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IN THE CIRCUIT COURT OF THE STATE OF OREGON
FOR THE COUNTY OF MULTNOMAH

COUNTY OF MULTNOMAH,

Plaintiff,

v.

EXXON MOBIL CORP., SHELL PLC, F.K.A.
ROYAL DUTCH SHELL PLC, SHELL U.S.A.,
INC., EQUILON ENTERPRISES LLC DBA
SHELL OIL PRODUCTS US, BP PLC, BP
AMERICA, INC., BP PRODUCTS NORTH
AMERICA, INC., CHEVRON CORP.,
CHEVRON U.S.A., INC., CONOCOPHILLIPS,
MOTIVA ENTERPRISES, LLC, OCCIDENTAL
PETROLEUM F.K.A. ANADARKO
PETROLEUM CORP., SPACE AGE FUEL,
INC., VALERO ENERGY CORP.,
TOTALENERGIES, S.E. F.K.A. TOTAL S.A.,
TOTALENERGIES MARKETING USA F.K.A.
TOTAL SPECIALTIES USA, INC.,
MARATHON OIL COMPANY, MARATHON
OIL CORP., MARATHON PETROLEUM
CORP., PEABODY ENERGY CORP., KOCH
INDUSTRIES, INC., AMERICAN
PETROLEUM INSTITUTE, WESTERN
STATES PETROLEUM ASSOCIATION,
MCKINSEY & COMPANY, INC., MCKINSEY
HOLDINGS, INC., and DOES 1-250
INCLUSIVE,

Defendants.

Case No. 23CV25264

**FIRST AMENDED
COMPLAINT**

(Public Nuisance, Negligence,
Fraud & Deceit, and Trespass)

PRAYER: \$51,550,000,000

Or Laws 2012, ch. 48, Sec. 2;
ORS 21.160(1)(e)

CLAIMS NOT SUBJECT TO
MANDATORY ARBITRATION

JURY TRIAL REQUESTED

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2 **FIRST AMENDED COMPLAINT FOR CIVIL DAMAGES**
3 **AND ABATEMENT OF PUBLIC NUISANCE**

4 **I. NATURE OF THE CASE**

5 1.

6 This is a case that seeks damages and equitable relief for harm caused to Multnomah
7 County (hereafter, “County” or “Plaintiff”), by Defendants’ execution of a scheme to rapaciously
8 sell fossil fuel products and deceptively promote them as harmless to the environment, while they
9 knew that carbon pollution emitted by their products into the atmosphere would likely cause deadly
10 extreme heat events like that which devastated Multnomah County in late June and early July
11 2021. Beginning on June 25, 2021, the Plaintiff, Multnomah County was scorched by the most
12 extreme heat event in its history. For several consecutive days and nights, a “heat dome,”
13 sometimes called a “blocking event” or an “extreme heat event,” boiled the County, causing
14 massive loss of life, grave ill health, destruction of County property, and the consumption of
15 resources. Over three consecutive days, County temperatures reached highs of 108°, 112°, and
16 116° Fahrenheit. All three of those high temperatures exceeded those of any day in any previous
17 year in the County, ever. Tree ring data revealed that the 2021 Pacific Northwest (“PNW”) heat
18 dome was the hottest event in the region since *the beginning of the record time* (starting in
19 950AD).¹
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26 ¹ Heeter, K.J., Harley, G.L., Abatzoglou, J.T. *et al.* Unprecedented 21st century heat across the
27 Pacific Northwest of North America. *npj Clim Atmos Sci* 6, 5 (2023). <https://doi.org/10.1038/s41612-023-00340-3>.

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2 2.

3 Because Multnomah County has historically enjoyed a mild climate, a substantial portion
4 of its residents, even those who have financial resources, have no central cooling system or window
5 units in their homes. A total of 69 people died in Multnomah County from overheating during this
6 event. In a typical year, Multnomah County experiences *zero* deaths from heat-related illnesses.
7 Prior to June 2021, Multnomah County recorded only two hyperthermia deaths since 2010 — one
8 each in 2016 and 2018.² More people died from the June 2021 heat wave in Multnomah County
9 than died from heat in the entire state of Oregon in the past 20 years.³ Deaths from *all causes*
10 during the heat dome were double the normal level.
11

12 3.

13 Many other residents fell ill from heat strokes, heat exhaustion, and dehydration. Hundreds
14 required emergency and critical medical care.
15

16 4.

17 The severity of the heat dome caused the County to expend enormous financial and human
18 resources that it otherwise would not have, and thus added crushing economic burden upon the
19 County, in tandem with the devastating human toll exacted upon its residents. In addition to
20 providing many types of emergency health and human services for residents suffering from the
21 extreme heat, the County spent taxpayer money to provide people with shelter, cooling centers,
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25 ² Multnomah County, June 2021 Extreme Heat Event, Preliminary Findings and Action Steps
26 <https://www.multco.us/file/june-2021-heat-event-preliminary-findings-and-action-steps> (last
visited June 12, 2023).

27 ³ Id.

1 fans, food, portable air conditioners, clothes, and water. The agitation and desperation wrought by
2 the record heat provoked an increase in crime and violence within the County, which further taxed
3 the resources of law enforcement and County healthcare providers, who were already pushed
4 beyond their limits in trying to care for those suffering from heat strokes and heat-related illnesses.
5 In the wake of the June 2021 extreme heat event, the County spent significant sums of its taxpayer
6 monies to prepare for future ones. These expenditures included increases in shelter space, supplies,
7 warehousing of supplies, an early warning system, staffing, training, and tree density. Still, the
8 County lacks the resources to adequately prepare for comparable or more severe heat extremes.
9
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11 5.

12 The heat dome that cost so much life and loss was not a natural weather event. It did not
13 just happen because life can be cruel, nor can it be rationalized as simply a mystery of God's will.
14 Rather, the heat dome was a direct and foreseeable consequence of the Defendants' decision to sell
15 as many fossil fuel products over the last six decades as they could and to lie to the County, the
16 public, and the scientific community about the catastrophic harm that pollution from those
17 products into the Earth's and the County's atmosphere would cause. In the aftermath of the June
18 2021 heat dome, world renown climatologists, physicists and statisticians researched the causes of
19 that extreme heat event and published their conclusions in peer-reviewed scientific journals. One
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2 such study concluded that the occurrence of a heat wave of the intensity experienced in the study
3 area would have been virtually impossible without anthropogenic climate change (“ACC”).⁴

4 6.

5 The same study concluded that this extreme heat event was 150 times less likely to have
6 occurred in the absence of ACC.⁵

7 7.

8 Finally, the authors determined that in the absence of ACC, a heat event this extreme in
9 this region might occur, if at all, one time in 1000 years. Escalating carbon pollution has increased
10 the likelihood that it will reoccur every 5 to 10 years.”⁶

11 8.

12 These autopsy-like climatic diagnoses corroborated prognoses that the Defendants had
13 since the late 1950s internally forecasted would occur: The heat catastrophe was caused by carbon
14 pollution emitted into and accumulated by the atmosphere that warmed the planet and the region
15 where the County resides, as well as dried out the region’s soil. It was so extreme and historically
16 anomalous that it would not have occurred so intensely, nor at all, absent that pollution. In sum,
17 but for carbon atmospheric pollution, the 2021 Pacific Northwest heat dome would have not
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24 ⁴ Philip, S. Y., et al., Rapid attribution analysis of the extraordinary heat wave on the Pacific coast
25 of the US and Canada in June 2021, *Earth Syst. Dynam.*, 13, 1689–1713 (2022).
<https://doi.org/10.5194/esd-13-1689-2022>.

26 ⁵ Id.

27 ⁶ Id.

1 occurred, and in the unlikely event that some atypical heating period may have still occurred, it
2 would not have been as severe or as destructive.
3

4 9.

5 The extreme heat event that began on June 25, 2021, and the Plaintiff’s damages caused
6 by it, occurred because first, the Defendants’ historical carbon and methane pollution heated up
7 the Earth’s (and the Plaintiff’s) atmosphere and, second, the Defendants’ engaged in a sophisticated
8 campaign of deflection and deception that denied what they knew was the foreseeable consequence
9 of using their fossil fuel products.
10

11 10.

12 Defendants have known and foreseen for decades that their fossil fuel pollution would
13 cause widespread and catastrophic harm throughout the world, including to Plaintiff, but they lied
14 and cynically sought to sow “scientific” and public doubt in furtherance of their ceaseless,
15 ravenous quest for more wealth. The use and consumption of fossil fuels—oil, natural gas, and
16 coal—is the primary source of greenhouse gas emissions. Those greenhouse gas emissions have
17 warmed the earth 1.1 to 1.2 ° C since 1900.⁷ The American Petroleum Institute (“API”), in
18 coordination with several Fossil Fuel Defendants that are long-standing members of that
19 organization, investigated the science and advised *each other*, but not the public, in stark terms
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25 ⁷ 2020 World Meteorological Organization (WMO) Report,
26 [https://public.wmo.int/en/media/press-release/2020-was-one-of-three-warmest-years-
27 record#:~:text=The%20differences%20in%20average%20global,\(1850%2D1900\)%20level.](https://public.wmo.int/en/media/press-release/2020-was-one-of-three-warmest-years-record#:~:text=The%20differences%20in%20average%20global,(1850%2D1900)%20level.)

1
2 that fossil fuel usage would cause global warming and catastrophic climate changes like those
3 experienced in Multnomah County.

4 11.

5 API is a trade group that promotes the fossil fuel production and sales activities of its
6 members, which include the following Defendants: Exxon, Shell, Chevron, BP, ConocoPhillips,
7 Motiva, and Anadarko. In 1965, API’s president, Frank Ikard, stated *internally* to the group’s
8 members, “... there is still time to save the world’s peoples from the catastrophic consequence of
9 pollution, but time is running out.”⁸ In 1965, the Defendants could have publicly admitted what
10 they privately understood: emissions into the atmosphere from the use of Defendants’ fossil fuels
11 threatened “the world’s people” with “catastrophic consequence[s].” Defendants understood that
12 such threats could be avoided if course corrections were implemented imminently, before “time
13 [runs] out.” Yet, Defendants did the opposite. They made no such public admission. They lied
14 publicly and repeatedly about the harm their pollution was causing and the calamities it would
15 cause. They chose to safeguard their financial bottom lines, rather than the health and safety of the
16 Plaintiff, the planet, and “the world’s peoples.”

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19 12.

20 Fossil Fuel Defendants consciously decided that they would lie about the impact of their
21 fossil fuel products on the global climate, and regional climate that includes Multnomah County.
22 In 1989, Fossil Fuel Defendants mobilized a campaign to create the “Global Climate Coalition”
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26 ⁸ Franta, B., Early oil industry knowledge of CO₂ and global warming. *Nature Clim Change* 8,
27 1024–1025 (2018). <https://doi.org/10.1038/s41558-018-0349-9>.

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2 (“GCC”). Through this organization, Fossil Fuel Defendants and others funded a marketing
3 campaign that intended to deceive and violate Oregon’s statutes and common law. That deception
4 continues to this day.

5
6 13.

7 In the spring of 1998, Fossil Fuel Defendants further organized their deceptive scheme into
8 what is now known as the “Victory” memorandum. The Defendants perceived that a “consensus”
9 had formed among qualified scientists and the informed public that carbon pollution from fossil
10 fuel consumption was substantially warming the planet and thereby inducing weather extremes
11 that posed an existential threat. Rather than seeking to modify their business activities to reduce
12 that threat, the Defendants set forth upon a plan *to change the narrative* about that serious problem
13 and undermine the consensus with pseudo-science, fabricated doubt, and a well-funded, sustained
14 public relations campaign to promote their spin. To that end, they sponsored a cadre of mercenary
15 “experts” who were selected for the purpose of seeding scientific literature and serving as moles
16 in climatology group think. Their role is and was to espouse fossil fuel industry-sponsored
17 propaganda under a false pretense that it was objective and reliable contrary science, and they
18 spread their disinformation across America, including in Multnomah County.

19
20 14.

21 In furtherance of the scheme that Defendants hatched in the “Victory” memorandum, they,
22 and the fabulists they sponsor, corrupted legitimate scientific literature by seeding it with anti-
23 science, pro-industry propaganda, upon which consumers, including consumer taxpayers in
24 Multnomah County, have detrimentally relied.

1
2 15.

3 The culpable conduct of the Fossil Fuel Defendants, as described more fully in this First
4 Amended Complaint includes:

- 5 (a). Defendants proclaimed that climate change was not a real or imminent
6 threat while they had actual knowledge that it was.
- 7 (b). Defendants had a duty to disclose under Oregon laws, but failed to disclose:
8 1) their own scientists confirmed that global climate change was a genuine
9 and serious threat; 2) that pollution from their fossil fuel products was a
10 direct cause of that threat; and 3) extreme heat in otherwise mild climates
11 like America's Pacific Northwest was one of the threats that they predicted
12 was made more likely to happen with more severe consequences.
- 13 (c). To conceal their fraudulent marketing scheme, Defendants masked their
14 activities through front groups, dark money funding, pseudo scientists for
15 hire, all in an enterprise to deceive the public and Multnomah County.
- 16 (d). Defendants failed to warn the public, including Multnomah County and its
17 citizens of the external social, economic and environmental costs from
18 using their products. Instead, the Defendants created a narrative of scarcity
19 of resources to maintain their energy production monopoly, make higher
20 profits, and block development of alternative energy, so as to create a
21 seemingly unbreakable dependence on their products.

22 16.

23 Defendants' false and misleading promotion and sale of fossil fuel products are individually
24 and collectively a cause, of the extreme heat event that struck the County beginning on June 25,
25 2021, two similar heat events that occurred in 2022, another one in May 2023, as well as causing
26 an increase in the frequency and severity of wildfires, which in turn were made more frequent and
27 more severe by two decades of drought. The harms caused by Defendants to Plaintiff are ongoing
28 and will multiply. Because Defendants have polluted the atmosphere with enormous amounts of
methane and carbon dioxide, which remain aloft for decades, and they continue to do so without

1
2 restraint, extreme heat events will reoccur with increasing intensity and frequency.⁹ Because
3 Defendants’ carbon and methane polluting products and activities cause both global and regional
4 temperature rise and sustained periods of drought, Plaintiff has experienced and will continue to
5 experience massive, unmanageable wildfires. Plaintiff lacks sufficient resources to prepare for the
6 enormity of that impending harm and seeks all remedies from Defendants provided by Oregon
7 state law for its damages, past and future, as well as for abatement of such harms.
8

9
10 17.

11 Plaintiff Multnomah County brings this action in its sovereign capacity for the public
12 benefit and to promote the welfare of the public. The County of Multnomah also brings this action
13 as an exercise of its police power, which includes, but is not limited to, its power to prevent
14 pollution of the County’s property, air, and waters, to prevent and abate nuisances, and to prevent
15 and abate hazards to public health, safety, welfare, and the environment. Finally, the County of
16 Multnomah also brings this action in its capacity as *parens patriae* on behalf of its taxpaying
17 residents who have suffered and will suffer harms, including for the expenditures of County
18 resources arising from extreme heat events and wildfires caused by Defendants’ malfeasance,
19 which is further described herein. **All of Plaintiff’s claims for relief arise under Oregon state
20 law. Plaintiff seeks no remedy under Federal law and expressly disclaims all theories of
21 recovery, if any, that may exist exclusively under Federal law. Plaintiff does not seek relief**
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26 ⁹ Zhang, X., Zhou, T., Zhang, W. et al. Increased impact of heat domes on 2021-like heat extremes
27 in North America under global warming. Nat Commun 14, 1690 (2023).
<https://doi.org/10.1038/s41467-023-37309-y>.

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2 with respect to any federal enclave located within the County’s geographic borders, or any
3 federal enclave elsewhere.

4 **II. THE PARTIES, JURISDICTION AND VENUE**

5 **A. Plaintiff**

6 18.

7 Multnomah County is an existing county government duly formed under the laws of the
8 State of Oregon and is a body politic and corporate. The seat of Multnomah County is in Portland,
9 Oregon. The Multnomah County Board of Commissioners is duly elected to exercise the powers
10 of Multnomah County and has approved the filing of this lawsuit. According to the 2020 US
11 consensus, 815,428 people reside in Multnomah County, the state’s most populous county.

12 19.

13 Pursuant to ORS 468A.205(2) the Oregon legislature declared “that it is the policy of this
14 state for state and local governments, businesses, nonprofit organizations and individual residents
15 to prepare for the effects of global warming and by doing so, prevent and reduce the social,
16 economic, and environmental effects of global warming.”

17 20.

18 It has long been the policy in the State of Oregon that the discharge into the air of gases
19 and particulates that cause injury to human, plant or animal life is a public nuisance and, as such,
20 is contrary to public policy.¹⁰ Moreover, since 1951, it has been the public policy in Oregon “[t]o
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26 ¹⁰ *Smejkal v. Empire Lite-Rock, Inc.*, 547 P.2d 1363, 1367, 1976 Ore. LEXIS 904, *13 (April 26,
27 1976).

1
2 restore and maintain the quality of the air resources of the state in a condition as free from air
3 pollution as is practicable, consistent with the overall public welfare of the state.”¹¹

4 21.

5 Multnomah County has standing and authority to bring this lawsuit under the Constitution
6 of the State of Oregon, Oregon Revised Statutes, The Multnomah County Charter, and under the
7 common law principle of *parens patriae*. Multnomah County has the right to bring this action to
8 recover damages caused by the Defendants’ malfeasance and protect the public interest and public
9 health of its citizens against fossil fuel induced weather extremes.
10

11 22.

12 On June 22, 2023, the Multnomah County Board of Commissioners voted unanimously on
13 a resolution declaring that ACC has caused an on-going public nuisance of climate related mass
14 catastrophe events driven by human caused climate change that has increased the frequency,
15 duration, and intensity of multiple disasters, which include extreme heat events (including, but not
16 limited to, “heat domes”), wildfires (and wildfire-generated smoke), and drought. Thus, the
17 existence of a public nuisance that burdens the County from anthropogenic climate change is
18 memorialized by official decree of Multnomah County.
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27 ¹¹ *Id.* (citing Oregon Laws 1951, Chapter 425, § 7).

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2 **B. Defendants**

3 **1. Oil and Gas Defendants**

4 23.

5 The Oil and Gas Defendants and Coal Defendants in this action, both individually and
6 collectively, have substantially polluted the world’s atmosphere with the greenhouse gases
7 (“GHG”) that super heat the planet’s surface and catalyze extreme heat events. About three quarters
8 of all fossil fuel combustion CO2 emissions in history have occurred since the 1960s and estimates
9 have more than half occurring since the late 1980s and even as late as 1994.¹² The annual rate of
10 CO2 emissions by some estimates from production, consumption, and use of fossil fuels has
11 increased by more than 60% since 1990.¹³ Cumulative carbon analysis allows an accurate
12 calculation of net annual CO2 and methane emissions attributable to each Defendant by
13 quantifying the amount and type of fossil fuel products each Defendant extracted and placed into
14 the stream of commerce, and multiplying those quantities by each fossil fuel product’s carbon
15 factor.¹⁴
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21 ¹² R. J. Andres et al., A synthesis of carbon dioxide emissions from fossil-fuel combustion, 9
22 *BIOGEOSCIENCES* 1845, at 1851 (2012), <https://bg.copernicus.org/articles/9/1845/2012/bg-9-1845-2012.pdf> (last visited June 20, 2023); See also ¶¶ 165-174.

23 ¹³ Le Quéré et al., Global Carbon Budget 2016, 8 *EARTH SYST. SCI. DATA* 605, at 630 (2016),
<https://essd.copernicus.org/articles/8/605/2016/essd-8-605-2016.pdf> (last visited June 20, 2023).

