climate change, and ConocoPhillips’s affirmative
13 promotion of its fossil fuel products as safe with knowledge of how the intended use of those
14 products would cause climate change-related harms, were designed to conceal and mislead
15 consumers and the public, including Santa Cruz and its residents, about the serious adverse
16 consequences that would result from continued use of ConocoPhillips’s products. That conduct
17 was purposefully directed to reach Santa Cruz and obscure the dangers of ConocoPhillips’s fossil
18 fuel products from Santa Cruz and its residents such that use of ConocoPhillips’s fossil fuel
19 products in Santa Cruz would not decline.

20 k. Over the last several decades and continuing to the present day,
21 ConocoPhillips spent millions of dollars on radio, television, online, social media, and outdoor
22 advertisements in the California market related to its fossil fuel products. Since at least 1970, and
23 continuing to the present day, ConocoPhillips has advertised in print publications circulated widely
24 to California consumers, including but not limited to the following: The Atlantic, Life, National
25 Geographic, The New York Times, People, Sports Illustrated, Time, The Wall Street Journal, and
26 The Washington Post. As further detailed herein, these include advertisements containing false or
27 misleading statements, misrepresentations, and/or material omissions obfuscating the connection
28 between the production and use of ConocoPhillips’s fossil fuel products and climate change,

1 and/or misrepresenting ConocoPhillips's products or ConocoPhillips itself as environmentally
2 friendly.

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

14 m. ConocoPhillips does substantial fossil fuel product-related business in
15 California, and a substantial quantity of its fossil fuel products are extracted, refined, transported,
16 traded, distributed, marketed, and/or sold in California. For instance, ConocoPhillips owns and/or
17 operates oil and natural gas terminals in Santa Cruz and Los Angeles, California; owns and
18 operates oil refineries in Arroyo Grande, Colton, and Wilmington, California; and distributes
19 ConocoPhillips fossil fuel products throughout California. Phillips 66 also owns and operates oil
20 refineries in Rodeo, Santa Maria, and Los Angeles, California. All of these refineries were owned
21 and operated by ConocoPhillips and its predecessors-in-interest from 1997 to 2012.

22 n. ConocoPhillips has historically directed its fossil fuel product advertising,
23 marketing, and promotional campaigns to California, including through maps identifying its
24 services throughout California. ConocoPhillips markets and advertises its fossil fuel products in
25 California to California residents by maintaining an interactive website available to prospective
26 customers by which it directs California residents to ConocoPhillips's nearby retail service
27 stations. ConocoPhillips offers a proprietary credit card known as the "76 Credit Card," which
28 allows consumers in California to pay for gasoline and other products at 76-branded service

1 stations, and which encourages California consumers to use 76-branded service stations by
2 offering various rewards, including discounts on gasoline purchases at 76-branded service stations
3 and cash rebates. ConocoPhillips further maintains a nationwide smartphone application known as
4 the “Fuel Forward App.” The application offers California consumers a cashless payment method
5 for gasoline and other products at 76-branded service stations. California consumers utilize the
6 payment method by providing their credit card information through the application. California
7 consumers can also apply for a 76 Credit Card through the application. By registering their
8 personal identifying information in the application and by using the application to identify and
9 activate gas pumps at 76-branded service stations, California consumers can receive additional
10 rewards, such as further discounts on ConocoPhillips gasoline purchases.

11 30. **Total Entities: Total E&P USA Inc. and Total Specialties USA Inc.**

12 a. **Total E&P USA Inc.** is a wholly owned subsidiary of Total S.A.—a French
13 energy conglomerate—engaged in the North American segment of Total SA’s fossil fuel products-
14 related business. Total E&P USA Inc. and its subsidiaries are involved in the exploration for,
15 extraction, transportation, research, and marketing of Total S.A.’s fossil fuel products. Total E&P
16 USA Inc. is registered to do business in the State of California and has designated an agent for
17 service of process in California.

18 b. **Total Specialties USA Inc.,** is a wholly owned subsidiary of Total SA,
19 involved in the marketing and distribution of Total S.A.’s fossil fuel products. Total Specialties
20 USA Inc. is incorporated in the State of Delaware and headquartered in Houston, Texas. Total
21 Specialties USA Inc. is registered to do business in the State of California and has designated an
22 agent for service of process in California. Total Specialties USA Inc. does substantial fossil fuel
23 product-related business in California, and a substantial portion of its fossil fuel products are
24 extracted, refined, transported, traded, distributed, marketed, and/or sold in California. For
25 instance, Total Specialties USA Inc. maintains regular distributorship relationships with several
26 California distributors of Total fossil fuel products, including engine oils, lubricants, greases, and
27 industrial petroleum products.

1 31. **Eni Entities: Eni S.p.A and Eni Oil & Gas Inc.**

2 a. **Eni S.p.A.** is a vertically integrated, multinational energy company
3 focusing on petroleum and natural gas. Eni is incorporated in the Republic of Italy, with its
4 principal place of business in Rome, Italy. With its consolidated subsidiaries, Eni engages in the
5 exploration, development, and production of hydrocarbons; in the supply and marketing of gas,
6 liquid natural gas, and power; in the refining and marketing of petroleum products; in the
7 production and marketing of basic petrochemicals, plastics and elastomers; in commodity trading;
8 and in electricity marketing and generation.

9 b. **Eni Oil & Gas Inc.** is incorporated in Texas, with its principal place of
10 business in Houston, Texas. Eni Oil & Gas Inc., is a wholly owned subsidiary of Eni America Ltd.,
11 a Delaware corporation doing business in the United States. Eni America, Ltd. Is a wholly owned
12 subsidiary of Eni UHL Ltd., a British corporation with its registered office in London, United
13 Kingdom. Eni UHL Ltd. is a wholly owned subsidiary of Eni ULT, Ltd., a British corporation with
14 its registered office on London, United Kingdom. Eni ULT, Ltd. is a wholly owned subsidiary of
15 Eni Lasmo Plc, a British corporation with its registered office on London, United Kingdom. Eni
16 Investments Plc, a British corporation with its registered office in London, United Kingdom, holds
17 a 99.9% ownership interest in Eni Lasmo Plc (the other 0.01% ownership interest is held by another
18 Eni entity, Eni UK Ltd, a British corporation with its registered office in London, United
19 Kingdom). Eni S.p.A owns a 99.99% interest in Eni Investments Plc. Eni UK Ltd. holds the
20 remainder interest in Eni Investments Plc. Collectively, these entities are referred to as “Eni.”

21 c. Eni Oil & Gas Inc. is a successor-in-interest to Golden Eagle Refining
22 Company, Inc. (“Golden Eagle”). At times relevant to this complaint, Golden Eagle did substantial
23 fossil fuel-related business in California. Specifically, Golden Eagle owned and/or operated oil
24 refineries in Carson (Los Angeles County) and Martinez (Contra Costa County), California, and
25 owned and/or operated oil pipelines in or near Long Beach (Los Angeles County), California.

26 32. **Anadarko Petroleum Corp. (“Anadarko”)**

27 a. Anadarko is incorporated in the State of Delaware and maintains its
28 principal place of business in The Woodlands, Texas. Anadarko is a multinational, vertically

1 integrated energy company comprised of multiple upstream and downstream segments. These
2 include exploration, production, gathering, processing, treating, transporting, marketing, and
3 selling fossil fuel products derived primarily from petroleum and natural gas. In the United States,
4 Anadarko entities operate fossil fuel product exploration and production concerns in Texas, the
5 Gulf of Mexico, Alaska, the Powder River Basin, Utah, Colorado, and the Marcellus Shale
6 Formation. Anadarko operates fossil fuel product production and exploration activities
7 internationally in Algeria, Ghana, Mozambique, and Columbia, among others. Anadarko
8 Petroleum Corporation is registered to do business in California and has designated an agent for
9 service of process in California.

10 b. Anadarko is a successor-in-interest to HS Resources Inc. (“HS”). HS was
11 an energy company headquartered in San Francisco, San Francisco County, California. It owned
12 natural gas reserves in Colorado, North Dakota, South Dakota, Montana, and along the coasts of
13 Texas and Louisiana, which it extracted and imported to California. HS was acquired by Kerr-
14 McGee Corporation in 2001. Kerr-McGee was an energy exploration and production company
15 owning oil and natural gas rights in the Gulf of Mexico, Colorado, and Utah, with its corporate
16 headquarters in Oklahoma. Anadarko Petroleum Corporation acquired Kerr-McGee Corporation
17 in 2006.

18 33. **Occidental Entities: Occidental Petroleum Corporation and Occidental**
19 **Chemical Corporation**

20 a. **Occidental Petroleum Corporation** is a multinational, vertically
21 integrated energy and chemical company incorporated in the State of Delaware and with its
22 principal place of business in Houston, Texas. Occidental’s operations consist of three segments:
23 (1) the exploration for, extraction of, and production of oil and natural gas products; (2) the
24 manufacture and marketing of chemicals and vinyls; and (3) processing, transport, storage,
25 purchase, and marketing of oil, natural gas, and power. Occidental Petroleum Corporation is
26 registered to do business in the State of California and has designated an agent for service of
27 process in the State of California.

1 b. **Occidental Chemical Corporation**, a manufacturer and marketer of
2 petrochemicals, such as polyvinyl chloride resins, is a wholly owned subsidiary of Occidental
3 Petroleum Corporation. Occidental Chemical Corporation is registered to do business in the State
4 of California and has designated an agent for service of process in the State of California.

5 c. Defendants Occidental Petroleum Corporation and Occidental Chemical
6 Corporation are collectively referred to as “Occidental.”

7 d. Occidental does substantial fossil fuel product-related business in the State
8 of California, and a substantial portion of its fossil fuel products are extracted, refined, transported,
9 traded, distributed, marketed and/or sold in California. For instance, Occidental extracted and
10 transported its fossil fuel products from approximately 30,900 drilling locations within the San
11 Joaquin, Los Angeles, Ventura, and Sacramento Basins in California.

12 e. In addition, Occidental has conducted substantial activities in the state,
13 including marketing and promotion; efforts to avoid or minimize regulation of greenhouse gas
14 pollution in and from California; and efforts to influence statutory and regulatory debate regarding
15 fossil fuel consumption, electric power distribution, and greenhouse gas pollution policies such
16 that the exercise of jurisdiction comports with traditional notions of fair play and substantial
17 justice. Since 1999, Occidental Petroleum Corp. and its subsidiaries have reported more than \$4.6
18 million in lobbying expenditures directed at numerous statutory and regulatory proposals before
19 the California legislature and executive agencies, including the California Energy Commission,
20 California Air Resources Board, and California Public Utilities Commission, related to its fossil
21 fuel products business.

22 34. **Repsol Entities: Repsol S.A., Repsol Energy North America Corporation, and**
23 **Repsol Trading USA Corporation**

24 a. **Repsol S.A.** is a vertically integrated, multinational global energy company,
25 incorporated in the Kingdom of Spain, with its principal place of business in Madrid, Spain. Repsol
26 is involved in multiple aspects of the fossil fuel industry, including exploration, production,
27 marketing, and trading. Repsol engages in significant fossil fuel exploration and production
28 activities in the United States, including in the Gulf of Mexico, the Marcellus Shale in

1 Pennsylvania, the Eagle Ford Shale in South Texas, the Mississippi Lime in Oklahoma and Kansas,
2 the North Slope in Alaska, and the Trenton-Black River in New York

3 b. Repsol does substantial fossil fuel product-related business in the State of
4 California, and a substantial portion of its fossil fuel products are extracted, refined, transported,
5 traded, distributed, marketed and/or sold in California. For instance, Repsol subsidiary **Repsol**
6 **Energy North America Corporation**, incorporated in the State of Texas and with its principal
7 place of business in The Woodlands, Texas, is listed as a natural gas procurement, storage,
8 transportation, scheduling, and risk management provider by Pacific Gas and Electric, a California
9 utility. Repsol Energy North America Corporation is registered to do business in California and
10 has designated an agent for service of process in California. Repsol subsidiary **Repsol Trading**
11 **USA Corporation**, incorporated in the State of Texas and with its principal place of business in
12 The Woodlands, Texas, is also registered do business in California and has designated an agent
13 for service of process in California. Additionally, Repsol represents on its website that it is
14 engaging in strategic opportunities involving its fossil fuel products in California, which may
15 consist of crude oil, gasoline, diesel, and/or jet fuel.

16 35. **Marathon Entities: Marathon Oil Company and Marathon Oil Corporation**

17 a. **Marathon Oil Company** is an energy company incorporated in the State
18 of Ohio and with its principal place of business in Houston, Texas. Marathon Oil Company is
19 registered to do business in California and has designated an agent for service of process in
20 California. Marathon Oil Company is a corporate ancestor of Marathon Oil Corporation and
21 Marathon Petroleum Company.

22 b. Marathon Oil Company is a successor-in-interest to Husky Oil Ltd.
23 (“Husky”), which it acquired in 1984. During times relevant to this Complaint, Husky operated oil
24 production facilities near Santa Maria (Santa Barbara County), California, where it produced
25 nearly 1,100 barrels per day. During the period relevant to this litigation, Husky did substantial
26 fossil fuel product-related business in California.

27 c. **Marathon Oil Corporation** is a multinational energy company
28 incorporated in the State of Delaware and with its principal place of business in Houston, Texas.

1 Marathon Oil Corporation consists of multiple subsidiaries and affiliates involved in the
2 exploration for, extraction, production, and marketing of fossil fuel products.

3 d. **Marathon Petroleum Corporation** is a multinational energy company
4 incorporated in Delaware and with its principal place of business in Findlay, Ohio. Marathon
5 Petroleum Corporation was spun off from the operations of Marathon Oil Corporation in 2011. It
6 consists of multiple subsidiaries and affiliates involved in fossil fuel product refining, marketing,
7 retail, and transport, including both petroleum and natural gas products.

8 e. Defendants Marathon Oil Company, Marathon Oil Corporation, and
9 Marathon Petroleum Corporation are collectively referred to as “Marathon.”

10 f. Marathon has purposefully directed its tortious conduct toward California
11 by distributing, marketing, advertising, promoting, and supplying its fossil fuel products in
12 California, with knowledge that the intended use of those products for combustion has caused and
13 will continue to cause climate change-related harms in Santa Cruz, including Plaintiffs’ injuries.
14 That conduct was purposefully directed to reach Santa Cruz and obscure the dangers of Marathon’s
15 fossil fuel products from Santa Cruz and its residents such that the use of Marathon’s fossil fuel
16 products in Santa Cruz would not decline.

17 36. **Hess Corporation (“Hess”)**

18 a. Hess is a global, vertically integrated petroleum exploration and extraction
19 company incorporated in the State of Delaware with its headquarters and principal place of
20 business in New York, New York.

21 b. Hess is engaged in the exploration, development, production,
22 transportation, purchase, marketing and sale of crude oil and natural gas. Its oil and gas production
23 operations are located primarily in the United States, Denmark, Equatorial Guinea, Malaysia,
24 Thailand, and Norway. Prior to 2014, Hess also conducted extensive retail operations in its own
25 name and through subsidiaries. Hess owned and operated more than 1,000 gas stations throughout
26 the United States, including in California during times relevant to this complaint. Prior to 2013,
27 Hess also operated oil refineries in the continental United States and U.S. Virgin Islands.

1 c. Hess has purposefully directed its tortious conduct toward California by
2 distributing, marketing, advertising, promoting, and supplying its fossil fuel products in California,
3 with knowledge that the intended use of those products for combustion has caused and will
4 continue to cause climate change-related harms in Santa Cruz, including Plaintiffs' injuries. That
5 conduct was purposefully directed to reach Santa Cruz and obscure the dangers of Hess's fossil
6 fuel products from Santa Cruz and its residents such that the use of Hess's fossil fuel products in
7 Santa Cruz would not decline.

8 37. **Devon Energy Entities: Devon Energy Corp. and Devon Energy Production**
9 **Company, L.P.**

10 a. **Devon Energy Corp.** is an independent energy company engaged in the
11 exploration, development, and production of oil, and natural gas. It is incorporated in the State of
12 Delaware and maintains its principal place of business in Oklahoma City, Oklahoma. Devon is
13 engaged in multiple aspects of the fossil fuel industry, including exploration, development,
14 production, and marketing of its fossil fuel products.

15 b. **Devon Energy Production Company, L.P.** is a Devon subsidiary
16 registered to do business in the State of California and with a designated agent for service of
17 process in California. Devon Energy does substantial fossil fuel product-related business in
18 California.

19 c. Devon Energy Corp. is a successor-in-interest to the Pauley Petroleum
20 Company ("Pauley"). At times relevant to this complaint, Pauley did substantial fossil-fuel related
21 business in California. Specifically, this included owning and operating a petroleum refinery in
22 Newhall (Los Angeles County), California from 1959 to 1989, and a refinery in Wilmington (Los
23 Angeles, Los Angeles County), California from 1988 to 1992. Pauley merged with Hondo Oil and
24 Gas Co. ("Hondo") in 1987. Subsequently, Devon Energy Corp. acquired Hondo in 1992.

25 d. Defendants Devon Energy Production Company, L.P. and Devon Energy
26 Corp. are collectively referred to as "Devon."

27 38. **Encana Corporation ("Encana")**

28 a. Encana is a Canadian corporation with its principal place of business in

1 Calgary, Alberta, Canada. Encana is an extractor and marketer of oil and natural gas and has
2 facilities including gas plants and gas wells in Colorado, Texas, Wyoming, Louisiana, and
3 New Mexico. By approximately 2005, Encana was the largest independent owner and operator of
4 natural gas storage facilities in North America.

5 b. Encana has done and continues to do substantial fossil fuel product-related
6 business in California. Between 1997 and 2006, Encana owned and operated the Wild Goose
7 Storage underground natural gas storage facility in Butte County, California. In 2003, Encana
8 began transporting natural gas through a 25-mile pipeline from the Wild Goose Station to a Pacific
9 Gas & Electric Co. (“PG&E”) compressor station in Colusa County, where gas entered the main
10 PG&E pipeline. Encana invested in a 100 billion cubic foot expansion of the facility in 2004,
11 bringing gas storage capacity at Wild Goose to 24 billion cubic feet.

12 39. **Apache Corporation (“Apache”)**

13 a. Apache is a publicly traded Delaware corporation with its principal place of
14 business in Houston, Texas. Apache is an oil and gas exploration and production company, with
15 crude oil and natural gas exploration and extraction operations in the United States, Canada, Egypt,
16 and in the North Sea.

17 b. During the time at issue, Apache extracted natural gas from wells developed
18 on approximately seven million acres of land held in the Canadian provinces of British Columbia,
19 Alberta, and Saskatchewan, and Apache did substantial fossil fuel product-related business in
20 California. Apache transported a substantial volume of the natural gas extracted from its Canadian
21 holdings to California, where it sold that gas to electric utilities, end-users, other fossil fuel
22 companies, supply aggregators, and other fossil fuel marketers. Apache directed sales of its natural
23 gas to California in addition to markets in Washington state, Chicago, and western Canada, to
24 intentionally retain a diverse customer base and maximize profits from the differential price rates
25 and demand levels in those respective markets.

26 **C. Doe Defendants**

27 40. The true names and capacities, whether individual, corporate, associate, or
28 otherwise of Defendants Does 1 through 100, inclusive, are unknown to Plaintiffs, who therefore

1 sue said Defendants by such fictitious names pursuant to California Code of Civil Procedure
2 Section 474. Plaintiffs are informed and believe, and on that basis allege, that each of the
3 fictitiously named Defendants is responsible in some manner for the acts and occurrences herein
4 alleged, and that Plaintiffs' damages were caused by such Defendants.

5 **D. Relevant Non-Parties: Defendants' Agents and Front Groups**

6 41. As detailed below, each Defendant had actual knowledge, or should have known,
7 that its fossil fuel products were hazardous because the intended use of the fossil fuel products for
8 combustion would substantially contribute to climate change and result in harms to Plaintiffs.
9 Defendants obtained knowledge of the hazards of their products independently and through their
10 membership and involvement in trade associations.

11 42. Defendants employed, financed, and participated in several industry-created front
12 groups to serve their mission of flooding the markets with climate change disinformation and
13 denialism. These organizations, acting on behalf of and under Defendants' supervision and control,
14 assisted the deception campaign by implementing public advertising and outreach campaigns to
15 discredit climate science, as well as funding scientists to cast doubt upon climate science and upon
16 the extent to which climate change is caused by human activity. In sum, Defendants, through their
17 front groups, engaged in a significant marketing campaign that misrepresented and concealed the
18 dangers of their fossil fuel products with the aim of protecting or enhancing sales of these products
19 to consumers, including consumers in California. Defendants actively supervised, facilitated,
20 consented to, and/or directly participated in the misleading messaging of these front groups, from
21 which Defendants profited significantly, including in the form of increased sales in California.

22 43. **The American Petroleum Institute (API)**

23 a. API is a national trade association representing the oil and gas industry,
24 formed in 1919. With more than 600 members, API is the country's largest oil trade association.
25 API's purpose is to advance its members' collective business interests, which includes increasing
26 consumer consumption of oil and gas for the financial profit of Defendants and other oil and gas
27 companies. Among other functions, API also coordinates members of the petroleum industry,
28 gathers information of interest to the industry, and disseminates that information to its members.

1 b. Acting on behalf of and under the supervision and control of Defendants,
2 API has, since at least 1988, participated in and led several coalitions, front groups, and
3 organizations that have promoted disinformation about the climate impacts of fossil fuel products
4 to consumers—including, but not limited to, the Global Climate Coalition, Partnership for a Better
5 Energy Future, Coalition for American Jobs, Alliance for Energy and Economic Growth, and
6 Alliance for Climate Strategies. These front groups were formed to promote climate disinformation
7 and advocacy from a purportedly objective source, when in fact these groups were financed and
8 controlled by Defendants and other oil and gas companies. Defendants have benefited from the
9 spread of this disinformation because, among other things, it has ensured a thriving consumer
10 market for oil and gas, resulting in substantial profits for Defendants. In effect, API acts and has
11 acted as a marketing arm for its member companies, including Defendants. Over the last several
12 decades, API has spent millions of dollars on television, newspaper, radio, social media, and
13 internet advertisements in the California market.

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

25 d. The following Defendants and/or their predecessors in interest are and/or
26 have been API members at times relevant to this litigation: Chevron, ExxonMobil, Shell,
27 ConocoPhillips, Anadarko, Occidental, Repsol, Marathon, EnCana, BP, Citgo, Hess, and Apache.
28 Each of these Defendants consistently holds API leadership positions, participates in API

1 committees and task forces formed to address climate change issues, makes decisions that
2 determine API's conduct, and works with other Defendants to achieve these ends. Their control of
3 and leadership roles in API are longstanding, deeply rooted, and continuous throughout relevant
4 time periods.

5 e. For example, Defendants served as corporate officers during the relevant
6 time period, including executives from Exxon, Shell, Chevron, ConocoPhillips, Marathon, Hess
7 and BP serving as API Board Chairman and on the Board's Executive Committee. Exxon's CEO
8 served on API's Executive Committee, including as President and Chairman, for 21 of the 29 years
9 between 1991 and 2020.¹¹ Multiple high-level executives from Exxon, such as Presidents, Vice
10 Presidents, CEOs, COOs, and Chairmans, served on API's Board in each year between 1994-2002.
11 BP's CEO served as API's Chairman in 1988, 1989, and 1998. Multiple high-level executives
12 from BP served on API's Board of Directors between 1994-2002. The Chairman and CEO of BP's
13 predecessor ARCO served as API treasurer in 1998 and Chairman in 1999. Chevron's CEO served
14 as API Chairman in 1994, 1995, 1997, 1998, 2003, and 2012. In 2002, Chevron's CEO served as
15 API treasurer. Chairman and CEO of Chevron's predecessor Texaco served as API Board
16 Chairman in 2001, and as treasurer in 1999. Multiple high-level executives from Chevron served
17 on API's Board of Directors in each year between 1994-2002. Shell's President served as API
18 treasurer in 1997 and sat on the Board's executive committee from at least 2005-2006. Multiple
19 high-level Shell executives served on API's Board of Directors between 1994-2002.
20 ConocoPhillips Chairman and CEO was API Chairman from 2016-2018, and currently serves on
21 API's executive committee. In 2020, API elected Phillips 66 Chairman and CEO to serve a two-
22 year term as its Board President, and Phillips 66's current President and CEO is on the API Board's
23 executive committee. Multiple high-level ConocoPhillips executives served on API's Board of
24 Directors between 1994-2002. Marathon or its predecessors' CEOs served on the API Board's
25 executive committee across multiple decades, for example Marathon's then-CEO was Treasurer
26 and testified to Congress on behalf of API in 1994. Multiple high-level executives from Marathon
27

28 ¹¹ 1991, 1996-1997, 2001, 2002, 2003, 2005-2016, 2018-2020.

1 served on API's Board of Directors between 1994-2002. Multiple CITGO high-level executives
2 served on API's Board of Directors between 1995 to 2002. Hess high-level executives served on
3 API's Board of Directors in 1994 and 1995; and Hess' CEO currently serves on the API Board's
4 Executive Committee and served on API's Board of Directors from at least 2015 to 2021. Multiple
5 high-level executives from Occidental served on API's Board of Directors between 1994-2002.
6 Anadarko or its predecessors' high-level executives served on API's Board of Directors between
7 1994-2002. Anadarko's then-President and COO served on API's executive committee as treasurer
8 in 2001.

9 f. Relevant information was shared among API and Defendants and
10 Defendants' predecessors-in-interest through the following: (1) API's distribution of information
11 to its members, and/or (2) participation of Defendants' officers and other personnel, and those of
12 Defendants' predecessors-in-interest, on API boards, committees, and task forces. This includes
13 representatives of Exxon, Chevron, BP, Shell, and ConocoPhillips sitting on both API's
14 Committee for Air and Water Conservation and a special advisory group to API's Committee for
15 Public Affairs, which worked together to develop research reports on air emissions and other
16 environmental topics. Different representatives of Exxon, Chevron, BP, Shell, ConocoPhillips, and
17 Marathon rotated in and out of these positions throughout the time periods discussed in this
18 complaint. Representatives from Marathon sat on the Executive Committee to API's Engineering
19 and Technical Research Committee and on the Committee for Air and Water Conservation.
20 Representatives from Chevron and Exxon chaired API's Engineering and Technical Research
21 Committee, and representatives from BP and Exxon chaired API's Health and Biological Research
22 Committee, also developing research documents. Different representatives of Exxon, Chevron,
23 BP, Shell and ConocoPhillips rotated in and out of these positions throughout the time periods
24 discussed in this complaint.¹²

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26
27 ¹² American Petroleum Institute, Comm. For Air and Water Conservation & Comm. On Public
28 Affairs, Environmental Research: A Status Report (1972) (listing members of relevant
committees and their fossil fuel company affiliations),
<https://files.eric.ed.gov/fulltext/ED066339.pdf>.

1 44. **The Information Council for the Environment (ICE)** was formed by coal
2 companies and their allies, including Western Fuels Association and the National Coal
3 Association. Associated companies included Pittsburg and Midway Coal Mining (Chevron).¹³

4 45. **The Global Climate Coalition (GCC)** was an industry group formed to preserve
5 and expand consumer demand for fossil fuels by publicly casting doubt on climate science and
6 opposing greenhouse gas emission reduction initiatives. The GCC was founded in 1989 in reaction
7 to the first meeting of the Intergovernmental Panel on Climate Change (IPCC), the United Nations
8 body for assessing the science related to climate change, and to NASA scientist James Hansen’s
9 presentation to the Senate Committee on Energy and Natural Resources, in which Hansen
10 emphasized that climate change was already happening and would lead to dire consequences if left
11 unaddressed. The GCC disbanded in or around 2001. Founding members included API, Shell Oil
12 Company (currently, Shell); Texaco, Inc. (currently, Chevron); Amoco (currently, BP); ARCO
13 (owned by BP at the time); and Phillips Petroleum Company (currently, ConocoPhillips). GCC
14 board membership during its existence included high-level executives from the founding members
15 and Chevron, Exxon, and Mobil (Exxon). Tom Lambrix, director of government relations for
16 Phillips Petroleum, was the first chairman of the GCC. Exxon was also a corporate member of the
17 GCC over the course of the GCC’s existence. The GCC Board of Directors was composed of high-
18 level executives from the fossil fuel industry. In 1994, for instance, the GCC Board was composed
19 of executives from API, Exxon, Phillips Petroleum Company (ConocoPhillips), and Texaco
20 (Chevron).¹⁴ In 1995, GCC’s Board of Directors included high-level executives from Texaco
21 (Chevron), American Petroleum Institute, ARCO, and Phillips Petroleum Company.¹⁵

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23
24
25 ¹³ Hereinafter, parenthetical references to Defendants indicate corporate ancestry and/or
26 affiliation.

27 ¹⁴ 1994 GCC Board Member List and Background Information, Climate Investigations Center,
28 <https://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1994-board-member-list-general-info/>.

¹⁵ 1995 GCC IRS 1024 and Attachments, Climate Investigations Center (1995), available at
<https://www.documentcloud.org/documents/5798254-GCC-IRS-1023#document/p17>.

1 **III. AGENCY**

2 46. At all times herein mentioned, each of the Defendants was the agent, servant,
3 partner, aider and abettor, co-conspirator, and/or joint venturer of each of the remaining
4 Defendants herein and was at all times operating and acting within the purpose and scope of said
5 agency, service, employment, partnership, conspiracy, and joint venture and rendered substantial
6 assistance and encouragement to the other Defendants, knowing that their conduct was wrongful
7 and/or constituted a breach of duty.

8 **IV. JURISDICTION AND VENUE**

9 47. This Court's personal jurisdiction over Defendants named herein is proper because
10 each Defendant maintains substantial contacts with California by and through their fossil fuel
11 business operations in this state, as described above, and because Plaintiffs' injuries described
12 herein arose out of and relate to those operations and occurred in California. Each Defendant
13 purposefully availed itself of the California market, and thus of the benefits of the laws of the State,
14 during all times relevant to this Complaint, so as to render California courts' exercise of
15 jurisdiction over each Defendant consistent with traditional notions of fair play and substantial
16 justice. Each Defendant researched, developed, manufactured, designed, marketed, distributed,
17 released, promoted, and/or otherwise sold its fossil fuel products in markets around the United
18 States, including within California.

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

21 a. With respect to its subsidiaries, each non-resident Defendant controls and
22 has controlled its direct and indirect subsidiaries' decisions about the quantity and extent of its
23 fossil fuel production and sales; determines whether and to what extent to market, produce, and/or
24 distribute its fossil fuel products; and controls and has controlled its direct and indirect
25 subsidiaries' decisions related to its marketing and advertising, specifically communications
26 strategies concerning climate change and the link between fossil fuel use and impacts on the
27 environment. Each subsidiary Defendant is the agent of its parent Defendant. As agents, the
28 subsidiaries of each non-resident Defendant conducted activities in California at the direction and

1 for the benefit of its parent company. Specifically, the subsidiaries furthered each parent
2 company's campaign of deception and denial through misrepresentations, omissions, and
3 affirmative promotion of the company's fossil fuel products as safe with knowledge of the climate
4 change-related harms that would result from the intended use of those products, all of which
5 resulted in climate change-related injuries in Santa Cruz and increased sales to the parent company.
6 The subsidiaries' jurisdictional activities are properly attributed to each parent company and serve
7 as a basis to assert jurisdiction over each of the non-resident Defendant parent companies.