24 ¹⁴ Richard Heede, Tracing Anthropogenic Carbon Dioxide and Methane Emissions to Fossil Fuel
25 and Cement Producers, 1854–2010, 122 *CLIMACTIC CHANGE* 229-241 (2014),
<https://link.springer.com/content/pdf/10.1007/s10584-013-0986-y.pdf>; see also, Richard Heede,
26 *Carbon Majors: Update of Top Twenty companies 1965-2017*, CLIMATE ACCOUNTABILITY
27 INSTITUTE (Oct. 9, 2019), <https://climateaccountability.org/wp-content/uploads/2020/12/CAI-PressRelease-Top20-Oct19.pdf> (last visited June 20, 2023).

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24.

The Oil and Gas Defendants, listed below, (along with their co-venturer carbon majors) are directly responsible for the majority of global GHG emissions from 1965-present.

25.

Defendant, Exxon Mobil Corp. (“Exxon”) is incorporated in New Jersey, with its principal place of business in Irving, Texas. It is registered with the SEC and is traded under the symbol, “XOM.” Exxon, along with Defendants, BP, Shell, Chevron and their predecessor corporations constituted a group in the 1970’s known as the “Seven Sisters,”¹⁵ which controlled around 85% of the world’s petroleum reserves.¹⁶

26.

Exxon is an American multinational oil and gas corporation and has consistently ranked as the world’s second largest company by revenue.¹⁷ It is one of the largest of the world’s Big Oil companies.¹⁸

¹⁵ “Seven Sisters” was a common term for the seven transnational oil companies of the “Consortium for Iran” oligopoly or Enterprise, which dominated the global petroleum industry from the mid-1940s to the mid-1970s. The industry group consisted of Anglo-Iranian (started as Anglo-Persian) Oil Company (now BP), Gulf Oil (later part of Chevron), Royal Dutch Shell, Standard Oil Company of California (SoCal, now Chevron), Standard Oil Company of New Jersey (Esso, later Exxon, now part of Exxon Mobil), Standard Oil Company of New York (Socony, later Mobil, also now part of ExxonMobil), and Texaco (later merged into Chevron).

¹⁶ Ian Mann, Shaky industry that runs the world, THE TIMES (Jan. 24, 2010), <https://www.timeslive.co.za/ideas/2010-01-24-shaky-industry-that-runs-the-world/> (last visited June 14, 2023).

¹⁷ Fortune, Global 500, FORTUNE 500, <https://fortune.com/fortune500/2022/> (last visited June 14, 2023).

¹⁸ Id.

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2 27.

3 Exxon is vertically integrated and is active in every area of the oil and gas industry,
4 including exploration and production, refining, transport, distribution and marketing,
5 petrochemicals, plastics, power generation and trading.

6 28.

7
8 When ranked by oil and gas reserves, Exxon, is ranked 14th in the world.¹⁹ Exxon's total
9 assets at the end of 2018 were valued at \$346.2 billion.²⁰

10 29.

11 Exxon manages, directs, and controls its and its subsidiaries' policies and practices related
12 to climate change and fossil fuel production. Exxon is the second largest investor-owned
13 greenhouse gas emitter.²¹

14 30.

15 Exxon is the largest non-government owned company in the energy industry.²² Exxon is
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20 ¹⁹ Steve Forbes, Will We Rid Ourselves of This Pollution?, FORBES (Mar. 20, 2007),
<https://www.forbes.com/forbes/2007/0416/033.html?sh=350a237f22f4> (last visited June 14,
21 2023).

22 ²⁰ Exxon Mobil, 2018 Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange
Act of 1934 (Form 10K), EXXONMOBIL (Feb. 27, 2019),
<https://www.sec.gov/Archives/edgar/data/34088/000003408819000010/xom10k2018.htm> (last
23 visited June 15, 2023).

24 ²¹ Exxon Mobil, 2018 Financial & Operating Review, EXXONMOBIL (2019)
[https://corporate.exxonmobil.com/-/media/Global/Files/annual-report/2018-Financial-and-
25 Operating-Review.pdf](https://corporate.exxonmobil.com/-/media/Global/Files/annual-report/2018-Financial-and-Operating-Review.pdf) (last visited June 14, 2023).

26 ²² Roslan Khasawneh, Exxon Mobil Eyes Multi-Billion Dollar Investment at Singapore Refinery:
Executive, REUTERS (Oct. 3, 2018), [https://www.reuters.com/article/us-singapore-bunker-sibcon-
27 Exxon-mobil-idUKKCN1MD0EF](https://www.reuters.com/article/us-singapore-bunker-sibcon-exxon-mobil-idUKKCN1MD0EF) (last visited June 14, 2023).

1
2 organized functionally into several global operating divisions, namely Upstream, Downstream and
3 Chemical, such as Exxon Coal & Minerals, Inc. It also owns hundreds of smaller subsidiaries, all
4 fossil fuel based, such as Imperial Oil Limited (69.6% ownership) in Canada, and SeaRiver
5 Maritime, a petroleum shipping company.

6 31.

7
8 Exxon’s upstream operation includes exploration, extraction, shipping, and wholesale
9 operations. Those operations drive much of ExxonMobil’s revenue, accounting for approximately
10 70% of the total.²³

11 32.

12
13 Exxon’s downstream operation, consisting of marketing, refining, and retail operations, is
14 based in Houston, Texas. Exxon merged its refining and marketing divisions, namely ExxonMobil
15 Refining and Supply Company and ExxonMobil Fuels, Lubricants & Specialties Marketing
16 Company in 2018, which enables ExxonMobil to generate more cash flow from downstream
17 activities – helping the energy giant to counter the volatility in its upstream business. Exxon’s
18 downstream operations include its sales of petroleum-based consumer products in Oregon.

19 33.

20
21 ExxonMobil Chemical is a petrochemical company which was created by merging Exxon’s
22 and Mobil’s chemical industries. Its principal products include petroleum-based olefins and

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24
25 ²³ Exxon Mobil, ExxonMobil Financial and Operations Summary: Overview and Highlights,
26 EXXONMOBIL (2018)
27 <https://web.archive.org/web/20181024231915/https://corporate.exxonmobil.com/en/company/annual-report/financial-operating-highlights> (last visited June 14, 2023).

1 aromatics, ethylene glycol, polyethylene, and polypropylene along with specialty lines such as
2 elastomers, plasticizers, solvents, process fluids, oxo alcohols and adhesive resins.
3

4 34.

5 Exxon’s “Mobil 1” brand is the market leader in high-value synthetic lubricants and is sold
6 in Oregon.²⁴
7

8 35.

9 Exxon’s “Infineum” line is a joint venture with Royal Dutch Shell that manufactures and
10 markets petroleum additives for the fuel and lubricant industries to commercial and consumer
11 markets.²⁵ The Infineum line manufactures and markets crankcase lubricant additives, fuel
12 additives, and specialty lubricant additives, as well as automatic transmission fluids, gear oils, and
13 industrial oils.²⁶ Infineum is a formulator, manufacturer and marketer of petroleum additives for
14 the fuel and lubricant industries. Their products include small engine, passenger car motor, heavy-
15 duty engine, gas engine, and marine oils along with fuels, transmission fluids, viscosity modifiers,
16 and pour point depressants.²⁷ Their products are classified into five distinct groups: driveline
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22 ²⁴ ExxonMobil, ExxonMobil 2018 Financial & Operating Review, EXXONMOBIL (Apr. 2. 2019)
23 <https://corporate.exxonmobil.com/-/media/Global/Files/annual-report/2018-Financial-and-Operating-Review.pdf> (last visited June 18, 2023).

24 ²⁵ Jack W. Plunkett, Plunkett's Chemicals, Coatings & Plastics Industry Almanac: The Only Complete Guide to the Chemicals Industry (2009).

25 ²⁶ Id.

26 ²⁷ Bloomberg, Infineum International Limited – Company Profile and News, BLOOMBERG
27 <https://www.bloomberg.com/profile/company/2573746Z:LN?leadSource=verify%20wall> (last visited June 20, 2023).

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2 additives, engine oil additives, fuel additives, marine additives and industrial products and are sold
3 worldwide, including in Oregon and Multnomah County.

4 36.

5 Exxon advertises, markets, and sells its products in Oregon and Multnomah County. Exxon
6 conducts substantial fossil fuel product business in Oregon and purposefully avails itself of the
7 rights, obligations, and privileges of Oregon’s laws.

8 37.

9
10 Exxon also has a known joint venture with another carbon major, Petrobras,²⁸ which is
11 responsible for gigatons of industrial CO₂e GH emissions from 1965-2023.

12 38.

13 Considering Exxon’s responsibility, coupled with those of its joint venture carbon major
14 partner, Exxon is responsible for substantial GHG emissions from 1965-2023 in both the direct
15 and indirect use of their products.

16 39.

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18 Exxon is a major carbon emitter, and its emissions are individually and collectively (with
19 the other Defendants) a cause of enormous harm to Plaintiff for which Exxon is individually as
20 well as jointly and severally liable to Plaintiff.

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25 ²⁸ ExxonMobil, Petrobras and ExxonMobil Form Strategic Alliance, ExxonMobil (Dec. 14, 2017)
26 [https://corporate.exxonmobil.com/news/news-releases/2017/1214_petrobras-and-exxonmobil-](https://corporate.exxonmobil.com/news/news-releases/2017/1214_petrobras-and-exxonmobil-form-strategic-alliance)
27 [form-strategic-alliance](https://corporate.exxonmobil.com/news/news-releases/2017/1214_petrobras-and-exxonmobil-form-strategic-alliance) (last visited June 20, 2023).

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40.

Exxon engaged in an enterprise of misrepresentation about the effect its activities would have on the climate, and that they could cause such an extreme heat event to occur. Exxon’s misrepresentations and fraud were individually and collectively (with the other Defendants) a cause of enormous harm to Plaintiff for which Exxon is individually as well as jointly and severally liable to Plaintiff.

41.

Defendant, Shell PLC F.K.A. Royal Dutch Shell PLC is a public limited company registered in England and Wales, with its international headquarters in The Hague, Netherlands. Shell’s headquarters for its U.S. operations is in Houston, Texas. Shell manages, directs, and controls its and its subsidiaries’ policies and practices related to climate change and fossil fuel production. Shell is the seventh largest investor-owned greenhouse gas emitter.

42.

Defendant, Shell USA, Inc. is a corporation incorporated in Delaware, and headquartered at 1000 Main Street, Houston, Texas 77002. Shell USA can be served through its registered agent in Oregon.

43.

Defendant, Equilon Enterprises LLC dba Shell Oil Products US is an oil refiner and marketer incorporated in Delaware and with headquarters located at 910 Louisiana Street, Houston, Texas 77002. Equilon Enterprises LLC dba Shell Oil Products US sold over 39,348,691 mtCO₂e worth of fossil fuels in Oregon.

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2 44.

3 Together Defendants Shell PLC F.K.A. Royal Dutch Shell PLC, Shell USA, Inc, Equilon
4 Enterprises LLC dba Shell Oil Products US, and any other subsidiaries and affiliate entities are
5 collectively, “Shell.”

6 45.

7 Shell has operations in over 70 countries, produces nearly 3.2 million barrels of oil
8 equivalent per day, sold 64.2 million tons of liquefied natural gas (LNG) during 2021 and has
9 interests in 10 refineries.²⁹ Like Exxon, Shell has billions in proven reserves. As of the end of
10 December 2014, Shell boasted 13.7 billion barrels of oil equivalent.³⁰ Shell is registered with the
11 SEC and is traded as RDSA. At the end of 2018, Shell reported \$339.2 billion in assets.³¹

12 46.

13 Like Exxon, Shell is vertically integrated and is active in every area of the oil and gas
14 industry, including exploration and production, refining, transport, distribution and marketing,
15 petrochemicals (plastics), power generation and trading.³²
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21 ²⁹ Shell Global, Who We Are, SHELL PLC <https://www.shell.com/about-us/who-we-are.html> (last
visited June 14, 2023).

22 ³⁰ Shell Global, Recommended Cash and Share Offer for BG Group PLC by Royal Dutch Shell
23 PLC, SHELL PLC (Apr. 8, 2015) [https://www.shell.com/media/news-and-media-
releases/2015/recommended-cash-and-share-offer-for-bg-group-plc.html](https://www.shell.com/media/news-and-media-releases/2015/recommended-cash-and-share-offer-for-bg-group-plc.html) (last visited June 14,
2023).

24 ³¹ Royal Dutch Shell PLC, Form 20-F Annual Report Pursuant to Section 13 or 15(d) of the
25 Securities Exchange Act of 1934 (Mar. 14, 2019) [https://shell.gcs-web.com/static-files/548074c8-
9ff1-4e08-9c69-ffd2c081f875](https://shell.gcs-web.com/static-files/548074c8-9ff1-4e08-9c69-ffd2c081f875) (last visited June 14, 2023).

26 ³² Vertical integration is the merging together of two businesses that are at different stages of
27 production—for example, a food manufacturer and a chain of supermarkets. Merging in this way
with something further on in the production process (and thus closer to the final consumer) is

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2 47.

3 Shell branded gasoline was sold in Oregon through retail stations and wholesale
4 distributors. Shell lubricants are sold through Christensen USA in Oregon.³³ Shell's website
5 reflects at least 205 Shell gas stations in Oregon, with as many as 156 in the Multnomah County
6 area as of June 22, 2023.³⁴

7
8 48.

9 Shell owns "Pennzoil," "Quaker State" and "Jiffy Lube." Shell sells its engine oil and
10 lubricants in Multnomah County, Oregon, and around the world. Shell claims to be the number
11 one global lubricant supplier, delivering market-leading lubricants to consumers in over 100
12 countries.³⁵ Shell advertises, markets, and sells its products, including consumer products, in
13 Multnomah County. Shell conducts substantial fossil fuel product business in Oregon and
14 purposefully avails itself of the rights, obligations, and privileges of Oregon's laws.
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21 known as forward integration. The Economist, Vertical Integration, THE ECONOMIST (Mar. 20,
22 2019) <https://www.economist.com/news/2009/03/30/vertical-integration> (last visited June 18,
2023).

23 ³³ Shell United States, Find a Shell Lubricants Dealer, Shell United States
24 [https://www.shell.us/business-customers/lubricants-for-business/lubricants-distributor-
locator.html](https://www.shell.us/business-customers/lubricants-for-business/lubricants-distributor-locator.html) (last visited June 15, 2023); Christensen, Fuel Products, Lubricants, Partners,
Christensen USA <https://christensenusa.com/products/> (last visited June 15, 2023).

25 ³⁴ Shell United States, Gas Station Near Me, SHELL UNITED STATES
26 <https://www.shell.us/motorist/gas-station-near-me> (last visited June 14, 2023).

27 ³⁵ Shell United States, Shell Engine Oils and Lubricants, SHELL UNITED STATES
28 <https://www.shell.com/motorist/oils-lubricants> (last visited June 14, 2022).

1
2 49.

3 Shell is responsible for substantial GHG emissions from 1965-2023 in both the direct and
4 end use of their products.

5 50.

6 Shell also has joint ventures with another carbon major, Gazprom,³⁶ which is responsible
7 for substantial GHG emissions from 1965-2023. Shell also has known joint ventures with another
8 carbon major, National Iranian Oil Company,³⁷ which is also responsible for substantial GHG
9 emissions from 1965-2023.
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11 51.

12 Shell also has known joint ventures with another carbon major, China Petroleum,³⁸ which
13 is responsible for substantial GHG emissions from 1965-2023. Shell also has known joint ventures
14 with another carbon major, Pemex,³⁹ which is responsible for substantial GHG emissions from
15 1965-2023.
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20 ³⁶ Reuter Staff, Gazprom, Shell to invest \$13 billion in projects in Russia: Russian Energy Minister,
21 Reuters (June 16, 2016) <https://www.reuters.com/article/us-russia-forum-gazprom-shell/gazprom-shell-to-invest-13-billion-in-projects-in-russia-russian-energy-minister-idUSKCN0Z223G> (last visited June 14, 2023).

22 ³⁷ Tom DiChristopher, The Billion-Dollar Gold Rush to Tap into Iranian Oil, CNBC (Nov. 6, 2016)
23 <https://www.cnn.com/2016/11/03/the-billion-dollar-gold-rush-to-tap-into-iranian-oil.html> (last
24 visited June 14, 2023).

25 ³⁸ Offshore Energy, Shell, CNPC Form Well Manufacturing JV (The Netherlands), OFFSHORE
26 ENERGY (Jun. 20, 2011) [https://www.lngworldnews.com/shell-cnpc-form-well-manufacturing-jv-
27 the-netherlands/](https://www.lngworldnews.com/shell-cnpc-form-well-manufacturing-jv-the-netherlands/) (last visited June 20, 2023).

28 ³⁹ Oil & Gas Journal, Pemex to Acquire Interest in Shell Texas Refinery, OIL & GAS JOURNAL
(Aug. 31, 1992) [https://www.ogj.com/home/article/17218678/pemex-to-acquire-interest-in-shell-
texas-refinery](https://www.ogj.com/home/article/17218678/pemex-to-acquire-interest-in-shell-texas-refinery) (last visited June 20, 2023).

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2 52.

3 Shell also has a known joint venture with another carbon major, Abu Dhabi National Oil
4 Company,⁴⁰ which is responsible for substantial GHG emissions from 1965-2023.

5 53.

6 Shell also has a known joint venture with another carbon major, Kuwait National Petroleum
7 Corporation,⁴¹ which is responsible for substantial GHG emissions from 1965-2023.

8 54.

9
10 Considering Shell's responsibility, coupled with those of its joint venture carbon major
11 partners, Shell and its affiliates have contributed a substantial amount of industrial GHG emissions
12 from 1965 to 2023.

13 55.

14 Shell is a major carbon emitter, and its emissions are individually and collectively (with
15 the other Defendants) a cause of enormous harm to Plaintiff for which Shell is individually and
16 jointly and severally liable to Plaintiff.

17 56.

18 Shell has engaged in an enterprise of misrepresentation about the effect its activities would
19 have on the climate, and that they could cause such an extreme heat event to occur. Shell's
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24 ⁴⁰ Abu Dhabi National Oil Company, Our Partners, ABU DHABI NATIONAL OIL COMPANY
<https://www.adnoc.ae/en/our-partners> (last visited June 14, 2023).

25 ⁴¹ 360 Feed Wire, Kuwait Petroleum and Shell Sign Agreement for Long-Term Supply of LNG to
26 Meet Domestic Energy Needs, OIL AND GAS 360 (Dec. 27, 2017)
[https://www.oilandgas360.com/wired-news-kuwait-petroleum-and-shell-sign-agreement-for-
27 long-term-supply-of-lng-to-meet-domestic-energy-needs/](https://www.oilandgas360.com/wired-news-kuwait-petroleum-and-shell-sign-agreement-for-long-term-supply-of-lng-to-meet-domestic-energy-needs/) (last visited June 15, 2023).

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2 misrepresentations and fraud were individually and collectively (with the other Defendants) a
3 cause of harm to Plaintiff for which Shell is individually and jointly and severally liable to Plaintiff.

4 57.

5 Defendant, Chevron Corporation is incorporated in Delaware with its principal place of
6 business in San Ramon, California. Chevron manages, directs, and controls its and its subsidiaries'
7 policies and practices related to climate change and fossil fuel production.⁴² Chevron is a publicly
8 traded corporation registered with the SEC and its symbol is "CVX."

9
10 58.

11 Chevron Corporation is an American multinational energy corporation. One of the
12 successor companies of Standard Oil, it is headquartered in San Ramon, California, and active in
13 more than 180 countries.

14 59.

15 Defendant, Chevron U.S.A. Inc. is a Pennsylvania corporation with its principal place of
16 business in California. Chevron U.S.A. Inc. does business in Oregon and is the wholly owned
17 subsidiary of Chevron Corporation.

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19 60.