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

13 c. Defendants, in coordination with API and other organizations, conspired to
14 conceal and misrepresent the known dangers of burning fossil fuels, to knowingly withhold
15 material information regarding the consequences of using fossil fuel products, to spread knowingly
16 false and misleading information to the public regarding the weight of climate science research,
17 and to promote their fossil fuel products which they knew were harmful. Through their own actions
18 and through their membership and participation in climate denialist front groups, API and each
19 Defendant were and are members of that conspiracy. Defendants committed substantial acts to
20 further the conspiracy in California by making misrepresentations and misleading omissions to
21 California consumers about the existence, causes, and effects of global warming; by affirmatively
22 promoting the Defendants' fossil fuel products as safe, with knowledge of the disastrous impacts
23 that would result from the intended use of those products; and by failing to warn California
24 consumers about the disastrous impacts of fossil fuel use. A substantial effect of the conspiracy
25 has also and will also occur in Santa Cruz, as the City and its residents have suffered and will
26 suffer injuries from Defendants' wrongful conduct, including but not limited to the following: sea
27 level rise, massive storms, flooding, extreme heat, reduced air quality, and other social and
28 economic consequences of these environmental changes. Defendants knew or should have known

1 based on information provided to them from their internal research divisions, affiliates, trade
2 associations, and industry groups that their actions in California and elsewhere would result in
3 these injuries in and to Santa Cruz and its residents. Finally, the climate effects described herein
4 are direct and foreseeable results of Defendants' conduct in furtherance of the conspiracy.

5 49. The Superior Court of California for Contra Costa County is a court of general
6 jurisdiction and therefore has subject matter jurisdiction over this action.

7 50. Venue is proper in Santa Cruz County pursuant to Code of Civil Procedure sections
8 395 and 395.5 because the injury giving rise to the City's claims occurred in Santa Cruz County.
9 Defendants have contributed to the creation of a public nuisance in Santa Cruz, and the Santa Cruz
10 City Attorney has the right and authority to seek abatement of that nuisance on behalf of the People
11 of the State of California. Injuries Santa Cruz has suffered personally have also occurred within
12 Contra Costa County.

13 51. Additionally, venue is also proper in San Francisco County for pre-trial purposes
14 pursuant to the February 5, 2024 order from Judge Treat in Contra Costa Superior Court and
15 February 9, 2024 order from the Judicial Council of California. Those orders coordinated this and
16 other actions into JCCP 5310, Fuel Industry Climate Cases, in San Francisco County.

17 **V. FACTUAL BACKGROUND**

18 **A. Global Warming—Observed Effects and Known Cause**

19 52. The Earth is warming at a rate unprecedented in human history.

20 53. The Earth's atmosphere is warming, sea level is rising, snow and ice cover is
21 diminishing, oceans are warming and acidifying, and hydrologic systems have been altered, among
22 other rapidly accelerating changes to our climate. These changes are directly harming people's
23 health, lives, lifestyles, and livelihoods, including in Santa Cruz. According to the IPCC, the
24 evidence that humans are causing this warming of the Earth is unequivocal.¹⁶ Greenhouse gas
25
26

27 ¹⁶ Climate Change 2021: The Physical Science Basis, THE INTERGOVERNMENTAL PANEL ON
28 CLIMATE CHANGE, at v, 4, 41, 63, 150, 425, 506 (2021),
https://report.ipcc.ch/ar6/wg1/IPCC_AR6_WGI_FullReport.pdf.

1 emissions caused by human activities are the most significant driver of climate change.¹⁷ Over the
2 past couple of decades, those emission rates have exceeded those predicted under previous “worst
3 case” global emissions scenarios.

4 54. Greenhouse gases are largely byproducts of human combustion of fossil fuels to
5 produce energy and use of fossil fuels to create petrochemical products. While there are several
6 greenhouse gases contributing to climate change, CO₂ is the primary greenhouse gas emitted as a
7 result of human activities.

8 55. Atmospheric and ocean temperatures have both increased substantially since the
9 beginning of the global industrial revolution, and the rate of warming has also dramatically
10 increased since the end of World War II.

11 56. In the geological short term, ocean and land surface temperatures have increased at
12 a rapid pace during the late 20th and early 21st centuries:

13 a. 2023 was the hottest year on record by globally averaged surface
14 temperatures, exceeding mid-20th century mean ocean and land surface temperatures by
15 approximately 2.12° F. Each month in 2023 was hotter by globally averaged surface temperatures
16 than those respective months in any previous year. June, July, August, September, October,
17 November and December 2023 were all the hottest average surface temperatures for those
18 months.¹⁸

19 b. The second hottest year on record by globally averaged surface
20 temperatures was 2016, and the third hottest was 2020.¹⁹

21 c. The ten hottest years on record by globally averaged surface temperature
22 have all occurred since 2014.²⁰

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26 ¹⁷ Id. at 41.

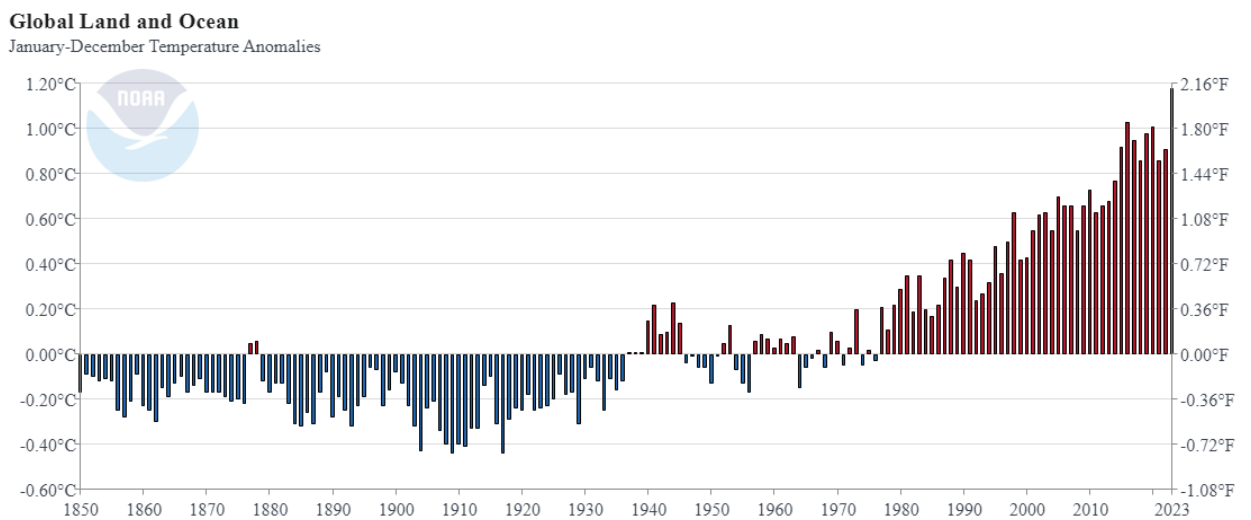
27 ¹⁸ NOAA National Center for Environmental Information, NOAA, Annual 2023 Global Climate Report (Jan. 2024), <https://www.ncei.noaa.gov/access/monitoring/monthly-report/global/202313>.

28 ¹⁹ Id.

²⁰ Id.

1 57. The average global surface and ocean temperature in 2023 was approximately
2 2.12° F warmer than the 20th century baseline, which is the greatest positive anomaly observed
3 since at least 1850.²¹ The increase in hotter temperatures and more frequent positive anomalies
4 during the Great Acceleration is occurring both globally and locally, including in Santa Cruz. The
5 graph below shows the increase in global land and ocean temperature anomalies since 1850, as
6 measured against the 1901–2000 global average temperature.²²

7 **Figure 1: Global Land and Ocean Temperature Anomalies, January – December**



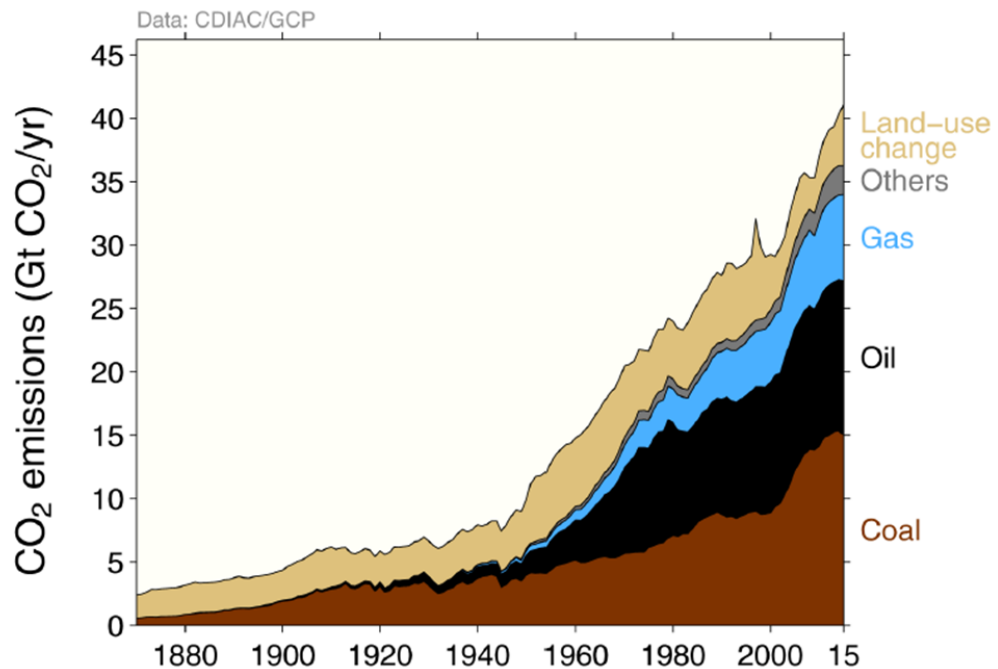
17
18 58. Prior to World War II, most anthropogenic CO₂ emissions were caused by land-use
19 practices, such as forestry and agriculture, which altered the ability of the land and global biosphere
20 to absorb CO₂ from the atmosphere; the impacts of such activities on Earth's climate were
21 relatively minor. Since the beginning of the Great Acceleration, however, both the annual rate and
22 total volume of human CO₂ emissions have increased enormously following the advent of major
23 uses of oil, gas, and coal. The graph below shows that while CO₂ emissions attributable to forestry
24 and other land-use change have remained relatively constant, total emissions attributable to fossil
25

26
27 ²¹NOAA National Center for Environmental Information, NOAA, Annual 2023 Global Climate
Report (Jan. 2024), <https://www.ncei.noaa.gov/access/monitoring/monthly-report/global/202313>.

28 ²² See id.

1 fuels have increased dramatically since the 1950s.²³

2 **Figure 2: Total Annual Carbon Dioxide Emissions by Source, 1860-2015:**



15 59. As human reliance on fossil fuels for industrial and mechanical processes has
16 increased, so too have greenhouse gas emissions, especially of CO₂. The Great Acceleration is
17 marked by a massive increase in the annual rate of fossil fuel emissions: more than half of all
18 cumulative CO₂ emissions have occurred since 1988.²⁴ The rate of CO₂ emissions from fossil fuels
19 and industry, moreover, has increased threefold since the 1960s, and by more than 60% since
20 1990.²⁵ The graph below illustrates the increasing rate of global CO₂ emissions since the industrial

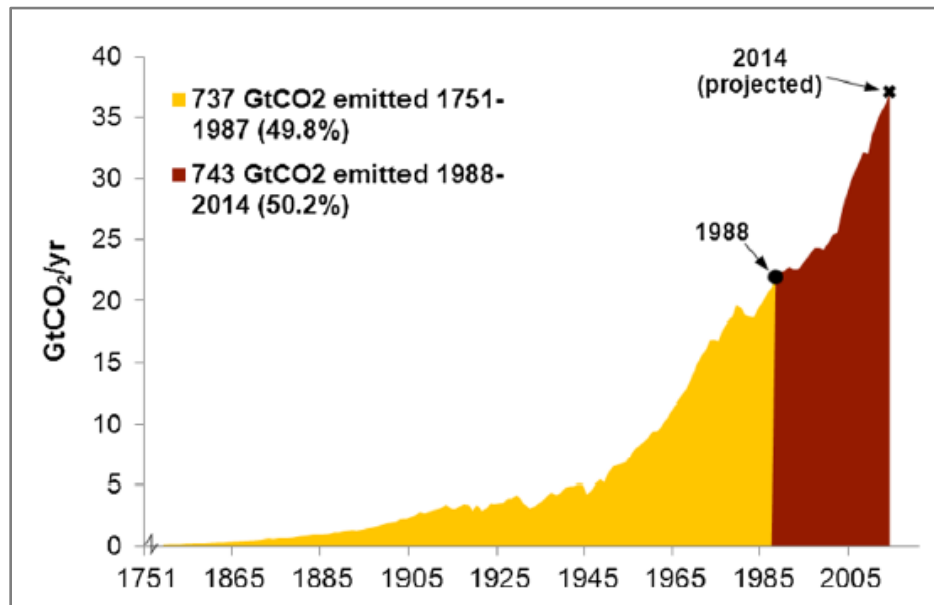
22 ²³ Global Carbon Project, Global Carbon Budget 2016 (Nov. 14, 2016),
23 www.globalcarbonproject.org/carbonbudget/16/files/GCP_CarbonBudget_2016.pdf, citing
24 CDIAC; R.A. Houghton et al., Carbon emissions from land use and land-cover change (2012),
25 <http://www.biogeosciences.net/9/5125/2012/bg-9-5125-2012.html>; Louis Giglio et al., Analysis
26 of daily, monthly, and annual burned area using the fourth-generation global fire emissions
database (2013), <http://onlinelibrary.wiley.com/doi/10.1002/jgrg.20042/abstract>; Le Quéré et al.
(2016), supra note 4.

26 ²⁴ Andres et al. (2012), supra note 6, at 1851.

27 ²⁵ Le Quéré et al. (2016), supra note 4, at 630 (“Global CO₂ emissions from fossil fuels and
28 industry have increased every decade from an average of 3.1±0.2 GtC/yr in the 1960s to an
average of 9.3±0.5 GtC/yr during 2006–2015”).

era began.²⁶

Figure 3: Cumulative Annual Anthropogenic Carbon Dioxide Emissions, 1751-2014:



60. Since 1960, the concentration of CO₂ in the atmosphere has spiked from under 320 parts per million (ppm) to approximately 423 ppm.²⁷ The concentration of atmospheric CO₂ has also been accelerating. From 1960 to 1970, atmospheric CO₂ increased by an average of approximately 0.9 ppm per year.²⁸

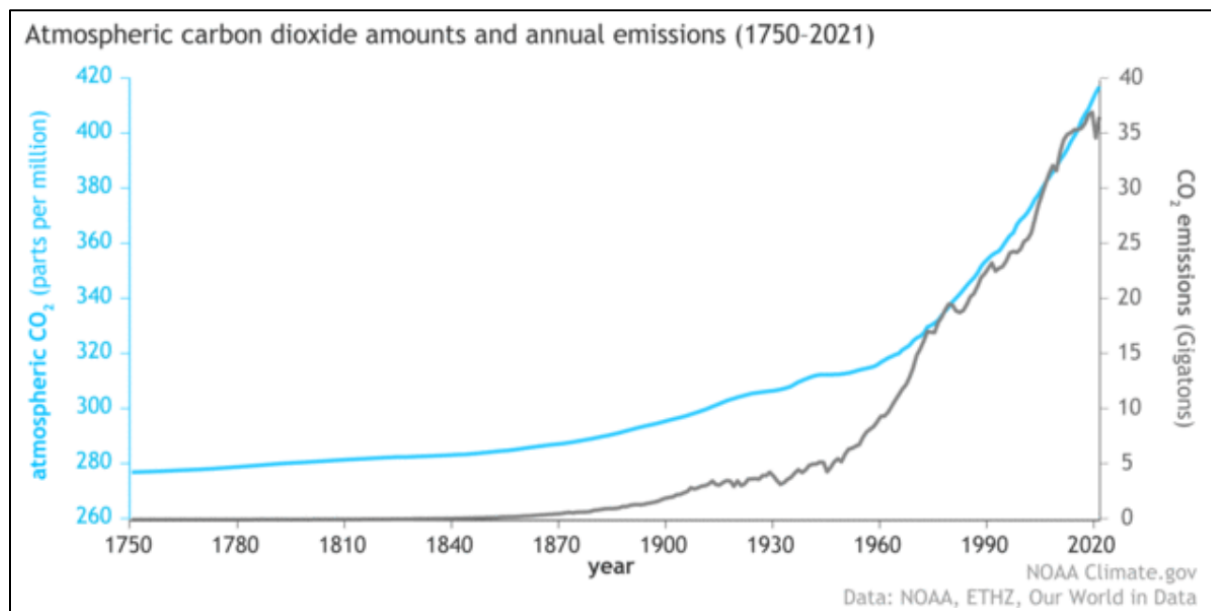
61. The graph below indicates the tight nexus between the sharp increase in emissions from the combustion of fossil fuels and the steep rise of atmospheric concentrations of CO₂.

²⁶ Peter Frumhoff et al. *The Climate Responsibilities of Industrial Carbon Producers*, 132 *Climatic Change* 157–71, 164 (2015).

²⁷ *Trends in Atmospheric Carbon Dioxide: Full Record*, Global Monitoring Laboratory, <https://gml.noaa.gov/ccgg/trends/mlo.html>.

²⁸ *Trends in Atmospheric Carbon Dioxide: Growth Rate*, Global Monitoring Laboratory <https://gml.noaa.gov/ccgg/trends/gr.html>.

Figure 4: Atmospheric CO₂ Concentration and Annual Emissions²⁹



Because of the increased burning of fossil fuel products, concentrations of greenhouse gases in the atmosphere are now at an unprecedented level, one not seen in at least three million years.³⁰

62. 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 a myriad of 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.

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

c. Changes to the global climate generally, bringing about longer droughts and dry periods interspersed with fewer and more severe periods of precipitation, and associated

²⁹ Rebecca Lindsey, Climate Change: Atmospheric Carbon Dioxide, CLIMATE.GOV (May 12, 2023), <https://www.climate.gov/news-features/understanding-climate/climate-change-atmospheric-carbon-dioxide>.

³⁰ *More CO₂ than ever before in 3 million years, shows unprecedented computer simulation*, SCIENCE DAILY (Apr. 3, 2019), <https://www.sciencedaily.com/releases/2019/04/190403155436.htm>.

1 impacts to the quantity and quality of water resources available to both human and ecological
2 systems.

3 d. Increased frequency and intensity of extreme weather events due to
4 increases in evaporation, evapotranspiration, and precipitation, a consequence of the warming
5 atmosphere's increased ability to hold moisture.

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

8 f. Flooding and inundation of land and infrastructure, increased erosion,
9 higher wave run-up and tides, increased frequency and severity of storm surges, saltwater
10 intrusion, and other impacts of higher sea levels.

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

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

15 **B. Defendants Went to Great Lengths to Understand, and Either Knew or Should**
16 **Have Known the Dangers Associated With Their Fossil Fuel Products.**

17 63. For decades, Defendants have known that their fossil fuel products pose risks of
18 "severe" and even "catastrophic" impacts on the global climate through the work and warnings of
19 their own scientists and/or through trade associations such as API. Defendants consistently
20 researched or funded research into significant issues relevant to fossil fuels, and were aware of
21 significant scientific reports on climate change science and impacts at the time they were issued.
22 Thus, Defendants developed a sophisticated understanding of climate change that far exceeded the
23 knowledge of the public, ordinary consumers, and Plaintiffs. Yet each Defendant decided to
24 continue its conduct and commit itself to massive fossil fuel promotion and sale. This was a
25 deliberate decision to place company profits ahead of human safety and well-being, and to foist
26 onto the public the costs of abating and adapting to the public nuisance of global warming.

27 64. Although concealed at the time, the industry's knowledge was later uncovered
28 by journalists at Inside Climate News and the Los Angeles Times, among others. In 1954,

1 geochemist Harrison Brown and his colleagues at the California Institute of Technology wrote
2 to API, informing the trade association that preliminary measurements of natural archives
3 of carbon in tree rings indicated that fossil fuels had caused atmospheric carbon dioxide
4 levels to increase by about 5% since 1840.³¹ API provided those scientists funding for various
5 research projects, and measurements of carbon dioxide continued for at least one year and
6 possibly longer, although the results were never published or otherwise made available to the
7 public.³² In 1957, H.R. Brannon of Humble Oil Company (predecessor-in-interest to Exxon)
8 measured an increase in atmospheric carbon dioxide attributable to fossil fuels, similar to—and
9 in agreement with—that measured by Harrison Brown.³³

10 65. In 1959, API organized a centennial celebration of the American oil industry at
11 Columbia University in New York City.³⁴ High-level representatives of Defendants were in
12 attendance. One of the keynote speakers was nuclear physicist Edward Teller. Teller warned the
13 industry that “a temperature rise corresponding to a 10[%] increase in carbon dioxide will be
14 sufficient to melt the icecap and submerge . . . [a]ll the coastal cities.” Teller added that since “a
15 considerable percentage of the human race lives in coastal regions, I think that this chemical
16 contamination is more serious than most people tend to believe.”³⁵ Following his speech, Teller
17 was asked to “summarize briefly the danger from increased carbon dioxide content in the
18 atmosphere in this century.” He responded that “there is a possibility the icecaps will start melting
19 and the level of the oceans will begin to rise.”³⁶

22 ³¹ See Benjamin Franta, Early Oil Industry Knowledge of CO₂ and Global Warming, 8 *Nature*
23 *Climate Change* 1024, 1024–25 (2018).

24 ³² Id.

25 ³³ Id.; H.R. Brannon, Jr. et al., Radiocarbon Evidence on the Dilution of Atmospheric and
26 Oceanic Carbon by Carbon from Fossil Fuels, 38 *Am. Geophysical Union Transactions* 643,
27 644–46 (1957).

28 ³⁴ See Allan Nevins & Robert G. Dunlop, Energy and Man: A Symposium (Appleton-Century-
Crofts, N.Y. 1960); see also Franta (2018), supra note 31, at 1024–25.

³⁵ Edward Teller, Energy Patterns of the Future, in Energy and Man: A Symposium, 53–72
(1960).

³⁶ Id. at 70.

1 66. In 1965, the president of API, Frank Ikard, relayed the findings of a recent report
2 to leaders of the fossil fuel industry at API’s annual meeting, saying, “[o]ne of the most important
3 predictions of the report is that carbon dioxide is being added to the earth’s atmosphere by the
4 burning of coal, oil, and natural gas at such a rate that by the year 2000 the heat balance will be so
5 modified as possibly to cause marked changes in climate beyond local or even national efforts,”
6 and quoting the report’s finding that “the pollution from internal combustion engines is so serious,
7 and is growing so fast, that an alternative nonpolluting means of powering automobiles, buses, and
8 trucks is likely to become a national necessity.”³⁷

9 67. Thus, by 1965, Defendants and their predecessors-in-interest were aware that the
10 scientific community had found that fossil fuel products, if used profligately, would cause global
11 warming by the end of the century, and that such global warming would have wide-ranging and
12 costly consequences.

13 68. By 1965, concern about the risks of anthropogenic greenhouse gas emissions
14 reached the highest level of the United States’ scientific community. In that year, President Lyndon
15 B. Johnson’s Science Advisory Committee Panel on Environmental Pollution reported that by the
16 year 2000, anthropogenic CO₂ emissions would “modify the heat balance of the atmosphere to
17 such an extent that marked changes in climate . . . could occur.”³⁸ President Johnson announced in
18 a special message to Congress that “[t]his generation has altered the composition of the atmosphere
19 on a global scale through . . . a steady increase in carbon dioxide from the burning of fossil fuels.”³⁹

20 69. These statements from the Johnson Administration, at a minimum, put Defendants
21 on notice of the potentially substantial dangers to people, communities, and the planet associated
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23

24 ³⁷ Ikard, Meeting the Challenges of 1966, in Proceedings of the American Petroleum Institute, at
25 13 (1965), available at <https://www.documentcloud.org/documents/5348130-1965-API-Proceedings>.

26 ³⁸ President’s Science Advisory Committee, Restoring the Quality of Our Environment: Report
27 of the Environmental Pollution Panel, at 9 (Nov. 1965),
<https://hdl.handle.net/2027/uc1.b4315678>.

28 ³⁹ President Lyndon B. Johnson, Special Message to Congress on Conservation and Restoration
of Natural Beauty (Feb. 8, 1965), <http://acsc.lib.udel.edu/items/show/292>.

1 with use of their fossil fuel products. Moreover, Defendants had amassed a considerable body of
2 knowledge on the subject through their own independent efforts.

3 70. In 1968, API received a report from the Stanford Research Institute, which it had
4 hired to assess the state of research on environmental pollutants, including carbon dioxide.⁴⁰ The
5 assessment endorsed the findings of President Johnson’s Scientific Advisory Council from three
6 years prior, stating that carbon dioxide emissions were “almost certain” to produce “significant”
7 temperature increases by 2000, and that these emissions were almost certainly attributable to fossil
8 fuels. The report warned of “major changes in the earth’s environment” and a “rise in sea levels,”
9 and concluded: “there seems to be no doubt that the potential damage to our environment could be
10 severe.” The scientists warned of “melting of the Antarctic ice cap” and informed API that “[p]ast
11 and present studies of CO₂ are detailed and seem to explain adequately the present state of CO₂ in
12 the atmosphere.” What was missing, the scientists said, was work on “air pollution technology
13 and . . . systems in which CO₂ emissions would be brought under control.”⁴¹

14 71. In 1969, the Stanford Research Institute delivered a supplemental report on air
15 pollution to API, projecting with alarming particularity that atmospheric CO₂ concentrations
16 would reach 370 parts per million (“ppm”) by 2000.⁴² This projection turned out to almost exactly
17 match the actual CO₂ concentrations measured in 2000 of 369.64 ppm.⁴³ The report explicitly
18 connected the rise in CO₂ levels to the combustion of fossil fuels, finding it “unlikely that the
19 observed rise in atmospheric CO₂ has been due to changes in the biosphere.”

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

24 ⁴⁰ Elmer Robinson & R.C. Robbins, Sources, Abundance, and Fate of Gaseous Atmospheric
25 Pollutants, Stanford Rsch. Inst. (Feb. 1968),
<https://www.smokeandfumes.org/documents/document16>.

26 ⁴¹ Id. at 108, 112.

27 ⁴² Elmer Robinson & R.C. Robbins, Sources, Abundance, and Fate of Gaseous Atmospheric
Pollutants Supplement, Stanford Rsch. Inst. (June 1969).

28 ⁴³ NASA Goddard Institute for Space Studies, Global Mean CO₂ Mixing Ratios (ppm):
Observations, <https://data.giss.nasa.gov/modelforce/ghgases/Fig1A.ext.txt>.

1 73. In 1969, Shell memorialized an ongoing 18-month project to collect ocean data
2 from oil platforms to develop and calibrate environmental forecasting theories related to predicting
3 wave, wind, storm, sea level, and current changes and trends.⁴⁴ Several Defendants and/or their
4 predecessors in interest participated in the project, including Esso Production Research Company
5 (ExxonMobil), Mobil Research and Development Company (ExxonMobil), Pan American
6 Petroleum Corporation (BP), Gulf Oil Corporation (Chevron), Texaco Inc. (Chevron), and the
7 Chevron Oil Field Research Company.

8 74. In 1972, API members, including Defendants, received a status report on all
9 environmental research projects funded by API. The report summarized the 1968 SRI report
10 describing the impact of Defendants' fossil fuel products on the environment, including global
11 warming and sea level rise. Industry participants who received this report include: American
12 Standard of Indiana (BP), Asiatic (Shell), Ashland (Marathon), Atlantic Richfield (BP), British
13 Petroleum (BP), Chevron Standard of California (Chevron), Cities Service (Citgo), Continental
14 (ConocoPhillips), Dupont (former owner of Conoco), Esso Research (Exxon), Ethyl (formerly
15 affiliated with Esso, which was subsumed by Exxon), Getty (Lukoil/Exxon), Gulf (Chevron,
16 among others), Humble Standard of New Jersey (Exxon/Chevron/BP), Marathon, Mobil (Exxon),
17 Pan American (BP), Phillips (ConocoPhillips), Shell, Standard of Ohio (BP), Texaco (Chevron),
18 Union (Chevron), Edison Electric Institute (representing electric utilities), Bituminous Coal
19 Research (coal industry research group), Mid-Continent Oil & Gas Association (presently the U.S.
20 Oil & Gas Association, a national trade association), Western Oil & Gas Association, National
21 Petroleum Refiners Association (presently the American Fuel and Petrochemical Manufacturers
22 Association, a national trade association), Champlin (Anadarko), Skelly (Lukoil/Exxon), Colonial
23 Pipeline (ownership has included BP, Citgo, ExxonMobil, ConocoPhillips, Chevron entities,
24 among others) and Caltex (Chevron), among others.⁴⁵

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26 _____
27 ⁴⁴ M.M. Patterson, An Ocean Data Gathering Program for the Gulf of Mexico, Society of
28 Petroleum Engineers (1969), <https://www.onepetro.org/conference-paper/SPE-2638-MS>.

⁴⁵ American Petroleum Institute, Environmental Research, A Status Report, Committee for Air
and Water Conservation (Jan. 1972), <http://files.eric.ed.gov/fulltext/ED066339.pdf>.

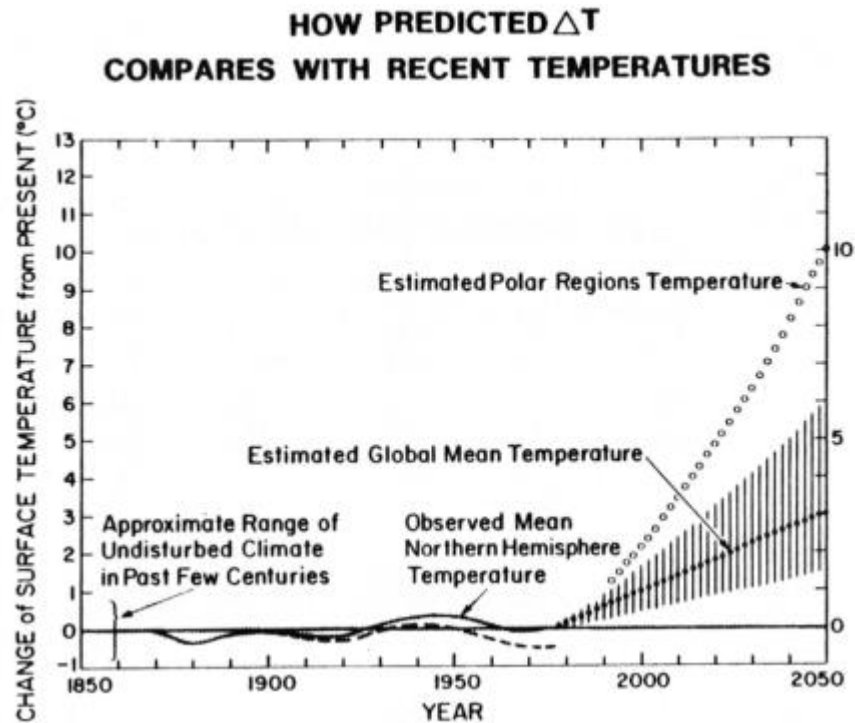
1 75. In 1977, James Black of Exxon gave a presentation to Exxon executives on the
2 “greenhouse effect,” which was summarized in an internal memo the following year. Black
3 reported that “current scientific opinion overwhelmingly favors attributing atmospheric carbon
4 dioxide increase to fossil fuel consumption,” and that doubling atmospheric carbon dioxide would,
5 according to the best climate model available, “produce a mean temperature increase of about 2°C
6 to 3°C over most of the earth,” with two to three times as much warming at the poles.⁴⁶ Black
7 reported that the impacts of global warming would include “more rainfall,” which would “benefit
8 some areas and would harm others,” and that “[s]ome countries would benefit, but others could
9 have their agricultural output reduced or destroyed.” “Even those nations which are favored,
10 however, would be damaged for a while since their agricultural and industrial patterns have been
11 established on the basis of the present climate.” Finally, Black reported that “[p]resent thinking
12 holds that man has a time window of five to ten years before the need for hard decisions regarding
13 changes in energy strategies might become critical.”⁴⁷ The figure below, reproduced from Black’s
14 memo, illustrates Exxon’s understanding of the timescale and magnitude of global warming that
15 its products would cause.

16 ///

26 ⁴⁶ J.F. Black, Exxon Research and Engineering Co., Memorandum to F.G. Turpin, Exxon
27 Research and Engineering Co. re The Greenhouse Effect (June 6, 1978) at 2, 23, available at
28 <https://www.documentcloud.org/documents/2805568-1978-Exxon-Presentation-on-GreenhouseEffect>.

⁴⁷ Id. at 2.

1 **Figure 5: Future Global Warming Predicted Internally by Exxon in 1977**



14 76. Black's report also stated:

15 There is general scientific agreement that the most likely manner in which mankind
16 is influencing the global climate is through carbon dioxide release from the burning
17 of fossil fuels . . . [and that] [m]an has a time window of five to ten years before the
18 need for hard decisions regarding changes in energy strategies might become
19 critical.⁴⁸

20 77. Thereafter, Exxon engaged in a research program to study the environmental fate
21 of fossil fuel-derived greenhouse gases and their impacts, which included publication of peer-
22 reviewed research by Exxon staff scientists and the conversion of a supertanker into a research
23 vessel to study the greenhouse effect and the role of the oceans in absorbing anthropogenic CO₂.
24 Much of this research was shared in a variety of Iora, symposia, and shared papers through trade
25 associations and directly with other Defendants.

26 78. Exxon scientists made the case internally for using company resources to build
27 corporate knowledge about the impacts of the promotion, marketing, and consumption of

28 ⁴⁸ Id.

1 Defendants' fossil fuel products. Exxon climate researcher Henry Shaw wrote in 1978: "The
2 rationale for Exxon's involvement and commitment of funds and personnel is based on our need
3 to assess the possible impact of the greenhouse effect on Exxon business. Exxon must develop a
4 credible scientific team that can critically evaluate the information generated on the subject and be
5 able to carry bad news, if any, to the corporation."⁴⁹ Shaw's internal memo to Exxon's John W.
6 Harrison reported that "[t]he climatic effects of carbon dioxide release may be the primary limiting
7 factor on energy production from fossil fuels[.]"⁵⁰ Moreover, Shaw emphasized the need to
8 collaborate with universities and government to more completely understand what he called the
9 "CO₂ problem."⁵¹

10 79. In 1979, API and its members, including Defendants, convened a Task Force to
11 monitor and share cutting edge climate research among the oil industry. The group was initially
12 called the CO₂ and Climate Task Force, but changed its name to the Climate and Energy Task
13 Force in 1980 (hereinafter referred to as "API CO₂ Task Force"). API kept and distributed meeting
14 minutes to Task Force members. Membership included senior scientists and engineers from nearly
15 every major U.S. and multinational oil and gas company, including Exxon, Mobil (ExxonMobil),
16 Amoco (BP), Phillips (ConocoPhillips), Texaco (Chevron), Shell, Sunoco, Sohio (BP) as well as
17 Standard Oil of California (Chevron) and Gulf Oil (Chevron, among others). The Task Force was
18 charged with assessing the implications of emerging science on the petroleum and gas industries
19 and identifying where reductions in greenhouse gas emissions from Defendants' fossil fuel
20 products could be made.⁵²

23 ⁴⁹ Henry Shaw, Memo to Edward David Jr. on the "Greenhouse Effect", Exxon Research and
24 Engineering Company (Dec. 7, 1978).

25 ⁵⁰ Henry Shaw, Environmental Effects of Carbon Dioxide, Climate Investigations Ctr. (Oct. 31,
1977), <https://www.industrydocuments.ucsf.edu/docs/tpwl0228>.

26 ⁵¹ Id.

27 ⁵² American Petroleum Institute, AQ-9 Task Force Meeting Minutes (March 18, 1980),
28 <http://insideclimateneeds.org/sites/default/files/documents/AQ-9%20Task%20Force%20Meeting%20%281980%29.pdf> (AQ-9 refers to the "CO₂ and Climate"
Task Force).

1 80. In 1979, API sent its members a background memo related to the API CO₂ and
2 Climate Task Force’s efforts, stating that CO₂ concentrations were rising steadily in the
3 atmosphere, and predicting when the first clear effects of climate change might be felt.⁵³

4 81. That same year, Exxon Research and Engineering reported: “The most widely held
5 theory [about increasing CO₂ concentration] is that the increase is due to fossil fuel combustion,
6 increasing CO₂ concentration will cause a warming of the earth’s surface, and the present trend of
7 fossil fuel consumption will cause dramatic environmental effects before the year 2050.”⁵⁴ Further,
8 the report stated that unless fossil fuel use was constrained, there would be “noticeable temperature
9 changes” associated with an increase in atmospheric CO₂ from about 280 parts per million before
10 the Industrial Revolution to 400 parts per million by the year 2010.⁵⁵ Those projections proved
11 remarkably accurate—atmospheric CO₂ concentrations surpassed 400 parts per million in May
12 2013, for the first time in millions of years.⁵⁶ In 2015, the annual average CO₂ concentration rose
13 above 400 parts per million, and in 2016 the annual low surpassed 400 parts per million, meaning
14 atmospheric CO₂ concentration remained above that threshold all year.⁵⁷ In 1980, API’s CO₂ Task
15 Force members discussed the oil industry’s responsibility to reduce CO₂ emissions by changing
16 refining processes and developing fuels that emit less CO₂.

21 ⁵³ Neela Banerjee, Exxon’s Oil Industry Peers Knew About Climate Dangers in the 1970s, Too,
22 Inside Climate News (Dec. 22, 2015), [https://insideclimatenews.org/news/22122015/exxon-](https://insideclimatenews.org/news/22122015/exxon-mobil-oil-industry-peers-knew-about-climate-change-dangers-1970s-american-petroleum-institute-api-shell-chevron-texaco)
23 [mobil-oil-industry-peers-knew-about-climate-change-dangers-1970s-american-petroleum-](https://insideclimatenews.org/news/22122015/exxon-mobil-oil-industry-peers-knew-about-climate-change-dangers-1970s-american-petroleum-institute-api-shell-chevron-texaco)
institute-api-shell-chevron-texaco.

24 ⁵⁴ W.L. Ferrall, Exxon Memo to R.L. Hirsch about “Controlling Atmospheric CO₂”, Exxon
25 Research and Engineering Company (Oct. 16, 1979),
[http://insideclimatenews.org/sites/default/files/documents/CO2%20and%20Fuel%20Use%20Pro-](http://insideclimatenews.org/sites/default/files/documents/CO2%20and%20Fuel%20Use%20Projections.pdf)
jections.pdf.

26 ⁵⁵ Id.

27 ⁵⁶ Nicola Jones, How the World Passed a Carbon Threshold and Why it Matters, Yale
28 Environment 360 (Jan. 26, 2017), [http://e360.yale.edu/features/how-the-world-passed-a-carbon-](http://e360.yale.edu/features/how-the-world-passed-a-carbon-threshold-400ppm-and-why-it-matters)
threshold-400ppm-and-why-it-matters.

⁵⁷ Id.

1 82. In or around February 29, 1980, Dr. John Laurmann, a “recognized expert in the
2 field of CO₂ and climate,” made a presentation to its members.⁵⁸ The meeting lasted for seven
3 hours and included a “complete technical discussion” of global warming caused by fossil fuels,
4 including “the scientific basis and technical evidence of CO₂ buildup, impact on society, methods
5 of modeling and their consequences, uncertainties, policy implications, and conclusions that can
6 be drawn from present knowledge.” His presentation identified the “scientific consensus on the
7 potential for large future climatic response to increased CO₂ levels” as a reason for API members
8 to have concern with the “CO₂ problem” and informed attendees that there was “strong empirical
9 evidence that rise [in CO₂ concentration was] caused by anthropogenic release of CO₂, mainly
10 from fossil fuel combustion.”⁵⁹ Moreover, Dr. Laurmann warned that the amount of CO₂ in the
11 atmosphere could double by 2038, which he said would likely lead to a 2.5° C (4.5° F) rise in
12 global average temperatures with “major economic consequences.” He then told the Task Force
13 that models showed a 5°C (9° F) rise by 2067, with “globally catastrophic effects.”⁶⁰ He also
14 suggested that, despite uncertainty, “THERE IS NO LEEWAY” in the time for acting. A taskforce
15 member and representative of Texaco leadership present at the meeting posited that the API CO₂
16 Task Force should develop ground rules for energy release of fuels and the cleanup of fuels as they
17 relate to CO₂ creation. Attendees to the presentation also included scientists and executives from
18 API, Exxon, and SOHIO (a predecessor to BP), and the minutes of the meeting were distributed
19 to the entire Task Force. API minutes show that the Task Force discussed topics including “the
20 technical implications of energy source changeover,” “ground rules for energy release of fuels and
21 the cleanup of fuels as they relate to CO₂ creation,” and researching “the Market Penetration
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24 ⁵⁸ J. J. Nelson, American Petroleum Institute, Letter to AQ-9 Task Force re The CO₂ Problem;
25 Addressing Research Agenda Development (Mar. 18, 1980) at 2, available at
<https://www.industrydocuments.ucsf.edu/docs/gffl0228>.

26 ⁵⁹ American Petroleum Institute, AQ-9 Task Force Meeting Minutes (March 18, 1980),
27 [http://insideclimatenews.org/sites/default/files/documents/AQ-](http://insideclimatenews.org/sites/default/files/documents/AQ-9%20Task%20Force%20Meeting%20%281980%29.pdf)
28 [9%20Task%20Force%20Meeting%20%281980%29.pdf](http://insideclimatenews.org/sites/default/files/documents/AQ-9%20Task%20Force%20Meeting%20%281980%29.pdf) (AQ-9 refers to the “CO₂ and Climate”
Task Force).

⁶⁰ Id.

1 Requirements of Introducing a New Energy Source into World Wide Use.”⁶¹ The Task Force even
2 asked the question “what is the 50 year future of fossil fuels?”

3 83. In 1980, the API CO₂ Task Force also discussed a potential area for investigation:
4 alternative energy sources as a means of mitigating CO₂ emissions from Defendants’ fossil fuel
5 products. These efforts called for research and development to “Investigate the Market Penetration
6 Requirements of Introducing a New Energy Source into World Wide Use.” Such investigation was
7 to include the technical implications of energy source changeover, research timing, and
8 requirements.⁶²

9 84. By 1980, Exxon’s senior leadership had become intimately familiar with the
10 greenhouse effect and the role of CO₂ in the atmosphere. In that year, Exxon Senior Vice President
11 and Board member George Piercy questioned Exxon researchers on the minutiae of the ocean’s
12 role in absorbing atmospheric CO₂, including whether there was a net CO₂ flux out of the ocean
13 into the atmosphere in certain zones where upwelling of cold water to the surface occurs, because
14 Piercy evidently believed that the oceans could absorb and retain higher concentrations of CO₂
15 than the atmosphere.⁶³ This inquiry aligned with Exxon supertanker research into whether the
16 ocean would act as a significant CO₂ sink that would sequester atmospheric CO₂ long enough to
17 allow reckless emissions without triggering dire climatic consequences. As described below,
18 Exxon eventually scrapped this research before it produced enough data from which to derive a
19 conclusion.⁶⁴

20 85. Also in 1980, Imperial Oil (ExxonMobil) reported to Esso and Exxon managers
21 and environmental staff that increases in fossil fuel usage aggravates CO₂ in the atmosphere.

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23 ⁶¹ Id.

24 ⁶² Id.

25 ⁶³ Neela Banerjee, More Exxon Documents Show How Much It Knew About Climate 35 Years
26 Ago, Inside Climate News (Dec. 1, 2015),
<https://insideclimatenews.org/news/01122015/documents-exxons-early-co2-position-senior-executives-engage-and-warming-forecast>.

27 ⁶⁴ Neela Banerjee et al., Exxon Believed Deep Dive Into Climate Research Would Protect Its
28 Business, Inside Climate News (Sept. 17, 2015),
<https://insideclimatenews.org/news/16092015/exxon-believed-deep-dive-into-climate-research-would-protect-its-business>.

1 Noting that the United Nations was encouraging research into the carbon cycle, Imperial reported
2 that there was “no doubt” that fossil fuels were aggravating the build-up of CO₂ in the atmosphere
3 and that “[t]echnology exists to remove CO₂ from [fossil fuel power plant] stack gases but removal
4 of only 50% of the CO₂ would double the cost of power generation.” Imperial also reported that
5 its coordination department had been internally evaluating its and Exxon’s products to determine
6 whether disclosure of a human health hazard was necessary. The report notes that Section (8e) of
7 Toxic Substances Control Act, 55 U.S.C. §§ 1601 et seq., requires that anyone who discovers that
8 a material or substance in commercial use is or may be a significant risk to human health must
9 report such findings to the Environmental Protection Agency within 15 days. Although greenhouse
10 gases are human health hazards (because they have serious consequences in terms of global food
11 production, disease virulence, and sanitation infrastructure, among other impacts), neither
12 Imperial, Exxon, nor any other Defendant has ever filed a disclosure with the U.S. Environmental
13 Protection Agency pursuant to the Toxic Substances Control Act.

14 86. Exxon scientist Roger Cohen warned his colleagues in a 1981 internal
15 memorandum that “future developments in global data gathering and analysis, along with advances
16 in climate modeling, may provide strong evidence for a delayed CO₂ effect of a truly substantial
17 magnitude,” and that under certain circumstances it would be “very likely that we will
18 unambiguously recognize the threat by the year 2000.”⁶⁵ Cohen had expressed concern that the
19 memorandum mischaracterized potential effects of reckless CO₂ emissions from Defendants’
20 fossil fuel products: “. . . it is distinctly possible that the . . . [Exxon Planning Division’s] scenario
21 will produce effects which will indeed be catastrophic (at least for a substantial fraction of the
22 world’s population).”⁶⁶

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26 ⁶⁵ Roger W. Cohen, Exxon Memo to W. Glass about possible “catastrophic” effect of CO₂,
27 Exxon Inter-Office Correspondence (Aug. 18, 1981),
[http://www.climatefiles.com/exxonmobil/1981-exxon-memo-on-possible-emission-](http://www.climatefiles.com/exxonmobil/1981-exxon-memo-on-possible-emission-consequences-of-fossil-fuel-consumption/)
28 [consequences-of-fossil-fuel-consumption/](http://www.climatefiles.com/exxonmobil/1981-exxon-memo-on-possible-emission-consequences-of-fossil-fuel-consumption/).

⁶⁶ Id.

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

- 4 • “Atmospheric CO₂ will double in 100 years if fossil fuels grow at 1.4% [per
5 year].
- 6 • 3°C global average temperature rise and 10°C at poles if CO₂ doubles.
 - 7 ○ Major shifts in rainfall/agriculture
 - 8 ○ Polar ice may melt”⁶⁷

8 88. In 1982, another report prepared for API by scientists at the Lamont-Doherty
9 Geological Observatory at Columbia University recognized that atmospheric CO₂ concentration
10 had risen significantly compared to the beginning of the industrial revolution from about 290 parts
11 per million to about 340 parts per million in 1981 and acknowledged that despite differences in
12 climate modelers’ predictions, all models indicated a temperature increase caused by
13 anthropogenic CO₂ within a global mean range of 4° C (7.2° F). The report advised that there was
14 scientific consensus that “a doubling of atmospheric CO₂ from [] pre-industrial revolution value
15 would result in an average global temperature rise of (3.0 ± 1.5)°C [5.4 ± 2.7° F].” It went further,
16 warning that “[s]uch a warming can have serious consequences for man’s comfort and survival
17 since patterns of aridity and rainfall can change, the height of the sea level can increase
18 considerably and the world food supply can be affected.”⁶⁸ Exxon’s own modeling research
19 confirmed this, and the company’s results were later published in at least three peer-reviewed
20 scientific papers.⁶⁹

21 _____
22 ⁶⁷ Henry Shaw, Exxon Memo to E. E. David, Jr. about “CO₂ Position Statement”, Exxon Inter-
23 Office Correspondence (May 15, 1981),
<https://insideclimatenews.org/sites/default/files/documents/Exxon%20Position%20on%20CO2%20%281981%29.pdf>.

24 ⁶⁸ American Petroleum Institute, Climate Models and CO₂ Warming: A Selective Review and
25 Summary, Lamont-Doherty Geological Observatory (Columbia University) (March 1982),
26 available at [https://assets.documentcloud.org/documents/2805626/1982-API-Climate-Models-
and-CO2-Warming-a.pdf](https://assets.documentcloud.org/documents/2805626/1982-API-Climate-Models-and-CO2-Warming-a.pdf).

27 ⁶⁹ See Roger W. Cohen, Exxon Memo summarizing findings of research in climate modeling,
28 Exxon Research and Engineering Company (Sept. 2, 1982),
[https://insideclimatenews.org/sites/default/files/documents/%2522Consensus%2522%20on%20
CO2%20Impacts%20\(1982\).pdf](https://insideclimatenews.org/sites/default/files/documents/%2522Consensus%2522%20on%20CO2%20Impacts%20(1982).pdf) (discussing research articles).

1 89. Also in 1982, Exxon’s Environmental Affairs Manager distributed a primer on
2 climate change to a “wide circulation [of] Exxon management . . . intended to familiarize Exxon
3 personnel with the subject.”⁷⁰ The primer also was “restricted to Exxon personnel and not to be
4 distributed externally.”⁷¹ The primer compiled science on climate change available at the time, and
5 confirmed fossil fuel combustion as a primary anthropogenic contributor to global warming. The
6 report estimated a CO₂ doubling around 2090 based on Exxon’s long-range modeled outlook. The
7 author warned that the melting of the Antarctic ice sheet could result in global sea level rise of five
8 feet which would “cause flooding on much of the U.S. East Coast, including the State of Florida
9 and Washington, D.C.”⁷² Indeed, it warned that “there are some potentially catastrophic events
10 that must be considered,” including sea level rise from melting polar ice sheets. It noted that some
11 scientific groups were concerned “that once the effects are measurable, they might not be
12 reversible.”⁷³

13 90. In a summary of Exxon’s climate modeling research from 1982, Director of
14 Exxon’s Theoretical and Mathematical Sciences Laboratory Roger Cohen wrote that “the time
15 required for doubling of atmospheric CO₂ depends on future world consumption of fossil fuels.”
16 Cohen concluded that Exxon’s own results were “consistent with the published predictions of more
17 complex climate models” and “in accord with the scientific consensus on the effect of increased
18 atmospheric CO₂ on climate.”⁷⁴

19 91. At the fourth biennial Maurice Ewing Symposium at the Lamont-Doherty
20 Geophysical Observatory in October 1982, attended by members of API, Exxon Research and
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22 ⁷⁰ M. B. Glaser, Exxon Memo to Management about “CO₂ ‘Greenhouse’ Effect”, Exxon
23 Research and Engineering Company (Nov. 12, 1982),
24 <http://insideclimatenews.org/sites/default/files/documents/1982%20Exxon%20Primer%20on%20CO2%20Greenhouse%20Effect.pdf>.

25 ⁷¹ Id.

26 ⁷² Id.

27 ⁷³ Id.

28 ⁷⁴ Roger W. Cohen, Exxon Memo summarizing findings of research in climate modeling, Exxon
Research and Engineering Company (Sept. 2, 1982),
[https://insideclimatenews.org/sites/default/files/documents/%2522Consensus%2522%20on%20CO2%20Impacts%20\(1982\).pdf](https://insideclimatenews.org/sites/default/files/documents/%2522Consensus%2522%20on%20CO2%20Impacts%20(1982).pdf).

1 Engineering Company president E.E. David delivered a speech titled: “Inventing the Future:
2 Energy and the CO₂ ‘Greenhouse Effect.’”⁷⁵ His remarks included the following statement: “[i]t
3 is ironic that the biggest uncertainties about the CO₂ buildup are not in predicting what the climate
4 will do, but in predicting what people will do.”

5 92. Throughout the early 1980s, at Exxon’s direction, Exxon climate scientist Henry
6 Shaw forecasted emissions of CO₂ from fossil fuel use. Those estimates were incorporated into
7 Exxon’s 21st century energy projections and were distributed among Exxon’s various divisions.
8 Shaw’s conclusions included an expectation that atmospheric CO₂ concentrations would double in
9 2090 per the Exxon model, with an attendant 2.3–5.6° F average global temperature increase. Shaw
10 compared his model results to those of the U.S. EPA, the National Academy of Sciences, and the
11 Massachusetts Institute of Technology, indicating that the Exxon model predicted a longer delay
12 than any of the other models, although its temperature increase prediction was in the mid-range of
13 the four projections.⁷⁶

14 93. During the 1980s, many Defendants formed their own research units focused on
15 climate modeling. The API, including the API CO₂ Task Force, provided a forum for Defendants
16 to share their research efforts and corroborate their findings related to anthropogenic greenhouse
17 gas emissions.⁷⁷

18 94. During this time, Defendants’ statements express an understanding of their
19 obligation to consider and mitigate the externalities of reckless promotion, marketing, and sale of
20 their fossil fuel products. For example, in 1988, Richard Tucker, the president of Mobil Oil,
21 presented at the American Institute of Chemical Engineers National Meeting, the premier
22 educational forum for chemical engineers, where he stated:

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26 ⁷⁵ E. E. David, Jr., Inventing the Future: Energy and the CO₂ Greenhouse Effect: Remarks at the
27 Fourth Annual Ewing Symposium, Tenafly, NJ (1982),
<http://sites.agu.org/publications/files/2015/09/ch1.pdf>.

28 ⁷⁶ Banerjee (2015), supra note 63.

⁷⁷ Banerjee (2015), supra note 53.

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

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

10 Prevention means engineering a new generation of fuels, lubricants and chemical
11 products. . . . Prevention means designing catalysts and processes that minimize
12 or eliminate the production of unwanted byproducts. . . . Prevention on a global
13 scale may even require a dramatic reduction in our dependence on fossil fuels—
14 and a shift towards solar, hydrogen, and safe nuclear power. It may be possible
15 that—just possible—that the energy industry will transform itself so completely
16 that observers will declare it a new industry. . . . Brute force, low-tech responses
17 and money alone won’t meet the challenges we face in the energy industry.⁷⁸

18 95. In 1987, Shell published an internal “brief for companies of the Royal Dutch/Shell
19 Group” titled “Air pollution: an oil industry perspective.” In this report, the company described
20 the greenhouse effect as occurring “largely as a result of burning fossil fuels and deforestation.”⁷⁹
21 Shell further acknowledged the “concern that further increases in carbon dioxide levels could cause
22 climatic changes, notably a rise in overall temperature, having major environmental, social and
23 economic consequences.”⁸⁰

24 96. In 1988, the Shell Greenhouse Effect Working Group issued a confidential internal
25 report, “The Greenhouse Effect,” which acknowledged global warming’s anthropogenic nature:
26 “Man-made carbon dioxide, released into and accumulated in the atmosphere, is believed to warm
27 the earth through the so-called greenhouse effect.” The authors also noted the burning of fossil
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⁷⁸ Richard E. Tucker, High Tech Frontiers in the Energy Industry: The Challenge Ahead, AIChE National Meeting (Nov. 30, 1988), <https://hdl.handle.net/2027/pur1.32754074119482?urlappend=%3Bseq=522>.

⁷⁹ Shell Briefing Service, Air pollution: an oil industry perspective (1987), at 4, available at <https://www.documentcloud.org/documents/24359057-shell-briefing-service-air-pollution-an-oil-industry-perspective-nr1-1987>.

⁸⁰ Id. at 5.

1 fuels as a primary driver of CO₂ buildup and warned that warming could “create significant
2 changes in sea level, ocean currents, precipitation patterns, regional temperature and weather.”
3 They further pointed to the potential for “direct operational consequences” of sea level rise on
4 “offshore installations, coastal facilities and operations (e.g. platforms, harbors, refineries,
5 depots).”⁸¹

6 97. Similar to early warnings by Exxon scientists, the 1988 Shell report noted that “by
7 the time the global warming becomes detectable it could be too late to take effective
8 countermeasures to reduce the effects or stabilize the situation.” The authors mentioned the need
9 to consider policy changes on multiple occasions, noting that “the potential implications for the
10 world are . . . so large that policy options need to be considered much earlier” and that research
11 should be “directed more to the analysis of policy and energy options than to studies of what we
12 will be facing exactly.”⁸²

13 98. In 1989, Esso Resources Canada (ExxonMobil) commissioned a report on the
14 impacts of climate change on existing and proposed natural gas facilities in the Mackenzie River
15 Valley and Delta, including extraction facilities on the Beaufort Sea and a pipeline crossing
16 Canada’s Northwest Territory.⁸³ It reported that “large zones of the Mackenzie Valley could be
17 affected dramatically by climatic change” and that “the greatest concern in Norman Wells [oil
18 town in North West Territories, Canada] should be the changes in permafrost that are likely to
19 occur under conditions of climate warming.” The report concluded that, in light of climate models
20 showing a “general tendency towards warmer and wetter climate,” operation of those facilities
21 would be compromised by increased precipitation, increase in air temperature, changes in
22
23

24 ⁸¹ Shell Internationale Petroleum, Greenhouse Effect Working Group, The Greenhouse Effect
25 (May 1988) at 1, 27, available at <https://www.documentcloud.org/documents/4411090-Document3.html#document/p9/a411239>.

26 ⁸² Id. at 1, 6.

27 ⁸³ Stephen Lonergan and Kathy Young, An Assessment of the Effects of Climate Warming on
28 Energy Developments in the Mackenzie River Valley and Delta, Canadian Arctic, Energy
Exploration & Exploitation, Vol. 7, Issue 5 (Oct. 1, 1989),
<http://journals.sagepub.com/doi/abs/10.1177/014459878900700508>.

1 permafrost conditions, and significantly, sea level rise and erosion damage.⁸⁴ The authors
2 recommended factoring these eventualities into future development planning and also warned that
3 “a rise in sea level could cause increased flooding and erosion damage on Richards Island.”

4 99. In the mid-1990s, ExxonMobil, Shell and Imperial Oil (ExxonMobil) jointly
5 undertook the Sable Offshore Energy Project in Nova Scotia. The project’s own Environmental
6 Impact Statement declared: “The impact of a global warming sea-level rise may be particularly
7 significant in Nova Scotia. The long-term tide gauge records at a number of locations along the
8 N.S. coast have shown sea level has been rising over the past century For the design of coastal
9 and offshore structures, an estimated rise in water level, due to global warming, of 0.5 m [1.64
10 feet] may be assumed for the proposed project life (25 years).”⁸⁵

11 100. Climate change research conducted by Defendants and their industry associations
12 frequently acknowledged uncertainties in their climate modeling—those uncertainties, however,
13 were merely with respect to the magnitude and timing of climate impacts resulting from fossil fuel
14 consumption, not that significant changes would eventually occur. Defendants’ researchers and
15 the researchers at their industry associations harbored little doubt that climate change was
16 occurring and that fossil fuel products were, and are, the primary cause.

17 101. In 1991, Ken Croasdale, a senior ice researcher for Exxon’s subsidiary Imperial
18 Oil, stated to an audience of engineers that greenhouse gas concentrations are rising “due to the
19 burning of fossil fuels. Nobody disputes this fact.”⁸⁶

20 102. Defendants also meticulously examined plausible scenarios if they failed to act in
21 the face of their internal knowledge. For instance, Shell evaluated in a 1989 internal confidential
22 planning document the issue of “climate change – the greenhouse effect, global warming,” which
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25 ⁸⁴ Id.

26 ⁸⁵ ExxonMobil, Sable Project, Development Plan, Volume 3 – Environmental Impact Statement
<http://soep.com/about-the-project/development-plan-application/>.

27 ⁸⁶ Jerving et al., Special Report: What Exxon Knew About Global Warming’s Impact on the
28 Arctic, L.A. Times (Oct. 10, 2015), <https://www.latimes.com/business/la-na-advexxon-arctic-20151011-story.html>.

1 the document identified as “the most important issue for the energy industry.”⁸⁷ The document
2 compared a scenario in which society “addresses the potential problem” with one in which it does
3 not. Acknowledging that “[c]hanging emission levels . . . and changing atmospheric CO2
4 concentration has been likened to turning around a VLCC [very large crude carrier],” even
5 “substantial efforts” by 2010 would have “hardly any impact on CO2 concentration.” In later years,
6 however, the impacts are “strikingly different”; early efforts “will not prevent the problem arising,
7 but . . . could mitigate the problem.” The document described the consequences of failing to
8 address the problem right away:

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

15 The changes would, however, most impact on humans. In earlier times, man was
16 able to respond with his feet. Today, there is no place to go because people already
17 stand there. Perhaps those in industrial countries could cope with a rise in sea level
18 (the Dutch examples) but for poor countries such defences are not possible. The
19 potential refugee problem . . . could be unprecedented. Africans would push into
20 Europe, Chinese into the Soviet Union, Latins into the United States, Indonesians
21 into Australia. Boundaries would count for little – overwhelmed by the numbers.
22 Conflicts would abound. Civilization could prove a fragile thing.⁸⁸

23 103. In another 1989 confidential internal planning document, Shell anticipated that
24 “public/media pressures” to “adopt[] environmental programmes” such as “much tighter targets
25 for CO₂ emissions” could prompt “effective consumer responses” that “will lead to intense and
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27 ⁸⁷ Shell, Scenarios 1989–2010: Challenge and Response (Oct. 1989), at 33, available at
28 <https://www.documentcloud.org/documents/23735737-1989-oct-confidential-shell-group-planning-scenarios-1989-2010-challenge-and-response-disc-climate-refugees-and-shift-to-non-fossil-fuels>.

⁸⁸ Id. at 36.

1 unpredictable pressures on business.”⁸⁹ The scenario envisioned that “[c]oncerns about global
2 warming and depletion will depress production of fossil fuels, their market share declining as
3 renewables are actively promoted,” given that “[w]here there can be real consumer choice it will
4 be a dominant force, especially where interest is heightened by obvious environmental impact.”⁹⁰
5

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

8 In 2010, a series of violent storms causes extensive damage to the eastern coast of
9 the U.S. Although it is not clear whether the storms are caused by climate change,
10 people are not willing to take further chances. The insurance industry refuses to
11 accept liability, setting off a fierce debate over who is liable: the insurance industry
12 or the government. After all, two successive IPCC reports since 1993 have
13 reinforced the human connection to climate change . . . Following the storms, a
14 coalition of environmental NGOs brings a class-action suit against the US
15 government and fossil-fuel companies on the grounds of neglecting what scientists
(including their own) have been saying for years: that something must be done. A
social reaction to the use of fossil fuels grows, and individuals become ‘vigilante
environmentalists’ in the same way, a generation earlier, they had become fiercely
anti-tobacco. Direct-action campaigns against companies escalate. Young
consumers, especially, demand action.⁹¹

16 105. Fossil fuel companies did not just consider climate change impacts in scenarios;
17 they also incorporated those impacts in their on-the-ground planning. In the mid-1990s, Exxon,
18 Shell, and Imperial Oil (Exxon) jointly undertook the Sable Offshore Energy Project in Nova
19 Scotia. The project’s own Environmental Impact Statement declared: “The impact of a global
20 warming sea-level rise may be particularly significant in Nova Scotia. The long-term tide gauge
21 records at a number of locations along the N.S. coast have shown sea level has been rising over
22 the past century. . . . For the design of coastal and offshore structures, an estimated rise in water
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25 ⁸⁹ See Shell UK, UK Scenarios 1989 (Nov. 1989), at 31, 34, available at
26 <https://embed.documentcloud.org/documents/24359062-snippets-of-confidential-shell-uk-november-1989-scenarios>.

27 ⁹⁰ Id. at 34.

28 ⁹¹ Royal Dutch/Shell Group, Group Scenarios 1998–2020 (1998), at 115, 122,
<http://www.documentcloud.org/documents/4430277-27-1-Compiled.html>.