20 Chevron Corporation and Chevron U.S.A. Inc. are hereafter referred to as "Chevron."
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26 ⁴² Richard Heede, Tracing anthropogenic carbon dioxide and methane emissions to fossil fuel and
27 cement producers, 1854–2010, CLIMATIC CHANGE, (Nov. 22, 2013)
<https://link.springer.com/content/pdf/10.1007/s10584-013-0986-y.pdf> (last visited June 15, 2023).

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2 61.

3 Like Exxon and Shell, Chevron is a fully integrated oil company, engaged in every aspect
4 of the oil industry, including hydrocarbon exploration and production, refining, marketing, and
5 transport; chemicals manufacturing and retail sales; plastics from petrochemicals and power
6 generation.⁴³

7
8 62.

9 Chevron sells the “Delo,” “Ursa,” “Havoline,” “IsoClean” and “Techron” heavy duty diesel
10 engine oils, coolants/antifreeze, transmission fluids, gear oils, greases and hydraulic oils in
11 Multnomah County and Oregon.

12 63.

13 Chevron is one of the world’s largest oil companies; as of 2017, it ranked nineteenth in the
14 Fortune 500 list of the top U.S. closely held and public corporations and sixteenth on the Fortune
15 Global 500 list of the top 500 corporations worldwide.⁴⁴ It was also one of the Seven Sisters that
16 dominated the global petroleum industry from the mid-1940s to the 1970s.⁴⁵

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18 64.

19 According to its 2017 corporate disclosures, Chevron had \$253.8 billion in total assets and
20 11.7 billion barrels in proven reserves.⁴⁶

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24 ⁴³ Chevron, Our History, CHEVRON, <https://www.chevron.com/about/history> (last visited June 15, 2023).

25 ⁴⁴ Fortune, Chevron | 2022 Fortune 500, FORTUNE
<https://fortune.com/company/chevron/fortune500/> (last visited June 15, 2023).

26 ⁴⁵ Id.

27 ⁴⁶ Chevron, 2017 Annual Report, CHEVRON (2018).

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65.

Chevron markets and sells its products in Multnomah County and Oregon. Chevron conducts substantial fossil fuel product business in Oregon and purposefully avails itself of the rights, obligations, and privileges of Oregon’s laws.

66.

Chevron is responsible for substantial GHG emissions from 1965-2023 in both the direct emissions from their industry and the end use of their products.

67.

Like Shell, Chevron partners with other carbon majors worldwide.

68.

Chevron also has known joint ventures with another carbon major, PDSVA,⁴⁷ which is responsible for substantial GHG emissions from 1965-2023. Chevron and BP also have known joint ventures with other carbon majors, Eni, Sonangol, and Total SA.⁴⁸ Eni is responsible for substantial GHG emissions from 1965-2023. Sonangol is responsible for substantial GHG emissions from 1965-2023. Total SA is responsible for substantial GHG emissions from 1965-

<https://www.chevron.com/-/media/chevron/annual-report/2017/2017-Annual-Report.pdf> (last visited June 15, 2023).

⁴⁷ Chevron, Venezuela, CHEVRON, <https://www.chevron.com/worldwide/venezuela>. (last visited June 20, 2023); Abu Dhabi National Oil Company (ADNOC), ADNOC Signs Landmark Strategic Partnership Agreements with Eni and OMV in Refining and Trading, ABU DHABI NATIONAL OIL COMPANY (Jan. 27, 2019) <https://www.adnoc.ae/en/news-and-media/press-releases/2019/adnoc-signs-landmark-strategic-partnership-agreements>. (last visited June 15, 2023).

⁴⁸ NS Energy, EU clears Angolan LNG joint venture by BP, Chevron, Eni, Sonangol and Total, NS ENERGY (May 16, 2012) <https://www.nsenergybusiness.com/news/newseu-clears-angolan-lng-joint-venture-by-bp-chevron-eni-sonangol-and-total-170512/> (last visited June 15, 2023).

1
2 2023. Chevron also has known joint ventures with Nigerian National Petroleum,⁴⁹ which is
3 responsible for substantial GHG emissions from 1965-2023.

4 69.

5 Considering Chevron's responsibility, coupled with those of its joint venture carbon major
6 partners, Chevron and its affiliates have contributed substantial GHG emissions from 1965-2023.

7 70.

8 Chevron is a major carbon emitter, and its emissions are individually and collectively (with
9 the other Defendants) a cause of enormous harm to Plaintiff for which Chevron is individually and
10 jointly and severally liable to Plaintiff.

11 71.

12 Chevron engaged in an enterprise of misrepresentation about the effect its activities would
13 have on the climate, and that they could cause such an extreme heat event to occur. Chevron's
14 misrepresentations and fraud were individually and collectively (with the other Defendants) a
15 cause of enormous harm to Plaintiff for which it is individually and jointly and severally liable to
16 Plaintiff.

17 72.

18 Defendant, BP PLC is a public limited company registered in England and Wales, with its
19 international headquarters in London, England. The headquarters for BP's U.S. operations is in
20 Houston, Texas. BP manages, directs, and controls its and its subsidiaries' policies and practices
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26 ⁴⁹ Chevron, Nigeria, CHEVRON, <https://www.chevron.com/worldwide/nigeria> (last visited June 15,
27 2023).

1
2 related to climate change and fossil fuel production. BP is the third largest investor-owned
3 greenhouse gas emitter.

4 73.

5 Defendant, BP America, Inc., is incorporated in Delaware, and is headquartered at 501
6 Westlake Park Blvd, Houston, Texas 77079. BP America can be served through its registered agent
7 in Oregon.

8 74.

9
10 Defendant, BP Products North America, Inc., F.K.A. The American Oil Company, F.K.A.
11 the AMOCO Oil Company, is a Maryland corporation registered to do business in Oregon. BP
12 Products North America is described as one of the largest retailers of oil and gas in the United
13 States, including Oregon and Multnomah County.

14 75.

15 Defendants BP PLC, BP America, Inc., and BP Products North America, Inc. and all
16 subsidiaries and affiliates are collectively referred to as “BP.”

17 76.

18
19 BP is one of the world’s seven oil and gas “supermajors” (including Exxon, Shell, Chevron,
20 ConocoPhillips among others).⁵⁰ Like Exxon, Shell, and Chevron, BP is vertically integrated in
21 both the production, refining and marketing of oil-based products.
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26 ⁵⁰ Tom Bergin, Oil Majors Output Grown Hinges On Strategy Shift, REUTERS (Aug. 1, 2008)
27 <https://www.reuters.com/article/us-oilmajors-production-idUSL169721220080801> (last visited
28 June 15, 2023).

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2 77.

3 BP upstream activities include exploring for new oil and natural gas resources, developing
4 access to such resources, and producing, transporting, storing, and processing oil.⁵¹ In 2017, BP
5 produced around 3.6 million barrels per day of oil equivalent,⁵² of which 2.26 million barrels per
6 day were liquids and 7.744 billion cubic feet was natural gas. In 2017, BP boasted reserves of
7 18.441 million barrels per day of oil equivalent.⁵³

8
9 78.

10 BP downstream activities include the refining, marketing, manufacturing, transportation,
11 trading and supply of crude oil, petrochemicals and petroleum-based plastic and resin
12 products.⁵⁴ BP's downstream operation is responsible for BP's fuels, lubricants and petrochemical
13 businesses and has major operations located in Europe, North America, and Asia.⁵⁵

14
15 79.

16 Castrol is BP's main brand for industrial and automotive lubricants and is applied to a large
17 range of BP oils, greases and similar products for most lubrication applications, selling these

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21 ⁵¹ Forbes, BP Company Overview & News, FORBES
<https://www.forbes.com/companies/bp/?sh=6e11aa61384b#41b79e1c384b> (last visited June 15,
2023).

22 ⁵² BP, BP Annual Report and Form 20-F 2017, BP (2018)
[https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/investors/bp-
23 annual-report-and-form-20f-2017.pdf](https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/investors/bp-annual-report-and-form-20f-2017.pdf) (last visited June 15, 2023).

24 ⁵³ Id.

25 ⁵⁴ Forbes, BP Company Overview & News, FORBES
<https://www.forbes.com/companies/bp/?sh=6e11aa61384b#41b79e1c384b> (last visited June 15,
2023).

26 ⁵⁵ Reuters, BP PLC Stock Price & Latest News, REUTERS
<https://www.reuters.com/markets/companies/BP.L> (last visited June 15, 2023).

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2 products worldwide,⁵⁶ including in Multnomah County. BP has three refineries located in the US
3 that represent about 40% of their global refining capacity.⁵⁷ BP markets petroleum products in
4 more than 50 countries worldwide.⁵⁸ It has around 18,300 service stations.⁵⁹

5
6 80.

7 BP is registered with the SEC and is traded as “BP.” On July 28, 2018, it was reported that
8 BP has acquired a portfolio of unconventional oil and gas assets from BHP Billiton Petroleum
9 (North America) for \$10.5 billion.⁶⁰ BHP was also a member of API.⁶¹ BP markets and sells its
10 products in Multnomah County and Oregon. BP conducts substantial fossil fuel product business
11 in Oregon and purposefully avails itself of the rights, obligations, and privileges of Oregon’s laws.

12
13 81.

14 BP is responsible for substantial GHG emissions from 1965-2023.

15
16 82.

17 As of February 27, 2022, BP held 19.75% of the shares of Rosneft Oil Company (OTC:
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19 ⁵⁶ BP, Castrol, BP <https://www.bp.com/en/global/corporate/who-we-are/our-brands/castrol.html>
20 (last visited June 15, 2023).

21 ⁵⁷ BP, Refineries, BP, https://www.bp.com/en_us/united-states/home/what-we-do/production-and-operations/refineries.html (last visited June 15, 2023).

22 ⁵⁸ BP, BP Annual Report and Form 20-F 2017, BP (2018)
23 <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/investors/bp-annual-report-and-form-20f-2017.pdf> (last visited June 15, 2023).

24 ⁵⁹ Id.

25 ⁶⁰ Sonali Paul and Ron Bousso, BP pays \$10.5 billion for BHP shale assets to beef up U.S. business,
26 REUTERS (Jul. 26, 2018) <https://www.reuters.com/article/us-bhp-divestiture-bp-idUSKBN1KG34V> (last visited June 15, 2023).

27 ⁶¹ BHP, Industry Associations 2019 Review: Second Update, BHP (2019)
28 <https://www.bhp.com/about/operating-ethically/industry-associations/2019-review-second-update> (last visited June 15, 2023).

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2 OJSCY).⁶² Rosneft serves as the leader of Russia’s petroleum industry and remains the world’s
3 largest publicly traded petroleum company. BP and Rosneft have a joint-venture agreement to
4 develop prospective resources in East and West Siberia. Rosneft is responsible for substantial GHG
5 emissions from 1965-2023.

6 83.

7
8 BP, along with China Petroleum and Basra Oil Company, are working in partnership to
9 develop Rumaila, an oil field in Iraq and the third-largest producing field in the world, estimated
10 to have around 17 billion barrels of recoverable oil remaining.⁶³ BP is also providing technical
11 assistance to the North Oil Company to aid the redevelopment of the Kirkuk field in Iraq. Kirkuk
12 is estimated to have around 9 billion barrels of recoverable oil remaining. Basra Oil Company and
13 North Oil Company are two of the nine companies that are owned by the Iraq National Oil
14 Company,⁶⁴ another carbon major which is responsible for substantial GHG emissions from 1965-
15 2023.

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21 ⁶² BP, BP to Exit Rosneft Shareholding, BP (Feb. 27, 2022)
22 [https://www.bp.com/en/global/corporate/news-and-insights/press-releases/bp-to-exit-rosneft-
shareholding.html](https://www.bp.com/en/global/corporate/news-and-insights/press-releases/bp-to-exit-rosneft-shareholding.html) (last visited June 15, 2023).

23 ⁶³ BP, What We do, Iraq, Reviving One of the World's Super-giant Oilfields, BP
24 <https://www.bp.com/en/global/corporate/what-we-do/bp-worldwide/bp-in-iraq.html> (last visited
25 June 15, 2023).

26 ⁶⁴ Reuters, Iraq transfers ownership of nine state oil companies to new National Oil Company,
27 REUTERS, (Oct. 18, 2018, 10:18 AM), [https://www.reuters.com/article/us-iraq-oil/iraq-transfers-
ownership-of-nine-state-oil-companies-to-new-national-oil-company-idUSKCN1MS27E](https://www.reuters.com/article/us-iraq-oil/iraq-transfers-ownership-of-nine-state-oil-companies-to-new-national-oil-company-idUSKCN1MS27E) (last
28 visited June 15, 2023).

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84.

BP also has known joint ventures with another carbon major, Sonatrach,⁶⁵ which is responsible for substantial GHG emissions from 1965-2023.

85.

Considering BP’s responsibility, coupled with those of its joint venture carbon major partners, BP and its affiliates have contributed a substantial amount of industrial emissions from 1965-2023 in both direct emissions from their extraction and refining and the end use of their products.

86.

BP is a major carbon emitter, and its emissions are individually and collectively (with the other Defendants) a cause of enormous harm to Plaintiff for which it is individually and jointly and severally liable to Plaintiff.

87.

BP has engaged in an enterprise of misrepresentation about the effect its activities would have on the climate, and that they could cause such an extreme heat event to occur. BP’s misrepresentations and fraud were individually and collectively (with the other Defendants) a cause of enormous harm to Plaintiff for which it is individually and jointly and severally liable to Plaintiff.

⁶⁵ BP, BP Has a Long History of Working in Algeria, BP <https://www.bp.com/en/global/corporate/what-we-do/bp-worldwide/bp-in-algeria.html> (last visited June 15, 2023).

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2 88.

3 Defendant, ConocoPhillips is incorporated in Delaware, with its principal place of business
4 in Houston, Texas. ConocoPhillips manages, directs, and controls its and its subsidiaries' policies
5 and practices related to climate change and fossil fuel production.

6 89.

7 ConocoPhillips is the world's largest independent pure-play exploration and production
8 company ranking No. 77 in the 2022 Fortune 500 list of the largest United States corporations by
9 total revenue.⁶⁶ ConocoPhillips is the fifth largest investor-owned greenhouse gas emitter.⁶⁷

10 90.

11 Like Exxon, Shell, Chevron and BP, ConocoPhillips is a fully integrated oil company.
12 ConocoPhillips was created through the merger of American oil companies Conoco
13 Inc. and Phillips Petroleum Co. on August 30, 2002.⁶⁸ In 2012, ConocoPhillips spun
14 off its downstream assets as a new, separate company, Phillips 66.⁶⁹
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20 ⁶⁶ Fortune, Fortune 500 List, FORTUNE <https://fortune.com/fortune500/> (last visited June 15, 2023).

21 ⁶⁷ Paul Griffin, The Carbon Majors Database CDP Carbon Majors Report 2017, CDP (Jul. 2017)
22 <https://cdn.cdp.net/cdp-production/cms/reports/documents/000/002/327/original/Carbon-Majors-Report-2017.pdf?1501833772> (last visited June 15, 2023).

23 ⁶⁸ ConocoPhillips, Form 8-K12G3, (Aug. 30, 2002),
24 <http://edgar.secdatabase.com/2323/89882202001082/filing-main.htm> (last visited June 15,
25 2023).

26 ⁶⁹ Christopher Helman, As ConocoPhillips Spins Off Refining Assets, Think Twice Before Buying
27 The New Phillips 66, FORBES, (Apr. 30, 2012),
28 <https://www.forbes.com/sites/christopherhelman/2012/04/30/as-conocophillips-spins-off-refining-assets-should-you-own-the-new-phillips-66/?sh=230ec05b4eb7> (last visited June 15,
2023).

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2 91.

3 Phillips 66 is the fourth-largest lubricants supplier in the United States. Phillips 66 claims
4 that, with its world-class research and development facilities and eight proprietary blending and
5 packaging facilities, Phillips 66 lubricants are sold in more than 80 countries, including the United
6 States under the brands of “Phillips 66,” “Red Line” and “Kendall.”⁷⁰

7
8 92.

9 ConocoPhillips participates in chemicals and plastics production worldwide through a 50
10 percent interest in Chevron Phillips Chemical Company LLC (CPChem), one of the world’s largest
11 producers of olefins, polyolefins, aromatics and styrenics, piping, and proprietary plastics.⁷¹

12 93.

13 As of 2014, CP Chem has 5,000 employees worldwide, \$9 billion in assets, and
14 36 manufacturing and research facilities in eight countries, including the United States, Belgium,
15 China, Colombia, Qatar, Saudi Arabia, Singapore, and South Korea.⁷²

16
17 94.

18 ConocoPhillips is registered with the SEC and is traded as “COP.” ConocoPhillips markets
19 and sells its products in Multnomah County and Oregon. ConocoPhillips conducts substantial
20
21

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23
24 ⁷⁰ Id.

25 ⁷¹ New York Encyclopedia, ConocoPhillips, NEW YORK ENCYCLOPEDIA,
<https://www.newworldencyclopedia.org/entry/ConocoPhillips> (last visited June 15, 2023).

26 ⁷² Chevron Phillips Chemical, Who We Are, CHEVRON PHILLIPS CHEMICAL,
<https://www.cpchem.com/who-we-are/company-history> (last visited June 15, 2023).

1 fossil fuel product business in Oregon and purposefully avails itself of the rights, obligations, and
2 privileges of Oregon’s laws.
3

4 95.

5 ConocoPhillips is responsible for substantial GHG emissions from 1965-2023 in both
6 direct emissions from their extraction and refining and end use of their products.
7

8 96.

9 ConocoPhillips is a major carbon emitter, and its emissions are individually and
10 collectively (with the other Defendants) a cause of enormous harm to Plaintiff, for which it is
11 individually and jointly and severally liable to Plaintiff.

12 97.

13 ConocoPhillips has engaged in an enterprise of misrepresentation about the effect its
14 activities would have on the climate, and that they could cause such an extreme heat event to occur.
15 ConocoPhillips’s misrepresentations and fraud were individually and collectively (with the other
16 Defendants) a cause of enormous harm to Plaintiff for which it is individually and jointly and
17 severally liable to Plaintiff.
18

19 98.

20 Defendant, Motiva Enterprises, LLC (“Motiva”) is a wholly owned subsidiary of Saudi
21 Arabia Refining Company (“Aramco”). Motiva has an interest in a joint-venture partnership with
22 Shell and Texaco known as Motiva Enterprises, LLC, which refines and markets petroleum
23 products in the eastern and Gulf Coast areas of the United States under the Texaco and Shell
24

1
2 brands. Motiva Enterprises, LLC, is a fully owned affiliate of Aramco and is headquartered in
3 Houston, Texas.⁷³

4 99.

5 State-owned Saudi Aramco is one of the world's largest petrochemical companies, with
6 2018 sales of almost \$356 billion. In 2019, Aramco announced plans to invest \$15 billion to
7 acquire a 20% stake in a Reliance Industries Ltd. unit that includes one of the world's largest
8 polypropylene businesses.⁷⁴

9
10 100.

11 In March, Aramco paid a little more than \$69bn (€61bn) for a 70% stake in global
12 commodity and engineering resins supplier Saudi Basic Industries Corp.⁷⁵ Saudi Aramco also has
13 partnered with Dow Inc. on the Sadara plastics and petrochemicals joint venture in Saudi Arabia.

14
15 101.

16 In 2017, Aramco purchased Motiva Enterprises, LLC from Co-Defendant Shell, including
17 the Port Arthur, Texas refinery and the right to sell Shell branded gasoline and diesel in numerous

18
19
20 ⁷³ Aramco, Saudi Aramco and Shell Finalize Agreement to Separate Motiva Assets, ARAMCO (Mar.
21 7, 2017) <https://www.aramco.com/en/news-media/news/2017/motiva-shell-aramco-separation>
(last visited June 15, 2023).