1 level, due to global warming, of 0.5 m [1.64 feet] may be assumed for the proposed project life
2 (25 years).”⁹²

3 106. Despite the overwhelming information about the threats to people and the planet
4 posed by continued use of their fossil fuel products, Defendants failed to act as they reasonably
5 should have to mitigate or avoid those dire adverse impacts. Defendants instead adopted the
6 position, as described below, that they had a license to continue the unfettered pursuit of profits
7 from those products—including by intentionally misleading and deceiving the public regarding
8 these threats. This position was an abdication and contravention of Defendants’ responsibility to
9 consumers and the public, including the City, to act on their unique knowledge of the reasonably
10 foreseeable hazards of reckless promotion and consumption of their fossil fuel products.

11 **C. Despite Their Early Knowledge That Global Warming Was Real and Posed**
12 **Grave Threats, Defendants Did Not Disclose Known Harms Associated with**
13 **the Extraction, Promotion, and Consumption of Their Fossil Fuel Products**
14 **and Instead Affirmatively Acted to Obscure Those Harms and Engaged in a**
15 **Campaign to Deceptively Protect and Expand the Use of their Fossil Fuel**
16 **Products.**

17 107. Notwithstanding Defendants’ early knowledge of climate change, Defendants have
18 engaged in advertising and communications campaigns intended to promote their fossil fuel
19 products by downplaying the harms and risks of global warming. Initially, the campaigns tried to
20 show that global warming was not occurring. More recently, the campaigns have sought to
21 minimize the risks and harms from global warming. The deception campaigns had the purpose and
22 effect of inflating and sustaining the market for fossil fuels, which—in turn—drove up greenhouse
23 gas emissions, accelerated global warming, delayed the energy economy’s transition to a lower-
24 carbon future, and brought about devastating climate change impacts to Santa Cruz and its
25 Disadvantaged Communities⁹³—sometimes referred to as environmental justice communities.

26 108. By 1988, Defendants had amassed a compelling body of knowledge about the role
27 of anthropogenic greenhouse gases, and specifically those emitted from the use of Defendants’
28

27 ⁹² ExxonMobil, Sable Project Development Plan, vol. 3, Environmental Impact Statement (Feb.
1996), at 4-77.

28 ⁹³ See City of Santa Cruz, Climate Action Plan, at 20 (Oct. 2016).

1 fossil fuel products, in causing global warming and sea level rise and the attendant consequences
2 for human communities and the environment. On notice that their deception and products were
3 causing global climate change and dire effects on the planet, Defendants were faced with the
4 decision of whether to take steps to limit the damages their fossil fuel products were causing and
5 would continue to cause for virtually every one of Earth's inhabitants, including the People of the
6 State of California, and the City of Santa Cruz and its residents.

7 109. Defendants at any time before or thereafter could and should reasonably have taken
8 any of a number of steps to mitigate the damage caused by their deception and fossil fuel products,
9 and their own comments reveal an awareness of what some of these steps may have been. For
10 example, Defendants should have issued reasonable warnings to consumers and the public of the
11 dangers known to Defendants of the consumption of their fossil fuel products. Doing so would
12 have allowed consumers to act sooner and faster to reduce their fossil fuel consumption, and would
13 have stimulated consumer demand for non-carbon energy alternatives whose use does not imperil
14 the Earth. This process is now stutteringly underway, but was wrongfully delayed by Defendants'
15 deception and continued downplaying of the reality and severity of climate change—and of fossil
16 fuels' role in causing it.

17 110. Several key events during the period between 1988 and 1992 prompted Defendants
18 to pivot from researching and discussing climate change internally to affirmatively deceiving
19 consumers and the public about the climatic dangers of fossil fuels. As climate change—and the
20 role of fossil fuels in causing it—became an increasingly prominent concern, Defendants realized
21 that accurate consumer and public understanding of the dangers of fossil fuels would pose a
22 paramount threat to their business model, their assets, and their profits. Key events that precipitated
23 the shift from research to deception included the following:

24 a. In 1988, National Aeronautics and Space Administration (NASA) scientists
25 confirmed that human activities were actually contributing to global warming.⁹⁴ On June 23 of that
26 year, NASA scientist James Hansen's presentation of this information to Congress engendered
27

28 ⁹⁴ See Frumhoff et al. (2015), *supra* note 26, at 161.

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

3 b. On July 28, 1988, Senator Robert Stafford and four bipartisan co-sponsors
4 introduced S. 2666, “The Global Environmental Protection Act,” to regulate CO₂ and other
5 greenhouse gases. Four more bipartisan bills to significantly reduce CO₂ pollution were introduced
6 over the following ten weeks, and in August, U.S. Presidential candidate George H.W. Bush
7 pledged that his presidency would “combat the greenhouse effect with the White House effect.”⁹⁵
8 Political will in the United States to reduce anthropogenic greenhouse gas emissions and mitigate
9 the harms associated with Defendants’ fossil fuel products was gaining momentum.

10 c. In December 1988, the United Nations formed the Intergovernmental Panel
11 on Climate Change (IPCC), a scientific panel dedicated to providing the world’s governments with
12 an objective, scientific analysis of climate change and its environmental, political, and economic
13 impacts.

14 d. In 1990, the IPCC published its First Assessment Report on anthropogenic
15 climate change,⁹⁶ in which it concluded that (1) “there is a natural greenhouse effect which already
16 keeps the Earth warmer than it would otherwise be,” and (2) that

17 emissions resulting from human activities are substantially
18 increasing the atmospheric concentrations of the greenhouse gases
19 carbon dioxide, methane, chlorofluorocarbons (CFCs) and nitrous
20 oxide. These increases will enhance the greenhouse effect, resulting
21 on average in an additional warming of the Earth’s surface. The
22 main greenhouse gas, water vapour, will increase in response to
23 global warming and further enhance it.⁹⁷

25 ⁹⁵ N.Y. Times, The White House and the Greenhouse, May 9, 1998,
26 <http://www.nytimes.com/1989/05/09/opinion/the-white-house-and-the-greenhouse.html>.

27 ⁹⁶ See IPCC, Reports,
http://www.ipcc.ch/publications_and_data/publications_and_data_reports.shtml.

28 ⁹⁷ IPCC, Climate Change: The IPCC Scientific Assessment, Policymakers Summary (1990),
http://www.ipcc.ch/ipccreports/far/wg_I/ipcc_far_wg_I_spm.pdf.

1 The IPCC reconfirmed these conclusions in a 1992 supplement to the First
2 Assessment report.⁹⁸

3 e. The United Nations began preparation for the 1992 Earth Summit in Rio de
4 Janeiro, Brazil, a major, newsworthy gathering of 172 world governments, of which 116 sent their
5 heads of state. The Summit resulted in the United Nations Framework Convention on Climate
6 Change (UNFCCC), an international environmental treaty providing protocols for future
7 negotiations aimed at “stabiliz[ing] greenhouse gas concentrations in the atmosphere at a level that
8 would prevent dangerous anthropogenic interference with the climate system.”⁹⁹

9 111. But rather than issuing warnings commensurate with their own understanding of
10 the risks posed by the expected and intended uses of fossil fuel products, Defendants embarked on
11 a decades-long series of campaigns designed to maximize continued dependence on their products.

12 112. Defendants’ campaigns, which focused on concealing, discrediting, and/or
13 misrepresenting information that tended to support restricting consumption of (and thereby
14 decreasing demand for) Defendants’ fossil fuel products, took several forms. The campaigns
15 enabled Defendants to accelerate their business practice of exploiting fossil fuel reserves, and to
16 concurrently externalize the social and environmental costs of their fossil fuel products. These
17 activities directly contradicted Defendants’ internal recognition that the science of anthropogenic
18 climate change was clear and that the greatest uncertainties involved responsive human behavior,
19 not scientific understanding of the issue.

20 113. Defendants—both on their own and jointly through industry and front groups such
21 as API, ICE, and the GCC—funded, conceived, planned, and carried out a sustained and
22 widespread campaign of denial and disinformation about the existence of climate change and their
23 products’ contribution to it. The campaign included a long-term pattern of direct
24 misrepresentations and material omissions to consumers, as well as a plan to influence consumers

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26 ⁹⁸ IPCC, 1992 IPCC Supplement to the First Assessment Report (1992),
27 http://www.ipcc.ch/publications_and_data/publications_ipcc_90_92_assessments_far.shtml.

28 ⁹⁹ United Nations, United Nations Framework Convention on Climate Change, Article 2 (1992),
<https://unfccc.int/resource/docs/convkp/conveng.pdf>.

1 indirectly by affecting public opinion through the dissemination of misleading research to the
2 press, government, and academia. Although Defendants were competitors in the marketplace, they
3 combined and collaborated with each other and with API on this public campaign to misdirect and
4 stifle public knowledge in order to increase sales and protect profits. The effort included promoting
5 hazardous fossil fuel products through advertising campaigns that failed to warn of the existential
6 risks associated with the use of those products, and that were designed to influence consumers to
7 continue using Defendants' fossil fuel products irrespective of those products' damage to
8 communities and the environment.

9 114. In a secretly-recorded video from 2021, an Exxon executive stated:

10 Did we aggressively fight against some of the science? Yes.

11 Did we join some of these shadow groups to work against some of the early efforts?

12 Yes, that's true. There's nothing illegal about that.

13 We were looking out for our investments. We were looking out for our
shareholders.”¹⁰⁰

14 115. In 1988, Joseph Carlson, an Exxon public affairs manager, described the “Exxon
15 Position,” which included among others, two important messaging tenets: (1) “[e]mphasize the
16 uncertainty in scientific conclusions regarding the potential enhanced Greenhouse Effect;” and (2)
17 “[r]esist the overstatement and sensationalization [sic] of potential greenhouse effect which could
18 lead to noneconomic development of non-fossil fuel resources.”¹⁰¹

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

22 [O]ur research [at Exxon] was consistent with findings of the United Nations
23 Intergovernmental Panel on Climate Change on human impacts of fossil fuel
24

25 ¹⁰⁰ Jeff Brady, Exxon Lobbyist Caught on Video Talking About Undermining Biden's Climate
26 Push, NPR (July 1, 2021, 11:37 AM ET), <https://www.npr.org/2021/07/01/1012138741/exxon-lobbyist-caught-on-video-talks-about-undermining-bidens-climate-push>.

27 ¹⁰¹ Joseph M. Carlson, Exxon Memo on “The Greenhouse Effect” (Aug. 3, 1988),
28 <https://assets.documentcloud.org/documents/3024180/1998-Exxon-Memo-on-the-Greenhouse-Effect.pdf>.

1 burning, which is that they are increasingly having a perceptible influence on
2 Earth's climate. . . . If anything, adverse climate change from elevated CO₂ is
3 proceeding faster than the average of the prior IPCC mild projections and fully
4 consistent with what we knew back in the early 1980's at Exxon. . . . I was greatly
5 distressed by the climate science denial program campaign that Exxon's front office
6 launched around the time I stopped working as a consultant—but not collaborator—
7 for Exxon. The advertisements that Exxon ran in major newspapers raising doubt
8 about climate change were contradicted by the scientific work we had done and
9 continue to do. Exxon was publicly promoting views that its own scientists knew
10 were wrong, and we knew that because we were the major group working on this.¹⁰²

11 117. Likewise, Shell “shaped a series of influential industry-backed publications that
12 downplayed or omitted key risks; emphasized scientific uncertainties; and pushed for more fossil
13 fuels, particularly coal.”¹⁰³ In 1992, for instance, Shell released a publication for wide external
14 distribution purporting to describe the “Basic Scientific Facts” of the “Potential Augmented
15 Greenhouse Effect.”¹⁰⁴ This document downplayed the scientific consensus (that Shell internally
16 acknowledged) by referring to the “relatively few established scientific fundamentals” regarding
17 the causes of climate change.¹⁰⁵ It also misleadingly suggested that a “particular cause” of global
18 warming was “difficult” to identify, even though Shell had identified the use of its products as a
19 significant contributor to the greenhouse effect in the previous decade.¹⁰⁶ (For example, in 1985,
20 a Shell UK environmental scientist had published an article laying out the scientific fact that

21 ¹⁰² Examining the Oil Industry's Efforts to Suppress the Truth About Climate Change, Hearing
22 Before the Subcomm. on Civil Rights and Civil Liberties of the Comm. on Oversight and
23 Reform, 116th Cong. 7–8 (Oct. 23, 2019) (statement of Martin Hoffert, Former Exxon
24 Consultant, Professor Emeritus, Physics, N.Y. University),
25 [https://oversight.house.gov/legislation/hearings/examining-the-oil-industry-s-efforts-to-suppress-](https://oversight.house.gov/legislation/hearings/examining-the-oil-industry-s-efforts-to-suppress-the-truth-about-climate-change)
26 [the-truth-about-climate-change](https://oversight.house.gov/legislation/hearings/examining-the-oil-industry-s-efforts-to-suppress-the-truth-about-climate-change).

27 ¹⁰³ Matthew Green, Lost Decade: How Shell Downplayed Early Warnings Over Climate Change,
28 DESMOG (Mar. 31, 2023, 21:00 PDT), [https://www.desmog.com/2023/03/31/lost-decade-how-](https://www.desmog.com/2023/03/31/lost-decade-how-shell-downplayed-early-warnings-over-climate-change/)
[shell-downplayed-early-warnings-over-climate-change/](https://www.desmog.com/2023/03/31/lost-decade-how-shell-downplayed-early-warnings-over-climate-change/).

¹⁰⁴ Jan Kuyper, Shell Group Planning, Business Environment Occasional Paper, Potential
Augmented Greenhouse Effect: Basic Scientific Facts (Sept. 1992), at 3,
[https://www.documentcloud.org/documents/24359060-1992-internal-shell-group-planning-](https://www.documentcloud.org/documents/24359060-1992-internal-shell-group-planning-report-potential-augmented-greenhouse-effect-and-depletion-of-the-ozone-layer)
[report-potential-augmented-greenhouse-effect-and-depletion-of-the-ozone-layer](https://www.documentcloud.org/documents/24359060-1992-internal-shell-group-planning-report-potential-augmented-greenhouse-effect-and-depletion-of-the-ozone-layer).

¹⁰⁵ Id. at 5.

¹⁰⁶ Id.

1 “[b]urning of fossil fuels which have taken millions of years to form has effectively upset the
2 balance [of the Carbon Cycle] leading to an increase in CO₂ in the atmosphere”¹⁰⁷.

3 118. A 1994 Shell report entitled “The Enhanced Greenhouse Effect: A Review of the
4 Scientific Aspects” similarly emphasized scientific uncertainty, noting, for example, that “the
5 postulated link between any observed temperature rise and human activities has to be seen in
6 relation to natural variability, which is still largely unpredictable.”¹⁰⁸

7 119. In 1996, Exxon released a publication called “Global Warming: Who’s Right?
8 Facts about a debate that’s turned up more questions than answers.” In the publication’s preface,
9 Exxon CEO Lee Raymond stated that “taking drastic action immediately is unnecessary since
10 many scientists agree there’s ample time to better understand the climate system.” The subsequent
11 article described the greenhouse effect as “unquestionably real and definitely a good thing,” while
12 ignoring the severe consequences that would result from the influence of the increased CO₂
13 concentration on the Earth’s climate. Instead, it characterized the greenhouse effect as simply
14 “what makes the earth’s atmosphere livable.” Directly contradicting their own internal reports and
15 peer-reviewed science, the article ascribed the rise in temperature since the late 19th century to
16 “natural fluctuations that occur over long periods of time” rather than to the anthropogenic
17 emissions that Exxon and other scientists had confirmed were responsible. The article also falsely
18 challenged the computer models that projected the future impacts of fossil fuel product
19 consumption, including those developed by Exxon’s own employees, as having been “proved to
20 be inaccurate.” The article contradicted the numerous reports circulated among Exxon’s staff, and
21 by API, by stating that “the indications are that a warmer world would be far more benign than
22 many imagine . . . moderate warming would reduce mortality rates in the US, so a slightly warmer
23 climate would be more healthful.” Raymond concluded his preface by attacking the basis for
24

25 ¹⁰⁷ T.G. Wilkinson, Why and How to Control Energy Pollution: Can Harmonisation Work?, 8
26 Conservation & Recycling 7, 19 (1985), [https://www.documentcloud.org/documents/24359067-
1985-03-why-and-how-to-control-energy-pollution-by-tg-wilkinson-shell](https://www.documentcloud.org/documents/24359067-1985-03-why-and-how-to-control-energy-pollution-by-tg-wilkinson-shell).

27 ¹⁰⁸ P. Langcake, Shell Internationale Petroleum, The Enhanced Greenhouse Effect: A Review of
28 the Scientific Aspects (Dec. 1994), [https://www.documentcloud.org/documents/4411099-
Document11.html#document/p15/a411511](https://www.documentcloud.org/documents/4411099-Documents11.html#document/p15/a411511).

1 reducing consumption of his company’s fossil fuel products as “drawing on bad science, faulty
2 logic, or unrealistic assumptions”—despite the important role that Exxon’s own scientists had
3 played in compiling those same scientific underpinnings.¹⁰⁹

4 120. Imperial Oil CEO Robert Peterson falsely denied the established connection
5 between Defendants’ fossil fuel products and anthropogenic climate change in the Summer 1998
6 Imperial Oil Review, “A Cleaner Canada”:

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

12 There is absolutely no agreement among climatologists on whether or not the planet
13 is getting warmer, or, if it is, on whether the warming is the result of man-made
14 factors or natural variations in the climate. . . . I feel very safe in saying that the
15 view that burning fossil fuels will result in global climate change remains an
16 unproved hypothesis.¹¹⁰

17 121. Exxon and Mobil (ExxonMobil) paid for a series of “advertorials,” advertisements
18 located in the editorial section of The New York Times and meant to look like editorials rather
19 than paid ads. These ads discussed various aspects of the public discussion of climate change and
20 sought to undermine the justifications for tackling greenhouse gas emissions as unsettled science.
21 For example, the 1993 Mobil advertorial below argued that “what’s wrong with so much of the
22 global warming rhetoric” is “[t]he lack of solid scientific data,” and quoted a purportedly neutral
23 scientific expert who insisted that ““there is a large amount of empirical evidence suggesting that
24 the apocalyptic vision is in error and that the highly touted greenhouse disaster is most
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26 ¹⁰⁹ Exxon Corp., Global warming: who’s right?, (1996),
27 <https://www.documentcloud.org/documents/2805542-Exxon-Global-Warming-Whos-Right.html>.

28 ¹¹⁰ Robert Peterson, A Cleaner Canada in Imperial Oil Review (1998),
<http://www.documentcloud.org/documents/2827818-1998-Imperial-Oil-Robert-Peterson-A-Cleaner-Canada.html>.

1 improbable.”¹¹¹ It also quoted another purportedly neutral scientist who asserted that “the net
2 impact [of a modest warming] may yet be beneficial.”

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¹¹¹ Mobil, Apocalypse No, N.Y. Times, A19 (Feb. 25, 1993),
<https://www.documentcloud.org/documents/357243-1993-2-25-mob-nyt-apocalypse-no>.

Apocalypse no

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

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

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

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

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

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

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

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

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

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

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

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

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

Perhaps the sky isn't falling, after all.

Mobil

Figure 6: "Apocalypse No" advertorial

1 122. The first of those purportedly neutral scientific experts, Robert C. Balling,
2 acknowledged five years after the advertorial ran that he had received \$408,000 in research funding
3 from the fossil fuel industry over the past decade, including from ExxonMobil.¹¹² The second, S.
4 Fred Singer, had previously been funded by tobacco companies to spread doubt about the scientific
5 claim that exposure to second-hand smoke causes cancer.¹¹³

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

- 9 • “We don’t know enough about the factors that affect global warming and the
10 degree to which—if any—that man-made emissions (namely, carbon dioxide)
contribute to increases in Earth’s temperature.”¹¹⁴
- 11 • “[G]reenhouse-gas emissions, which have a warming effect, are offset by another
12 combustion product—particulates—which leads to cooling.”¹¹⁵
- 13 • “Even after two decades of progress, climatologists are still uncertain how—or even
14 if—the buildup of man-made greenhouse gases is linked to global warming. It could
15 be at least a decade before climate models will be able to link greenhouse warming
unambiguously to human actions. Important answers on the science lie ahead.”¹¹⁶
- 16 • “[I]t is impossible for scientists to attribute the recent small surface temperature
17 increases to human causes.”¹¹⁷

18
19 ¹¹² DeSmog, Robert C. Balling, Jr., <https://www.desmog.com/robert-c-balling-jr/>.

20 ¹¹³ Naomi Oreskes & Erik M. Conway, Merchants of Doubt: How a Handful of Scientists
21 Obscured the Truth on Issues from Tobacco Smoke to Global Warming, 150–54 (Bloomsbury
Press, 1st ed. 2011)

22 ¹¹⁴ Mobil, Climate change: a prudent approach, N.Y. Times (Nov. 13, 1997)
23 <https://www.documentcloud.org/documents/705548-mob-nyt-1997-11-13-climateprudentapproach.html>.

24 ¹¹⁵ Mobil, Less Heat, More Light on Climate Change (July 18, 1996),
25 <https://www.documentcloud.org/documents/705544-mob-nyt-1996-jul-18-lessheatmorelight.html>.

26 ¹¹⁶ Mobil, Climate Change: Where We Come Out, N.Y. Times (Nov. 20, 1997),
27 <https://www.documentcloud.org/documents/705549-mob-nyt-1997-11-20-ccwherewecomeout.html>.

28 ¹¹⁷ ExxonMobil, Unsettled Science (Mar. 23, 2000), reproduced in
<https://www.theguardian.com/environment/2021/nov/18/the-forgotten-oil-ads-that-told-us-climate-change-was-nothing>.

- 1 • “Within a decade, science is likely to provide more answers on what factors affect
2 global warming, thereby improving our decision-making. We just don’t have this
3 information today. Answers to questions about climate change will require more
4 reliable measurements of temperature at many places on Earth, better understanding
of clouds and ocean currents along with greater computer power.”¹¹⁸

5 124. A quantitative analysis of Exxon’s climate communications between 1989 and
6 2004 found that, while 83% of the company’s peer-reviewed papers and 80% of its internal
7 documents acknowledged the reality and human origins of climate change, 81% of its advertorials
8 communicated doubt about those conclusions.¹¹⁹ Exxon’s tendency to contradict its own peer-
9 reviewed research in statements meant for lay audiences also appeared at a year-to-year scale.
10 Based on this “statistically significant” discrepancy between internal and external
11 communications, the authors concluded that “ExxonMobil misled the public.”¹²⁰

12 125. Defendants—individually and through API, other trade associations, and various
13 front groups—mounted a deceptive public campaign in order to continue wrongfully promoting
14 and marketing their fossil fuel products, despite their own knowledge and the growing national
15 and international scientific consensus about the hazards of doing so.

16 126. One of the key organizations formed by Defendants to coordinate the fossil fuel
17 industry’s response to the world’s growing awareness of climate change was the International
18 Petroleum Industry Environmental Conservation Association (“IPIECA”). In 1987, the IPIECA
19 formed a “Working Group on Global Climate Change” chaired by Duane LeVine, Exxon’s
20 manager for science and strategy development. The Working Group also included Brian Flannery
21 from Exxon, Leonard Bernstein from Mobil, Terry Yosie from API, and representatives from BP,
22 Shell, and Texaco (Chevron). In 1990, the Working Group sent a strategy memo created by LeVine

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25 ¹¹⁸ Mobil, Science: What We Know and Don’t Know, (1997), reproduced in
[https://www.theguardian.com/environment/2021/nov/18/the-forgotten-oil-ads-that-told-us-
climate-change-was-nothing](https://www.theguardian.com/environment/2021/nov/18/the-forgotten-oil-ads-that-told-us-climate-change-was-nothing).

26 ¹¹⁹ Geoffrey Supran & Naomi Oreskes, Assessing ExxonMobil’s Climate Change
27 Communications (1977–2014), 12 Envtl. Research Letters, IOP Publishing Ltd. 12 (2017),
<https://iopscience.iop.org/article/10.1088/1748-9326/aa815f/pdf>.

28 ¹²⁰ Id.

1 to hundreds of oil companies around the world, including Defendants. This memo explained that,
2 to forestall a global shift away from burning fossil fuels for energy, the industry should emphasize
3 uncertainties in climate science, and the need for further research.¹²¹

4 127. In 1991, the Information Council for the Environment (“ICE”), whose members
5 included affiliates, predecessors and/or subsidiaries of Defendants, Pittsburg and Midway Coal
6 Mining (Chevron), and Island Creek Coal Company (Occidental), launched a national climate
7 change science denial campaign with full-page newspaper ads, radio commercials, a public
8 relations tour schedule, “mailers,” and research tools to measure campaign success. Included
9 among the campaign strategies was to “reposition global warming as theory (not fact).” Its target
10 audience included older less-educated males who are “predisposed to favor the ICE agenda, and
11 likely to be even more supportive of that agenda following exposure to new info.”¹²²

12 128. An implicit goal of ICE’s advertising campaign was to change public opinion. A
13 memo from Richard Lawson, president of the National Coal Association noted that “[p]ublic
14 opinion polls reveal that 60% of the American people already believe global warming is a serious
15 environmental problem. Our industry cannot sit on the sidelines in this debate.”¹²³

16 129. The following images are examples of ICE-funded print advertisements
17 challenging the validity of climate science, which sought to obscure the scientific consensus on
18 anthropogenic climate change in order to inflate consumer demand for fossil fuels:¹²⁴

23 ¹²¹ Benjamin A. Franta, Big Carbon’s Strategic Response to Global Warming, 1950–2020, 140
24 (2022), <https://purl.stanford.edu/hq437ph9153>.

25 ¹²² Id.

26 ¹²³ Naomi Oreskes, My Facts Are Better Than Your Facts: Spreading Good News about Global
Warming, in Peter Howlett et al., How Well Do Facts Travel?: The Dissemination of Reliable
Knowledge, Cambridge University Press 136–66 (2010).

27 ¹²⁴ Union of Concerned Scientists, Deception Dossier #5: Coal’s “Information Council on the
Environment” Sham, 47–49 (1991),
28 http://www.ucsusa.org/sites/default/files/attach/2015/07/Climate-Deception-Dossier-5_ICE.pdf.



Figure 7: ICE Print Advertisements

130. The Global Climate Coalition (“GCC”), on behalf of Defendants and other fossil fuel companies, spent millions of dollars on deceptive advertising campaigns and misleading material to discredit climate science and generate public uncertainty around the climate debate and thereby inflate consumer demand for fossil fuels.¹²⁵ The GCC operated between 1989 and 2001. Its founding members included Defendants Exxon, Shell, Phillips Petroleum Company (ConocoPhillips), and API. Defendants BP and Chevron also participated as members of the GCC. William O’Keefe, former president of the GCC, was also a former executive of API.¹²⁶ 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, was responsible for rising global temperatures:

The GCC believes that the preponderance of the evidence indicates that most, if not all, of the observed warming is part of [a] natural warming trend which began approximately 400 years ago. If there is an anthropogenic component to this

¹²⁵ Id.

¹²⁶ Jeff Nesmith, Industry Promotes Skeptical View of Global Warming, Cox News Service (May 28, 2003) <http://www.heatisonline.org/contentserver/objecthandlers/index.cfm?ID=4450&Method=Full>.

1 observed warming, the GCC believes that it must be very small and must be
2 superimposed on a much larger natural warming trend.¹²⁷

3 131. The GCC's promotion of overt climate change skepticism also contravened its
4 internal assessment that such theories lacked scientific support. In December 1995, the GCC's
5 Science and Technology Advisory Committee ("GCC-STAC"), whose members included
6 employees of Mobil Oil Corporation (an Exxon predecessor) and API, drafted a primer on the
7 science of global warming for GCC members. The primer concluded that the GCC's contrarian
8 theories "do not offer convincing arguments against the conventional model of greenhouse gas
9 emission-induced climate change." However, the GCC excluded this section from the publicly
10 released version of the report.¹²⁸ Nonetheless, for years afterward, the GCC and its members
11 continued to tout their contrarian theories about global warming, even though the GCC had
12 admitted internally these arguments were invalid. Between 1989 and 1998, the GCC spent \$13
13 million on one ad campaign to obfuscate the public's understanding of climate science and
14 undermine its trust in climate scientists.¹²⁹ For example, the GCC distributed a video to hundreds
15 of journalists, which claimed that carbon dioxide emissions would increase crop production and
16 feed the hungry people of the world.¹³⁰

17 132. In a 1994 public report, the GCC stated that "observations have not yet confirmed
18 evidence of global warming that can be attributed to human activities," and that "[t]he claim that
19 serious impacts from climate change have occurred or will occur in the future simply has not been
20

21 _____
22 ¹²⁷ Global Climate Coalition, Global Climate Coalition: An Overview 2 (Nov. 1996),
23 <http://www.climatefiles.com/denial-groups/global-climatecoalition-collection/1996-global-climate-coalition-overview/>.

24 ¹²⁸ Memorandum from Gregory J. Dana, Assoc. of Int'l Auto. Mfrs., to AIAM Technical
25 Committee, Global Climate Coalition (GCC) – Primer on Climate Change Science – Final Draft
(Jan. 18, 1996), <http://www.webcitation.org/6FyqHawb9>.

26 ¹²⁹ Wendy E. Franz, Kennedy School of Government, Harvard University, Science, Skeptics and
27 Non-State Actors in the Greenhouse, ENRP Discussion Paper E-98-18, 13 (Sept. 1998),
<https://www.belfercenter.org/sites/default/files/legacy/files/Science%20Skeptics%20and%20Non-State%20Actors%20in%20the%20Greenhouse%20-%20E-98-18.pdf>.

28 ¹³⁰ Source Watch, Global Climate Coalition (Dec. 25, 2019),
http://www.sourcewatch.org/index.php/Global_Climate_Coalition.

1 proven.”¹³¹ In 1994, GCC Board of Directors was composed of high-level executives from API,
2 Exxon, Phillips Petroleum Company (ConocoPhillips), and Texaco (Chevron). Representatives
3 from Shell, Amoco (BP), and BP were also GCC members at that time.¹³² In 1995, the GCC
4 published a booklet called “Climate Change: Your Passport to the Facts,” which stated, “While
5 many warnings have reached the popular press about the consequences of a potential man-made
6 warming of the Earth’s atmosphere during the next 100 years, there remains no scientific evidence
7 that such a dangerous warming will actually occur.”¹³³ In 1995, GCC’s Board of Directors
8 included high-level executives from Texaco (Chevron), API, ARCO, and Phillips Petroleum
9 Company.¹³⁴

10 133. In 1997, William O’Keefe, chairman of the GCC and executive vice president of
11 API, falsely wrote in a Washington Post op-ed, “[c]limate scientists don’t say that burning oil, gas,
12 and coal is steadily warming the earth.”¹³⁵ This statement contradicted the established scientific
13 consensus as well as Defendants’ own knowledge. Yet Defendants did nothing to correct the public
14 record, and instead continued to fund the GCC’s anti-scientific climate skepticism.

15 134. In addition to publicly spreading false and misleading information about the climate
16 science consensus, the GCC also sought to undermine credible climate science from within the
17 IPCC. After becoming a reviewer of IPCC’s Second Assessment Report in 1996, the GCC used
18 its position to accuse the convening author of a key chapter in the Report of modifying its
19

20 ¹³¹ GCC, Issues and Options: Potential Global Climate Change, Climate Files (1994),
21 <http://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1994-potential-global-climate-change-issues>.

22 ¹³² 1994 GCC Board Member List and Background Information, Climate Investigations Center,
23 <https://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1994-board-member-list-general-info/>.

24 ¹³³ GCC, Climate Change: Your Passport to the Facts, Climate Files (1995),
25 <http://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1995-climate-change-facts-passport>.

26 ¹³⁴ 1995 GCC IRS 1024 and Attachments, Climate Investigations Center (1995),
27 <https://www.documentcloud.org/documents/5798254-GCC-IRS-1023#document/p17>

28 ¹³⁵ William O’Keefe, A Climate Policy, in The Washington Post (July 5, 1997),
<https://www.washingtonpost.com/archive/opinions/1997/07/05/a-climate-policy/6a11899a-c020-4d59-a185-b0e7eebf19cc/>.

1 conclusions. The GCC claimed that the author, climatologist Ben Santer, had engaged in
2 “scientific cleansing” that “understate[d] uncertainties about climate change causes and effect . . .
3 to increase the apparent scientific support for attribution of changes to climate to human
4 activities.”¹³⁶ The GCC also arranged to spread the accusation among reporters, editors of
5 scientific journals, and even the op-ed page of the Wall Street Journal.¹³⁷ This effort “was widely
6 perceived to be an attempt on the part of the GCC to undermine the credibility of the IPCC.”¹³⁸

7 135. In the late 1990s, Defendants shifted away from openly denying anthropogenic
8 warming toward peddling a subtler form of climate change skepticism. Defendants became
9 alarmed by significant legal judgments Big Tobacco now faced as a result of decades spent
10 publicly denying the health risks of smoking cigarettes, with a Shell employee explaining that the
11 company “didn’t want to fall into the same trap as the tobacco companies who have become
12 trapped in all their lies.”¹³⁹ Defendants began to shift their communications strategy, claiming they
13 had accepted climate science all along.¹⁴⁰ Several large fossil fuel companies, including BP and
14 Shell, left the GCC (although all Defendants remained members of API).¹⁴¹ At this point in time,
15 Defendants publicly claimed to accept the reality that the climate is changing (or Earth is warming)
16 and that climate change is anthropogenic.

17 136. Despite the shift in official public messaging, Defendants surreptitiously continued
18 to organize and fund programs designed to deceive the public about the weight and veracity of the
19 climate science consensus. In 1998, API convened a Global Climate Science Communications
20
21

22 _____
23 ¹³⁶ Franz (1998), supra note 129, at 14.

24 ¹³⁷ Naomi Oreskes & Erik Conway, Merchants of Doubt: How a Handful of Scientists Obscured
25 the Truth on Issues from Tobacco Smoke to Global Warming, New York: Bloomsbury Press
26 205–13 (2011); see also S. Fred Singer, Climate Change and Consensus, Science vol. 271, no.
27 5249 (Feb. 2, 1996); Frederick Seitz, A Major Deception on 'Global Warming', Wall Street
28 Journal (June 12, 1996).

¹³⁸ Franz (1998), supra note 129, at 15.

¹³⁹ Nathaniel Rich, Losing Earth: A Recent History, London: Picador 186 (2020).

¹⁴⁰ Franta (2022), supra note 121, at 170.

¹⁴¹ Id. at 177.

1 Team (“GCSCT”) whose members included representatives from Exxon, Chevron, and API.¹⁴²
2 There were no scientists on the “Global Climate Science Communications Team.” Steve Milloy
3 (a key player in the tobacco industry’s front group) and his organization, The Advancement of
4 Sound Science Coalition (“TASSC”), were founding members of the GCSCT. TASSC was a fake
5 grassroots citizen group created by the tobacco industry to sow uncertainty by discrediting the
6 scientific link between exposure to second-hand cigarette smoke and increased rates of cancer and
7 heart disease. Philip Morris had launched TASSC on the advice of its public relations firm, which
8 advised Philip Morris that the tobacco company itself would not be a credible voice on the issue
9 of smoking and public health. TASSC, through API and with the approval of Defendants, also
10 became a front group for the fossil fuel industry beyond its role in GCSCT, using the same tactics
11 it had honed while operating on behalf of tobacco companies to spread doubt about climate science.
12 Although TASSC posed as a grassroots group of concerned citizens, it received significant funding
13 from Defendants. For example, between 2000 and 2004, Exxon donated \$50,000 to Milloy’s
14 Advancement of Sound Science Center; and an additional \$60,000 to the Free Enterprise
15 Education Institute and \$50,000 to the Free Enterprise Action Institute, both of which were
16 registered to Milloy’s home address.¹⁴³ The GCSCT, including TASSC, represented a continuation
17 of Defendants’ concerted actions to sow doubt and confusion about climate change in order to
18 inflate consumer demand for fossil fuels.

19 137. The GCSCT continued Defendants’ efforts to expand the market for fossil fuels by
20 convincing the public that the scientific basis for climate change was in doubt. The multi-million-
21 dollar, multi-year plan, among other elements, sought to: (a) “[d]evelop and implement a national
22

23 ¹⁴² In 1998, the GCC Board included executives from API, Amoco (BP), Chevron, Exxon, Mobil
24 (Exxon), and Texaco (Chevron); and CEOs from ARCO (BP) and Amoco (BP) were on the
25 executive committee for API's Board of Directors, and high-level executives from
26 ConocoPhillips, ARCO, Anadarko, Marathon, BP, Shell, Chevron, Citgo, and Exxon also served
as Board members; see 1998 GCC Membership, Climate Investigations Center,
[https://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1998-
membership/](https://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1998-membership/).

27 ¹⁴³ Union of Concerned Scientists, Smoke, Mirrors & Hot Air: How ExxonMobil Uses Big
28 Tobacco’s Tactics to Manufacture Uncertainty on Climate Science (July 16, 2007),
<https://www.ucsusa.org/resources/smoke-mirrors-hot-air>.

1 media relations program to inform the media about uncertainties in climate science to generate
2 national, regional, and local media coverage on the scientific uncertainties”; (b) “[d]evelop a
3 global climate science information kit for media including peer-reviewed papers that undercut the
4 ‘conventional wisdom’ on climate science”; (c) “[p]roduce . . . a steady stream of op-ed columns”;
5 and (d) “[d]evelop and implement a direct outreach program to inform and educate members of
6 Congress . . . and school teachers/students about uncertainties in climate science”¹⁴⁴—a blatant
7 attempt to deceive consumers and the general public in order to ensure a continued and unimpeded
8 market for their fossil fuel products.

9 138. Exxon, Chevron, and API directed and contributed to the development of the plan,
10 which plainly set forth the criteria by which the contributors would know when their efforts to
11 manufacture doubt had been successful. “Victory,” they wrote, “will be achieved when . . . average
12 citizens ‘understand’ (recognize) uncertainties in climate science” and “recognition of
13 uncertainties becomes part of the ‘conventional wisdom.’”¹⁴⁵ In other words, the plan was part of
14 Defendants’ goal to use disinformation to plant doubt about the reality of climate change in an
15 effort to maintain consumer demand for their fossil fuel products and their large profits.

16 139. In furtherance of these strategies, Defendants made misleading statements to
17 consumers about climate change, the relationship between climate change and their fossil fuel
18 products, and the urgency of the problem. Defendants made these statements in public fora and in
19 advertisements published in newspapers and other media with substantial circulation to Santa Cruz
20 and California, including national publications such as The New York Times, The Wall Street
21 Journal, and The Washington Post.

22 140. Another key strategy in Defendants’ efforts to discredit scientific consensus on
23 climate change and the IPCC was to bankroll scientists who, although accredited, held fringe
24 opinions that were even more questionable given the sources of their research funding. These
25

26 ¹⁴⁴ Email from Joe Walker to Global Climate Science Team, Draft Global Climate Science
27 Communications Plan (Apr. 3, 1998), [https://assets.documentcloud.org/documents/784572/api-](https://assets.documentcloud.org/documents/784572/api-global-climate-science-communications-plan.pdf)
28 [global-climate-science-communications-plan.pdf](https://assets.documentcloud.org/documents/784572/api-global-climate-science-communications-plan.pdf).

¹⁴⁵ Id.

1 scientists obtained part or all of their research budget from Defendants directly or through
2 Defendant-funded organizations like API,¹⁴⁶ but they frequently failed to disclose their fossil fuel
3 industry underwriters.¹⁴⁷ During the early- to mid-1990s, Exxon directed some of this funding to
4 Dr. Fred Seitz, Dr. Fred Singer, and/or Seitz and Singer’s Science and Environmental Policy
5 Project (“SEPP”) in order to launch repeated attacks on mainstream climate science and IPCC
6 conclusions, even as Exxon scientists participated in the IPCC.¹⁴⁸ Seitz, Singer, and SEPP had
7 previously been paid by the tobacco industry to create doubt in the public mind about the hazards
8 of smoking.¹⁴⁹ Seitz and Singer were not climate scientists.

9 141. At least one industry-funded scientist, Dr. Wei-Hock Soon, contractually agreed to
10 allow donors to review his research before publication, and his housing institution agreed not to
11 disclose the funding arrangement without prior permission from his fossil fuel donors.¹⁵⁰ Between
12 2001 and 2012, various fossil fuel interests, including Exxon and API, paid Soon over \$1.2
13 million.¹⁵¹ “Dr. Soon, in correspondence with his corporate funders, described many of his
14 scientific papers as ‘deliverables’ that he completed in exchange for their money.”¹⁵² His
15 Defendant-funded research includes articles in scientific journals accusing the IPCC of overstating
16 the negative environmental effects of carbon dioxide emissions and arguing that the sun is

17
18 ¹⁴⁶ Willie Soon & Sallie Baliunas, Proxy Climatic and Environmental Changes of the Past 1000
19 Years, *Climate Research* 23, 88–110 (Jan. 31, 2003), <http://www.int-res.com/articles/cr2003/23/c023p089.pdf>.

20 ¹⁴⁷ Newsdesk, Smithsonian Statement: Dr. Wei-Hock (Willie) Soon, *Smithsonian* (Feb. 26,
21 2015), <http://newsdesk.si.edu/releases/smithsonian-statement-dr-wei-hock-willie-soon>.

22 ¹⁴⁸ Union of Concerned Scientists (2007), supra note 143.

23 ¹⁴⁹ Source Watch, S. Fred Singer, Center for Media and Democracy,
24 http://www.sourcewatch.org/index.php/S._Fred_Singer; http://www.sourcewatch.org/index.php/Frederick_Seitz.

25 ¹⁵⁰ Union of Concerned Scientists, Climate Deception Dossier #1: Dr. Wei-Hock Soon’s
26 Smithsonian Contracts (July 2015), <https://www.ucsusa.org/sites/default/files/attach/2015/07/The-Climate-Deception-Dossiers.pdf>
27 [<https://perma.cc/JL2V-XYGL>] & https://s3.amazonaws.com/ucs-documents/global-warming/Climate-Deception-Dossier-1_Willie-Soon.pdf.

28 ¹⁵¹ Justin Gillis & John Schwartz, Deeper Ties to Corporate Cash for Doubtful Climate
Researcher, *N.Y. Times* (Feb. 21, 2015), <https://www.nytimes.com/2015/02/22/us/ties-to-corporate-cash-for-climate-change-researcher-Wei-Hock-Soon.html?mcubz=1>.

¹⁵² Id.

1 responsible for recent climate trends. Soon was also the lead author of a 2003 article that argued
2 that the climate had not changed significantly. The article was widely promoted by other denial
3 groups funded by Exxon, including via “Tech Central Station,” a website supported by Exxon.¹⁵³
4 Soon published other bogus “research” in 2009, attributing global warming to solar activity, for
5 which Exxon paid him \$76,106.¹⁵⁴ This 2009 grant was made several years after Exxon had
6 publicly committed not to fund global warming deniers.¹⁵⁵

7 142. Defendants intended for the papers of authors they funded to be distributed to and
8 relied on by consumers when buying Defendants’ products, including by consumers in Santa Cruz.

9 143. Defendants have also funded dozens of think tanks, front groups, lobbyists, and
10 dark money foundations pushing climate change denial. These include the Competitive Enterprise
11 Institute, the Heartland Institute, Frontiers for Freedom, Committee for a Constructive Tomorrow,
12 and Heritage Foundation. From 1998 to 2014, Exxon spent almost \$31 million funding numerous
13 organizations misrepresenting the scientific consensus that Defendants’ fossil fuel products were
14 causing climate change, sea level rise, and injuries to Santa Cruz, among other coastal
15 communities.¹⁵⁶

16 144. Philip Cooney, an attorney at API from 1996 to 2001, testified at a 2007
17 Congressional hearing that it was “typical” for API to fund think tanks and advocacy groups that
18 minimized fossil fuels’ role in causing climate change.¹⁵⁷

21 ¹⁵³ Union of Concerned Scientists (2007), supra note 143, at 13–14.

22 ¹⁵⁴ See Willie Soon FOIA Grants Chart 02 08 2011, contributed by Greenpeace,
23 <https://www.documentcloud.org/documents/682765-willie-soon-foia-grants-chart-02-08-2011.html>.

24 ¹⁵⁵ Social Investment News, SRI World Group, (June 7, 2024),
25 http://www.socialfunds.com/shared/reports/1211896380_ExxonMobil_2007_Corporate_Citizenship_Report.pdf.

26 ¹⁵⁶ ExxonMobil Climate Denial Funding 1998–2014, ExxonSecrets.org,
<http://exxonsecrets.org/html/index.php>.

27 ¹⁵⁷ Allegations of Political Interference with Government Climate Change Science: Hearing
28 Before the Comm. on Oversight and Government Reform, 110th Cong. 324 (Mar. 19, 2007)
(statement of Philip A. Cooney), <https://www.govinfo.gov/content/pkg/CHRG-110hrg37415/html/CHRG-110hrg37415.htm>.

1 145. Creating a false sense of disagreement in the scientific community (despite the
2 consensus that its own scientists, experts, and managers had previously acknowledged) has had an
3 evident impact on public opinion. A 2007 Yale University-Gallup poll found that while 71% of
4 Americans personally believed global warming was happening, only 48% believed that there was
5 a consensus among the scientific community, and 40% believed there was a lot of disagreement
6 among scientists over whether global warming was occurring.¹⁵⁸ Eight years later, a 2015 Yale-
7 George Mason University poll found that “[o]nly about one in ten Americans understands that
8 nearly all climate scientists (over 90%) are convinced that human-caused global warming is
9 happening, and just half . . . believe a majority do.”¹⁵⁹ Further, it found that 33% of Americans
10 believe that climate change is mostly due to natural causes, compared to the 97% of peer-reviewed
11 papers that acknowledge that global warming is real and at least partly human-caused.¹⁶⁰ The lack
12 of progress, and even regress, in the public understanding of climate science over this period—
13 during which Defendants professed to accept the conclusions of mainstream climate science—
14 testifies to the success of Defendants’ deception campaign in thwarting dissemination of accurate
15 scientific expertise to the public regarding the effects fossil fuel consumption.

16 146. Beginning in 2015, journalists began to uncover mounting evidence of Defendants’
17 campaign of deception. In September 2015, journalists at Inside Climate News reported that, as
18 far back as the 1970s, Exxon had sophisticated knowledge of the causes and consequences of
19 climate change and of the role its products played in contributing to climate change.¹⁶¹

20 147. Between October and December 2015, several journalists at the Energy and
21 Environment Reporting Project at Columbia University’s Graduate School of Journalism and the

22 _____
23 ¹⁵⁸ American Opinions on Global Warming: A Yale/Gallup/Clearvision Poll, Yale Program on
Climate Change Communication (July 31, 2007),

24 <http://climatecommunication.yale.edu/publications/american-opinions-on-global-warming/>.

25 ¹⁵⁹ Leiserowitz et al., Climate Change in the American Mind, Yale Program on Climate Change
Comm. & Geo. Mason U., Ctr. for Climate Change Comm eds. (Oct. 2015),
26 <https://climatecommunication.yale.edu/wp-content/uploads/2015/11/Climate-Change-American-Mind-October-20151.pdf>.

27 ¹⁶⁰ Id. at 7.

28 ¹⁶¹ Neela Banerjee et al., Exxon: The Road Not Taken, Inside Climate News,
<https://insideclimatenews.org/project/exxon-the-road-not-taken/>.

1 Los Angeles Times also exposed the fact that, as far back as the 1970s, Exxon and other members
2 of the fossil fuel industry had superior knowledge of the causes and consequences of climate
3 change and the role their products played in causing it.¹⁶²

4 148. In November 2017, the Center for International Environmental Law issued a report
5 revealing that Defendants, including API, had superior knowledge of the causes and consequences
6 of climate change and the role fossil fuel products played in causing it as early as the 1970s.¹⁶³

7 149. In September 2023, the Wall Street Journal reported that Exxon worked “behind
8 closed doors” to sow public doubt about climate change. The article was based on “documents
9 reviewed by the Journal, which haven’t been previously reported.”¹⁶⁴

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

12 150. Defendants could have contributed to the global effort to mitigate the impacts of
13 greenhouse gas emissions by, for example, issuing warnings commensurate with their own
14 understanding of the risks posed by the expected and intended uses of fossil fuel products. Instead,
15 Defendants undertook a momentous effort to deceive consumers and the public about the
16 existential hazards of burning fossil fuels— all with the purpose and effect of perpetuating and
17 hyperinflating fossil fuel consumption and delaying the advent of alternative energy sources not
18 based on fossil fuels.

19 151. As a result of Defendants’ tortious, false and misleading conduct, consumers of
20 Defendants’ fossil fuel products in Santa Cruz as elsewhere, have been deliberately and
21 unnecessarily deceived about: the role of fossil fuel products in causing global warming, sea level
22 rise, disruptions to the hydrologic cycle, and increased extreme precipitation, heat waves, drought,
23

24 ¹⁶² The Los Angeles Times published a series of three articles between October and December
25 2015.

26 ¹⁶³ Carol Muffett & Steven Feit, Smoke and Fumes: The Legal and Evidentiary Basis for Holding
Big Oil Accountable for the Climate Crisis, CENTER FOR INT’L ENV’T L. (2017),
<https://www.ciel.org/reports/smoke-and-fumes>.

27 ¹⁶⁴ Christopher M. Matthews & Collin Eaton, Inside Exxon’s Strategy to Downplay Climate
Change, THE WALL STREET J. (Sept. 14, 2023), [https://www.wsj.com/business/energy-oil/exxon-](https://www.wsj.com/business/energy-oil/exxon-climate-change-documents-e2e9e6af)
28 [climate-change-documents-e2e9e6af](https://www.wsj.com/business/energy-oil/exxon-climate-change-documents-e2e9e6af).

1 and other consequences of the climate crisis; the acceleration of global warming since the mid-
2 twentieth century and the continuation thereof; and the fact that the continued increase in fossil
3 fuel consumption creates severe environmental threats and significant economic costs for coastal
4 communities, including Santa Cruz. Consumers in Santa Cruz and elsewhere have also been
5 deceived about the depth and breadth of the state of the scientific evidence on anthropogenic
6 climate change, and in particular about the strength of the scientific consensus demonstrating the
7 role of fossil fuels in causing both climate change and a wide range of potentially destructive
8 impacts, including sea level rise, disruptions to the hydrologic cycle, extreme precipitation, heat
9 waves, drought, and associated consequences.

10 152. By sowing doubt about the future consequences of unrestricted fossil fuel
11 consumption, Defendants' deception campaign successfully delayed the transition to alternative
12 energy sources, which Defendants forecasted could penetrate half of a competitive energy market
13 in 50 years if allowed to develop unimpeded. This delay caused emission of huge amounts of
14 avoidable greenhouse gases, thereby ensuring that the damage caused by climate change will be
15 substantially more severe than if Defendants had acted forthrightly, commensurate with their
16 internal knowledge of climate risks.

17 **E. In Contrast to Their Denial and Downplaying the Risks of Climate Change in**
18 **Public, Defendants' Internal Actions Demonstrate Their Awareness of and**
19 **Intent to Profit from Uses of Fossil Fuel Products They Knew Were**
20 **Hazardous.**

21 153. In contrast to their public-facing efforts challenging the validity of the scientific
22 consensus about anthropogenic climate change, Defendants' acts and omissions evidence their
23 internal acknowledgement of the reality of climate change and its likely consequences. Those
24 actions include, but are not limited to, making multi-billion-dollar infrastructure investments for
25 their own operations that acknowledge the reality of coming anthropogenic climate-related change.
26 Those investments included (among others), raising offshore oil platforms to protect against sea
27 level rise; reinforcing offshore oil platforms to withstand increased wave strength and storm
28 severity; developing technology and infrastructure to extract, store, and transport fossil fuels in a
warming arctic environment; and developing and patenting designs for equipment intended to

1 extract crude oil and/or natural gas in areas previously unreachable because of the presence of
2 polar ice sheets.

3 154. For example, oil and gas reserves in the Arctic that were not previously reachable
4 due to sea ice are becoming increasingly reachable as sea ice thins and melts due to climate
5 change.¹⁶⁵ In 1973 Exxon obtained a patent for a cargo ship capable of breaking through sea ice¹⁶⁶
6 and for an oil tanker¹⁶⁷ designed specifically for use in previously unreachable areas of the Arctic.

7 155. In 1974, Chevron obtained a patent for a mobile arctic drilling platform designed
8 to withstand significant interference from lateral ice masses,¹⁶⁸ allowing for drilling in areas with
9 increased ice floe movement due to elevated temperature.

10 156. That same year, Texaco (Chevron) worked toward obtaining a patent for a method
11 and apparatus for reducing ice forces on a marine structure prone to being frozen in ice through
12 natural weather conditions,¹⁶⁹ allowing for drilling in previously unreachable Arctic areas that
13 would become seasonally accessible.

14 157. Shell obtained a patent for an Arctic offshore platform adapted for conducting
15 operations in the Beaufort Sea in 1984.¹⁷⁰

16 158. In 1989, Norske Shell, Royal Dutch Shell's Norwegian subsidiary, altered designs
17 for a natural gas platform planned for construction in the North Sea to account for anticipated sea
18
19

20 ¹⁶⁵ Henderson & Loe, The Prospects and Challenges for Arctic Oil Development, Oxford
21 Institute for Energy Studies (Nov. 2014) at 1, available at
22 [https://www.oxfordenergy.org/publications/the-prospects-and-challenges-for-arctic-](https://www.oxfordenergy.org/publications/the-prospects-and-challenges-for-arctic-oildevelopment/)
23 [oildevelopment/](https://www.oxfordenergy.org/publications/the-prospects-and-challenges-for-arctic-oildevelopment/).

23 ¹⁶⁶ ExxonMobil Research Engineering Co., Patent US3727571A, Icebreaking cargo vessel,
(granted April 17, 1973), <https://www.google.com/patents/US3727571>.

24 ¹⁶⁷ ExxonMobil Research Engineering Co., Patent US3745960A, Tanker vessel, (granted July
25 17, 1973), <https://www.google.com/patents/US3745960>.

25 ¹⁶⁸ Chevron Research & Technology Co., Patent US3831385A, Arctic offshore platform (granted
26 Aug. 27, 1974), <https://www.google.com/patents/US3831385>.

26 ¹⁶⁹ Texaco Inc., Patent US3793840A, Mobile, arctic drilling and production platform, (granted
27 Feb. 26, 1974), <https://www.google.com/patents/US3793840>.

28 ¹⁷⁰ Shell Oil Co., Patent US4427320A, Arctic offshore platform, Shell Oil Company (granted
Jan. 24, 1984), <https://www.google.com/patents/US4427320>.

1 level rise. Those design changes were ultimately carried out by Shell’s contractors, adding
2 substantial costs to the project.¹⁷¹

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

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

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

13 d. In 1989, Shell engineers revised their plans to increase the above-water
14 height of the platform by 3 to 6 feet, specifically to account for higher anticipated average sea
15 levels and increased storm intensity due to global warming over the platform’s 70-year operational
16 life.¹⁷²

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

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

22 159. As greenhouse gas pollution accumulates in the atmosphere, some of which does
23 not dissipate for potentially thousands of years (namely CO₂), climate changes and consequent
24 adverse environmental changes compound, and their frequencies and magnitudes increase. As
25 those adverse environmental changes compound and their frequencies and magnitudes increase,

26 ¹⁷¹ Greenhouse Effect: Shell Anticipates A Sea Change, N.Y. Times (Dec. 20, 1989),
27 [http://www.nytimes.com/1989/12/20/business/greenhouse-effect-shell-anticipates-a-sea-
change.html](http://www.nytimes.com/1989/12/20/business/greenhouse-effect-shell-anticipates-a-sea-change.html).

28 ¹⁷² Id.; Amy Lieberman & Suzanne Rust, Big Oil braced for global warming while it fought
regulations, L.A. Times (Dec. 31, 2015), <http://graphics.latimes.com/oil-operations/>.

1 so too do the physical, environmental, economic, and social injuries resulting therefrom.

2 160. Delayed societal development and adoption of alternative energy sources have
3 therefore increased environmental harms and increased the magnitude and cost to remediate harms
4 that have already occurred or are locked in by previous emissions. Therefore, Defendants’
5 campaign to obscure the science of climate change and to expand the use of fossil fuels greatly
6 increased and continues to increase the harms and rate of harms suffered by Plaintiffs. Had market
7 demand to transition away from fossil fuels—and for affordable, reliable sources of clean energy—
8 developed earlier, the subsequent impacts of climate change could have been avoided or mitigated.

9 161. Defendants have been aware for decades that clean energy presents a feasible
10 alternative to fossil fuels. In 1980, Exxon forecasted that non-fossil fuel energy sources, if pursued,
11 could penetrate half of a competitive energy market in approximately 50 years.¹⁷³ This internal
12 estimate was based on extensive modeling within the academic community, including research
13 conducted by the Massachusetts Institute of Technology’s David Rose, which concluded that a
14 transition to non-fossil energy could be achieved in around 50 years. Exxon circulated an internal
15 memo approving of Rose’s conclusions, stating they were “based on reasonable assumptions.”¹⁷⁴
16 But instead of pursuing a clean energy transition or warning consumers about the dangers of
17 burning fossil fuels, Defendants chose to deceive consumers to preserve Defendants’ profits and
18 assets. As a result, much time has been lost during which consumers and market forces would have
19 spurred a societal transition away from fossil fuels, which would have reduced or eliminated
20 entirely the harmful effects of climate change in Santa Cruz.

21 162. The costs of inaction and the opportunities to confront anthropogenic climate
22 change and sea level rise caused by normal consumption of their fossil fuel products were not lost
23

24 _____
25 ¹⁷³ Shaw & McCall, Exxon Research and Engineering Company’s Technological Forecast: CO₂
26 Greenhouse Effect (Dec. 18, 1980), at 5, available at [https://insideclimatenews.org/wp-](https://insideclimatenews.org/wp-content/uploads/2015/09/Technological-Forecast-on-CO2-Greenhouse-Effect-1980.pdf)
content/uploads/2015/09/Technological-Forecast-on-CO2-Greenhouse-Effect-1980.pdf

27 ¹⁷⁴ Exxon Research and Engineering Company, Coordination and Planning Division, CO₂
28 Greenhouse Effect: A Technical Review (Apr. 1, 1982), at 17–18, available at
[https://insideclimatenews.org/wp-content/uploads/2015/09/1982-Exxon-Primer-on-CO2-](https://insideclimatenews.org/wp-content/uploads/2015/09/1982-Exxon-Primer-on-CO2-Greenhouse-Effect.pdf)
Greenhouse-Effect.pdf.

1 on Defendants. In a 1997 speech by John Browne, Group Executive for BP America, at Stanford
2 University, Browne described Defendants' and the entire fossil fuel industry's responsibility and
3 opportunities to reduce use of fossil fuel products, reduce global CO₂ emissions, and mitigate the
4 harms associated with the use and consumption of such products:

5 A new age demands a fresh perspective of the nature of society and responsibility.

6 We need to go beyond analysis and to take action. It is a moment for change and
7 for a rethinking of corporate responsibility. . . .

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

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

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

15 The time to consider the policy dimensions of climate change is not when the link
16 between greenhouse gases and climate change is conclusively proven . . . but when
17 the possibility cannot be discounted and is taken seriously by the society of which
we are part. . . .

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

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

21 To control our own emissions.

22 To fund continuing scientific research.

23 To take initiatives for joint implementation.

24 To develop alternative fuels for the long term.

25 And to contribute to the public policy debate in search of the wider global answers
26
27
28

1 to the problem.”¹⁷⁵

2 163. Despite Defendants’ knowledge of the foreseeable, measurable harms associated
3 with the consumption and use of their fossil fuel products, and despite the existence and
4 Defendants’ knowledge of technologies and practices that could have helped to reduce the
5 foreseeable dangers associated with their fossil fuel products, Defendants continued to
6 misleadingly market and promote heavy fossil fuel use and conceal the connection between use of
7 their products and the climate crisis, dramatically increasing the cost of abatement. This campaign
8 was intended to and did reach and influence Santa Cruz consumers, along with consumers
9 elsewhere.

10 164. At all relevant times, Defendants were deeply familiar with opportunities to reduce
11 the use of their fossil fuel products, reduce global CO₂ emissions associated therewith, and mitigate
12 the harms associated with the use and consumption of such products. Examples of that recognition
13 include, but are not limited to the following:

14 a. In 1961, Phillips Petroleum Company filed a patent application for a method
15 to purify gas, among other things, as “natural gas containing gasoline hydrocarbons can contain
16 undesirable amounts of sulfur and other compounds such as carbon dioxide which are undesirable
17 in the finished gasoline product.”¹⁷⁶

18 b. In 1963, Esso (Exxon) obtained multiple patents on technologies for fuel
19 cells, including on the design of a fuel cell and necessary electrodes,¹⁷⁷ and on a process for
20 increasing the oxidation of a fuel, specifically methanol, to produce electricity in a fuel cell.¹⁷⁸

21 c. In 1970, Esso (Exxon) obtained a patent for a “low-polluting engine and
22

23 _____
24 ¹⁷⁵ John Browne, BP Climate Change Speech to Stanford (May 19, 1997),
<http://www.climatefiles.com/bp/bp-climate-change-speech-to-stanford/>.

25 ¹⁷⁶ Phillips Petroleum Co., Patent US3228874A: Method for recovering a purified component
from a gas (filed Aug. 22, 1961), <https://patents.google.com/patent/US3228874>.

26 ¹⁷⁷ Patents, Fuel cell and fuel cell electrodes, Exxon Research Engineering Co. (Dec. 31, 1963),
27 <https://www.google.com/patents/US3116169>.

28 ¹⁷⁸ Patents, Direct production of electrical energy from liquid fuels, Exxon Research Engineering
Co. (Dec. 3, 1963) <https://www.google.com/patents/US3113049>.

1 drive system” that used an interburner and air compressor to reduce pollutant emissions, including
2 CO₂ emissions, from gasoline combustion engines (the system also increased the efficiency of the
3 fossil fuel products used in such engines, thereby lowering the amount of fossil fuel product
4 necessary to operate engines equipped with this technology).¹⁷⁹

5 d. In 1980, Imperial Oil wrote in its “Review of Environmental Protection
6 Activities for 1978–79”: “There is no doubt that increases in fossil fuel usage and decreases in
7 forest cover are aggravating the potential problem of increased CO₂ in the atmosphere. Technology
8 exists to remove CO₂ from stack gases but removal of only 50% of the CO₂ would double the cost
9 of power generation.”¹⁸⁰

10 e. A 1987 company briefing produced by Shell on “Synthetic Fuels and
11 Renewable Energy” noted that while “immediate prospects” were “limited,” “nevertheless it is by
12 pursuing commercial opportunities now and in the near future that the valuable experience needed
13 for further development will be gained.” The brief also noted that “the task of replacing oil
14 resources is likely to become increasingly difficult and expensive and there will be a growing need
15 to develop lean, convenient alternatives. Initially these will supplement and eventually replace
16 valuable oil products. Many potential energy options are as yet unknown or at very early stages of
17 research and development. New energy sources take decades to make a major global contribution.
18 Sustained commitment is therefore needed during the remainder of this century to ensure that new
19 technologies and those currently at a relatively early stage of development are available to meet
20 energy needs in the next century.”¹⁸¹

21 f. A 1989 article in a publication from Exxon Corporate Research for
22 company use only stated: “CO₂ emissions contribute about half the forcing leading to a potential
23

24 ¹⁷⁹ Patents, Low-polluting engine and drive system, Exxon Research Engineering Co. (May 16,
25 1970) <https://www.google.com/patents/US3513929>.