22 ⁷⁴ Frank Esposito, Saudi Aramco continues growth with Texas acquisition, (Aug. 21, 2019, 1:25
23 PM), PLASTIC NEWS EUROPE, [https://www.plasticsnews.com/news/saudi-aramco-continues-
buying-sprees-flint-hills-feedstocks-site-texas](https://www.plasticsnews.com/news/saudi-aramco-continues-buying-sprees-flint-hills-feedstocks-site-texas) (last visited June 15, 2023).

24 ⁷⁵ On March 27, 2019, SABIC announced that state-owned energy company Saudi Aramco signed
25 a share purchase agreement to acquire a 70% majority stake in SABIC from the Public Investment
26 Fund of Saudi Arabia in a private transaction worth \$69.1 billion. Aramco, Saudi Aramco Signs
27 Share Purchase Agreement to Acquire 70% Majority Stake in SABIC from the Public Investment
28 Fund of Saudi Arabia, ARAMCO (Mar. 27, 2019) [https://www.aramco.com/en/news-
media/news/2019/aramco-sabic](https://www.aramco.com/en/news-media/news/2019/aramco-sabic) (last visited June 15, 2023).

1
2 US states, including Oregon.

3 102.

4 SABIC (Saudi Arabia Basic Industries Corporation) is a public petrochemical company
5 founded in 1976 and based in Riyadh, Saudi Arabia. SABIC is 70% owned by Aramco.⁷⁶

6 103.

7 SABIC is active in chemicals and intermediates, industrial polymers, fertilizers, and
8 metals. SABIC is the world's third-largest producer of polyethylene and the fourth-largest
9 producer of polypropylene and polyolefins in general.⁷⁷ The company operates in more than 40
10 countries across the world, has 60 manufacturing sites and employs over 40,000 people. According
11 to Forbes, SABIC generated about \$35 billion in sales in 2017.⁷⁸

12 104.

13 Motiva's products include diesel, gasoline, liquefied petroleum gas (LPG), aviation fuel,
14 and lubricants, which are supplied to American states in the South, Mid-Atlantic, and the
15 Northeast. Marketing outlets include 5200 Shell and 76-branded service stations, and 24 storage
16 and distribution terminals.
17
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19 _____
20
21 ⁷⁶ Bloomberg, Saudi Basic Industries Corp. (SABIC: Saudi Arabia): Stock Quote & Company
22 Profile - Businessweek, BLOOMBERG,
23 <https://www.bloomberg.com/quote/SABIC:AB?leadSource=verify%20wall> (last visited June
15, 2023).

24 ⁷⁷ Plastics Technology, Top 10 Largest Plastic Producing Companies, PLASTICS TECHNOLOGY
25 <https://www.plastics-technology.com/articles/top-largest-plastic-producing-companies> (last
visited June 15, 2023).

26 ⁷⁸ Forbes, Saudi Basic Industries, Company Overview & News, FORBES,
27 <https://www.forbes.com/companies/saudi-basic-industries/#2aa3a7a073dc> (last visited June 15,
2023).

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105.

Motiva is registered to do business in Oregon. Motiva markets and sells its products in Oregon through its joint ventures with co-Defendants. Motiva conducts substantial fossil fuel product business in Oregon and purposefully avails itself of the rights, obligations, and privileges of Oregon’s laws.

106.

Parent company Aramco is the world’s largest contributor to global industrial GHG and is responsible for substantial GHG emissions from 1965-2023 in both direct emissions from their industry and end use of their products.

107.

Motiva is a major carbon emitter, and its emissions are individually and collectively (with the other Defendants) a cause of enormous harm to Plaintiff for which it is individually and jointly and severally liable to Plaintiff.

108.

Motiva engaged in an enterprise of misrepresentation about the effect its activities would have on the climate, and that they could cause such an extreme heat event to occur. Motiva’s misrepresentations and fraud were individually and collectively (with the other Defendants) a cause of enormous harm to Plaintiff for which it is individually and jointly and severally liable to Plaintiff.

109.

Defendant, Occidental Petroleum F.K.A. Anadarko Petroleum Corp. (Anadarko) is an American Petroleum and natural gas exploration company headquartered in The Woodlands,

1 Texas. Anadarko is ranked 257th on the Fortune 500⁷⁹ and is registered with the SEC and is traded
2 as APC.
3

4 110.

5 Anadarko, in addition to exploration and production, engages in petroleum and natural gas
6 gathering, processing, treating, and transportation. The company also participates in the hard
7 minerals business through its ownership of non-operated joint ventures and royalty arrangements.
8

9 111.

10 As of December 31, 2018, the company had approximately 1.473 billion barrels of oil
11 equivalent of proved reserves, 45% of which was oil reserves, 37% of which was natural gas, and
12 18% was natural gas liquids. In 2018, the company produced 666 thousand barrels of oil equivalent
13 per day.⁸⁰
14

15 112.

16 In 2019, Anadarko was acquired by Occidental Petroleum. Occidental Petroleum is
17 responsible for substantial GHG emissions from 1965-2023.
18

19 113.

20 Anadarko operates in the upstream, midstream, and downstream marketing of its oil-based
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23
24 ⁷⁹ Fortune 500, Anadarko Petroleum, FORTUNE, <https://fortune.com/fortune500/2016/anadarko-petroleum/> (last visited June 15, 2023).

25 ⁸⁰ U.S. Securities and Exchange Commission, Anadarko Petroleum Corporation 2018 Form 10-K
26 Annual Report, U.S. SECURITIES AND EXCHANGE COMMISSION, <https://www.sec.gov/Archives/edgar/data/773910/000077391019000009/apc201810k-10k.htm>
27 (last visited June 15, 2023).

1 products, including plastics.⁸¹

2
3 114.

4 The company's international operations accounted for 14% of total sales volumes during
5 2018 and 12% of total proved reserves at year-end 2018. The company has holdings in Algeria,
6 Ghana, Mozambique, Colombia, and The Ivory Coast among others.⁸²

7
8 115.

9 Anadarko markets and sells consumer products⁸³ worldwide, including in Oregon.
10 Anadarko conducts substantial fossil fuel product business in Oregon and purposefully avails itself
11 of the rights, obligations, and privileges of Oregon's laws.

12
13 116.

14 Anadarko is responsible for substantial GHG emissions from 1965-2023 in both direct
15 emissions from their extraction and end use of their products.

16
17 117.

18 Considering Anadarko's responsibility, coupled with its parent carbon major Occidental,
19 Anadarko and its parent are responsible for substantial GHG emissions from 1965-2023 in both
20 direct emissions from the extraction and end use of their products.

21
22
23 ⁸¹ Business Wire, Occidental Completes Acquisition of Anadarko, BUSINESS WIRE (Aug. 8, 2019,
24 11:21 AM) <https://www.businesswire.com/news/home/20190808005586/en/Occidental-Completes-Acquisition-of-Anadarko> (last visited June 15, 2023).

25 ⁸² Fortune 500, Anadarko Petroleum, FORTUNE, <https://fortune.com/fortune500/2016/anadarko-petroleum/> (last visited June 15, 2023).

26 ⁸³ Forbes, Anadarko Petroleum, FORBES <https://www.forbes.com/companies/anadarko-petroleum/?sh=40dcb73c468c> (last visited June 15, 2023).

1
2 118.

3 Anadarko is a major carbon emitter, and its emissions are individually and collectively
4 (with the other Defendants) a cause of enormous harm to Plaintiff for which it is individually and
5 jointly and severally liable to Plaintiff.

6 119.

7 Anadarko engaged in an enterprise of misrepresentation about the effect its activities would
8 have on the climate, and that they could cause such an extreme heat event to occur. Anadarko's
9 misrepresentations and fraud were individually and collectively (with the other Defendants) a
10 cause of enormous harm to Plaintiff for which it is individually and jointly and severally liable to
11 Plaintiff.

12 120.

13 Defendant, Valero Energy Corporation, ("Valero") is a corporation organized under the
14 laws of the state of Delaware, with its principal place of business at One Valero Way, in San
15 Antonio, Texas.

16 121.

17 Valero Energy Corporation is the world's largest independent petroleum refiner. Through
18 its subsidiaries, Valero Energy Corporation owns 15 petroleum refineries in the United States,
19 Canada, and the United Kingdom which generate total throughput capacity of approximately 3.2
20 million barrels per day. Valero Energy Corporation and its subsidiaries supply approximately 7,000
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1
2 independently owned fuel outlets carrying its family of brands in the United States, Canada, the
3 U.K., Ireland, and Mexico, as well as rack and bulk markets in those countries and Peru.⁸⁴

4 122.

5 Valero Energy Corporation determines and directs marketing, production, and/or
6 distribution of fossil fuel products for itself and its subsidiaries. Additionally, Valero Energy
7 Corporation directs policy and procedures for itself and its subsidiaries regarding the marketing,
8 advertising, climate change, and greenhouse gas emissions from fossil fuel products, and
9 communications strategies concerning climate change and the link between fossil fuel use and
10 climate-related impacts on the environment and communities.

12 123.

13 Valero Energy Corporation subsidiary, Valero Marketing and Supply Company, has been
14 registered to do business in Oregon and has had a designated agent for service of process in Oregon
15 from 1999 to the present. Valero Energy Corporation subsidiary, Valero Payment Services
16 Company, has been registered to do business in Oregon and has had a designated agent for service
17 of process in Oregon from 2015 to the present. Valero Energy Corporation subsidiary, Valero
18 Refining Company-California, has been registered to do business in Oregon and has had a
19 designated agent for service of process in Oregon from 2000 to the present.

24
25
26 ⁸⁴ Valero, Our History Advancing the Future of Energy Through the Years
27 <https://www.valero.com/about/our-history> (last visited June 18, 2023).

1
2 124.

3 At times relevant herein, Valero Energy Corporation, individually, and through one or more
4 of its subsidiaries, sold fossil fuel products including fuels, engine oils, lubricants, and/or greases
5 at several gas stations owned and/or operated in Oregon including but not limited to stations
6 located in the Oregon cities of Ashland, Bend, Eugene, Klamath Falls, and Medford. Valero Energy
7 Corporation and the subsidiaries it controls conduct substantial fossil fuel product business in
8 Oregon and purposefully avails itself of the rights, obligations, and privileges of Oregon's laws.
9

10 125.

11 Valero is responsible for substantial GHG emissions in both direct emissions from their
12 refining, transportation, and retail sales of their products.
13

14 126.

15 Fossil fuel emissions attributable to Valero Energy Company and the subsidiaries it controls
16 are individually and collectively (with the other Defendants) a cause of enormous harm to Plaintiff
17 for which the company is individually and jointly and severally liable to Plaintiff. Valero Energy
18 Company refused to disclose the truth about the nature and degree to which its fossil fuel
19 operations, and those of the subsidiaries it controls, could super heat and thereby harm Multnomah
20 County. This Defendant's deception is individually and collectively (with the other Defendants) a
21 of enormous harm to the Plaintiff for which the Defendant is individually and jointly and severally
22 liable to Plaintiff.
23

24 127.

25 Defendant, Koch Industries, Inc., ("Koch") is a corporation organized and existing under
26 the laws of the State of Kansas with its headquarters located in Wichita, Kansas. Koch is the second
27

1
2 largest privately held company in the United States and earned more than \$120 billion in revenue
3 in 2022.⁸⁵

4 128.

5 Koch Industries, Inc. consists of multiple subsidiaries and affiliates, many of which are and
6 have been involved in the exploration, extraction, production, manufacturing, refining,
7 distribution, and/or marketing of petroleum products. Those subsidiaries unnamed in this First
8 Amended Complaint are DOES 1-25.

9
10 129.

11 One such subsidiary, Flint Hills Resources LP, formerly known as Koch Petroleum Group,
12 is a wholly owned subsidiary of Koch Industries which sells gasoline, diesel, jet fuel, ethanol,
13 polymers, intermediate chemicals, base oils, and asphalt. It operates refineries with a combined
14 crude oil processing capacity of more than 700,000 barrels per day.⁸⁶ Additionally, it transports
15 petroleum products through a network of over 4,000 miles of pipeline.⁸⁷

16
17 130.

18 Koch Industries, Inc. has a substantial presence in the State of Oregon. According to the
19 company website, Koch Industries, Inc. accounts for 1,617 jobs and \$148,591,526 in wages and
20

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22
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24 ⁸⁵ Murphy, A., America's Largest Private Companies Forbes (Decemner 1, 2022)
25 <https://www.forbes.com/lists/largest-private-companies/?sh=4d6a7d9cbac4> (last visited on June 18, 2023).

26 ⁸⁶ Flint Hills Resources, The Rewards of Refining, [https://www.fhr.com/products-services/fuels-and-](https://www.fhr.com/products-services/fuels-and-aromatics)
27 [aromatics](https://www.fhr.com/products-services/fuels-and-aromatics) (last visited on June 18, 2023).

28 ⁸⁷ Id.

1
2 benefits in the State of Oregon.⁸⁸ One of its wholly owned subsidiaries, Georgia Pacific, has 4
3 locations in Oregon, including one in Multnomah County, which account for total combined
4 compensation and benefits, including direct and indirect jobs, of \$450,000,000, and capital
5 investments and acquisitions in Oregon since 2013 valued at \$746,000,000.⁸⁹

6 131.

7
8 Several Koch Industries, Inc. subsidiaries, including the petroleum refining, distributing,
9 and transporting subsidiary, Flint Hills Resources LP, are registered to do business in the State of
10 Oregon. Flint Hills Resources LP and its predecessor entities have been registered to do business
11 in Oregon from 1995 to the present.

12 132.

13 Koch Industries, Inc. controls and has controlled companywide decision making about the
14 amount and scope of its fossil fuel production and sales, including those of its subsidiaries. Koch
15 Industries, Inc. determines and directs marketing, production, and/or distribution of fossil fuel
16 products by its subsidiaries. Additionally, Koch Industries, Inc. controls and has controlled
17 companywide decision making on matters including but not limited to marketing, advertising,
18 climate change, and greenhouse gas emissions from its fossil fuel products, and communications
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24 ⁸⁸ Koch Industries, Driving Change Around the World – Locations
25 <https://www.kochind.com/about/locations> (last visited on June 18, 2023).

26 ⁸⁹ Georgia Pacific Our Locations <https://www.gp.com/about-us/locations/oregon/> (last visited on June 18,
27 2023).

1 strategies concerning climate change and the link between fossil fuel use and climate-related
2 impacts on the environment and communities, on behalf of itself and its subsidiaries.

3
4 133.

5 Defendant Koch Industries, Inc. and its predecessors, successors, parents, subsidiaries,
6 affiliates, and/or divisions, are collectively referred to herein as “Koch.”

7
8 134.

9 Koch is responsible for substantial GHG emissions in both direct emissions from their
10 industry activities, and end use of their products.

11
12 135.

13 At times relevant herein, Koch, through one or more of its subsidiaries, sold fossil fuel
14 products including fuels, engine oils, lubricants, and/or greases at several gas stations owned
15 and/or operated in Oregon. Upon information and belief, Koch, and the subsidiaries it controls,
16 conduct substantial fossil fuel product business in Oregon and Koch purposefully avails itself of
17 the rights, obligations, and privileges of Oregon’s laws.

18
19 136.

20 Fossil fuel emissions attributable to Koch and the subsidiaries it controls are individually
21 and collectively (with the other Defendants) a cause of enormous harm to Plaintiff for which the
22 company is individually and jointly and severally liable to Plaintiff. Koch refused to disclose the
23 truth about the nature and degree to which its fossil fuel operations, and those of the subsidiaries
24 it controls, could super heat and thereby harm Multnomah County. Instead, Koch has funded a
25 concerted effort to deceive the public through climate change denial campaigns. This Defendant’s
26
27

1
2 deception is individually and collectively (with the other Defendants) a cause of enormous harm
3 to the Plaintiff for which the Defendant is individually and jointly and severally liable to Plaintiff.

4 137.

5 Defendant TotalEnergies, S.E. is a French multinational energy and petroleum company
6 with its headquarters in Courbevoie, France. The entity was formerly known as Total S.A. but
7 changed its name to TotalEnergies, S.E. as an intended illustration of its investments in the
8 production of green electricity.
9

10 138.

11 Defendant, TotalEnergies Marketing USA, Inc., is a wholly owned subsidiary of
12 TotalEnergies, S.E. and/or its predecessor Total S.A. and, at times relevant herein, marketed,
13 distributed, and sold the fossil fuel products of TotalEnergies, S.E. and/or its predecessor Total
14 S.A. Total Specialties USA Inc. is incorporated in Delaware and headquartered in Houston, Texas.
15

16 139.

17 Defendant, TotalEnergies Marketing USA, Inc., f/k/a Total Specialties USA Inc., f/k/a Total
18 Lubricants USA, Inc., f/k/a Total Fina ELF Lubricants USA, Inc., f/k/a ELF Lubricants North
19 America, Inc., is and/or has been registered to do business in the State of Oregon and has and/or
20 previously had designated an agent for service of process in Oregon. Total Specialties USA Inc.
21 does substantial fossil fuel product-related business in Oregon, and a substantial portion of its
22 fossil fuel products are transported, distributed, marketed, and/or sold in Oregon. For instance,
23 TotalEnergies Marketing USA, Inc., maintains regular sales or distribution relationships with
24 Oregon distributors and sellers of Total fossil fuel products, including engine oils, lubricants,
25 greases, and/or industrial petroleum products. Said Oregon distributors or sellers include, but are
26
27

1 not necessarily limited to, Mighty Auto Parts, which maintains one or more retail stores in Oregon,
2 and Advance Auto Parts, which maintains several retail stores in Oregon, including multiple retail
3 stores in Multnomah County. TotalEnergies Marketing USA, Inc., conducts substantial fossil fuel
4 product business in Oregon and purposefully avails itself of the rights, obligations, and privileges
5 of Oregon’s laws.
6

7
8 140.

9 Defendants TotalEnergies, S.E. and TotalEnergies Marketing USA, Inc., and its
10 predecessors, successors, parents, subsidiaries, affiliates, and divisions, are collectively referred to
11 herein as “Total.”

12 141.

13 Total is responsible for substantial GHG emissions from 1965-2023 in both direct
14 emissions from their industry activities, and end use of their products.
15

16 142.

17 Fossil fuel emissions attributable to Total are individually and collectively (with the other
18 Defendants) a cause of enormous harm to Plaintiff for which the company is individually and
19 jointly and severally liable to Plaintiff. Total refused to disclose the truth about the nature and
20 degree to which its fossil fuel operations could super heat and thereby harm Multnomah County.
21 This Defendant’s deceptions have caused substantial harm to the Plaintiff for which the Defendant
22 is individually and jointly and severally liable.
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143.

Defendant, Marathon Oil Corporation is incorporated under the laws of the State of Delaware with its corporate headquarters and principal place of business located in the Marathon Oil Tower in Houston, Texas.

144.

Marathon Oil Corporation consists of multiple subsidiaries and affiliates involved in the exploration, extraction, production, and marketing of fossil fuel products. As of December 31, 2020, the company had 972 million barrels of oil equivalent of estimated proven reserves. In 2020, the company sold 383 thousand barrels of oil equivalent per day.⁹⁰

145.

Defendant, Marathon Oil Company is an energy company incorporated in the State of Ohio with its principal place of business in Houston, Texas. Marathon Oil Company is a wholly owned subsidiary and/or corporate ancestor of Marathon Oil Corporation which acts on Marathon Oil Corporation's behalf and subject to Marathon Oil Corporation's control.

146.

Marathon Oil Corporation subsidiary, Marathon Oil Company, has been registered to do business in Oregon and has had a designated agent for service of process in Oregon from 1982 to the present.