26 ¹⁸⁰ Imperial Oil Ltd., Review of Environmental Protection Activities for 1978–1979, at 2 (Aug.
27 6, 1980), [http://www.documentcloud.org/documents/2827784-1980-Imperial-Oil-Review-of-
28 Environmental.html#document/p2](http://www.documentcloud.org/documents/2827784-1980-Imperial-Oil-Review-of-Environmental.html#document/p2).

¹⁸¹ Synthetic Fuels and Renewable Energy, Shell Service Briefing, no. 2, 1987,
<https://assets.documentcloud.org/documents/4411089/Document2.pdf>.

1 enhancement of the Greenhouse Effect. Since energy generation from fossil fuels dominates
2 modern CO₂ emissions, strategies to limit CO₂ growth focus near term on energy efficiency and
3 long term on developing alternative energy sources. Practiced at a level to significantly reduce the
4 growth of greenhouse gases, these actions would have substantial impact on society and our
5 industry—near-term from reduced demand for current products, long term from transition to
6 entirely new energy systems.”¹⁸²

7 165. Defendants could have taken other practical, cost-effective steps to reduce the risk
8 created by their fossil fuel products and marketing. These alternatives could have included, among
9 other measures:

10 a. Accepting scientific evidence on the validity of anthropogenic climate
11 change and the damages it will cause people and communities, including Plaintiffs, and the
12 environment. Mere acceptance of that information would have altered the debate from *whether* to
13 combat climate change and sea level rise to *how* to combat it; and avoided much of the public
14 confusion that has ensued over more than 30 years, since at least 1988;

15 b. Forthrightly communicating with Defendants’ shareholders, consumers,
16 banks, insurers, and Plaintiffs about the climatic hazards of Defendants’ fossil fuel products that
17 were known to Defendants, which would have enabled those groups to make material, informed
18 decisions about whether and how to address climate change and sea level rise vis-à-vis Defendants’
19 products;

20 c. Refraining from affirmative efforts, whether directly, through coalitions, or
21 through front groups, to distort consumer awareness of the climatic dangers of fossil fuels, and to
22 cause many consumers and business leaders to think the relevant science was far less certain than
23 it actually was; and
24
25
26

27 ¹⁸² Brian Flannery, Greenhouse Science, Connections: Corporate Research, Exxon Research and
28 Engineering Company (1989), <http://www.climatefiles.com/exxonmobil/1989-exxon-mobil-article-technologys-place-marketing-mix>.

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

4 **G. Defendants Intended for Consumers to Use Their Fossil Fuel Products in a**
5 **Way Defendants Knew Was Harmful.**

6 166. Consumer use of fossil fuel products, particularly by driving gasoline-powered cars
7 and other vehicles, is a significant contributor to climate change. However, as a result of
8 Defendants' sustained and widespread campaign of disinformation, many consumers have been
9 unaware of the magnitude of the threat posed by their use of fossil fuels, or of the relationship
10 between their purchasing behavior and climate change.

11 167. By misleading consumers about the climate impacts of using fossil fuel products,
12 even to the point of claiming that certain of their products may benefit the environment, and by
13 failing to disclose the climate risks associated with their purchase and use of those products,
14 Defendants have deprived and are continuing to deprive consumers of information about the
15 consequences of their purchasing decisions.

16 168. Defendants intended for consumers to rely on their omissions and concealments
17 and to continue purchasing Defendants' fossil fuel products without regard for the damage such
18 products cause.

19 169. Knowledge of the risks associated with the routine use of fossil fuel products is
20 material to consumers' decisions to purchase and use those products. As with cigarettes, history
21 demonstrates that when consumers are made aware of the harmful effects or qualities of the
22 products they purchase, they often choose to stop purchasing them, to reduce their purchases, or
23 to make different purchasing decisions. This phenomenon holds especially true when products
24 have been shown to harm public health or the environment. For example, increased consumer
25 awareness of the role of pesticides in harming human health, worker health, and the environment
26 has spurred a growing market for food grown organically and without the use of pesticides. With
27 access to information about how their food is grown, consumers have demanded healthier choices,
28 and the market has responded.

1 170. A consumer who received accurate information that fossil fuel use was a primary
2 driver of climate change, and about the resultant dangers to the environment and to public health,
3 might have decreased the consumer’s use of fossil fuel products and/or demanded lower-carbon
4 transportation options. Indeed, recent studies and surveys have found that consumers with
5 substantial awareness of climate change are largely willing “to change their consumption habits
6 . . . to help reduce the impacts of climate change.”¹⁸³ If consumers were aware of what the
7 Defendants knew about climate change when the Defendants knew it, consumers might have opted
8 to avoid or minimize airplane travel; avoid or combine car travel trips; carpool; switch to more
9 fuel-efficient vehicles, hybrid vehicles, or electric vehicles; demand more charging infrastructure
10 for electric vehicles; use a car-sharing service; seek transportation alternatives all or some of the
11 time, if and when available (e.g., public transportation, biking, or walking); or adopt any
12 combination of these choices. In addition, informed consumers often attempt to contribute toward
13 solving environmental problems by supporting companies that they perceive to be developing
14 “green” or more environmentally friendly products.¹⁸⁴

15 171. As described herein, by casting doubt upon the scientific consensus on climate
16 change, Defendants deceived consumers about the relationship between consumption of fossil
17 fuels and climate change, and the magnitude of the threat posed by fossil fuel use. Consumers
18 equipped with complete and accurate knowledge about the climate and the public health effects of
19 continued consumption of fossil fuels would have likely formed a receptive customer base for
20
21

22 ¹⁸³ The Conference Board, Changes in Consumers’ Habits Related to Climate Change May
23 Require New Marketing and Business Models (Oct. 26, 2022), available at
24 [https://www.conference-board.org/topics/consumers-attitudes-sustainability/changes-in-](https://www.conference-board.org/topics/consumers-attitudes-sustainability/changes-in-consumer-habits-related-to-climate-change)
[consumer-habits-related-to-climate-change](https://www.conference-board.org/topics/consumers-attitudes-sustainability/changes-in-consumer-habits-related-to-climate-change).

25 ¹⁸⁴ See, e.g., Leiserwitz et al., Program on Climate Change Communication, Yale University, and
26 Center for Climate Change Communication, George Mason University, Consumer Activism on
27 Global Warming, September 2021 (2021), [https://climatecommunication.yale.edu/wp-](https://climatecommunication.yale.edu/wp-content/uploads/2021/12/consumer-activism-onglobal-warming-september-2021.pdf)
28 [content/uploads/2021/12/consumer-activism-onglobal-warming-september-2021.pdf](https://climatecommunication.yale.edu/wp-content/uploads/2021/12/consumer-activism-onglobal-warming-september-2021.pdf). 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 3).

1 clean energy alternatives decades before such demand in fact developed. Instead, Defendants’
2 campaign of deception allowed them to exploit public uncertainty to reap substantial profits.

3 172. The delayed emergence of a scalable market for non-fossil fuel energy is
4 attributable to consumers’ industry-induced ignorance of the reality and severity of the climatic
5 consequences associated with normal use of fossil fuels. The societal transition to a low-carbon
6 economy would have been far cheaper and more efficient had Defendants publicly acknowledged
7 the conclusions reached by their own scientists and the broader scientific community. As a result
8 of this delay, huge quantities of avoidable greenhouse gas emissions have been released into the
9 atmosphere, causing greater total emissions, higher peak emissions, and all associated climatic
10 effects.

11 **H. Defendants’ Deceit Only Recently Came to Light, and Their Misconduct Is**
12 **Ongoing.**

13 173. The fact that Defendants and their proxies knowingly provided incomplete and
14 misleading information to the public, including Santa Cruz consumers, only recently became
15 discoverable due to, among other things:

16 a. Defendants’ above-described deception campaign, which continues to this
17 day;

18 b. Defendants’ concealment and misrepresentations regarding the fact that
19 their products cause catastrophic harms; and

20 c. the fact that Defendants used front groups such as API, the GCC, and ICE
21 to obscure their involvement in these actions, which put Plaintiffs off the trail of inquiry.

22 174. Moreover, Defendants’ tortious misconduct—in the form of misrepresentations,
23 omissions, and deceit—began decades ago and continues to this day. Now, rather than engaging
24 in outright denials of the existence of climate change, Defendants deflect attention from their role
25 in causing climate change by falsely portraying fossil fuel products as environmentally friendly,
26 climate-friendly, or otherwise less environmentally damaging than those products really are.

27 175. Defendants have continued to mislead the public about the impact of fossil fuel
28 products on climate change through “greenwashing.” Through recent advertising campaigns and

1 public statements in California and/or intended to reach California, including but not limited to
2 online advertisements and social media posts, Defendants falsely and misleadingly portray these
3 products as “green,” and the Defendants portray themselves as climate-friendly energy companies
4 that are deeply engaged in finding solutions to climate change. In reality, Defendants continue to
5 primarily invest in, develop, promote, and profit from fossil fuel products and heavily market those
6 products to consumers, with full knowledge that those products will continue to exacerbate climate
7 change harms.

8 176. Defendants’ greenwashing exploits consumers’ concerns about climate change and
9 their desire to purchase “green” products and spend their consumer dollars on products and
10 businesses that are taking substantial and effective measures to combat climate change.
11 Defendants’ false advertisements are likely to mislead consumers by giving the impression that in
12 purchasing the Defendants’ fossil fuel products, consumers are supporting genuine, substantial,
13 and effective measures to mitigate climate change through these companies’ alleged investments
14 in clean energy. Defendants’ greenwashing ultimately attempts to persuade consumers to support
15 Defendants’ purported attempts to contribute to climate change solutions by purchasing and
16 consuming these products, including the Defendants’ fossil fuel products.

17 177. As described above, Defendants, directly and/or through membership in other
18 organizations, continue to misrepresent their own activities, the fact that their products cause
19 climate change, and the danger presented by climate change. Exemplars of Defendants’ continuing
20 misrepresentations, omissions, and deceit follow below.

21 178. As recently as June 2018, a post on the official Shell blog stated: “the potential
22 extent of change in the climate itself could now be limited. In other words, the prospect of runaway
23 climate change might have passed.”¹⁸⁵ However, this statement is not supported by valid scientific
24 research, and was and is contradicted by various studies.¹⁸⁶

25
26 ¹⁸⁵ David Hone, Has Climate Change Run Its Course??, Shell Climate Change Blog (June 14,
2018), <https://blogs.shell.com/2018/06/14/has-climate-change-run-its-course>.

27 ¹⁸⁶ See, e.g., Fiona Harvey, Carbon Emissions from Warming Soils Could Trigger Disastrous
28 Feedback Loop, The Guardian (Oct. 5, 2017), <https://www.theguardian.com/environment/2017/>

1 179. In March 2018, Chevron issued a report entitled “Climate Change Resilience: A
2 Framework for Decision Making,” which misleadingly stated that “[t]he IPCC Fifth Assessment
3 Report concludes that there is warming of the climate system and that warming is due in part to
4 human activity.”¹⁸⁷ In reality, the Fifth Assessment report concluded that “[i]t is *extremely likely*
5 [defined as 95–100% probability] that human influence has been the *dominant cause* of the
6 observed warming since the mid-20th century.”¹⁸⁸

7 180. Despite this fact, in April 2017, Chevron CEO and Chairman of the Board John
8 Watson said on a podcast, “There’s no question there’s been some warming; you can look at the
9 temperatures data and see that. The question and debate is around how much, and how much is
10 caused by humans.”¹⁸⁹

11 181. Similarly, ConocoPhillips’s “Climate Change Position” as it appeared on the
12 company’s website through 2020 stated that human activity is “contributing to” climate change
13 and emphasizes “uncertainties,” even though the science is clear: “ConocoPhillips recognizes that
14 human activity, including the burning of fossil fuels, is contributing to increased concentrations of
15 greenhouse gases in the atmosphere that can lead to adverse changes in global climate. . . . While
16 uncertainties remain, we continue to manage greenhouse gas emissions in our operations and to
17 integrate climate change related activities and goals into our business planning.”¹⁹⁰

18 _____
19 oct/05/carbon-emissions-warming-soils-higher-than-estimated-signalling-tipping-points;
20 Jonathan Watts, Domino-Effect of Climate Events Could Move Earth into a ‘Hothouse’ State,
21 The Guardian (Aug. 7, 2018), [https://www.theguardian.com/environment/2018/aug/06/domino-](https://www.theguardian.com/environment/2018/aug/06/domino-effect-of-climate-events-could-push-earth-into-a-hothouse-state)
22 [effect-of-climate-events-could-push-earth-into-a-hothouse-state](https://www.theguardian.com/environment/2018/aug/06/domino-effect-of-climate-events-could-push-earth-into-a-hothouse-state); Fiona Harvey, ‘Tipping Points’
23 Could Exacerbate Climate Crisis, Scientists Fear, The Guardian (Oct. 9, 2018),
24 [https://www.theguardian.com/environment/2018/oct/09/tipping-points-could-exacerbate-climate-](https://www.theguardian.com/environment/2018/oct/09/tipping-points-could-exacerbate-climate-crisis-scientists-fear)
25 [crisis-scientists-fear](https://www.theguardian.com/environment/2018/oct/09/tipping-points-could-exacerbate-climate-crisis-scientists-fear).

23 ¹⁸⁷ Chevron, Climate Change Resilience: A Framework for Decision Making 20 (Mar. 2018),
24 <https://www.chevron.com/-/media/shared-media/documents/climate-change-resilience.pdf>.

24 ¹⁸⁸ IPCC, Summary for Policymakers: Working Group I Contribution to the Fifth Assessment
25 Report 17 (2013), https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_SPM_FINAL.pdf.

25 ¹⁸⁹ Columbia Energy Exchange Podcast, John Watson, CEO, Chevron (Apr. 10, 2017),
26 <https://www.energypolicy.columbia.edu/us-energy-markets-policy>.

26 ¹⁹⁰ ConocoPhillips, Climate Change Position (Oct. 28, 2020),
27 [https://web.archive.org/web/20201028115814/https://www.conocophillips.com/sustainability/int-](https://web.archive.org/web/20201028115814/https://www.conocophillips.com/sustainability/integrating-sustainability/sustainable-development-governance/policies-positions/climate-change-position/)
28 [egrating-sustainability/sustainable-development-governance/policies-positions/climate-change-](https://web.archive.org/web/20201028115814/https://www.conocophillips.com/sustainability/integrating-sustainability/sustainable-development-governance/policies-positions/climate-change-position/)
[position/](https://web.archive.org/web/20201028115814/https://www.conocophillips.com/sustainability/integrating-sustainability/sustainable-development-governance/policies-positions/climate-change-position/).

1 182. On May 27, 2015, at Exxon’s annual shareholder meeting, then-CEO Rex Tillerson
2 misleadingly downplayed global warming’s risks by stating that climate models used to predict
3 future impacts were unreliable: “What if everything we do it turns out our models are lousy, and
4 we don’t get the effects we predict? Mankind has this enormous capacity to deal with adversity,
5 and those solutions will present themselves as those challenges become clear.”¹⁹¹ But as noted
6 above, in 1982 Exxon’s scientific staff stated, based upon the climate models, that there was a
7 “clear scientific consensus” with respect to the level of projected future global warming and
8 starting shortly thereafter Exxon relied upon the projections of climate models, including its own
9 climate models, in order to protect its own business assets. Tillerson’s statement reached
10 consumers because it was reported in the press, including in California,¹⁹² as is common when
11 fossil fuel company CEOs make statements regarding climate change and as Exxon had reason to
12 know would occur.

13 183. Until approximately early 2017, Exxon’s website continued to emphasize the
14 “uncertainty” of global warming science and impacts: “current scientific understanding provides
15 limited guidance on the likelihood, magnitude, or time frame” of events like temperature extremes
16 and sea level rise.¹⁹³ Exxon’s insistence on crystal-ball certainty was clear misdirection, since
17 Exxon knew that the fundamentals of climate science were well settled and showed global
18 warming to present a clear and present danger.¹⁹⁴

19 184. Until approximately early 2016, API’s website referred to global warming as
20 “possible man-made warming” and claimed that the human contribution is “uncertain.” API
21

22 ¹⁹¹ Dallas Morning News, Exxon CEO: Let’s Wait for Science to Improve Before Solving
23 Problem of Climate Change (May 27, 2015),

24 [https://www.dallasnews.com/business/energy/2015/05/28/](https://www.dallasnews.com/business/energy/2015/05/28/exxon-ceo-let-s-wait-for-science-to-improve-before-solving-problem-of-climate-change)

25 [exxon-ceo-let-s-wait-for-science-to-improve-before-solving-problem-of-climate-change](https://www.dallasnews.com/business/energy/2015/05/28/exxon-ceo-let-s-wait-for-science-to-improve-before-solving-problem-of-climate-change).

26 ¹⁹² See, e.g., David Koenig, Exxon shareholders to vote on climate change, fracking, San Diego
27 Union-Tribune, May 27, 2015, [http://www.sandiegouniontribune.com/news/2015/may/27/exxon-](http://www.sandiegouniontribune.com/news/2015/may/27/exxon-shareholders-to-vote-on-climate-change/)
28 [shareholders-to-vote-on-climate-change/](http://www.sandiegouniontribune.com/news/2015/may/27/exxon-shareholders-to-vote-on-climate-change/)

¹⁹³ Formerly found at [http://corporate.exxonmobil.com/en/current-issues/climate-policy/meeting-](http://corporate.exxonmobil.com/en/current-issues/climate-policy/meeting-global-needs/managing-climate-change-business-risks)
27 [global-needs/managing-climate-change-business-risks](http://corporate.exxonmobil.com/en/current-issues/climate-policy/meeting-global-needs/managing-climate-change-business-risks).

¹⁹⁴ See IPCC, Climate Change 2014, Impacts, Adaptation, and Vulnerability, Summary for
28 Policymakers, http://www.ipcc.ch/pdf/assessment-report/ar5/wg2/ar5_wgII_spm_en.pdf.

1 removed this statement from its website in 2016 when journalistic investigations called attention
2 to API’s misleading statements on global warming and its participation in the climate change Task
3 Force during the late 1970s and early 1980s.

4 185. Defendants bombard the public and consumers with the following advertisements,
5 although these are a mere sliver of Defendants’ extensive campaigns. Defendants’ advertisements
6 must be understood in their proper context—as following Defendants’ substantial early knowledge
7 on global warming risks and impacts, and following a decades-long campaign of misleading
8 statements on global warming that primed the pump for massive use of their fossil fuel products.

9 a. Exxon’s “Lights Across America” website advertisement states that natural
10 gas is “helping dramatically reduce America’s emissions”¹⁹⁵ even though natural gas is a fossil
11 fuel causing widespread planetary warming and harm to coastal cities like Santa Cruz and the use
12 of natural gas competes with wind and solar, which have no greenhouse gas emissions.

13 b. In 2017, Shell’s CEO promoted massive fossil fuel use by stating that the
14 fossil fuel industry could play a “crucial role” in lifting people out of poverty.¹⁹⁶ A Shell website
15 promotion states: “We are helping to meet the world’s growing energy demand while limiting
16 CO₂ emissions, by delivering more cleaner-burning natural gas.”¹⁹⁷

17 c. BP touts natural gas on its website as “a vital lower carbon energy source”
18 and as playing a “crucial role” in a transition to a lower carbon future.¹⁹⁸ BP promotes continued
19 massive fossil fuel use as enabling two billion people to be lifted out of poverty.¹⁹⁹

22 _____
23 ¹⁹⁵ [https://www.youtube.com/watch?v=tMu1CBjXfq4&list=PLIrXIHj7zayYGaExfTp_](https://www.youtube.com/watch?v=tMu1CBjXfq4&list=PLIrXIHj7zayYGaExfTp_B4t6gqTtkGf9A&index=6)
24 [B4t6gqTtkGf9A&index=6](https://www.youtube.com/watch?v=tMu1CBjXfq4&list=PLIrXIHj7zayYGaExfTp_B4t6gqTtkGf9A&index=6) (at 0:46).

25 ¹⁹⁶ Shell CEO speech, Mar. 9, 2017, [http://www.shell.com/media/speeches-and-](http://www.shell.com/media/speeches-and-articles/2017/deliver-today-prepare-for-tomorrow.html)
26 [articles/2017/deliver-today-prepare-for-tomorrow.html](http://www.shell.com/media/speeches-and-articles/2017/deliver-today-prepare-for-tomorrow.html).

27 ¹⁹⁷ Shell United States, Transforming Natural Gas, [http://www.shell.us/energy-and-](http://www.shell.us/energy-and-innovation/transforming-natural-gas.html)
28 [innovation/transforming-natural-gas.html](http://www.shell.us/energy-and-innovation/transforming-natural-gas.html).

¹⁹⁸ [https://www.bp.com/content/dam/bp/en/corporate/pdf/sustainability-report/group-reports/bp-](https://www.bp.com/content/dam/bp/en/corporate/pdf/sustainability-report/group-reports/bp-sustainability-report-2016.pdf)
[sustainability-report-2016.pdf](https://www.bp.com/content/dam/bp/en/corporate/pdf/sustainability-report/group-reports/bp-sustainability-report-2016.pdf); <http://www.bp.com/energytransition/shifting-towards-gas.html>.

¹⁹⁹ BP energy outlook, [http://www.bp.com/en/global/corporate/energy-economics/energy-](http://www.bp.com/en/global/corporate/energy-economics/energy-outlook.html)
[outlook.html](http://www.bp.com/en/global/corporate/energy-economics/energy-outlook.html).

1 d. Chevron’s website implores the public that “we produce safe, reliable
2 energy products for people around the world.”²⁰⁰ Chevron also promotes massive use of fossil
3 fuels as the key to lifting people out of poverty: “Reliable and affordable energy is necessary for
4 improving standards of living, expanding the middle class and lifting people out of poverty. Oil
5 and natural gas will continue to fulfill a significant portion of global energy demand for decades
6 to come – even in a carbon-constrained scenario.”²⁰¹ A prior Chevron advertisement still available
7 on the web promotes Chevron fossil fuels on a massive scale by stating that “our lives demand
8 oil.”²⁰²

9 e. ConocoPhillips promotes its fossil fuel products by stating that it
10 “responsibly suppl[ies] the energy that powers modern life.”²⁰³ Similarly, ConocoPhillips has the
11 following advertising slogan on its website: “Providing energy to improve quality of life.”²⁰⁴

12 **I. The City Has Suffered, Is Suffering, and Will Suffer Injuries from Defendants’**
13 **Tortious Conduct.**

14 186. Defendants’ individual and collective conduct—including, but not limited to, their
15 failures to warn of the threats their fossil fuel products posed to the climate; their wrongful
16 promotion of fossil fuel products and their concealment of known hazards associated with the use
17 of those products; and their public deception campaigns designed to obscure the connection
18 between their products and climate change and its environmental, physical, social, and economic
19 consequences—is direct and proximate cause that brought about or helped bring about climate
20 change and consequent harms to the City. Such harms include the increase in global mean
21 temperature and consequent increase in sea level rise and attendant flooding; and disruptions to
22 the hydrologic cycle, including, but not limited to, more frequent and extreme droughts, more

23 _____
24 ²⁰⁰ Chevron, Products and Services, <https://www.chevron.com/operations/products-services>.

25 ²⁰¹ Chevron, Managing Climate Change Risks, <https://www.chevron.com/corporate-responsibility/climate-change/managing-climate-risk>.

26 ²⁰² Chevron TV ad (2009), <https://www.youtube.com/watch?v=-KyjTGMVTkA>.

27 ²⁰³ ConocoPhillips, The Changing Energy Landscape, <http://www.conocophillips.com/who-we-are/our-company/spirit-values/responsibility/Pages/the-changing-energy-landscape.aspx>.

28 ²⁰⁴ ConocoPhillips, Producing energy, <http://www.conocophillips.com/what-we-do/producing-energy/Pages/default.aspx>.

1 frequent and extreme precipitation events and resulting flooding, erosion, and landslides, higher
2 groundwater levels and an accompanying increased risk of contaminant spread from hazardous,
3 superfund, landfills, and similar sites, more frequent and extreme heat waves, more frequent and
4 extreme wildfires, reduced air quality; and the cascading social, economic, health, and other
5 consequences of these environmental changes. These adverse impacts will continue to increase in
6 frequency and severity in Santa Cruz and disproportionately impact the City’s most vulnerable
7 communities.

8 187. The City of Santa Cruz, California is uniquely situated along the northern edge of
9 Monterey Bay and surrounded by a greenbelt of open space, with a river running through its
10 downtown and tourist-serving areas. Although these geographic features are a part of its appeal,
11 these features increase its vulnerability to the impacts of climate change. Sea level in California,
12 including Santa Cruz, will continue to rise significantly and dangerously through at least 2150.²⁰⁵

13 188. Without Defendants’ fossil fuel-related greenhouse gas pollution, current sea level
14 rise would have been far less than the observed sea level rise to date.²⁰⁶ Similarly, committed sea
15 level rise that will occur in the future would also be far less.²⁰⁷

16 189. Anthropogenic climate change is also compressing precipitation into mid-winter
17 (January–February) months, which will create drier than normal conditions in the City in the fall
18 (November–December) and spring (March–April), effectively extending the summer “dry” season
19 and compressing the winter “wet” season.

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21
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23 ²⁰⁵ See Gary Griggs et al., Rising Seas in California: An Update on Sea-Level Rise Science,
24 California Ocean Science Trust, at 26, Table 1(b) (April 2017),
25 <http://www.opc.ca.gov/webmaster/ftp/pdf/docs/rising-seas-in-california-an-update-on-sea-level-rise-science.pdf>.

26 ²⁰⁶ Robert E. Kopp et al., Temperature-driven Global Sea-level Variability in the Common Era,
27 Proceedings of the National Academy of Sciences, Vol. 113, No. 11, E1434-E1441, E1438
(2016), <http://www.pnas.org/content/113/11/E1434.full>.

28 ²⁰⁷ Peter U. Clark et al., Consequences of Twenty-First-Century Policy for Multi-Millennial
Climate and Sea-Level Change, Nature Climate Change Vol. 6, 365 (2016).

1 190. Additionally, California is moving toward a regime in which annual rainfall is
2 increasingly either extremely abundant or extremely lacking, with fewer “normal” rainfall years
3 occurring in 1982–2015 as compared to 1949–1981.²⁰⁸

4 191. The upshot is that the same amount of rain will fall in a shorter period via more
5 intense storms in Santa Cruz. The water supply generated from those events evaporates more
6 quickly, resulting in diminished surface water availability and diminished groundwater recharge.
7 In turn, this will diminish water supply for both human and ecological demand. Decreased soil
8 moisture will result in increased fuel aridity – that is, vegetation will dry out quickly and
9 completely in the absence of water, increasing its flammability.

10 192. Because of anthropogenic global warming, Santa Cruz’s hydrologic regime is
11 shifting toward one characterized by more frequent and severe drought, more extreme precipitation
12 events, more frequent and severe heatwaves, and more frequent and severe wildfires.

13 193. Defendants have actually and proximately caused the sea levels to rise, increased
14 the destructive impacts of storm surges, increased coastal erosion, exacerbated the onshore impact
15 of regular tidal ebb and flow, caused saltwater intrusion, disrupted the hydrologic cycle, caused
16 increased frequency and severity of drought, caused increased frequency and severity of extreme
17 precipitation events, caused increased frequency and severity of heat waves, caused increased
18 frequency and severity of wildfires, and caused consequent social and economic injuries associated
19 with the aforementioned physical and environmental impacts, among other impacts, resulting in
20 inundation, destruction, and/or other interference with Plaintiffs’ property and citizenry.

21 194. Plaintiffs have already incurred, and will foreseeably continue to incur, injuries,
22 and damages because of sea level rise and disruptions to the hydrologic cycle, including increased
23 frequency and severity of drought, increased frequency and severity of extreme precipitation
24 events, increased frequency and severity of heat waves, increased frequency and severity of

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26 ²⁰⁸ Daniel L. Swain et al., Trends in Atmospheric Patters Conducive to Seasonal Precipitation
27 and Temperature Extremes in California, Science Advances, e10501344, at 5 (2016); U.S.
28 Geological Survey, Simulation of Climate Change in San Francisco Bay Basins, California: Case
Studies in the Russian River Valley and Santa Cruz Mountains, Scientific Investigations Report
2012-5132, at 36 (2012).

1 wildfires, and consequent social and economic injuries associated with those physical and
2 environmental changes, all of which have been caused and/or exacerbated by Defendants’ conduct.

3 195. But for Defendants’ conduct, Plaintiffs would have suffered no or far less injuries
4 and damages than they have endured, and foreseeably will endure, due to anthropogenic sea level
5 rise, disruption of the hydrologic cycle, and associated consequences of those physical and
6 environmental changes.

7 **i. Sea Level Rise-Related Conditions and Injuries.**

8 196. Santa Cruz has experienced significant sea level rise over the last half century
9 attributable to Defendants’ conduct.²⁰⁹ Sea level rise endangers City property and infrastructure,
10 causing coastal flooding of low-lying areas, erosion of coastal cliffs, saltwater intrusion, and storm
11 surges. Several critical City facilities, existing roadways, sanitary sewer, storm pipes and water
12 mains, wetlands, habitat, coastal trails, access points, and beaches are already suffering the
13 combined hazards of sea level rise. The City will experience additional, significant, and dangerous
14 sea level rise through at least the year 2150,²¹⁰ and the increases will continue and accelerate.
15 Additionally, Santa Cruz will experience greater committed sea level rise due to the “locked in”
16 greenhouse gases already emitted.²¹¹ The City will suffer greater overall sea level rise than the
17 global average.²¹²

18 197. The City of Santa Cruz is particularly vulnerable to the impacts of sea level rise
19 because of its substantial coastline characterized by steep cliffs and pocket beaches combined and
20 because a large portion of its downtown urban core is located within the historic flood plain of the
21 San Lorenzo River. The maps below illustrate the areas of the City that are experiencing and will

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24 ²⁰⁹ See NOAA, Mean Sea Level Trend at Tide Station 9413450 (Monterey, CA),
https://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?stnid=9413450 (accessed Nov.
25 3, 2017).

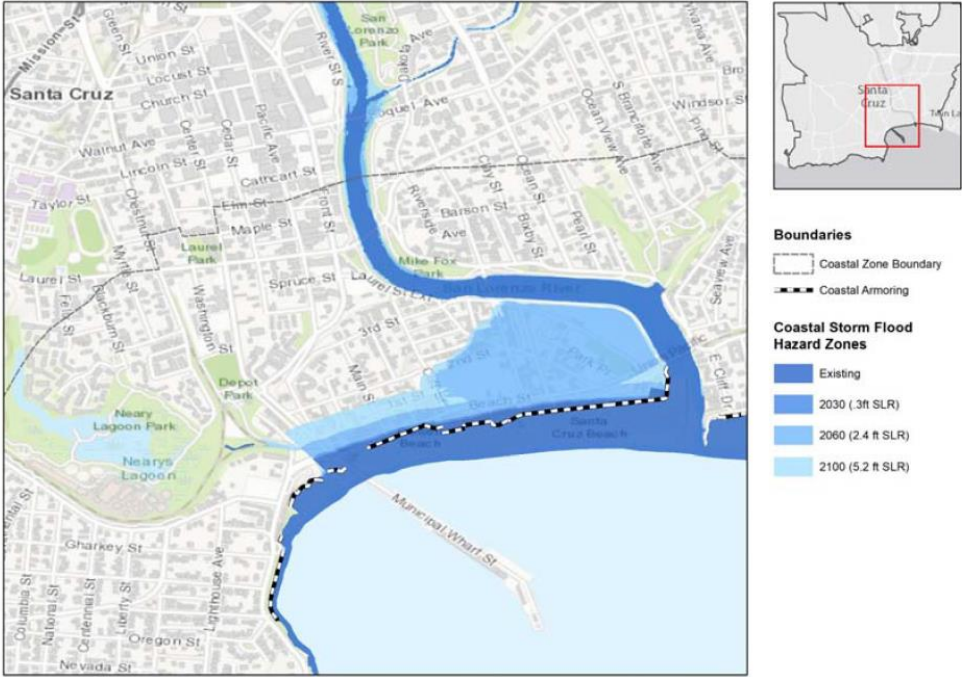
26 ²¹⁰ Griggs et al. (2017), supra note 205, at 26, Table 1(b) (describing sea level rise at the Golden
Gate, approximately 80 miles from Santa Cruz).

27 ²¹¹ Clark et al. (2016), supra note 207, at 363–65.

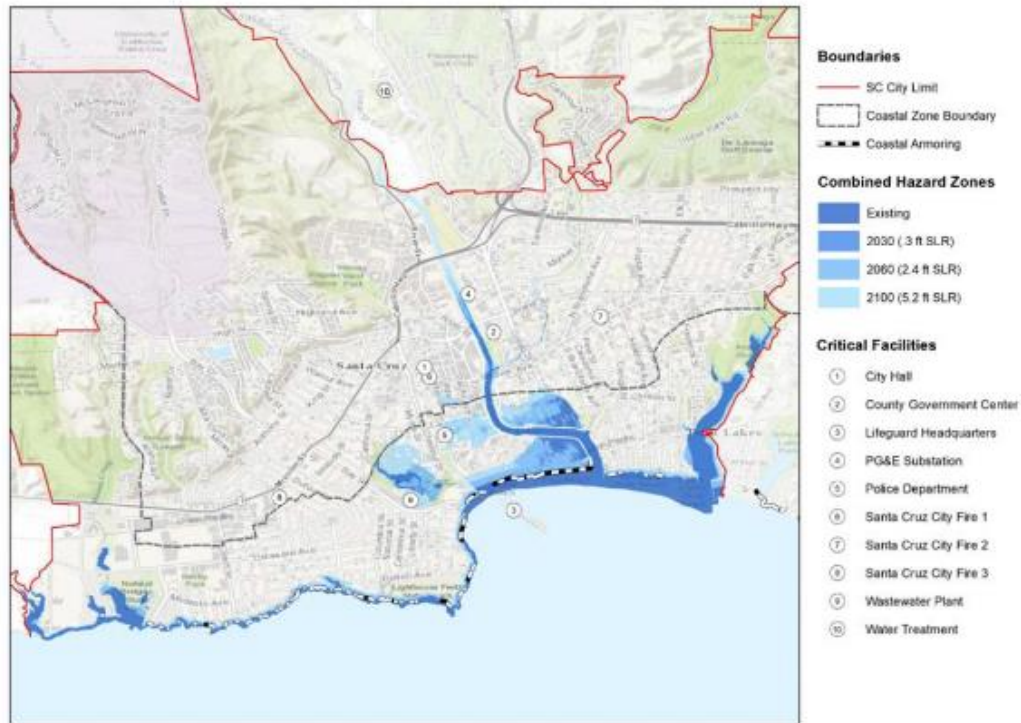
28 ²¹² Global sea level rise is projected to be 82.7 cm (32.6 inches) above 2000 levels by 2100. See
National Research Council, Sea-Level Rise for the Coasts of California, Oregon, and
Washington: Past Present and Future (2012) at 107, Table 5.2; 117, Table 5.3.

1 continue to experience increases in flooding, tidal inundation, erosion, wave overtopping, and
2 other impacts of sea level rise.

3 **Figure 8: Coastal Storm Flood Hazard Zones – Beach Flats (2030, 2060, and 2100)**



1 **Figure 9: Combined²¹³ Coastal Hazard Zones (2030, 2060, and 2100)**



14 198. The increased flooding and severe storm events associated with climate change will
15 result in significant structural and financial losses in the City’s low-lying downtown. The
16 downtown area in the San Lorenzo River floodplain falls within the 100-year floodplain
17 boundaries mapped by the Federal Emergency Management Agency.²¹⁴ The City has spent
18 substantial funds to raise the height of the San Lorenzo River levees as a measure to protect against
19 flooding associated with rising sea levels and increasingly extreme precipitation events.²¹⁵

20 199. Being situated on the flood plain of the San Lorenzo River, Santa Cruz’s downtown
21 is also particularly vulnerable to saltwater intrusion. During high tides, the water table rises,
22 sometimes reaching within a few feet of the surface requiring City Public Works Department to
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26 ²¹³ “Combined coastal hazards” includes rising tide, coastal storm flooding, and erosion.

27 ²¹⁴ City of Santa Cruz, Draft Local Hazard Mitigation Plan Update, 2017–2022, 67–69 (2017).

28 ²¹⁵ City of Santa Cruz, Economic Development, Development Projects, Levees Project, <http://www.cityofsantacruz.com/government/city-departments/economic-development/development-projects/levees-project>.

1 pump groundwater back out to sea. Sea level rise will exacerbate this issue in the future, requiring
2 more monitoring and pumping.

3 200. Additional sea level rise-related impacts to the City's beaches and coastline will
4 include, but are not limited to, the following:

5 a. Coastline along West Coast Drive is characterized by 25-40-foot cliffs
6 broken up by small pocket beaches. Sea level rise and coastal erosion will narrow the beaches and
7 threaten the road, bike path, parking areas, the Bethany Curve Bridge, and sewage pumping station
8 along West Coast Drive.

9 b. The area from Cowell's Beach to the San Lorenzo River mouth is one long,
10 wide, essentially continuous beach which is an intensively used recreational area and boasts the
11 Santa Cruz Beach Boardwalk, which attracts about 3 million people annually. Sea level rise will
12 impact this area through inundation and storm damage to oceanfront development and
13 infrastructure.

14 c. Seabright Beach and Santa Cruz Small Craft Harbor are currently protected
15 from erosion by jetties that have essentially halted annual cliff erosion rates. However, sea level
16 rise will narrow the beach and resume erosion, injuring East Cliff Drive and the harbor facilities.

17 d. The City's Wastewater Treatment Plant located near Neary Lagoon serves
18 approximately 135,000 people, including 58,000 residents of the city of Santa Cruz, as well as
19 people living in the Live Oak, East Cliff and Capitola areas. The plant already suffers from high
20 ground water condition, and ground water levels rise in response to a continued sea level rise will
21 exacerbate the existing problems requiring implementation of adaptation measures such as a cut
22 off wall, sealing wastewater pipes, and monitoring and protecting the facility from ground water
23 infiltration.

24 201. The City of Santa Cruz is planning adaptation strategies to address sea level rise
25 and related impacts, including coastal armoring, managed retreat, sealing wastewater facilities and
26 pipes, and replacing the Highway 1/9 bridge. A new 2.8-mile West Cliff Drive, and new revetment
27 or armoring to protect private homes within the hazard zone, would be enormously expensive.
28

1 202. Some sea level rise impacts do not offer any practical adaptation measure. One such
2 impact is the inundation of beaches where a building, rip rap, or other structure is fixed at the back
3 edge of the beach. Increased erosion, severe storms and flooding will gradually narrow these
4 beaches. Public beaches are the focal point of the tourism industry in the City. Natural Bridges
5 State Beach and Its Beach are the largest and most intensively used beaches. Costly beach
6 nourishment projects can mitigate these effects, but acreage and tidal availability of City beaches
7 will decrease. Because tourism and recreation will be gradually affected by beach loss, along with
8 the loss of other public lands and structures, the City stands to lose material portions of tax revenue
9 because of the continued erosion and inundation of its beaches and other tourist attractions.

10 203. Sea level rise will also impact tourism through increased flooding, storm waves,
11 and erosion of key roads and bridges located at low elevation and close to the coast. Damage to
12 these access points will result in declines in tourist visitors to the City, which in turn decreases the
13 economic productivity of the tourism industry and associated tax revenue to the City.

14 204. As a direct and proximate result of the acts and omissions of the Defendants'
15 alleged herein, Plaintiff has incurred significant expenses related to planning for and predicting
16 future sea level rise injuries to its real property, improvements thereon, municipal infrastructure,
17 and citizens, in order to preemptively mitigate and/or prevent such injuries. This includes updates
18 to the Local Hazard Mitigation Plan and other planning documents at significant expense to the
19 City.

20 205. As a direct and proximate result of the acts and omissions of the Defendants'
21 alleged herein, Plaintiff has incurred and will continue to incur significant expenses related to
22 planning for and predicting future sea level rise injuries to its real property, improvements thereon,
23 civil infrastructure, and citizens, in order to preemptively mitigate and/or prevent such injuries.

24 206. As a direct and proximate result of Defendants' acts and omissions alleged herein,
25 Plaintiffs have incurred sea level rise-related injuries and damages. These include infrastructural
26 repair and reinforcement of roads and beach access.

27 207. As a direct and proximate result of Defendants' acts and omissions alleged herein,
28 Plaintiffs' real property has been inundated by sea water, causing injury and damages thereto and

1 to improvements thereon, and preventing free passage on, use of, and normal enjoyment of that
2 real property, or permanently destroying it.

3 208. Defendants' conduct as described herein is therefore an actual, substantial, and
4 proximate cause of Plaintiffs' sea level rise-related injuries.

5 **ii. Conditions and Injuries Resulting from Disruption to the Hydrologic**
6 **Cycle**

7 **a. Precipitation and Water Supply**

8 209. Anthropogenic greenhouse gas emissions attributable to Defendants' fossil fuel
9 products and consequent changes to the hydrologic cycle increase the frequency and severity of
10 extreme precipitation events in the winter and drought in the dry season. Both of these disruptions
11 to precipitation patterns in the region will adversely affect the water supply in the City of Santa
12 Cruz.

13 210. As a result of anthropogenic global warming, Santa Cruz's hydrologic regime is
14 shifting toward one that is characterized by more frequent, more intense drought.²¹⁶

15 211. California and Santa Cruz most recently experienced a record-setting drought in
16 2012-2016, which featured the lowest multi-year precipitation total recorded in the state, as well
17 as the highest annual temperature.²¹⁷ Anthropogenic warming was a substantial contributing cause
18 of the severity of that drought,²¹⁸ which caused significant and material injuries in Santa Cruz.

19 212. As annual rainfall concentrates into a shorter time span, the annual dry period is
20 growing longer, resulting in conditions of moisture deficiency over longer periods. Even in the
21 absence of substantial changes in average precipitation in the City, precipitation will fall in a
22 shorter time span and therefore be less susceptible to capture and use.

23
24
25 ²¹⁶ Union of Concerned Scientists, Causes of Drought: What's the Climate Connection?,
26 http://www.ucsusa.org/global_warming/science_and_impacts/impacts/causes-of-drought-climate-change-connection.html#.WgCiK2i3w0F.

27 ²¹⁷ Noah S. Diffenbaugh et al., Anthropogenic Warming Has Increased Drought Risk in California, Proceedings of the National Academy of Sciences, 3931–3936, 3931 (2015).

28 ²¹⁸ See A. Park Williams et al., Contribution of Anthropogenic Warming to California Drought During 2012–2014, 42 Geophysical Research Letters 6819–6828 (2015).

1 213. An increase in the frequency and persistence of unusual atmospheric pressure
2 patterns also have contributed to the frequency of meteorological drought in California and the
3 City. For instance, multi-year persistence of an atmospheric high-pressure ridge off the California
4 coast that diverted atmospheric moisture away from California was a substantial contributor to the
5 absence of precipitation during the 2012-2016 California drought.²¹⁹

6 214. The co-occurrence of the precipitation/moisture deficits that constitute “drought”
7 with extremely warm temperatures induced by anthropogenic global warming exacerbates the
8 impacts of precipitation deficits by amplifying evapotranspiration and inducing increased
9 groundwater withdrawal and surface water diversion, thereby magnifying the impacts of drought
10 in Santa Cruz.²²⁰ Continued global warming is likely to cause a transition to a regime in which
11 essentially every seasonal, annual, and multiannual precipitation deficit co-occurs with historically
12 warm ambient temperatures.²²¹ Thus, future droughts in the City will be more severe than historical
13 droughts, with an attendant exacerbation of drought impacts.

14 215. The City of Santa Cruz Water Department serves approximately 90,000 customers
15 spread from Davenport to Live Oak. The City is particularly vulnerable to supply reliability issues
16 stemming from two factors. First, the City’s water system is unique in that it is entirely self-reliant.
17 The City’s water supply relies entirely on rainfall, surface runoff, and groundwater infiltration
18 occurring within watersheds located in Santa Cruz County. Thus, the amount of water available
19 varies from year to year as a function of rainfall and runoff.

20 216. Second, the City has limited storage capacity.²²² The Loch Lomond Reservoir, the
21 City’s sole reservoir, has a storage capacity of 2.8 billion gallons. Under current conditions, Santa
22 Cruz only has a marginally adequate amount of storage to serve demand during dry years when
23 the system’s reservoir does not fill completely.

24
25
26 ²¹⁹ Diffenbaugh et al. (2015), supra note 217, at 3931.

27 ²²⁰ Id.

28 ²²¹ Id. at 3934.

²²² City of Santa Cruz, Draft Local Hazard Mitigation Plan Update, 2017–2022, 78 (2017).

1 217. Disruption in the precipitation patterns resulting from climate change can affect the
2 quantity, quality, and distribution of water available to the City. The changing precipitation
3 patterns due to global warming will significantly alter the amount of water available to the city,
4 both surface and groundwater. Elevated winter flows present a challenge to the City’s water
5 supply. The San Lorenzo River is the City’s primary source of drinking water, providing an
6 average of 50% of the City’s annual water supply. Major storms mobilize sediment, increasing
7 turbidity (i.e. the cloudiness of water due to siltation) far in exceedance water treatment capacity.
8 Therefore, increased storm intensity and frequency will reduce the time during which the City can
9 draw water from the San Lorenzo River, unless the City improves water treatment capacity. More
10 intense winter precipitation will also result in lower summer base flows, reducing the time window
11 during which water can be diverted from streams. Thus, increased winter runoff paired with
12 decrease summer flows will require the City to significantly increase storage capacity.
13 Consequently, anthropogenic global warming will turn what is currently a marginally deficient
14 water supply into one of seriously deficient supply in the coming years.²²³

15 218. Other climate-related impacts, such as increased winter storms and wildfires also
16 pose a risk to the City’s water supply by threatening damage to water infrastructure.

17 219. The City has put considerable time and resources into studying, planning for, and
18 mitigating damage and vulnerabilities exacerbated by climate-driven changes to the hydrological
19 cycle. The City is considering water supply alternatives such as inter-basin water transfers and
20 passive and active aquifer recharge. Improvement of the Santa Cruz water supply’s sufficiency
21 and reliability by 2025 is a “very high priority action.”²²⁴

22 220. More intense winter precipitation has impacts beyond water supply. A significant
23 increase in the intensity and amount of rainfall during winter months will contributing to larger
24 flows along the San Lorenzo River and the major tributaries within the City limits increasing risks
25
26

27 _____
²²³ Id. at 78.

28 ²²⁴ Id. at 142.

1 of floods, landslides, and dam failure. Many of the City’s water system facilities and pipelines are
2 located in hilly and mountainous areas of Santa Cruz County, which are prone to landslides.²²⁵

3 221. More intense winter precipitation will also stress the City’s stormwater
4 infrastructure. Improvements to the City’s storm drain system to reduce flood risks will be very
5 expensive for the City.

6 **b. Wildfires**

7 222. Anthropogenic greenhouse gas emissions attributable to Defendants’ conduct and
8 consequent changes to the hydrologic cycle increase the risk of wildfire in the City of Santa Cruz.
9 Increased wildfire risk threatens individuals, residences, open space, public and private
10 infrastructure, City-owned real property and buildings, natural resources, and other City resources.

11 223. The climatic and meteorological trends toward longer, hotter, drier summers in
12 Santa Cruz are key indicia of increased fire occurrence, area burned, and fire behavior.²²⁶ Climate
13 drives moisture availability and weather conditions that increase fire risk.²²⁷ Wet conditions during
14 winter and spring promote fuel (vegetation) growth, while dry conditions prior to and during fire
15 season increase the flammability of live and dead fuels that sustain wildfires.²²⁸ Factors that limit
16 and/or facilitate wildfires that are interrelated to moisture availability include fuel aridity,²²⁹ fuel
17 density, ambient meteorological conditions (temperature, relative humidity, wind, and
18 precipitation), availability of ignition sources (lightning and anthropogenic sources), and fire
19 suppression rates.²³⁰

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21 _____
22 ²²⁵ Id. at 143.

23 ²²⁶ John T. Abatzoglou & Crystal A. Kolden, Relationships Between Climate and Macroscale
Area Burned in the Western United States, International Journal of Wildland Fire at A (2013).

24 ²²⁷ A.L. Westerling & B.P. Bryant, Climate Change and Wildfire in California, Climatic Change,
87 (Suppl. 1) S231-S249, S233 (2007).

25 ²²⁸ Id.

26 ²²⁹ John T. Abatzoglou & A. Park Williams, Impact of Anthropogenic Climate Change on
Wildfires Across Western US Forests, Proceedings of the National Academy of Sciences, Vol.
113, No. 42, E11770-11775, E11770 (2016) (citations omitted).

27 ²³⁰ O. Pechony & D.T. Shindell, Driving Forces of Global Wildfires Over the Past Millenium
and the Forthcoming Century, Proceedings of the National Academy of Sciences, Vol. 107, No.
28 45, 19167–19170, 19167 (2010).

1 224. In Northern California, including Santa Cruz, there is a positive correlation between
2 autumn-winter temperatures and the area burned in the subsequent fire season (i.e. higher
3 temperature in a given autumn-winter correlates with larger areas burned in the following fire
4 season), and a negative correlation between moisture availability and the area burned during the
5 fire season (i.e. less moisture correlates to more area burned).²³¹ Thus, as temperatures increase,
6 and moisture availability decreases with anthropogenic global warming's effects on the hydrologic
7 cycle, conditions have and will continue to become more conducive to wildfires in the City.

8 225. Fire activity, including the number of large fires, total area burned, and fire-season
9 length, have all increased across the western United States in the last half century.²³² Man-made
10 global warming has and will continue to exacerbate the areal extent and frequency of extreme fire
11 risk in California, including Santa Cruz.²³³

12 226. Anthropogenic climate change is responsible for increasing the number of days in
13 which there is a high fire potential in the western United States, including Santa Cruz, by a
14 substantial number per year over the period 1979-2015.²³⁴

15 227. Anthropogenic forcing, in the form of greenhouse gas pollution attributable to the
16 defendants' fossil fuel products, is responsible for nearly doubling the land surface area burned by
17 wildfires in the western United States, which includes Santa Cruz, over the period 1984-2015.²³⁵
18 The net increase in burned area attributable to anthropogenic climate change in the Western United
19 States during that timeframe is approximately 10.4 million acres.²³⁶

20 228. The annual average area burned by wildfires in Santa Cruz has increased
21 substantially from the period 1961-1990 to the period 2006-2017.²³⁷

22
23 ²³¹ Abatzoglou & Kolden (2013), supra note 226, at F.

24 ²³² Abatzoglou & Williams (2016), supra note 229, at E11770 (2016) (citations omitted).

25 ²³³ See Jin-Ho Yoon et al., Extreme Fire Season in California: A Glimpse into the Future?,
Bulletin of the American Meteorological Society.

26 ²³⁴ Abatzoglou & Williams (2016), supra note 229, at E11771.

27 ²³⁵ Id. at E11772 (citations omitted).

28 ²³⁶ Id.

²³⁷ See California Energy Commission, Cal-Adapt: Exploring California's Climate Change
Research, Wildfire Tool, available at <http://cal-adapt.org> (accessed Nov. 30, 2017).

1 229. The average area in Santa Cruz annually burned by wildfires will continue to
2 increase substantially at least through the 2099 relative to the historical baseline.²³⁸

3 230. The City of Santa Cruz Fire Department responds annually to about 50 vegetation
4 type fires.²³⁹ Suppression costs to contain and extinguish each of these fires cumulatively were
5 several tens of millions of dollars.²⁴⁰ The destructive force of these fires has been, and will
6 continue to be, exacerbated by anthropogenic greenhouse gases attributable to defendants' fossil
7 fuel products.

8 231. The City has expended and will continue to expend significant funds studying,
9 planning, preparing for, and preventing the increased risk of wildfire that will impact the City and
10 its residents.²⁴¹

11 232. Within the City of Santa Cruz there are five wildland/urban interface areas, all of
12 which are subject to increased risk of wildfire from climate change.²⁴² Residential development
13 continues to spread into wildland/urban interface areas increasing the danger to life and property
14 should a fire occur. Areas targeted as "likely" to have a wildland fire include the Arroyo
15 Seco/Meder Canyon, DeLaveaga, Pogonip, Moore Creek area and Arana Gulch.²⁴³ Increased use
16 of these areas by residents, transient encampments with fires, and young adults, exacerbates the
17 risks. The wildland/urban interface areas in the City, and their relative wildfire risk, are illustrated
18 in the figure below.²⁴⁴ Additional City resources located outside of the City's jurisdictional
19 boundaries are at risk from increased frequency and magnitude of wildfires, including water
20 service areas and water infrastructure areas on which the City depends for water service.²⁴⁵

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24 ²³⁸ Id.

25 ²³⁹ Id. at 58.

26 ²⁴⁰ Id. at 58.

27 ²⁴¹ Id. at 146.

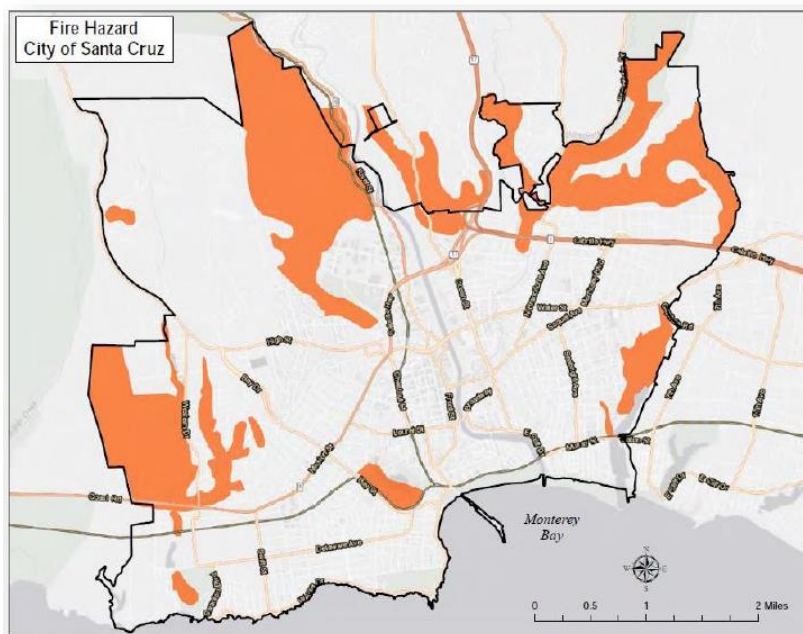
28 ²⁴² Id. at 56–57.

²⁴³ Id. at 59.

²⁴⁴ City of Santa Cruz, Draft Local Hazard Mitigation Plan Update, 2017–2022, 56–57 (2017).

²⁴⁵ Id. at 58.

Figure 10: Fire Hazard Map



233. Public buildings that are in the wildfire hazard zone areas include, but are not limited to, the historic Pogonip Clubhouse, DeLaveaga Golf Club and associated buildings, schools (including university housing and educational buildings within city limits), day care centers, and some park structures. There are also commercial and/or industrial structures in the threat zone.

234. The City estimates that there are 6,026 people and 1,270 parcels with 1,084 structures located within the wildfire hazard zone.²⁴⁶ The City estimates the value of property in the wildfire hazard area in the several hundreds of millions of dollars.²⁴⁷

235. The City found that the risk for large wildfires will increase by as much as 55% if temperatures rise to what is considered a medium warming range.²⁴⁸ Such a percent increase is twice as high as if temperatures only increased into the lower warming range.

²⁴⁶ Id. at 61, Table 5-1.

²⁴⁷ Id.

²⁴⁸ Id. at 56.

1 **iii. Heat Waves and Health Impacts**

2 236. The City has and will continue to incur expenses in planning and preparing for, and
3 treating, the public health impacts associated with anthropogenic global warming including, but
4 not limited to, impacts associated with extreme weather, extreme heat, drought, vector borne
5 illnesses, and sea level rise.

6 237. Extreme weather-induced public health impacts in the City will increase risk of
7 fatal and nonfatal injuries from drowning, being struck by objects, fire, explosions, electrocution,
8 or exposure to toxic materials, among others. A widespread weather-related natural disaster may
9 destroy or ruin housing, schools and businesses and cause temporary or permanent displacement.
10 Individuals and families may experience post-traumatic stress, depression, and increased risk of
11 suicide.²⁴⁹

12 238. The annual average number of extreme heat days²⁵⁰ has increased in Santa Cruz
13 relative to the historical baseline.²⁵¹

14 239. With future emissions, the annual average number of extreme heat days will
15 continue to increase substantially in the City.²⁵²

16 240. Extreme heat-induced public health impacts in the City will result in increased risk
17 of heat-related illnesses (mild heat stress to fatal heat stroke) and the exacerbation of pre-existing
18 conditions in the medically fragile, chronically ill, and vulnerable. Increased heat also intensifies
19 the photochemical reactions that produce smog and ground level ozone and fine particulates
20 (PM2.5), which contribute to and exacerbate respiratory disease in children and adults. Increased
21 heat and carbon dioxide enhance the growth of plants that produce pollen, which are associated

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23 _____
24 ²⁴⁹ N. Maizlish et al., Climate Change and Health Profile Report: Santa Cruz County Office of
Health Equity, California Department of Public Health, at 12 (2017).

25 ²⁵⁰ Defined as days in April-October that meet or exceed the 98th percentile of historical
26 maximum temperatures between April 1 and October 31 based on observed daily temperature
27 data from 1961–1990.

28 ²⁵¹ See California Energy Commission, Cal-Adapt: Exploring California’s Climate Change
Research, Number of Extreme Heat Days Tool, accessed Nov. 30, 2017, available at [http://cal-](http://cal-adapt.org)
[adapt.org](http://cal-adapt.org).

²⁵² Id.

1 with allergies. Because of Santa Cruz’s urban infrastructure, increased temperatures will add to
2 the heat load of buildings and exacerbate existing urban heat islands adding to the risk of high
3 ambient temperatures.²⁵³

4 241. Increased frequency and intensity of wildfires will increase fire-related injuries and
5 increase respiratory and cardiovascular risks from smoke, ash, and fine particles.²⁵⁴

6 242. Increased frequency and intensity of drought will create human health impacts by
7 reducing water availability to fight wildfires.²⁵⁵ Drought will also increase risk of exposure to
8 health hazards including wildfires, dust storms, extreme heat events, flash flooding, degraded
9 water quality, and reduced water quantity.²⁵⁶

10 243. In addition, a warming climate system, will create disease-related public health
11 impacts in the City, including but not limited to, increased incidence of emerging diseases and
12 vector-borne disease with migration of animal and insect disease vectors; physical and mental
13 health impacts associated with severe weather events, such as flooding, when they cause
14 population dislocation and infrastructure loss; exacerbation of existing respiratory disease,
15 cardiovascular disease, and stroke as a result of heatwaves and increased average temperature; and
16 respiratory distress, and exacerbation of existing disease.²⁵⁷

17 244. Sea level rise will increase risk of public health impacts in the City including, but
18 are not limited to, salt water intrusion into coastal aquifers reducing quality and quantity of water
19 supply; loss of recreational venues and hazards to infrastructure and public safety due to coastal
20 erosion; and; and indoor air quality problems from mold resulting from water intrusion.²⁵⁸

21 245. Public health impacts are likely to be disproportionately borne by communities
22 made vulnerable by geographic, racial, or income disparities.²⁵⁹ The City is taking steps to ensure
23

24 ²⁵³ Id. at 13.

25 ²⁵⁴ Id.

26 ²⁵⁵ Id.

27 ²⁵⁶ Id.

28 ²⁵⁷ Id.

²⁵⁸ Id.

²⁵⁹ Id.

1 that vulnerable communities are provided with necessary information and resources to respond to
2 climate change-related extreme weather events.

3 246. As a direct and proximate result of the acts and omissions of the Defendants'
4 alleged herein, Plaintiff has incurred significant expenses related to planning for and predicting
5 injuries from disruptions to the hydrologic cycle and associated consequences to its real property,
6 improvements thereon, civil infrastructure, citizens, water supply, and public health, in order to
7 preemptively mitigate and/or prevent such injuries.

8 247. As a direct and proximate result of Defendants' acts and omissions alleged herein,
9 Plaintiffs have incurred and will continue to incur injuries and damages resulting from disruption to the
10 hydrologic cycle and associated consequences. These injuries and damages include, but are not
11 limited to, infrastructural repair, reinforcement of roads and beach access, and loss of revenue.

12 248. Defendants' conduct as described herein is therefore an actual, substantial, and
13 proximate cause of Plaintiffs' injuries relating to and resulting from disruption to the hydrologic
14 cycle, including increasing frequency and severity of drought, increasing frequency and severity
15 of extreme precipitation events, increasing frequency and severity of heatwaves, increasing
16 frequency and severity of wildfires, and the associated consequences of those physical and
17 environmental changes.

18 **VI. CAUSES OF ACTION**

19 **FIRST CAUSE OF ACTION**

20 **(Public Nuisance on Behalf of the People of the State of California)**

21 **(Against All Defendants)**

22 249. The People incorporate by reference each and every allegation in §§ I–V contained
23 above, as though set forth herein in full.

24 250. The People of the State of California, acting by and through the Santa Cruz City
25 Counsel, bring this claim seeking abatement pursuant to California public nuisance law, including
26 section 731 of the California Code of Civil Procedure, and sections 3479, 3480, 3491, and 3494
27 of the California Civil Code.

1 251. Defendants, individually and in concert with each other, by their affirmative acts
2 and omissions, have caused, created, assisted in the creation of, and/or maintained harmful climate
3 change-related conditions, and continue to engage in that conduct. The climate change-related
4 conditions include higher sea level, increased storm frequency and intensity, more frequent and
5 extreme heat events, reduced air quality, and increased flooding, with compounding effects in
6 Santa Cruz’s Disadvantaged Communities. They are (1) are harmful and dangerous to human
7 health; (2) are indecent and offensive to the senses of the ordinary person; (3) obstruct and threaten
8 to obstruct the free use of the People’s property so as to interfere with the comfortable enjoyment
9 of life and property; and (4) obstruct and threaten to obstruct the free passage and use of public
10 parks, squares, streets, bodies of water, and/or highways within Santa Cruz. They therefore
11 constitute a nuisance.

12 252. Defendants, individually and in concert with each other, created, caused,
13 contributed to, and assisted in the creation of these and other climate change-related harms in Santa
14 Cruz by, among other things, affirmatively and deceptively promoting the sale and use of fossil
15 fuel products in Santa Cruz which Defendants knew would cause or exacerbate climate change
16 and its impacts in Santa Cruz including without limitation sea level rise, more frequent and extreme
17 precipitation events, coastal and inland flooding, more frequent and extreme heat events, and
18 reduced air quality. The affirmative misconduct also includes disseminating and funding the
19 dissemination of information intended to mislead consumers and the public regarding the risks of
20 climate change and its consequences that Defendants knew would inevitably follow from the
21 intended or reasonably foreseeable use of their products. It also includes engaging in other conduct
22 to manipulate and induce the public into continued and elevated consumption of fossil fuels and
23 delaying the shift to renewable energy in a way that exacerbates climate change harms.