⁹⁰ Marathon Oil Corporation Form 10-K, December 31, 2020
<https://www.sec.gov/ix?doc=/Archives/edgar/data/101778/000010177821000018/mro-20201231.htm> (last visited on June 18, 2023).

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147.

Defendant, Marathon Petroleum Corporation was a wholly owned subsidiary of Marathon Oil Corporation until was spun off from the operations of Marathon Oil Corporation in 2011.⁹¹ Marathon Petroleum is a company organized and existing under the laws of the state of Delaware with its principal place of business in Findlay, Ohio.

148.

Marathon Petroleum Corporation operates the nation’s largest refining system, with a crude oil refining capacity of approximately 2.9 million barrels per day from 13 refineries across the United States, including Anacortes, Washington.⁹²

149.

Marathon Petroleum Corporation owns the general partner and majority limited partner interest in MPLX LP, a midstream company that owns and operates gathering, processing, and fractionation assets, as well as crude oil and light product transportation and logistics infrastructure.⁹³ MPLX LP subsidiary, Marathon Pipe Line LLC, operates pipelines, storage tanks,

⁹¹ Marathon Landing Page, Announcement that Marathon Oil and Marathon Petroleum Corporation are separate entities as of 2011, <https://www.marathon.com/> (last visited on June 18, 2023).

⁹² Marathon, Nation’s Largest Refiner, MPC Refinery Locations in the US, <https://www.marathonpetroleum.com/Operations/Refining/> (last visited on June 18, 2023).

⁹³ Marathon Petroleum Corporation, We are MPC - About Us, <https://www.marathonpetroleum.com/About/> (last visited on June 18, 2023).

1
2 and marine facilities across the country, including a pipeline called the “Boise – Pasco 8”-6”
3 Products” pipeline which runs through northeastern Oregon.⁹⁴

4 150.

5 Marathon Petroleum Corporation maintains a coast-to-coast retail network of gas stations
6 where Marathon Petroleum Corporation products are sold, including Marathon branded stations as
7 well as stations bearing the ARCO brand which Marathon Petroleum Corporation acquired in
8 2018.⁹⁵ There are currently 41 ARCO stations in the State of Oregon, several of which are in
9 Multnomah County.⁹⁶

11 151.

12 Marathon Petroleum Corporation was registered to do business in Oregon from 1982 until
13 on or after 2017 and has had a designated agent for service of process in Oregon from 1982 to the
14 present. Marathon Petroleum Corporation subsidiary, Marathon Pipeline LLC has been registered
15 to do business in Oregon and has had a designated agent for service of process in Oregon from
16 2019 to the present.

23 ⁹⁴ Marathon Petroleum Corporation, Coast to Coast Retail Network
24 <https://www.marathonpetroleum.com/Operations/Retail/> (last visited on June 18, 2023).

25 ⁹⁵ ARCO, Gas Station Locations [https://www.arco.com/en-us/northwest/find-a-
26 station/multnomah%20county,%20OR/](https://www.arco.com/en-us/northwest/find-a-station/multnomah%20county,%20OR/) (last visited on June 18, 2023); Number of gas Stations in
27 the United States in 2023,
28 <https://www.scrapehero.com/location-reports/ARCO-USA/> (last visited on June 18, 2023).

⁹⁶ Id.

1
2 152.

3 Defendants Marathon Oil Corporation, Marathon Oil Company, and Marathon Petroleum
4 Corporation and their predecessors, successors, parents, subsidiaries, affiliates, and divisions are
5 collectively referred to herein as (“Marathon”).

6 153.

7 Marathon conducts substantial fossil fuel product business in Oregon and purposefully
8 avails itself of the rights, obligations, and privileges of Oregon’s laws.

9 154.

10 According to the Oregon Department of Environmental Quality, Marathon is responsible
11 for 42,655,513 metric tons of CO₂ e from 2010 to 2020.

12 155.

13 Marathon is responsible for substantial GHG emissions from 1965-2023 in both direct
14 emissions from their industry, and end use of their products.

15 156.

16 Marathon’s public statements and proclamations made in furtherance of its campaign of
17 deception and denial, and its repeated failure to warn the public and consumers of global warming-
18 related hazards when it marketed, advertised, and sold its products, were intended to conceal, and
19 mislead the public and consumers about the serious adverse consequences from continued use of
20 Marathon’s products. Said conduct was intended to reach and influence Multnomah County, as
21 well as its residents, among others, to continue unabated use of Defendants’ fossil fuel products,
22 resulting in Multnomah County’s injuries.
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2 157.

3 Fossil fuel emissions attributable to Marathon are individually and collectively (with the
4 other Defendants) a cause of enormous harm to Plaintiff for which the company is individually
5 and jointly and severally liable to Plaintiff. Marathon refused to disclose the truth about the nature
6 and degree to which its fossil fuel operations could super heat and thereby harm Multnomah
7 County. Marathon's deceptions are individually and collectively (with the other Defendants) a
8 cause of enormous harm to the Plaintiff for which this Defendant is individually and jointly and
9 severally liable to Plaintiff.
10

11 158.

12 Defendant, Space Age Fuel, Inc. was organized under the laws of Oregon in 1982. Its
13 principal place of business is 15525 SE FOR MOR CT, Clackamas, OR 97015. Space Age Fuel,
14 Inc. is a resident of the State of Oregon and purposefully avails itself of the rights, obligations, and
15 privileges of the laws of Oregon.
16

17 159.

18 Space Age Fuel is a fossil fuel marketer, and retail distributor.

19 160.

20 Space Age Fuel owns a retail chain of fuel and convenience stores. Space Age Fuel operates
21 predominately under the Space Age brand along with the Exxon and Union 76 brands.⁹⁷
22
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27 ⁹⁷ Space Age, Retail, <http://spaceagefuel.com/retail/> (last visited on June 18, 2023).

1
2 161.

3 Over the years Space Age Fuel Inc. has experienced rapid growth. Space Age Fuel Inc. is
4 one of the largest independent marketers in the State of Oregon.

5 162.

6 Space Age Fuel consists of four divisions which are the company operated stations,
7 commercial sales accounts, commercial freight deliveries and home heating oil deliveries.
8 Currently Space Age Fuel currently operates nine truck and trailers in the Pacific Northwest.
9

10 163.

11 Space Age Fuel delivers its own fossil fuel and the fossil fuel of others in the state of
12 Oregon. Space Age Fuel currently operates twenty-one locations and supplies another 60 retail and
13 wholesale fueling facilities.

14 164.

15 Space Age Fuel also transports fuel for other Petroleum companies when the need arises.
16 Space Age Fuel sells both unbranded and branded products. Space Age Fuel's branded products
17 are with Exxon and ConocoPhillips.
18

19 165.

20 Space Age is responsible for substantial GHG emissions from 1982-2023 in both direct
21 emissions from their storage, transportation and end use of their products.
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During the years 2010 through 2021, Space Age Fuel contributed 7,601,219 metric tons of CO₂ greenhouse gas emissions in Oregon.⁹⁸ These numbers were self-reported to the Oregon Department of Environmental Quality. Carbon emissions attributable to this Defendant are individually and collectively (with the other Defendants) a cause of enormous harm to Plaintiff for which this Defendant is individually and jointly and severally liable to Plaintiff. This Defendant's refusal to disclose that its fossil fuel activities could cause substantial damage to Plaintiff and deadly consequences to the County's inhabitants was individually and collectively (with the other Defendants) a cause of enormous harm to Plaintiff for which this Defendant is individually and jointly and severally liable to Plaintiff.

2. Coal Defendants

Defendant, Peabody Energy Corporation ("Peabody") is a multi-national energy company incorporated in the State of Delaware and with its principal place of business in St. Louis, Missouri. Through a diverse web of affiliates and subsidiaries, Peabody is the world's largest coal extractor

⁹⁸ Fuel Suppliers, 2010 – 2021 – Greenhouse Gas Emissions From Fuel Use, Oregon DEQ, <https://www.oregon.gov/deq/ghgp/Pages/GHG-Emissions.aspx> (last visited June 13, 2023).

1
2 by volume. Peabody is registered with the SEC and is traded under ticker “BTU.”

3 168.

4 Peabody primary business consists of the mining, sale, and distribution of coal, which is
5 purchased for use in electricity generation and steelmaking. Peabody also markets, brokers and
6 trades coal through offices in China, Australia, the United Kingdom, and the United States.

7 169.

8
9 In 2017, Peabody recorded sales of 191.5 million tons of coal.⁹⁹ Peabody markets coal to
10 electricity generating and industrial customers in more than 25 nations on six continents. As of
11 December 31, 2017, the company had approximately 5.2 billion tons of proven and probable coal
12 reserves.¹⁰⁰ Peabody filed for bankruptcy in 2016, and emerged reorganized in 2017, but continues
13 the conduct alleged herein.

14 170.

15 Peabody maintains ownership of majority interests in 23 surface and underground mining
16 operations located throughout the United States and Australia.¹⁰¹ On information and belief,
17 Peabody directs some of its business activities into Oregon and purposefully avails itself of the
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24 ⁹⁹ Peabody, Annual report which provides a comprehensive overview of the company for the past
25 year, PEABODY (2021), [https://www.peabodyenergy.com/Investor-Info/Shareholder-
Information/Annual-Report](https://www.peabodyenergy.com/Investor-Info/Shareholder-Information/Annual-Report) (last visited June 15, 2023).

¹⁰⁰ Id.

26 ¹⁰¹ Peabody Energy, Operations, PEABODY ENERGY, <https://www.peabodyenergy.com/> (last visited
27 June 15, 2023).

1
2 rights, obligations, and privileges of the laws of Oregon.

3 171.

4 In the United States, company-owned mines are located in Wyoming, Colorado, Arizona,
5 New Mexico, Illinois, and Indiana. Peabody's largest operation is the North Antelope Rochelle
6 Mine located in Campbell County, Wyoming, mining more than 92 million tons of coal in 2016.¹⁰²
7 Peabody spun off coal mining operations in West Virginia and Kentucky into Patriot Coal
8 Corporation in October 2007.

9
10 172.

11 Vitol Group, the biggest independent oil trader, and mining giant Coal Defendant Peabody
12 Energy Corp. have joined forces. The companies have teamed with a U.K. startup which has
13 developed a process to pulverize coal, remove impurities and pollutants, and blend it with crude
14 or fuels for use by refineries and other customers.¹⁰³

15
16 173.

17 Peabody also has known joint venture with another carbon major, Coal India.¹⁰⁴ Peabody
18 Coal India ranks eighth among the top twenty companies. Coal India is responsible for substantial
19 GHG emissions from 1965-2023 in both direct emissions from their industry and end use of their
20

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22
23 ¹⁰² Mine Safety and Health Administration, MSHA Mine Overview, MINE SAFETY AND HEALTH
ADMINISTRATION, <https://www.msha.gov/> (last visited June 15, 2023).

24 ¹⁰³ Andy Hoffman, Oil Trader Vitel Teams with Peabody to Grind Coal for Refineries,
BLOOMBERG (Jul. 18, 2018), [https://www.bnnbloomberg.ca/oil-trader-vitol-teams-with-peabody-
to-grind-coal-for-refineries-1.1109759](https://www.bnnbloomberg.ca/oil-trader-vitol-teams-with-peabody-to-grind-coal-for-refineries-1.1109759) (last visited June 15, 2023).

25 ¹⁰⁴ Mineweb, Coal India to ink joint venture with Peabody, MINEWEB (May 18, 2011, 6:20 AM),
26 <https://www.mining.com/coal-india-to-ink-joint-venture-with-peabody/102/> (last visited June 15,
27 2023).

1
2 products.

3 174.

4 Peabody is responsible for fossil fuel generated GHG emissions from 1965-2023, in both
5 direct emissions from their industrial operations and end use of their products.¹⁰⁵

6 175.

7 Along with its joint venture, Peabody is responsible for substantial fossil fuel sourced GHG
8 emissions from 1965-2023. GHG emissions attributable to Peabody are individually and
9 collectively (with the other Defendants) a cause of enormous harm to Plaintiff for which Peabody
10 is individually and jointly and severally liable to Plaintiff. Peabody's failure to disclose the truth
11 that its GHG emissions could cause extreme heat events and thereby inflict great damage to
12 Plaintiff is individually and collectively (with the other Defendants) a cause of enormous harm to
13 Plaintiff for which Peabody is individually and jointly and severally liable to Plaintiff.
14

15 176.

16 The Oil and Gas Defendants and Coal Defendants listed above are collectively responsible
17 for a substantial portion of all GHG emissions from 1965-2023, in both direct emissions from their
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27 ¹⁰⁵ Griffin, *supra* footnote 67.

1 industry activities and end use of their product.¹⁰⁶

2
3 177.

4 Thus, these Oil and Gas Defendants and Coal Defendants (together called “Fossil Fuel
5 Defendants”) were individually and collectively (with the other Defendant groups) a cause of the
6 County's damages from extreme heat events, wildfires, and droughts described herein.

7
8 178.

9 Decades ago, the Fossil Fuel Defendants knew that their fossil fuel activities would
10 substantially contribute to a dramatic rise in the concentration of GHG in the atmosphere and that
11 the concentration of GHG in the atmosphere would lead to significant temperature changes, which
12 would, in turn, lead to changes in the global climate, such as the increased frequency and intensity
13 of extreme weather-related events like the heat dome and wildfires. They knew and should have
14 known that immediate and sustained reductions in carbon pollution from their products were
15 required to avoid a new normal of fossil fuel induced climate catastrophes. Had the Defendants
16 *disclosed the truth* somewhere along the way, that because of the mass consumption of Defendants’
17 fossil fuel products, regions like Multnomah County would experience high temperatures for a
18 sustained period more than *35 degrees F* above normal, including highs of 116 degrees F in June,
19 an environmentally conscious community and leadership structure like that in the County would
20 have *been able to prepare* for such an extreme. The Defendants knew and foresaw that which the
21 County did not: The climate change that the Defendants were causing did not just include the
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27 ¹⁰⁶ Id.

1
2 melting of distant ice caps, stranding of polar bears, rising of sea levels, and the diminishment of
3 Greenland, but rather, could heat and smoke choke the County to a degree that was deadly to many
4 of its inhabitants and unparalleled in its history.

5 179.

6 When an allegation is made in this First Amended Complaint to an act or omission of the
7 Defendants, unless specifically attributed or otherwise stated, such allegations assert that the
8 officers, directors, agents, employees, or representatives of the Defendants committed or
9 authorized such an act or omission, or failed to adequately supervise or properly control or direct
10 their employees while engaged in the management, direction, operation or control of the affairs of
11 Defendants, and did so while acting within the scope of their employment or agency. In addition,
12 each Fossil Fuel Defendant acted individually, as well as in concerted or coordinated action with
13 other Defendants, when causing economic harm and property damages to the Plaintiff, as well as
14 in the negligent and/or intentional creation of a public nuisance in the County.
15

16
17 **3. Estimated Carbon Footprint for Fossil Fuel Defendants**

18 180.

19 Each Oil and Coal Defendant above is a major carbon emitter. Each Defendant's carbon
20 footprint,¹⁰⁷ the amount of carbon dioxide (and other greenhouse gases) historically emitted from
21 _____

22
23
24 ¹⁰⁷ Defendants have reported on their equity production of crude oil and natural gas and related
25 fossil fuels since the passage of the Securities Act in 1933, and even earlier in annual reports to
26 shareholders. However, oil and gas companies only began reporting on refinery output and
27 petroleum product sales in the 1990s (often much later) in annual reports to shareholders or 10-Ks
28 or 20-Fs filed with the SEC. Plaintiff has used publicly available data to estimate emissions of
carbon dioxide (CO₂) on three components of emissions attributed to the Defendant:

1
2 its operations and products is individually and collectively (with the other Defendants) a cause of
3 the warming that is responsible for the occurrence, frequency and severity of the extreme weather
4 events alleged by Plaintiff, including but not limited to the 2021 heat dome, the extreme heat of
5 2022, the ongoing drought and the Oregon wildfires and wildfire-generated smoke. Defendant's
6 historical carbon emissions can be measured as a linear carbon-to-climate temperature response.

7
8 181.

9 Based on the information available, prior to discovery, the tables and charts below indicate,
10 for each Defendant, for a given period of time, a good faith estimate of their individual "carbon
11 footprint" or "CF." The CF is expressed in metric tons of carbon dioxide emitted (i.e., tCO₂e) and
12

13
14
15 Fossil fuel production method: emissions based on the carbon contained in the company's net
16 equity production of crude oil and natural gas on an annual basis, deducting for sequestered net
17 non-energy uses of petroleum for lubricants, petrochemicals, and road oil, and the combustion of
18 the carbon fuels by a particular Defendant's worldwide consumers who use those fuels as intended;
19 Refinery Output method: emissions based on the carbon content of company-reported petroleum
20 products supplied through the company's own refineries (or share of jointly owned refineries),
21 ignoring output of petrochemical and other non-combustible feedstocks. Defendant may run only
22 its own crude oil through its refineries, or, more commonly, supplement refinery input with third
23 party crude oil;

24 Petroleum product sales method: emissions based on the carbon content of company-reported sale
25 of petroleum products such as jet-fuel, gasoline, distillate fuels, heavy fuels, propane, and the like.
26 As with the refinery output method, the emission factor per barrel (bbl) of each fuel is well known,
27 hence the emissions of CO₂ for each Defendant's sales of petroleum products can be
28 estimated. Vertically integrated Defendants procure additional quantities of finished petroleum
products to supplement those refined in its refineries and often sell far more petroleum products
than refined through its global supply chains to wholesalers and branded gas stations.

Plaintiff's estimate of each Defendant's carbon footprint is a good faith effort to compile the
figures based on the information available. As such, the estimates herein are conservative. Through
the process of discovery, continued research, and development by experts, Plaintiff will amend the
carbon footprint quantity of each Defendant over a given period of time as new information is
obtained.

1 includes methane emitted (unless otherwise stated). The figures below include estimated emissions
 2 from flaring, operated refinery emissions, Defendant’s own fuel use, vented CO₂, and fugitive
 3 methane. The fossil fuel production data, as compared to end-product sales or extraction to
 4 combustion supply chain data, are relatively accessible. The end product sales or supply chain
 5 data, which includes raw and refined fossil fuel products purchased from third parties, is less
 6 accessible. In general, for a vertically integrated private shareholder owned fossil fuel company,
 7 the CF based on the quantity of fossil fuel products sold (and combusted) is significantly greater
 8 than the CF based on the quantity of fossil fuels extracted. As more data on Defendants’ fossil fuel
 9 refining, procurement of finished petroleum fuels from third parties, and petroleum product sales
 10 data becomes available through the process of discovery or otherwise, Plaintiffs reserves the right
 11 to supplement and update each Defendant’s aggregated and cumulative CF calculations for use at
 12 trial.
 13
 14

15 182.