24 253. Defendants’ nuisance-creating conduct included egregiously making untruthful,
25 deceptive, and/or misleading environmental marketing claims, explicit and implied, in violation of
26 Cal. Bus. & Prof. Code section 17580.5. The People are within the class of persons that statute
27 seeks to protect. Defendants’ misleading environmental marketing claims include, but are not
28 limited to, deceptively marketing fossil fuel products claimed to be “low carbon,” “emissions-

1 reducing,” “clean” and/or “green,” or otherwise environmentally beneficial or benign when in
2 reality those products contribute to climate change and are harmful to the health of the planet and
3 its people; and deceptively marketing their companies and their products as contributing to
4 solutions to climate change when in reality their investments in clean energy and alternative fuels
5 pale in comparison to their investments in expanding fossil fuel production.

6 254. The climate change-related harms that Defendants created, caused, contributed to,
7 and assisted in the creation of, constitute a substantial and unreasonable interference with and
8 obstruction of public rights and property, including, *inter alia*, the public rights to health, safety,
9 welfare, peace, comfort, and convenience of Santa Cruz residents and other citizens. These
10 interferences with public rights, which Defendants knew their affirmative wrongful promotion
11 would cause or exacerbate, include without limitation:

12 a. Interference with the public’s rights so regular and severe as to cause
13 permanent inundation;

14 b. The destruction of real and personal property, rather than mere annoyance;

15 c. The loss of property and infrastructure within Santa Cruz, which will
16 actually be borne by Plaintiff’s residents as loss of use of public property and infrastructure and
17 diversion of tax dollars away from other public services to sea level rise;

18 d. Plaintiff’s coastal property, which serves myriad uses including industrial,
19 residential, infrastructural, commercial and ecological, is not suitable for regular inundation;

20 e. Sea level rise, coastal inundation and flooding, and groundwater changes,
21 which obstruct the free passage and use of roads and property, impair water quality in groundwater
22 aquifers, damage critical public infrastructure, and lead to unprecedented and dangerous storm
23 surges that can cause injury or even deaths;

24 f. More frequent and extreme precipitation events, including atmospheric
25 rivers, which cause flooding that can damage public infrastructure, obstructing the free passage
26 and use of property;

27 g. More frequent and extreme heat events, which increase the risk of injury or
28 death from dehydration, heat stroke, heart attack, and respiratory problems; and

1 h. Public health harms including reduced air quality from smoke and
2 dangerous pollutants caused by more frequent and intense wildfires across California, which
3 exacerbates existing health conditions, damages lungs and increases rates of childhood asthma,
4 respiratory and heart disease, and death, and which reduces visibility and obstructs scenic views.

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

7 256. This public nuisance affects and/or interferes with the rights of an entire community
8 and/or the rights of a considerable number of persons in Santa Cruz and the State of California to
9 health, safety, peace, comfort, and convenience.

10 257. The People's injuries and threatened injuries from each Defendant's affirmative
11 acts or omissions are indivisible injuries. Each Defendant's past and ongoing conduct is a direct
12 and proximate cause of the People's injuries and threatened injuries. As a direct and proximate
13 result of Defendants' acts and omissions, Plaintiffs will be required to expend significant public
14 resources to mitigate the impacts of climate-related harms throughout Santa Cruz.

15 258. As a direct and proximate result of Defendants' conduct, as set forth above, the
16 common rights enjoyed by the People of the State of California and by the general public in the
17 City of Santa Cruz have been unreasonably interfered with because Defendants knew or should
18 have known that their conduct would create a continuing problem with long-lasting significant
19 negative effects on the rights of the public.

20 259. Defendants' actions are a direct and legal cause of the public nuisance.

21 260. Defendants' acts and omissions as alleged herein are indivisible causes of the
22 People's injuries and damage as alleged herein.

23 261. Defendants are jointly and severally liable to the People for committing a public
24 nuisance.

25 262. The People of the State of California, acting through the City of Santa Cruz, have
26 a clearly ascertainable right to have the public nuisance created by Defendants abated.

27 263. Wherefore, the People of the State of California also pray for relief as set forth
28 below.

1 **SECOND CAUSE OF ACTION**

2 **(Public Nuisance on Behalf of the City of Santa Cruz)**

3 **(Against All Defendants)**

4 264. Plaintiff incorporates by reference each and every allegation in §§ I–V contained
5 above, as though set forth herein in full.

6 265. Defendants, individually and in concert with each other, by their affirmative acts
7 and omissions, have caused, created, assisted in the creation of, and/or maintained harmful climate
8 change-related conditions, and continue to engage in that conduct. The climate change-related
9 conditions include higher sea level, increased storm frequency and intensity, more frequent and
10 extreme heat events, reduced air quality, and increased flooding, with compounding effects in
11 Santa Cruz’s Disadvantaged Communities. They are (1) are harmful and dangerous to human
12 health; (2) are indecent and offensive to the senses of the ordinary person; (3) obstruct and threaten
13 to obstruct the free use of the City’s property so as to interfere with the comfortable enjoyment of
14 life and property; and (4) obstruct and threaten to obstruct the free passage and use of public parks,
15 squares, streets, bodies of water, and/or highways within Santa Cruz. They therefore constitute a
16 nuisance.

17 266. Defendants, and each of them, created, caused, contributed to, and assisted in the
18 creation of these and other climate change-related harms in Santa Cruz by, among other things,
19 affirmatively and deceptively promoting the sale and use of fossil fuel products in Santa Cruz
20 which Defendants knew would cause or exacerbate climate change and its impacts in Santa Cruz
21 including without limitation sea level rise, more frequent and extreme precipitation events, coastal
22 and inland flooding, more frequent and extreme heat events, and reduced air quality. The
23 affirmative misconduct also includes disseminating and funding the dissemination of information
24 intended to mislead consumers and the public regarding the risks of climate change and its
25 consequences that Defendants knew would inevitably follow from the intended or reasonably
26 foreseeable use of their products. It also includes engaging in other conduct to manipulate and
27 induce the public into continued and elevated consumption of fossil fuels and delaying the shift to
28 renewable energy in a way that exacerbates climate change harms.

1 267. Defendants’ nuisance-creating conduct included egregiously making untruthful,
2 deceptive, and/or misleading environmental marketing claims, explicit and implied, in violation of
3 Cal. Bus. & Prof. Code section 17580.5. The City is within the class of persons that statute seeks
4 to protect. Defendants’ misleading environmental marketing claims include, but are not limited to,
5 deceptively marketing fossil fuel products claimed to be “low carbon,” “emissions-reducing,”
6 “clean” and/or “green,” or otherwise environmentally beneficial or benign when in reality those
7 products contribute to climate change and are harmful to the health of the planet and its people;
8 and deceptively marketing their companies and their products as contributing to solutions to
9 climate change when in reality their investments in clean energy and alternative fuels pale in
10 comparison to their investments in expanding fossil fuel production.

11 268. The climate change-related harms that Defendants created, caused, contributed to,
12 and assisted in the creation of, constitute a substantial and unreasonable interference with and
13 obstruction of public rights and property, including, *inter alia*, the public rights to health, safety,
14 welfare, peace, comfort, and convenience of Santa Cruz residents and other citizens. These
15 interferences with public rights, which Defendants knew their affirmative wrongful promotion
16 would cause or exacerbate, include without limitation:

17 a. Interference with the public’s rights so regular and severe as to cause
18 permanent inundation;

19 b. The destruction of real and personal property, rather than mere annoyance;

20 c. The loss of property and infrastructure within Santa Cruz, which will
21 actually be borne by Plaintiff’s residents as loss of use of public property and infrastructure and
22 diversion of tax dollars away from other public services to sea level rise;

23 d. Plaintiff’s coastal property, which serves myriad uses including industrial,
24 residential, infrastructural, commercial and ecological, is not suitable for regular inundation;

25 e. Sea level rise, coastal inundation and flooding, and groundwater changes,
26 which obstruct the free passage and use of roads and property, impair water quality in groundwater
27 aquifers, damage critical public infrastructure, and lead to unprecedented and dangerous storm
28 surges that can cause injury or even deaths;

1 f. More frequent and extreme precipitation events, including atmospheric
2 rivers, which cause flooding that can damage public infrastructure, obstructing the free passage
3 and use of property;

4 g. More frequent and extreme heat events, which increase the risk of injury or
5 death from dehydration, heat stroke, heart attack, and respiratory problems; and

6 h. Public health harms including reduced air quality from smoke and
7 dangerous pollutants caused by more frequent and intense wildfires across California, which
8 exacerbates existing health conditions, damages lungs and increases rates of childhood asthma,
9 respiratory and heart disease, and death, and which reduces visibility and obstructs scenic views.

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

12 270. This public nuisance affects and/or interferes with the rights of an entire community
13 and/or the rights of a considerable number of persons in Santa Cruz to health, safety, peace,
14 comfort, and convenience.

15 271. In addition to the harms suffered by the public at large, Plaintiff has suffered special
16 injuries different in kind. Among other harms,

17 a. Plaintiff has been forced to spend or set aside significant funds to assess,
18 plan for, and enact infrastructure changes needed to mitigate rising sea levels on Plaintiff's publicly
19 owned beaches and other public coastal property;

20 b. Plaintiff has had to plan for and provide additional emergency and other
21 public services in response to more frequent and more intense flooding and storm surges on both
22 properties owned by Plaintiff, and properties owned, leased, and utilized by residents and visitors
23 to Plaintiff's communities.

24 272. Plaintiff's injuries and threatened injuries from each Defendant's affirmative acts
25 or omissions are indivisible injuries. Each Defendant's past and ongoing conduct is a direct and
26 proximate cause of Plaintiff's injuries and threatened injuries. As a direct and proximate result of
27 Defendants' acts and omissions, Plaintiff will be required to expend significant public resources
28 to mitigate the impacts of climate-related harms throughout Santa Cruz.

1 substantial ability to influence, the manufacturing and distribution processes of their affiliates and
2 subsidiaries.

3 281. As manufacturers, advertisers, promoters, and/or sellers of fossil fuel products and
4 their derivatives, Defendants had a duty to warn consumers, the public, and Plaintiffs of reasonably
5 foreseeable environmental and health risks posed by those products and derivatives.

6 282. Throughout the times at issue, Defendants individually and collectively knew or
7 should have known—based on information passed to them from their internal research divisions
8 and affiliates, trade associations and entities, and/or from the international scientific community—
9 that fossil fuel products, whether used as intended or misused in a foreseeable manner, release
10 greenhouse gases into the atmosphere, causing global warming, sea level rise, increased intensity
11 and frequency of precipitation events and flooding, increased intensity and frequency of
12 storm surges, more frequent and severe heat waves and extreme temperatures, reduced air quality,
13 and the consequences and injuries associated with those physical and environmental changes,
14 which result in risks to human health and safety, damage to property and infrastructure, and loss
15 of use of public services in Santa Cruz.

16 283. Throughout the times at issue and continuing today, Defendants’ fossil fuel
17 products and their derivatives were used, distributed, and sold in a manner in which they were
18 reasonably foreseeably intended to be used, distributed, and sold, including but not limited to being
19 combusted for energy, combusted to power automobiles, refined into petrochemicals, and refined
20 and/or incorporated into petrochemical products including, but not limited to, fuels and plastics.

21 284. Defendants and their affiliates and subsidiaries knew, or should have known, that
22 these fossil fuel products and their derivatives would be used by the City, its residents, and others
23 within the City’s limits, amongst others, in the manner reasonably foreseeably intended.

24 285. Throughout the times at issue and continuing today, fossil fuel products presented
25 and still present a substantial risk of injury to Plaintiffs through the climate effects described above,
26 whether used as intended or misused in a reasonably foreseeable manner. They were not
27 reasonably safe at the time they left Defendants’ control because they lacked adequate warnings
28 and instructions. Defendants’ actual and/or constructive knowledge described above also

1 encompassed all of the risks described in this paragraph. The fossil fuel products and their
2 derivatives reached consumers and the environment substantially unchanged from that in which
3 they left the Defendants' control. Defendants and their affiliates and subsidiaries knew, or should
4 have known, that these fossil fuel products and their derivatives would be used by Plaintiffs, their
5 residents, and others within the Santa Cruz's limits, amongst others, in the manner reasonably
6 foreseeably intended.

7 286. Throughout the times at issue, the ordinary consumer would not recognize that the
8 use or foreseeable misuse of fossil fuel products causes global and localized changes in climate,
9 including those effects described herein.

10 287. At the time of manufacture, merchandising, advertising, promotion, or sale,
11 Defendants could have provided warnings or instructions regarding the full and complete risks
12 fossil fuel products and their derivatives posed because they knew, and/or should have known, of
13 the unreasonable risks of harm associated with the use of these products, as described herein.

14 288. Throughout the times at issue, Defendants individually and in concert widely
15 disseminated marketing materials, refuted the scientific knowledge generally accepted at the time
16 concerning climate change, and advanced pseudo-scientific theories of their own, and developed
17 public relations campaigns and materials that prevented reasonable consumers from recognizing
18 or discovering the latent risk that Defendants' fossil fuel products and their derivatives would
19 cause grave climate changes. Defendants also represented, asserted, claimed, and warranted that
20 their fossil fuel products and derivatives were safe for their intended and foreseeable uses.

21 289. Despite the Defendants' superior and unequal knowledge of the risks posed by
22 fossil fuel products and their derivatives, Defendants, and each of them, breached their duty to
23 warn by failing to adequately warn Plaintiffs, customers, , and the public of the risks of climate
24 change and other dangers that Defendants knew would inevitably follow from the intended or
25 reasonably foreseeable use of Defendants' fossil fuel products.

26 290. Any warnings the Defendants may have issued as to the risks of their fossil fuel
27 products and their derivatives were rendered ineffective and inadequate by Defendants' false and
28 misleading public relations campaigns and statements about fossil fuel products, and their decades-

1 long efforts to conceal and misrepresent the dangers that follow from the intended or reasonably
2 foreseeable use of such products.

3 291. Accordingly, throughout the times at issue, the ordinary consumer would not
4 recognize that the use of fossil fuel products and their derivatives causes global and localized
5 changes in climate, and consequent injuries to Santa Cruz and its communities, as described herein.

6 292. Had the Defendants provided adequate warnings and not waged a deceptive
7 campaign against climate science, their fossil fuel products and their derivatives would not have
8 had widespread acceptance in the marketplace, and alternatives to fossil fuel products could have
9 been developed faster, investment in fossil fuel alternatives would be greater, and/or fossil fuel
10 alternatives would be used in greater amounts.

11 293. Moreover, had the Defendants provided adequate warnings about the adverse
12 impacts to public health and the environment that result from the intended and reasonably
13 foreseeable use of fossil fuel products and their derivatives, Plaintiff and its residents would have
14 taken measures to decrease fossil fuel dependency in order to avoid or lessen the climate related
15 harms described herein and property damage that would inevitably follow.

16 294. As a result of the Defendants' failure to warn about the unreasonably dangerous
17 conditions of their fossil fuel products and their derivatives, Defendants are strictly liable to
18 Plaintiff.

19 295. Defendants' wrongful conduct was oppressive, malicious, and fraudulent, in that
20 their conduct was willful, intentional, and in conscious disregard for the rights of others.
21 Defendants' conduct was so vile, base, and contemptible that it would be looked down upon and
22 despised by reasonable people, justifying an award of punitive and exemplary damages in an
23 amount subject to proof at trial, and justifying equitable disgorgement of all profits Defendants
24 obtained through their unlawful and outrageous conduct.

25 296. As a direct and proximate result of the defects previously described, fossil fuel
26 products caused Plaintiff to sustain the injuries and damages set forth in this Complaint, including
27 damage to publicly owned infrastructure and real property, and the creation and maintenance of a
28 nuisance that interferes with the rights of the City, its residents, and of the People.

1 304. The condition described above created by Defendants' conduct substantially
2 interferes with Plaintiff's use and quiet enjoyment of its properties.

3 305. Plaintiff has not consented to Defendants' conduct in creating the condition that has
4 led to climate change and its associated harms.

5 306. The ordinary person, and the ordinary City or public entity in Plaintiff's position,
6 would be reasonably annoyed and disturbed by Defendants' conduct and the condition created
7 thereby, because, *inter alia*, it infringes on Plaintiff's ability to provide public space and safe
8 property to residents and visitors, and has forced Plaintiff to plan for and provide additional
9 emergency and other public services in response to more frequent and more intense flooding and
10 storm surges on properties owned by Plaintiff.

11 307. The seriousness of rising sea levels, increased weather volatility, flooding, and
12 extreme heat events (including fire smoke) is extremely grave, and outweighs the social utility of
13 Defendants' conduct. The seriousness of the harm to Plaintiff outweighs the benefit of Defendants'
14 and each of their conduct.

15 308. Defendants' conduct was a direct and proximate cause of Plaintiff's injuries, and a
16 substantial factor in the harms suffered by Plaintiff as described in this Complaint.

17 309. Defendants' acts and omissions as alleged herein are indivisible causes of
18 Plaintiff's injuries and damage as alleged herein.

19 310. Defendants' wrongful conduct was oppressive, malicious, and fraudulent, in that
20 their conduct was willful, intentional, and in conscious disregard for the rights of others.
21 Defendants' conduct was so vile, base, and contemptible that it would be looked down upon and
22 despised by reasonable people, justifying an award of punitive and exemplary damages in an
23 amount subject to proof at trial, and justifying equitable disgorgement of all profits Defendants
24 obtained through their unlawful and outrageous conduct.

25 311. Defendants are jointly and severally liable to the Plaintiff for causing a private
26 nuisance.

27 312. Wherefore, Plaintiff prays for relief as set forth below.\

28

1 **FIFTH CAUSE OF ACTION**

2 **(Negligence on Behalf of the City of Santa Cruz)**

3 **(Against All Defendants)**

4 313. Plaintiff incorporates by reference each and every allegation contained in §§ I–V
5 above, as though set forth herein in full.

6 314. Defendants knew or should have known of the climate effects inherently caused by
7 the normal use and operation of their fossil fuel products, including the likelihood and likely
8 severity of global and local climate change and its consequences, and including Plaintiff’s injuries
9 and damages described herein.

10 315. For decades, Defendants possessed knowledge—based on information passed to
11 them from their internal research divisions and affiliates, from trade associations and industry
12 groups, and from the international scientific community—that fossil fuels are the primary cause of
13 climate change and that, if unabated, climate change would cause climate-related harms, including
14 but not limited to: sea level rise, more frequent and extreme precipitation events, increased
15 frequency and severity of heat waves and extreme temperatures, reduced air quality, and other
16 adverse environmental changes, and the associated consequences of those physical and
17 environmental changes in Santa Cruz and elsewhere, with compounding effects in Disadvantaged
18 Communities. Defendants possessed knowledge that these climate-related harms would result in
19 risks to human health and safety, damage to property and infrastructure, and loss of use.

20 316. Given the scientific evidence available to and conducted by Defendants, as
21 referenced herein, such injury was likely and reasonably foreseeable.

22 317. Under California law, each Defendant had a duty to Plaintiff and its residents to
23 exercise reasonable care in the marketing, promoting, sale, and/or labeling of their fossil fuel
24 products and to act reasonably for the protection of Santa Cruz and its residents to avoid inflicting
25 the injuries described herein. All Defendants had a duty to exercise reasonable care in the
26 production and dissemination of information regarding the climate impacts of fossil fuel products
27 to users of those products and to the public.

1 318. Defendants had superior knowledge of the risk posed by fossil fuel products at all
2 times relevant to this Complaint.

3 319. Defendants, collectively and individually, had a duty to use due care in developing,
4 testing, inspecting, selling, and marketing their fossil fuel products. That duty obligated
5 Defendants collectively and individually to, *inter alia*, prevent defective products from entering
6 the stream of commerce, and prevent reasonably foreseeable harm that could have resulted from
7 the ordinary use or reasonably foreseeable misuse of Defendants' products.

8 320. Defendants, and each of them, breached their duty of due care by engaging in a
9 campaign of disinformation regarding global warming and the climatic effects of fossil fuel
10 products that prevented customers, consumers, and the general public from taking steps to
11 mitigate the inevitable consequences of fossil fuel consumption, and incorporating those
12 consequences into either short-term decisions or long-term planning. This includes when they
13 advertised, promoted, and/or sold fossil fuel products and their derivatives, while failing to include
14 warnings of the risk of harm associated with fossil fuel products and their derivatives, in a manner
15 that they knew or should have known would result in injury to human health and safety, damage
16 to Plaintiff's property and infrastructure, loss of use of Plaintiff's services, and other damages to
17 the Plaintiff. Any warnings provided by Defendants were rendered ineffective by the years-long
18 deceptive marketing practices and public relations campaigns, which promulgated false and
19 misleading statements, casted doubt on the consensus of climate scientists, and advanced pseudo-
20 scientific theories.

21 321. Defendants' individual and collective acts and omissions were actual, substantial
22 causes of climate change and its consequences, including Plaintiff's injuries and damages set forth
23 herein.

24 322. Defendants' individual and collective acts and omissions were proximate causes of
25 climate change and its consequences, including Plaintiff's injuries and damages set forth herein.
26 No other act, omission, or natural phenomenon intervened in the chain of causation between
27 Defendants' conduct and Plaintiff's injuries and damages, or superseded Defendants' breach of
28 their duties' substantiality in causing Plaintiff's injuries and damages.

1 their respective affiliates and subsidiaries. Defendants received direct financial benefit from their
2 affiliates' and subsidiaries' sales of fossil fuel products. Defendants' role as promoter and marketer
3 was integral to their respective businesses and a necessary factor in bringing fossil fuel products
4 and their derivatives to the consumer market, such that Defendants had control over, and a
5 substantial ability to influence, the manufacturing and distribution processes of their affiliates and
6 subsidiaries.

7 332. As manufacturers, advertisers, promoters, and/or sellers of fossil fuel products and
8 their derivatives, Defendants had a duty to warn consumers, the public, and Plaintiff of reasonably
9 foreseeable environmental and health risks posed by those products and derivatives.

10 333. Throughout the times at issue, Defendants individually and collectively knew or
11 should have known—based on information passed to them from their internal research divisions
12 and affiliates, trade associations and entities, and/or from the international scientific community—
13 that fossil fuel products, whether used as intended or misused in a foreseeable manner, release
14 greenhouse gases into the atmosphere, causing global warming, sea level rise, increased intensity
15 and frequency of precipitation events and flooding, increased intensity and frequency of
16 storm surges, more frequent and severe heat waves and extreme temperatures, reduced air quality,
17 and the consequences and injuries associated with those physical and environmental changes,
18 which result in risks to human health and safety, damage to property and infrastructure, and loss
19 of use of public services in Santa Cruz.

20 334. Defendants knew or should have known, based on information passed to them from
21 their internal research divisions and affiliates, their trade organizations, and/or from the
22 international scientific community, that the climate effects described above rendered their fossil
23 fuel products dangerous, or likely to be dangerous, when used as intended or misused in a
24 reasonably foreseeable manner.

25 335. Throughout the times at issue and continuing today, Defendants' fossil fuel
26 products and their derivatives were used, distributed, and sold in a manner in which they were
27 reasonably foreseeably intended to be used, distributed, and sold, including but not limited to being
28

1 combusted for energy, combusted to power automobiles, refined into petrochemicals, and refined
2 and/or incorporated into petrochemical products including, but not limited to, fuels and plastics.

3 336. Defendants and their affiliates and subsidiaries knew, or should have known, that
4 these fossil fuel products and their derivatives would be used by the City, its residents, and others
5 within the City's limits, amongst others, in the manner reasonably foreseeably intended.

6 337. Throughout the times at issue and continuing today, fossil fuel products presented
7 and still present a substantial risk of injury to Plaintiff through the climate effects described above,
8 whether used as intended or misused in a reasonably foreseeable manner. They were not
9 reasonably safe at the time they left Defendants' control because they lacked adequate warnings
10 and instructions. Defendants' actual and/or constructive knowledge described above also
11 encompassed all of the risks described in this paragraph. The fossil fuel products and their
12 derivatives reached consumers and the environment substantially unchanged from that in which
13 they left the Defendants' control. Defendants and their affiliates and subsidiaries knew, or should
14 have known, that these fossil fuel products and their derivatives would be used by Plaintiff, its
15 residents, and others within the Santa Cruz's limits, amongst others, in the manner reasonably
16 foreseeably intended.

17 338. At the time of manufacture, merchandising, advertising, promotion, or sale,
18 Defendants could have provided warnings or instructions regarding the full and complete risks
19 fossil fuel products and their derivatives posed because they knew, and/or should have known, of
20 the unreasonable risks of harm associated with the use of these products, as described herein.

21 339. Throughout the times at issue, Defendants individually and in concert widely
22 disseminated marketing materials, refuted the scientific knowledge generally accepted at the time
23 concerning climate change, and advanced pseudo-scientific theories of their own, and developed
24 public relations campaigns and materials that prevented reasonable consumers from recognizing
25 or discovering the latent risk that Defendants' fossil fuel products and their derivatives would
26 cause grave climate changes. Defendants also represented, asserted, claimed, and warranted that
27 their fossil fuel products and derivatives were safe for their intended and foreseeable uses.

28

1 340. Despite the Defendants' superior and unequal knowledge of the risks posed by
2 fossil fuel products and their derivatives, Defendants, and each of them, breached their duty to
3 warn by failing to adequately warn Plaintiffs, customers, and the public of the risks of climate
4 change and other dangers that Defendants knew would inevitably follow from the intended or
5 reasonably foreseeable use of Defendants' fossil fuel products.

6 340. Any warnings the Defendants may have issued as to the risks of their fossil fuel
7 products and their derivatives were rendered ineffective and inadequate by Defendants' false and
8 misleading public relations campaigns and statements about fossil fuel products, and their decades-
9 long efforts to conceal and misrepresent the dangers that follow from the intended or reasonably
10 foreseeable use of such products.

11 341. Accordingly, throughout the times at issue, the ordinary consumer would not
12 recognize that the use of fossil fuel products and their derivatives causes global and localized
13 changes in climate, and consequent injuries to Santa Cruz and its communities, as described herein.

14 342. Had the Defendants provided adequate warnings and not waged a deceptive
15 campaign against climate science, their fossil fuel products and their derivatives would not have
16 had widespread acceptance in the marketplace, and alternatives to fossil fuel products could have
17 been developed faster, investment in fossil fuel alternatives would be greater, and/or fossil fuel
18 alternatives would be used in greater amounts.

19 343. Moreover, had the Defendants provided adequate warnings about the adverse
20 impacts to public health and the environment that result from the intended and reasonably
21 foreseeable use of fossil fuel products and their derivatives, Plaintiffs and their residents would
22 have taken measures to decrease fossil fuel dependency in order to avoid or lessen the climate
23 related harms described herein and property damage that would inevitably follow.

24 344. As a result of the Defendants' failure to warn about the unreasonably dangerous
25 conditions of their fossil fuel products and their derivatives, Defendants are liable to Plaintiff.

26 345. Defendants further breached their duty of care by making untruthful, deceptive,
27 and/or misleading environmental marketing claims, explicit and implied, in violation of Cal. Bus.

28

1 & Prof. Code section 17580.5. By violating the greenwashing statute, Defendants are presumed to
2 have breached their duty per se under Evidence Code section 669.

3 a. Defendants violated section 17580.5 with such conduct including
4 deceptively marketing fossil fuel products claimed to be “low carbon,” “emissions-reducing,”
5 “clean” and/or “green,” or otherwise environmentally beneficial or benign when in reality those
6 products contribute to climate change and are harmful to the health of the planet and its people;
7 and deceptively marketing their companies and their products as contributing to solutions to
8 climate change when in reality their investments in clean energy and alternative fuels pale in
9 comparison to their investments in expanding fossil fuel production.

10 b. This conduct was the proximate cause of Plaintiff’s climate related injuries.

11 c. Plaintiff’s injuries resulted from an occurrence of the nature which the
12 greenwashing statute was designed to prevent.

13 d. Plaintiff is among the class of persons for whose protection the
14 greenwashing statute was adopted.

15 346. Defendants’ wrongful conduct was oppressive, malicious, and fraudulent, in that
16 their conduct was willful, intentional, and in conscious disregard for the rights of others.
17 Defendants’ conduct was so vile, base, and contemptible that it would be looked down upon and
18 despised by reasonable people, justifying an award of punitive and exemplary damages in an
19 amount subject to proof at trial, and justifying equitable disgorgement of all profits Defendants
20 obtained through their unlawful and outrageous conduct.

21 347. As a direct and proximate result of the defects previously described, fossil fuel
22 products caused Plaintiff to sustain the injuries and damages set forth in this Complaint, including
23 damage to publicly owned infrastructure and real property, and the creation and maintenance of a
24 nuisance that interferes with the rights of the City, its residents, and of the People.

25 348. Defendants’ acts and omissions as alleged herein are indivisible causes of
26 Plaintiff’s injuries as alleged herein.

27 349. As a direct and proximate result of Defendants’ acts and omissions as alleged
28 herein, Plaintiff has suffered monetary losses and damages in amounts to be proven at trial.

1 change impacts to Santa Cruz, was a substantial factor in causing the injuries and damages to
2 Plaintiff's public and private real property.

3 357. Defendants' acts and omissions as alleged herein are indivisible causes of
4 Plaintiff's injuries and damage as alleged herein.

5 358. Defendants' wrongful conduct was oppressive, malicious, and fraudulent, in that
6 their conduct was willful, intentional, and in conscious disregard for the rights of others.
7 Defendants' conduct was so vile, base, and contemptible that it would be looked down upon and
8 despised by reasonable people, justifying an award of punitive and exemplary damages in an
9 amount subject to proof at trial, and justifying equitable disgorgement of all profits Defendants
10 obtained through their unlawful and outrageous conduct.

11 359. Defendants are jointly and severally liable to the Plaintiff for causing trespass.

12 360. Wherefore, Plaintiff prays for relief as set forth below.

13 **VII. PRAYER FOR RELIEF**

- 14 1. Compensatory damages in an amount according to proof;
 - 15 2. Equitable relief to abate the nuisances complained of herein;
 - 16 3. Reasonable attorneys' fees pursuant to California Code of Civil Procedure 1021.5
17 or otherwise;
 - 18 4. Punitive damages;
 - 19 5. Disgorgement of profits;
 - 20 6. Finding Defendants jointly and severally liable for causing, creating, assisting in
21 the creation, of, contributing to, and/or maintaining a public nuisance;
 - 22 7. Ordering an abatement fund remedy to be paid for by Defendants to provide for
23 infrastructure and other support necessary for the People to abate the nuisances complained of
24 herein;
 - 25 8. Pre- and post-judgment interest as permitted by law;
 - 26 9. Costs of suit and expenses; and
 - 27 10. For such and other relief as the court may deem proper.
- 28

1 **VIII. JURY DEMAND**

2 Plaintiff the City of Santa Cruz demands a jury trial on all issues so triable.

3
4 Dated: June 10, 2024

**CITY OF SANTA CRUZ
CITY ATTORNEY'S OFFICE**

5
6
7 By: /s/ Anthony P. Condotti

8 ANTHONY P. CONDOTTI
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20 *Attorneys for The City of Santa Cruz, a*
21 *municipal corporation, individually and on*
22 *behalf of the People of the State of California*
23
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25
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1 **PROOF OF SERVICE**

2 I am employed in the County of San Francisco, State of California. I am over the age of
3 eighteen (18) years and not a party to the action. My business address is 100 Montgomery St., Ste.
4 1410, San Francisco, CA 94104. I am readily familiar with Sher Edling LLP's practice for
5 collection and processing of documents for mailing.

6 On June 10, 2024, I served copies of the following document:

7 **FIRST AMENDED COMPLAINT**

8 upon the counsel listed below via File&ServeXpress as follows:

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12 I declare under penalty of perjury that the foregoing is true and correct. Executed in San
13 Francisco, CA on June 10, 2024.

14
15 /s/ Oni Strawn
16 Oni Strawn