16 Emissions attributed to Defendants from oil, gas, & coal production between 1965 - 2022.

17
 18 **Table 1. Emissions attributed to Defendants from oil, gas, & coal production between 1965
 -2022**

19 COMPANY	20 YEARS OF COVERAGE	21 PRODUCTION-RELATED MTCO ₂
22 British Petroleum	1965-2022	36,506
23 Chevron	1965-2022	45,639
24 ConocoPhillips	1965-2022	16,576
25 ExxonMobil	1965-2022	44,772
26 Occidental (incl. Anadarko)	1965-2022	10,289
27 Peabody Energy	1965-2022	16,901
28 Shell	1965-2022	34,469
TotalEnergies	1965-2022	14,421

Table 2. Emissions attributed to Defendants from oil, gas, & coal production from Earliest Date Available

COMPANY	YEARS OF COVERAGE	PRODUCTION-RELATED MTCO _{2e} (CO ₂ & CH ₄)
British Petroleum	1913-2022	42,530
Chevron	1912-2022	57,090
ConocoPhillips	1924-2022	20,332
ExxonMobil	1884-2022	55,105
Occidental (incl. Anadarko)	1945-2022	11,361
Peabody Energy	1945-2022	17,661
Shell	1892-2022	40,674
TotalEnergies	1934-2022	16,624

Table 3. Estimated Emissions attributed to Defendants from Petroleum Products and Natural Gas sales (to be updated)

Company	Years of coverage	Product-sales MtCO ₂	Average MtCO ₂ /yr
ExxonMobil	1983-2022	38,765	969
Shell	1993-2022	28,618	954
BP	2004-2022	17,854	940
Chevron	2001-2022	11,355	516
TotalEnergies	2011-2022	4,407	367
Valero (petroleum only)	2010-2022	4,737	364
Marathon	2010-2022	4,575	352
Peabody Energy	1950-2022	15,834	217
Koch Industries (petroleum only)	2006-2022	1,720	101
Motiva (petroleum only)	2010-2022	1,108	85
Occidental (gas only)	1955-2022	757	12

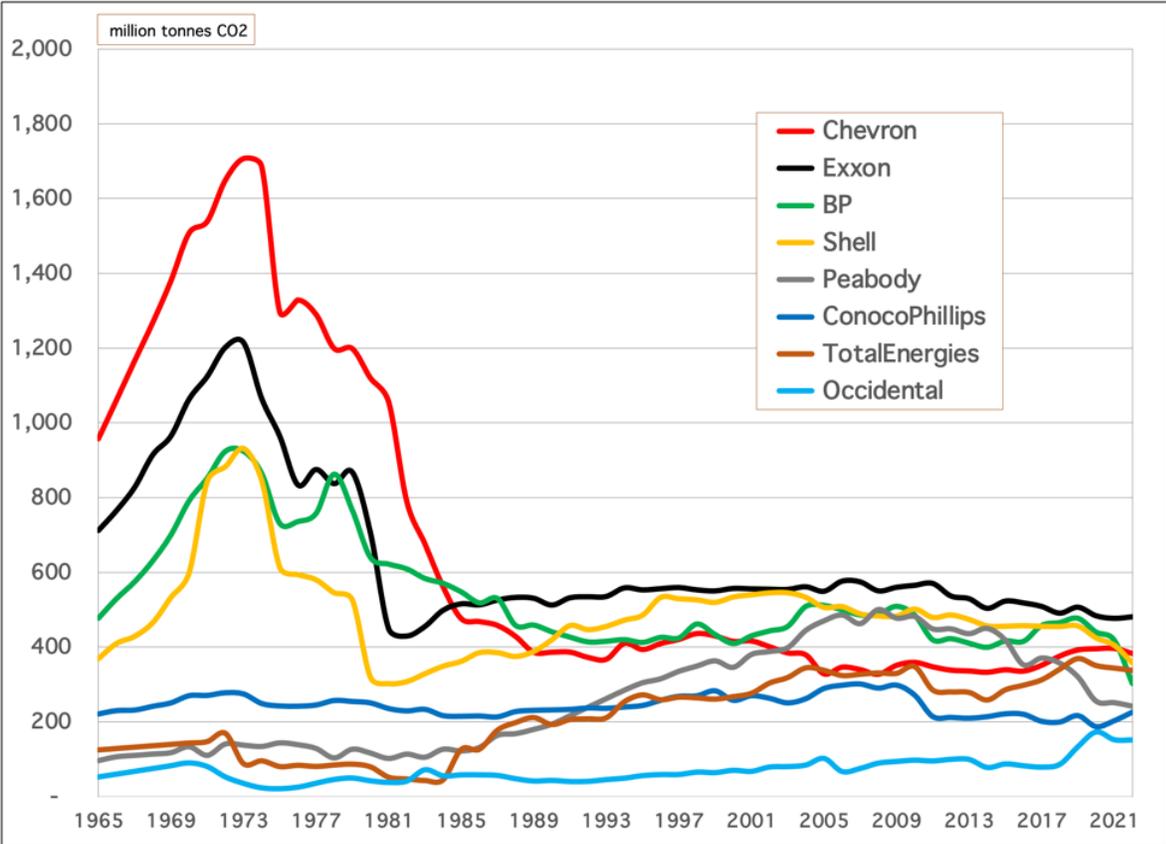
Table 3 shows, for each Defendant above, from the severely limited sales data publicly accessible, the carbon emissions based on the quantity of fossil fuel products sold.

183.

The following charts (i.e., Figures 1, 2 and 3) show the historical carbon emissions from eight Defendants based on company-reported production of crude oil, natural gas and coal. The

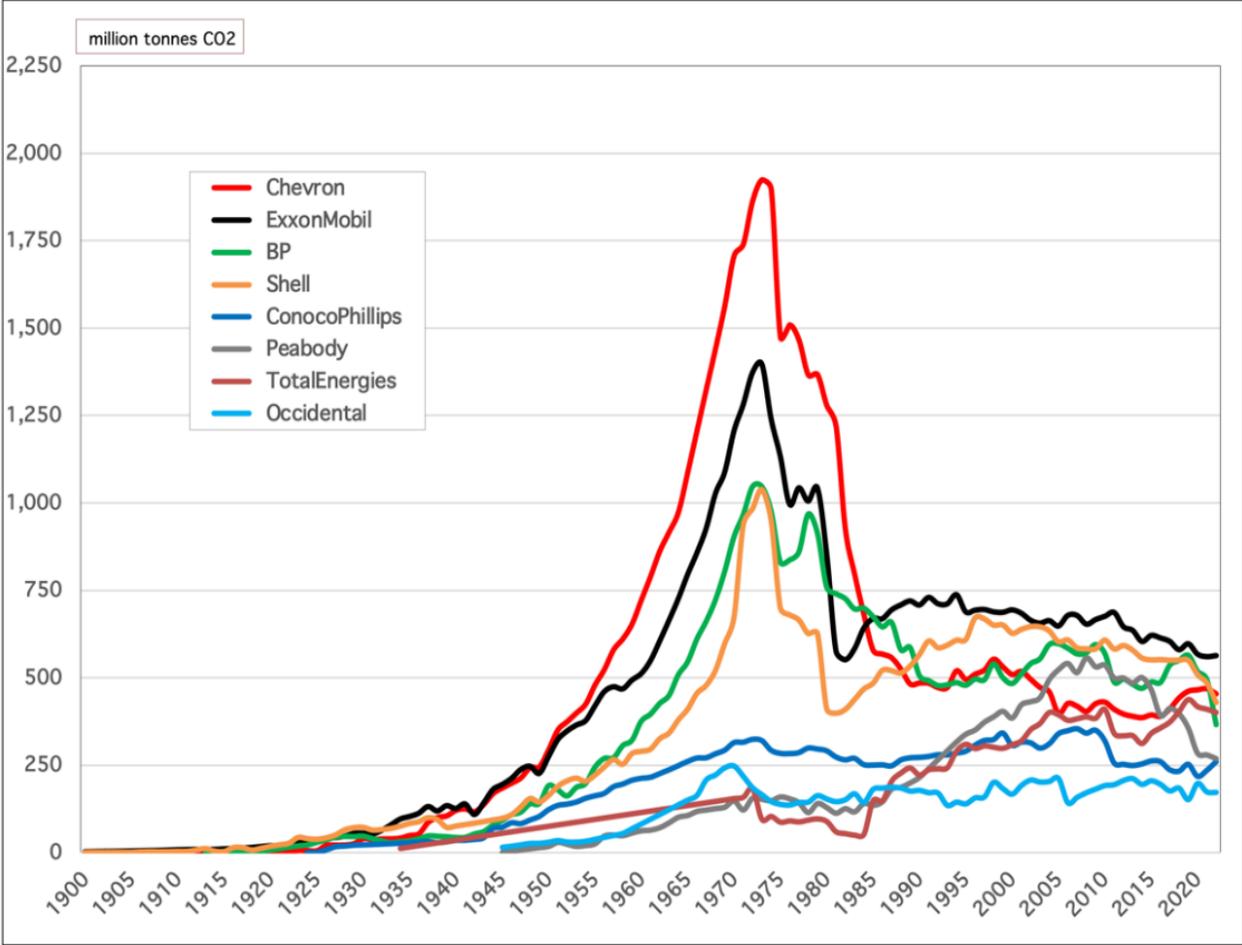
1
2 emissions, quantified in terms of millions of tons of CO₂ emitted, are based on the quantity of
3 carbon fuels extracted. The totals deduct fossil fuel products that are not combusted for the purpose
4 of generating energy (e.g., road oil, petrochemicals, lubricants). The total emissions (minus the
5 deductions mentioned) are calculated using well known emission factors for petroleum products
6 such as gasoline, distillate fuels, heavy oils, and jet fuel, as well as natural gas. The final net
7 emissions for eight Defendants are estimated for 1965 to 2022 in Figure 1. This calculation thus
8 excludes estimated *substantial* operational emissions attributable to each company, such as from
9 flaring of natural gas, vented CO₂ from gas processing, use of company fuels for refineries and
10 pipelines, and vented and fugitive methane.
11

12 **Figure 1. Emissions for Eight Defendants from oil & gas production, 1965-2022**



1
2 Figure 2 includes estimated operational emissions *and* emissions from coal-assets owned
3 by eight Defendants.

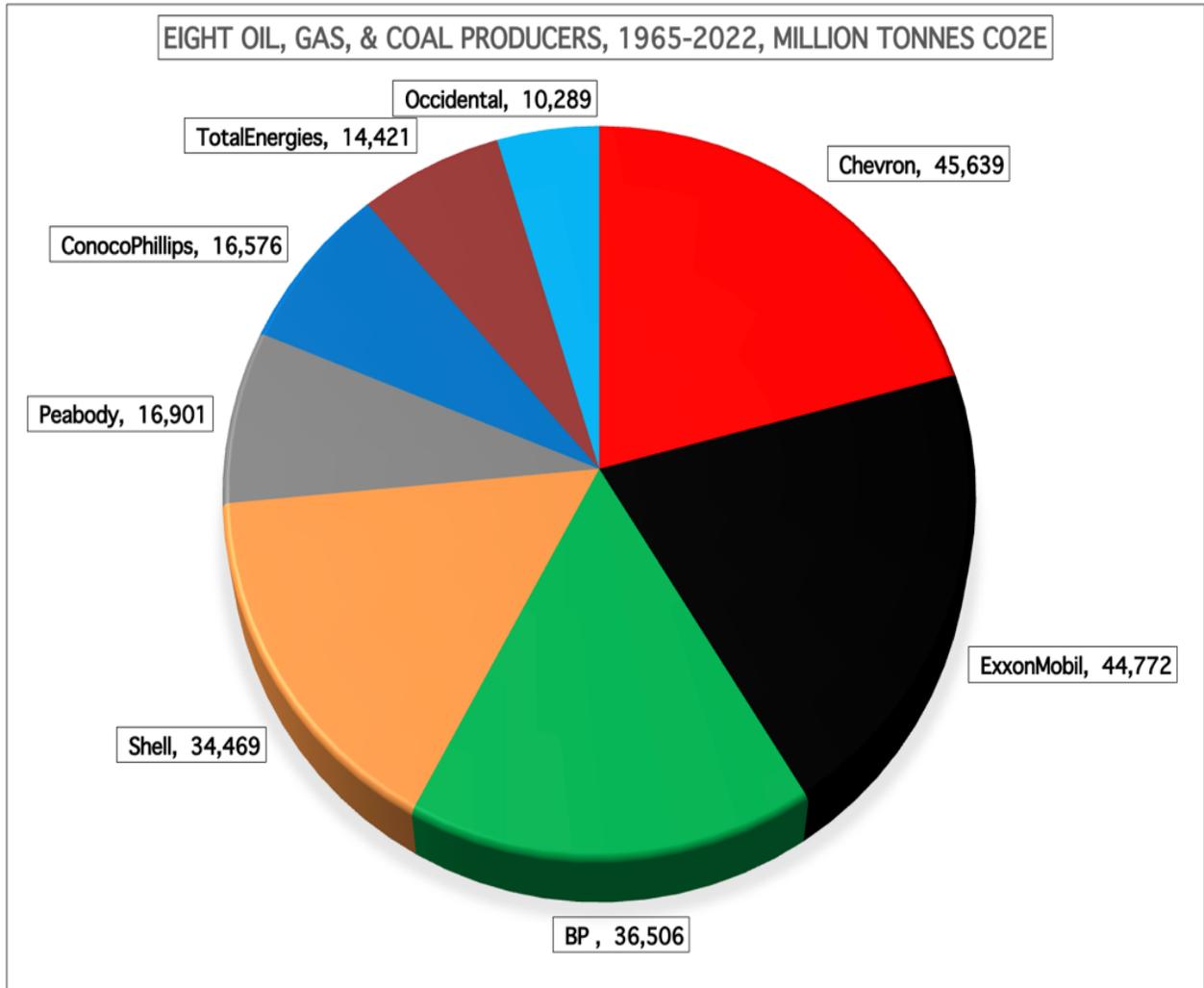
4 **Figure 2. Emissions from Eight Defendants oil, gas, & coal production, 1900-2022**



21 Based on company-reported production of net equity crude oil, natural gas, and coal over
22 the period from 1900 to 2022 the associated emissions of CO₂ and methane attributed to each of
23 the eight Defendants can be summed, as shown in Figure 3.

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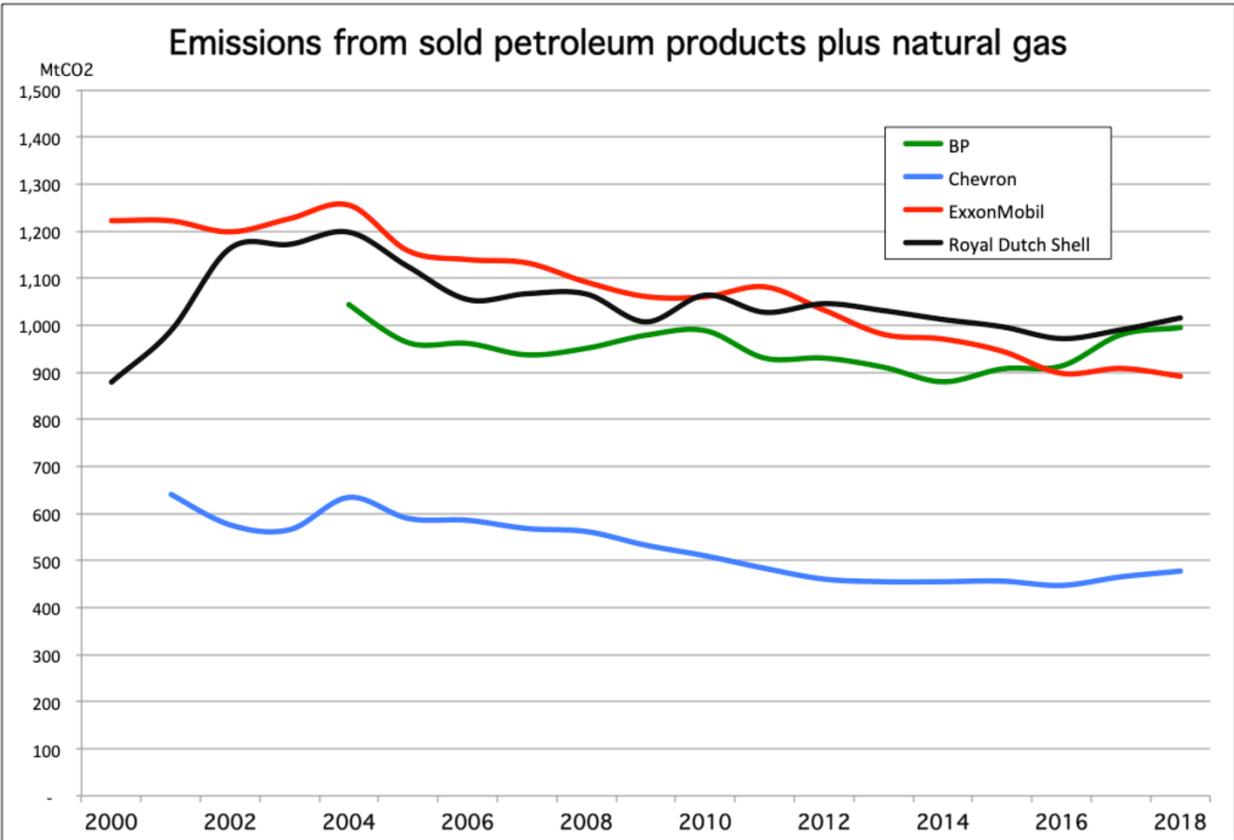
Figure 3. Eight Carbon Majors cumulative emissions from oil, gas, & coal production 1965-2022



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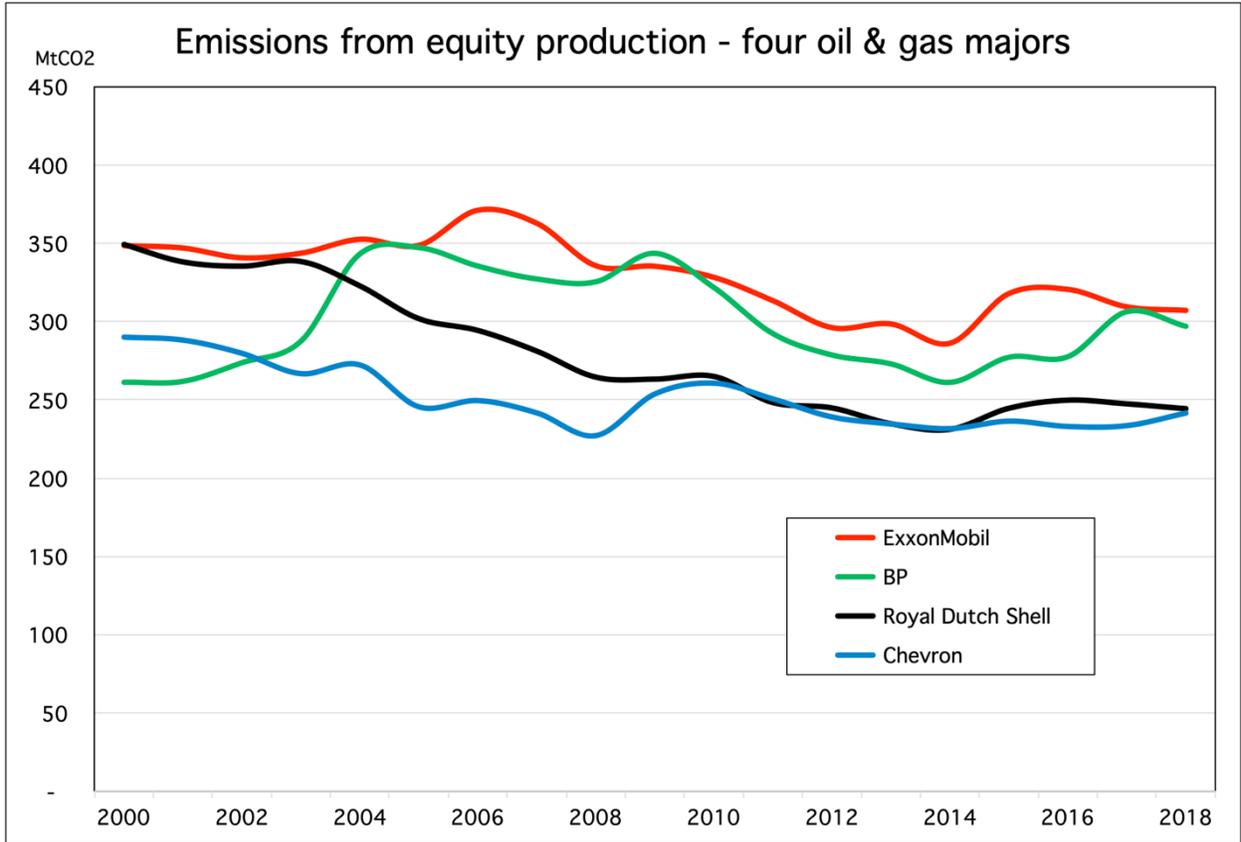
In Figure 4, Plaintiffs show from 2000 to 2018 the CF for four Defendants based on the combustion of fossil fuel products sold.

Figure 4: Emissions from four Vertically Integrated Defendants Including End Products Sold



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2
3 In Figure 5, Plaintiffs show, for the same period, for the same Defendants, the CF based
4 solely on the quantity of fossil fuels extracted or produced. For these four Defendants, the CF
5 based on the combustion of products sold in the marketplace is significantly greater than the CF
6 based solely on the quantity of fossil fuel products extracted.

7 **Figure 5: Emissions from Same 4 Vertically Integrated Defendants from Production Only**



22 184.

23
24 Scientists have established a simple yet robust metric for measuring the “dose-response”
25 relationship between cumulative CO2 emissions and global warming, as measured in degrees
26 Celsius. The formula is referred to as TCRE, the Transient Climate Response to Cumulative CO2

1 Emissions. TCRE is the proportionality constant that links a quantity of CO2 emissions to a global
2 temperature increase. The relationship between the amount of emissions and the change in
3 temperature is near linear.
4

5 185.

6 Plaintiffs will show that the aggregated and cumulative greenhouse gas emissions from
7 each fossil fuel Defendant was individually and collectively (with the other Defendants) a cause
8 of increasing the probability and severity of the heat dome, wildfires and drought identified and
9 described herein. But for the Fossil Fuel Defendants’ conduct, more than half of the total
10 greenhouse gas accumulation would not have occurred, the climate would not have dramatically
11 warmed and extreme weather events would not be as severe or as frequent as those that have been
12 smothering the County since late June 2021.
13

14 **4. Trade and Front Groups**

15 186.

16 Defendant, the American Petroleum Institute (“API”) is a national trade association
17 representing the oil and gas industry, formed in 1919. API is headquartered in Washington, DC. In
18 2021, API reported total revenues of \$228,789,035.
19

20 187.

21 The following Defendants and/or their predecessors in interest are and/or have been API
22 members at times relevant to this litigation: Exxon, Shell, Chevron, BP, ConocoPhillips, Motiva,
23
24
25
26
27

1
2 and Anadarko, all of whom have actively served on boards, committees and groups for API.¹⁰⁸

3 188.

4 API is a nonprofit corporation registered to do business in Oregon during the period at
5 issue in this lawsuit.

6 189.

7 With more than 600 members, API is the country’s largest oil trade association.

8 190.

9
10 API asserts that it “speak[s] for the oil and gas industry to the public, Congress and the
11 Executive Branch, state governments and the media.”¹⁰⁹ API states that it “negotiate[s] with
12 regulatory agencies, represent[s] the industry in legal proceedings, participate[s] in coalitions and
13 work[s] in partnership with other associations to achieve [its] members’ public policy goals.”¹¹⁰
14 API’s purpose is to advance the individual members’ collective business interests, which includes
15 increasing consumers’ consumption of oil and gas to Defendants’ financial benefit. Among other
16

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20 ¹⁰⁸ API’s full membership is much more extensive, and includes predecessors to the Fossil Fuel
21 Defendants named herein, American Standard of Indiana (BP), Asiatic (Shell), Ashland
22 (Marathon), Atlantic Richfield (BP), British Petroleum (BP), Chevron Standard of California
23 (Chevron), Esso Research (ExxonMobil), Ethyl (formerly affiliated with Esso, which was
24 subsumed by ExxonMobil), Getty (ExxonMobil), Gulf (Chevron, among others), Humble
25 Standard of New Jersey (ExxonMobil/Chevron/BP), Marathon, Mobil (ExxonMobil), Pan
26 American (BP), Shell, Standard of Ohio (BP), Texaco (Chevron), Union (Chevron), Skelly
27 (ExxonMobil), Colonial Pipeline (ownership has included BP, ExxonMobil, and Chevron entities,
28 among others), Continental (ConocoPhillips), Dupont (former owner of Conoco), Phillips
(ConocoPhillips), and Caltex (Chevron).

¹⁰⁹ About API, American Petroleum Institute, <https://www.api.org/about> (last visited on June 12, 2023).

¹¹⁰ Id.

1 functions, API coordinates among members of the petroleum industry and gathers information of
2 interest to the industry and disseminates that information to its members.
3

4 191.

5 API has coordinated and participated in a deliberate misinformation campaign to downplay
6 and/or outright deny the causal relationship between the GHG emissions of its members and
7 extreme weather events like those described herein. API's deception is individually and
8 collectively (with the other Defendants) a cause of enormous harm to the Plaintiff for which this
9 Defendant is individually and jointly and severally liable to Plaintiff. Upon information and belief,
10 API has directed business activities into Oregon and purposefully availed itself of the rights,
11 obligations, and privileges of the laws of Oregon.
12

13 192.

14 Defendant, the Western States Petroleum Association ("WSPA") is a non-profit trade
15 association headquartered in Sacramento, California, representing Fossil Fuel Defendants'
16 interests in Arizona, California, Nevada, Oregon and Washington. Its members include, and at
17 times relevant to this matter, have included ExxonMobil, Shell, Chevron, Valero, Marathon, and
18 BP.
19

20 193.

21 The Western States Petroleum Association was founded in 1907 and represents companies
22 that account for the bulk of petroleum exploration, production, refining, transportation, and
23 marketing in the five western states of Arizona, California, Nevada, Oregon, and Washington.
24
25
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1
2 194.

3 WSPA has engaged in a climate deception/misinformation campaign in Oregon to continue
4 to further the business objectives of its carbon polluting members. WSPA has conducted substantial
5 business activities in Oregon and purposefully availed itself of the rights, obligations, and
6 privileges of the laws of Oregon.

7
8 195.

9 WSPA has coordinated and participated in a deliberate misinformation campaign to
10 downplay and/or deny the causal relationship between the GHG emissions of its members and
11 extreme weather events like those described herein. WSPA's deception is individually and
12 collectively (with the other Defendants) a cause of enormous harm to the Plaintiff for which this
13 Defendant is individually and jointly and severally liable to Plaintiff.

14 **5. Other Defendants**

15
16 196.

17 McKinsey and Company, Inc. United States is a privately owned entity headquartered in
18 New York, New York. McKinsey is registered to do business in Oregon and in all fifty states. At
19 all relevant times, McKinsey has transacted business throughout Oregon, including in Multnomah
20 County. McKinsey has conducted substantial business activities in Oregon and purposefully
21 availed itself of the rights, obligations, and privileges of the laws of Oregon.

22
23 197.

24 Defendant McKinsey & Company, Inc. is a corporation organized under the laws of the
25 state of New York. McKinsey's principal place of business is located at 711 Third Avenue, New
26
27

1
2 York, NY 10017. It may be served with process via its registered agent, Corporation Service
3 Company, at 80 State Street, Albany, NY 12207.

4 198.

5 Defendant McKinsey Holdings, Inc. is a Delaware corporation with its principal place of
6 business is located at 711 Third Avenue, New York, NY 10017. It may be served with process via
7 its registered agent, Corporation Service Company, 251 Little Falls Drive, Wilmington, DE 19808.

8 199.

9
10 Upon information and belief, McKinsey & Company, Inc. is the parent company of
11 McKinsey Holdings, Inc., which is itself the parent company of both McKinsey & Company, Inc.
12 United States and McKinsey & Company, Inc. Washington D.C. Upon information and belief, each
13 subsidiary corporation is wholly owned by its parent. to as (collectively “McKinsey”).

14 200.

15 McKinsey is one of the world’s largest and most influential consulting companies.
16 McKinsey prides itself on learning the intimacies of its clients’ businesses, embedding itself in
17 management, and evolving “transformational partnerships” with actual boots on the ground.
18 McKinsey’s work with fossil fuel entities dates back several decades. Though McKinsey promotes
19 itself as being “committed to protecting the planet,” McKinsey counts at least seventeen mining
20 and fossil fuel companies among its biggest clients. McKinsey’s claims of commitment to
21 environmental protectionism stand in stark contrast to the millions of dollars it has earned assisting
22 its fossil fuel and mining company clients in promoting themes to deny the existence and/or gravity
23 of ACC.
24
25
26
27

1
2 201.

3 Since 2010, McKinsey has worked for at least forty-three of the hundred companies that
4 have pumped substantial tons of carbon dioxide into the atmosphere since 1965.

5 202.

6 Those forty-three companies, when accounting for the customers who use their products,
7 were responsible for a substantial share of the greenhouse gas emissions from the fossil fuel
8 industry, including Defendants, in the past several decades.

9
10 203.

11 Chevron is one of McKinsey's biggest clients, generating at least \$50 million in consulting
12 fees in 2019. Saudi Aramco, number one on the list, has been a McKinsey client since at least the
13 1970s. During that half a century, Chevron's total emissions were approximately 43.7 gigatons (43
14 billion tons) of carbon dioxide. In 2019, energy-related emissions for the entire planet amounted
15 to about 33 gigatons, according to the International Energy Agency.

16
17 204.

18 Other top McKinsey fossil fuel clients include ExxonMobil, BP, Royal Dutch Shell,
19 Russia's Gazprom, and Qatar Petroleum.

20 205.

21 McKinsey has coordinated and participated in a deliberate misinformation campaign to
22 downplay and/or outright deny the causal relationship between the GHG emissions of its members
23 and extreme weather events like those described herein. McKinsey's contribution to, and deception
24 is a individually and collectively (with the other Defendants) a cause of enormous harm to the
25 Plaintiff for which this Defendant is individually and jointly and severally liable to Plaintiff.
26
27

1
2 206.

3 DOES 25-250, are heretofore unnamed entities, organizations or persons actively engaged
4 in the GHG emissions, or in the deceptive enterprise that have harmed Multnomah County.

5 **C. Venue**

6
7 207.

8 Venue is proper in Multnomah County under ORS 14.080(1) because a substantial portion
9 of the causes of action asserted by Plaintiff herein arose in Multnomah County.

10 **III. FACTUAL ALLEGATIONS**

11 **A. Anthropogenic Climate Change (ACC) is Scorching the Planet**

12 208.

13 Fossil fuels are a primary cause of global warming. This is the consensus among the world's
14 leading scientists.¹¹¹ Present-day concentrations of atmospheric carbon dioxide (CO₂) are at higher
15 levels than at any time in at least the past two million years.¹¹²
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21 ¹¹¹ Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6), Chapter
22 2.1, (2023) (“Human activities, principally through emissions of greenhouse gases, have
23 unequivocally caused global warming, with global surface temperature reaching 1.1°C above
24 1850-1900 in 2011-2020. Global greenhouse gas emissions have continued to increase over 2010-
25 2019, with unequal historical and ongoing contributions arising from unsustainable energy
26 use...”). https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM_final.pdf

27 ¹¹² Gulev, S. K. et al. Changing State of the Climate System. In *Climate Change 2021: The Physical
28 Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the
Intergovernmental Panel on Climate Change* (eds. Masson-Delmotte, V. et al.)(Cambridge
University Press Cambridge, United Kingdom and New York, NY, USA, 287–422), (2021)
<https://doi.org/10.1017/9781009157896.004>.

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209.

ACC is already affecting many weather and climate extremes in every region across the globe, including in the Pacific Northwest and Multnomah County.¹¹³ In 1960, the atmospheric concentration of CO₂ was measured at 317 ppm. Today it is 423 ppm.

210.

The fossil fuel products that Defendants marketed, distributed, extracted, refined, transported, and sold, when used as intended, release greenhouse gases, including carbon dioxide (CO₂) and methane, which trap atmospheric heat.

211.

The earth's temperature depends on the balance between energy entering and leaving the planet's system. When sunlight reaches the planet surface, it can either be reflected into space or absorbed by the earth. Incoming energy that is absorbed by the earth warms the planet. Once absorbed, the planet releases some of the energy back into the atmosphere as heat (also called infrared radiation). Solar energy that is reflected to space does not warm the earth.

212.

Global temperatures have warmed by 1.1°C to 1.2°C since 1900.¹¹⁴ Global warming has destabilized the planet's climate patterns and has caused an increased frequency and intensity of extreme weather events, like the 2021 PNW heat dome.

¹¹³ Id.

¹¹⁴ Id.

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2 213.

3 The scientific community has determined and declared that because of rising greenhouse
4 gas emissions, planet Earth is facing an unprecedented and accelerating climate emergency.
5 Scientists have warned that ACC has substantially contributed to rising land, air and oceanic
6 temperatures, the melting of the polar ice sheets, and the increased frequency and severity of
7 extreme heat events, wildfires, drought, floods, and storms.¹¹⁵ In sum, scientists have declared that
8 unabated climate change presents a “code red” danger to humanity.¹¹⁶
9

10 214.

11 Changes in Oregon’s climate are being harshly felt and growing worse at a rapid pace. Nine
12 of Oregon’s hottest years in recorded history have occurred since the year 2000 and seven have
13 come since 2010.¹¹⁷
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15 215.

16 Multiple scientific studies have found that climate change is already contributing to
17 extreme heat waves, widespread drought conditions, severe wildfires, coastal erosion, and other
18 erratic weather conditions in Oregon.¹¹⁸ Unless carbon emissions decline considerably, these
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23 ¹¹⁵ Fleishman, Erica, and Oregon Climate Change Research Institute. 2023. Sixth Oregon Climate
24 Assessment. : [Corvallis, Oregon] : Oregon Climate Change Research Institute, Oregon State
25 University, [https://energyinfo.oregon.gov/blog/2023/1/11/occris-sixth-climate-assessment-
outlines-climate-change-effects-on-oregon](https://energyinfo.oregon.gov/blog/2023/1/11/occris-sixth-climate-assessment-outlines-climate-change-effects-on-oregon) (last visited June 13, 2023).

26 ¹¹⁶ Id.

27 ¹¹⁷ Id.

28 ¹¹⁸ Id.

1 impacts will intensify over the coming decades.¹¹⁹

2
3 216.

4 According to the Oregon Climate Change Research Institute, if greenhouse gas emissions
5 continue at current levels, the annual temperature in Oregon is projected to increase by 5°F by the
6 2050s and 8.2°F by the 2080s, with the greatest seasonal increases in summer.¹²⁰

7
8 217.

9 The Oregon Climate Change Research Institute has found that ACC poses a significant
10 threat to Oregon’s forestry, fisheries, water supplies, and coastal resources. In addition to extreme
11 heat events, the OCCRI predicts that other likely ACC-related impacts include winter flooding,
12 summer droughts, loss of shoreline, forest fires, worsening air quality, diminished fish and wildlife
13 habitat, retreating glaciers, decreased snowpack, and increased disease vectors and invasive
14 species.

15
16 218.

17 Increased temperatures are projected to contribute to: (i) decreased winter snowpack and
18 changes in the timing and volume of streamflow fed by snowmelt; (ii) increased summer water
19 demand, especially during more intense and longer summer droughts; (iii) increased risk of
20 flooding due to more intense snow events and sea level rise; (iv) increased risk of fire in forest
21 lands, open space, and in areas where forest and residential lands overlap; (v) increased risk of
22 heat-related morbidity and mortality during more intense summer heat waves like the extreme heat
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26 ¹¹⁹ Id.
27 ¹²⁰ Id.

1
2 event of June 2021; (vi) increased summer air pollution and related health impacts; (vii) decreased
3 summer hydropower production and increased summer energy demand, especially from air
4 conditioning; (viii) increased harm to aquatic wildlife because of warmer water temperatures in
5 streams, rivers, lakes; and (ix) increased shifts in habitat, invasive species, and insects affecting
6 forest health, agriculture, and ecosystem function.

7
8 ***B. Oregonians Died and Multnomah County Suffered Damages Because of
Defendants’ Fossil Fuel Activities – 2021 PNW Heat Dome***

9 219.

10 In June of 2021, the Pacific Northwest experienced an extreme weather event unlike any
11 the region has ever experienced. The extreme weather event occurred earlier in the summer, before
12 residents could naturally acclimate to warmer temperatures.¹²¹ Additionally, the heat dome brought
13 a prolonged period of heat intensity never experienced in the region.¹²²

14 220.

15 Multnomah County, known for its traditionally mild climate, was unprepared for the
16 devastation the heat dome unleashed on its citizens. Although extreme heat is one of the leading
17 causes of weather-related deaths in the United States¹²³ — in some years killing more people than
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23 ¹²¹ Multnomah County, Preliminary Review on Excessive Heat Deaths,
<https://www.multco.us/preliminary-review-excessive-heat-deaths-multnomah-county-june-2021>
24 (last visited June 12, 2023).
25 ¹²² Id.
26 ¹²³ CDC, Extreme Heat and Your Health,
<https://www.cdc.gov/nceh/features/trackingheat/index.html#:~:text=Extreme%20heat%20events%2C%20or%20heat,inability%20to%20cool%20down%20properly>. (“Extreme heat events, or
27 heat waves, are one of the leading causes of weather-related deaths in the United States. When
28

1 all other weather hazards (except hurricanes) combined — the severity of these conditions and
2 their impacts was new for customarily cool and wet Multnomah County.¹²⁴

3
4 221.

5 On June 25, 2021, the high temperature in Multnomah County was **95° F**. The average high
6 temperature for this date prior to 2021 was 76° F.¹²⁵

7
8 222.

9 On June 26, 2021, the high temperature in Multnomah County was **108° F**. The average
10 high temperature for this date prior to 2021 was 76.4° F.¹²⁶

11
12 223.

13 On June 27, 2021, the high temperature in Multnomah County was **112 ° F**. The average
14 high temperature for this date prior to 2021 was 76.7° F.¹²⁷

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18
19 temperatures rise in the summer, extremely hot weather can cause sickness or even death. Heat
20 stress is heat-related illness caused by your body’s inability to cool down properly.”).

21 ¹²⁴ Multnomah County, Preliminary Review on Excessive Heat Deaths,
<https://www.multco.us/preliminary-review-excessive-heat-deaths-multnomah-county-june-2021>
(last visited June 12, 2023).

22 ¹²⁵ This average is calculated from temperature readings from 1991 to 2020 for June 25.
<https://www.extremeweatherwatch.com/cities/portland-or/day/june-25> (last visited on June 12,
23 2023).

24 ¹²⁶ This average is calculated from temperature readings from 1991 to 2020 for June 26.
<https://www.extremeweatherwatch.com/cities/portland-or/day/june-26> (last visited on June 12,
25 2023).

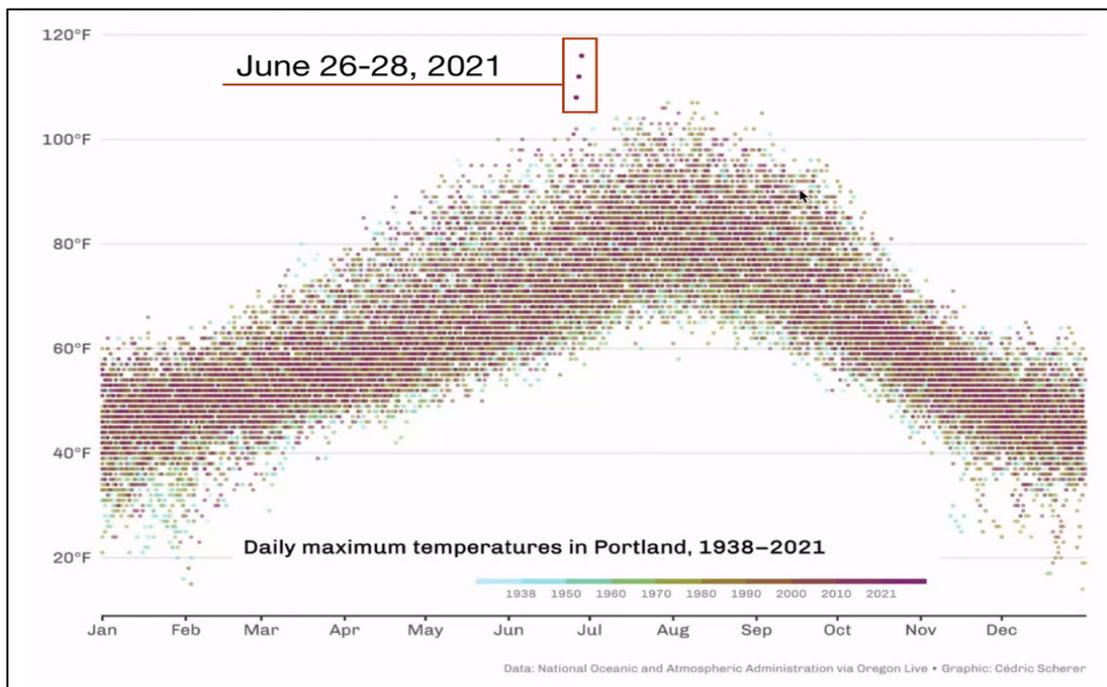
26 ¹²⁷ This average is calculated from temperature readings from 1991 to 2020 for June 27.
<https://www.extremeweatherwatch.com/cities/portland-or/day/june-27> (last visited on June 12,
27 2023).

224.

On June 28, 2021, the high temperature in Multnomah County was **116° F**. The average high temperature for this date prior to 2021 was 77° F.¹²⁸

225.

The temperature readings on June 26, 27, and 28 were so far outside the normal distribution of temperatures that this heat event was classified as an extreme weather event—and perhaps the most extreme in history.¹²⁹ The graph below shows how outside of the mean temperatures were:



¹²⁸ This average is calculated from temperature readings from 1991 to 2020 for June 28. <https://www.extremeweatherwatch.com/cities/portland-or/day/june-28> (last visited on June 12, 2023).

¹²⁹ Multnomah County, June 2021 Extreme Heat Event, Preliminary Findings and Action Steps <https://www.multco.us/file/june-2021-heat-event-preliminary-findings-and-action-steps> (last visited June 12, 2023).

1
2 226.

3 The occurrence of the heat dome was “virtually impossible” without ACC caused by
4 Defendants’ fossil fuel related activities and enterprise.¹³⁰

5 227.

6 Another study that evaluated the 2021 PNW heat dome concluded, “[i]t is clear... that
7 anthropogenic warming of the planet contributed to the severity of this event.”¹³¹

8 228.

9 Yet another study determined that “while the extreme heat was unprecedented, it was
10 nevertheless mechanistically linked to regional climate change.¹³²

11 229.

12 Defendants’ carbon emissions were individually and collectively a cause of the dramatic
13 warming of the region’s surface temperature, the decrease in atmospheric moisture and the
14 desiccation of the region’s soil. Defendants’ collective emissions fueled an impenetrable and slow-
15 moving high-pressure system, all of which combined to cause the 2021 PNW heat dome.
16

17 230.

18 Defendants’ GHG emissions were individually and collectively (with the other Defendants)
19 a cause of the occurrence and severity of the heat dome. The heat dome would have been less
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24 ¹³⁰ Philip, *et al.*, *supra*, Footnote 4.

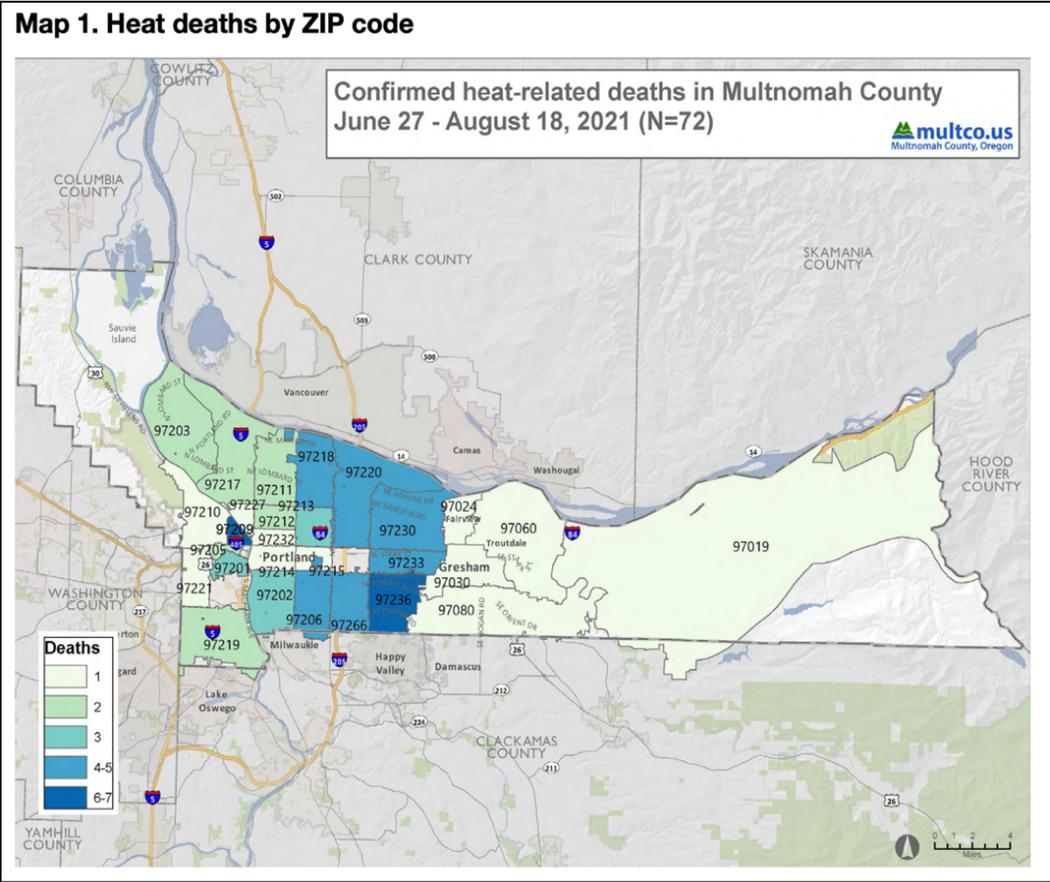
25 ¹³¹ White, R.H., Anderson, S., Booth, J.F. et al. The unprecedented Pacific Northwest heatwave of
June 2021. *Nat Commun* 14, 727 (2023). <https://doi.org/10.1038/s41467-023-36289-3>.

26 ¹³² Bartusek, S., Kornhuber, K. & Ting, M. 2021 North American heatwave amplified by climate
change-driven nonlinear interactions. *Nat. Clim. Chang.* **12**, 1143–1150 (2022).
27 <https://doi.org/10.1038/s41558-022-01520-4>.

likely to occur without Defendants' GHG emissions and the warming it caused. Even if the heat dome would have occurred absent a Defendant's GHG contributions, the heat dome would have been less severe and less catastrophic in and to Multnomah County.

231.

The 2021 PNW heat dome event was responsible for approximately 619 heat-related deaths in Canada, a 95% increase over the number reported for late-June in prior years. The State of Washington recorded 196 heat-related deaths. Oregon recorded 100 deaths, 69 of which occurred in Multnomah County, which the coroner ruled were caused by hyperthermia. These deaths were in virtually every zip code of Multnomah County.



1
2 232.

3 In prior years, the County reported zero heat-related deaths. Elderly persons living alone
4 in multi-family buildings without air conditioning in densely populated parts of the region
5 accounted for a large percentage of those who perished.

6 233.

7 In a typical year, there are about 95 deaths from all causes in the last week of June. In 2021
8 there were 186, nearly double the average during the previous three years.

9 234.

10 In addition to casualties and injuries, the heat dome's impacts were far-reaching. Roads,
11 rails, bridges, power stations, utilities, hardscapes, parks, levees, greenscapes, and buildings were
12 impacted. Asphalt melted. Businesses shuttered. Tourists fled. Marine life perished. Circuits fried.
13 Productivity plummeted as the heat drove the outdoor labor force indoors, away from their jobs,
14 simply to survive. Multnomah County incurred immediate costs by treating people with heat-
15 related symptoms and establishing air-conditioned emergency shelters, among other costs. The
16 County recorded 257 emergency visits for heat illness, compared to a typical volume of 83 visits
17 for that same time of the year.

18 235.

19 To the North, the heat dome sparked wildfires, which in turn generated smoke-related
20 health impacts, as well as eventual floods and mudslides.
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236.

Long term global warming and soil drying transformed the heat dome from “virtually impossible” to a more than likely a 10 yearly reoccurrence if the climate continues to warm from the current 1.2°C to 2°C over pre-industrial times.¹³³

237.

“Global warming caused a ~0.8°C–1°C increase in heatwave temperatures. Future warming would lead to a ~5°C increase in heatwave temperature by the end of the 21st century.”¹³⁴

238.

“Climate model projections indicate a rapidly increasing risk of the PNW regularly experiencing 2021-like extreme summer temperatures, with a 50% chance of yearly occurrence by 2050. The 2021 summer temperatures experienced across the PNW provide a benchmark and impetus for communities in historically temperate climates to account for extreme heat-related impacts in climate change adaptation strategies.”¹³⁵

239.

In light of the 2021 PNW extreme heat wave, “policymakers and governments need to prepare for events beyond current records – particularly with trends caused by ACC enhancing the probability of extremes. Heatwaves are deadly—but better preparation can save lives. Planning

¹³³ Bartusek, S., Kornhuber, K. & Ting, M. 2021 North American heatwave amplified by climate change-driven nonlinear interactions. *Nat. Clim. Chang.* **12**, 1143–1150 (2022). <https://doi.org/10.1038/s41558-022-01520-4>.

¹³⁴ Emily Bercos-Hickey, et al. “Anthropogenic contributions to the 2021 Pacific Northwest heatwave.” *Geophysical Research Letters* 49 (2022).

¹³⁵ *Id.*

1
2 ahead can reduce mortality from climatic extremes. For example, city heat plans that include
3 actions such as establishing cooling centers or reducing hours of work for outdoor workers can
4 reduce heat impacts. Policy changes following the 2003 European heatwave led to fewer deaths
5 after the similar magnitude 2006 event.¹³⁶

6
7 240.

8 During Summer 2021, the number of Heat-Related Illness Emergency Department or
9 urgent care clinic (ED) visits were over twice those observed in past years (2016-2019).
10 Multnomah County recorded 266 heat-related Emergency Department visits in 2021. In 2020, the
11 County recorded 55 visits. In 2021, Multnomah County recorded 52 heat related hospitalizations.
12 In the prior three years, from 2018 to 2019, the County averaged 4 hospitalizations.

13
14 241.

15 Increasing CO₂ emissions and global temperatures are expected to create more extreme
16 heat events in Multnomah County in the future, in the form of heatwaves, wildfires, and storms.
17 Damage from extreme weather events restricts access to essential services, including clean water,
18 food, basic sanitation, and health care. Trauma from the loss of friends, family, and community
19 also creates stress and affects mental health. This stress grows over time if limited resources are
20 available for mental and physical care, recovery, and reconstruction efforts.

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25 ¹³⁶ Thompson, V., Mitchell, D., Hegerl, G.C. et al. The most at-risk regions in the world for high-
26 impact heatwaves. *Nat Commun* 14, 2152 (2023). <https://doi.org/10.1038/s41467-023-37554-1> (last
27 visited on June 18, 2023).

1
2 **C. ACC Has Caused Deadly Fires and Smoke Plumes that Have Harmed the**
3 **Public Health of Multnomah County**

4 242.

5 On September 7th and 8th of 2020 several fires inundated Oregon. Five of these fires were
6 megafires—which are greater than 100,000 acres in size.¹³⁷ These fires became known as the Labor
7 Day 2020 fires.¹³⁸ There were 12 other fires ranging from 112 to 50,951 acres.¹³⁹

8 243.

9 Multnomah County was inundated with smoke from these fires. On Monday September 7,
10 2020, the Oregon Department of Environmental Quality (DEQ) issued an air quality alert for
11 Multnomah County.¹⁴⁰

12 244.

13 Multnomah County remained under a dense smoke warning from September 12-17, 2020.
14 This smoke intrusion incident resulted in the most hazardous air quality in the world for a period
15 of time and the worst ever recorded in Multnomah County.¹⁴¹

16 245.

17 In response, Multnomah County was required to provide KN95 masks, emergency
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22 ¹³⁷ Report, Oregon Forest Resources Institute, Economic Impacts to Oregon’s Forest Sector
23 September 2021, 1.0 Executive Summary at p. 8 https://oregonforests.org/sites/default/files/2021-09/OFRI-LaborDayFiresEconomicReport_Final%20Sept%202021.pdf.

24 ¹³⁸ Id.

25 ¹³⁹ Id.

26 ¹⁴⁰ Report, Wildfire Threat and Smoke Intrusion Incident, After Action Report/Improvement Plan
(AAR/IP) Multnomah County, Oregon May 8, 2021, p. 4.

27 ¹⁴¹ Id. at 5.

1
2 services, shelters, and fire response management. In the wake of the smoke intrusion incident, the
3 County replaced 1,200 air filters and provided extensive HVAC maintenance.

4 ***D. ACC is Contributing to the Frequency and Severity of Deadly Wildfires and***
5 ***Smoke***

6 246.

7 Anthropogenic climate change, induced by the burning of fossil fuels, has caused an
8 increase in the frequency and severity of wildfires in Oregon, which not only destroy lives,
9 property and natural resources, but also generate plumes of toxic smoke which in the last ten years
10 has damaged the health and property of residents of Multnomah County.

11 247.

12 Wildfire-generated plumes of smoke inject fine particulate matter (PM2.5) at high
13 altitudes, increasing long-range transport of PM2.5 from locations outside of the County where
14 they have caused a health hazard.

15 248.

16 Excessive PM2.5, pollution from wildfires cause numerous human health problems,
17 including chronic obstructive pulmonary disease, acute lower respiratory illness, asthma, ischemic
18 heart disease, and lung cancer that disproportionately affect vulnerable populations, such as
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2 children with respiratory ailments, the elderly, people of color, and the economically
3 disadvantaged¹⁴²

4 249.

5 The health problems are amplified in airsheds closest to a specific fire event, but impacts
6 can extend over vast distances depending on wind patterns and other factors. The particulates are
7 dangerous to human health.

8 250.

9
10 Wildfire-generated particulate matter has increased dramatically in Oregon, which has
11 directly impacted the health of people in Multnomah County. From 1979 through 2019, the
12 duration of the fire weather season in forests in Oregon has increased by 43 percent, and the annual
13 number of days when fire danger was extreme increased by 166 percent. Widespread drought has
14 led to increased fire danger.

15 251.

16
17 The Oregon Global Warming Commission stated its 2023 report to the legislature that:

18 “Climate change is already having a measurable impact on Oregon’s landscape,
19 communities and economy. Oregon is experiencing increased temperatures,
20 changing precipitation patterns, reduced snowpack, drier summers, and more
21 frequent and damaging wildfires. Since the 2020 Report to the Legislature, extreme
22 heat events, severe drought conditions, shifting precipitation patterns, and high-
23 intensity wildfires have continued to inflict significant damage on Oregonians,
24 communities, the environment, and the economy. These impacts are projected to
25 become more frequent and severe as temperatures increase and global climate
26 conditions become more extreme and unpredictable.”

27
28 ¹⁴² Reid CE, Maestas MM. Wildfire smoke exposure under climate change: impact on respiratory
29 health of affected communities. CURR OPIN PULM MED. Mar 25, 2019, pp 179-187.
30 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6743728/>.

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252.

The report further predicted, “Warmer temperatures and drier conditions increase the risk of more frequent and severe wildfires.”

253.

The total area of land burned by wildfire each year has increased in Oregon over the past 35 years, and wildfires have grown larger and spread into higher elevations during this period. In the Pacific Northwest, the number of days with extreme wildfire danger have more than doubled since 1979. Drought, increased aridity, and reductions in relative humidity contribute to the growing fire risk in Oregon. As global temperatures increase, wildfires are expected to become larger and fire seasons increasingly extreme in Oregon and across the West.

254.

ACC, induced by the burning of fossil fuels, has substantially contributed to hotter, drier conditions that generate more toxic smoke from wildfires. ACC has substantially contributed to diminished air quality and increased levels of harmful ground level ozone. Wildfire-generated smoke triggers asthma symptoms.

255.

ACC, induced by the burning of fossil fuels, has substantially contributed to air quality related respiratory illness visits at hospital emergency departments and urgent care clinics in the County. In 2022, a total of 84,081 visits in Multnomah, Washington and Clackamas Counties were due to air quality-related illness, most of which occurred in Multnomah County. From 2016 to 2022, Multnomah County recorded steadily increased visits each year except in 2021, which recorded a level similar to 2017.

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256.

In September of 2020, Multnomah County experienced a spike in medical visits for asthma caused by poor air quality as a result of ACC-related wildfire smoke. Asthma-related emergency room visits in Multnomah County increased by nearly one-third in the four weeks during and after wildfires in 2020.

257.

The Labor Day fires of 2020 produced extreme smoke levels resulting in unhealthy air quality in Multnomah County.

258.

The air quality index in Multnomah County from September 10th through the 13th repeatedly broke records during the Labor Day 2020 fires (215, 287, 288 and 477 AQI, respectively).¹⁴³ AQI above 200 is considered “very unhealthy.”¹⁴⁴ Before 2015, Portland did not have a single day with air quality ≥ Unhealthy for Sensitive Groups (USG) from wildfire smoke since air quality monitoring began in 1985.¹⁴⁵ From 2015 to 2022, Portland had 26 ≥ USG days or

¹⁴³ State of Oregon Department of Environmental Quality, *Wildfire Smoke Trends and the Air Quality Index* (May 2023) <https://www.oregon.gov/deq/wildfires/Documents/WildfireSmokeTrendsReport.pdf> (last visited June 21, 2023).

¹⁴⁴ Id.

¹⁴⁵ Id.

1
2 3.3 ≥ USG days/year.¹⁴⁶ In 2020, Portland had its first days over the unhealthy AQI level with 3
3 very unhealthy and 5 hazardous days.¹⁴⁷ In 2022, Portland had 3 ≥ USG days.¹⁴⁸

4 259.

5 AQI categories from wildfire smoke have been increasing since around 2012, with more
6 frequent days at more “unhealthy” or worse levels, including the record-breaking events of
7 September 2020.¹⁴⁹ Scientists expect this trend will continue and worsen.

8 260.

9
10 The Labor Day 2020 fires were among the worst ever in Oregon history, scorching nearly
11 1,500 square miles of mainly forested areas, the largest area in the state’s recorded history. Strong
12 and dry winds, combined with desiccated vegetation, drove the rapid growth of the fires. A key
13 driver of the wildfires was unusually high aridity (the drop in atmospheric water vapor), a trend to
14 which fossil fuel induced climate change substantially contributed.

15 261.

16
17 The Labor Day fires are also part of a regional trend. Total annual area burned in Oregon
18 has increased during the last 35 years.¹⁵⁰ As aridity has increased, wildfires have spread into higher
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23 ¹⁴⁶ Id.

24 ¹⁴⁷ Id.

25 ¹⁴⁸ Id.

26 ¹⁴⁹ Id.

27 ¹⁵⁰ Oregon Department of Energy, *OCCRI’s Sixth Climate Assessment Outlines Climate Change
Effects On Oregon* [https://energyinfo.oregon.gov/blog/2023/1/11/occris-sixth-climate-
assessment-outlines-climate-change-effects-on-oregon](https://energyinfo.oregon.gov/blog/2023/1/11/occris-sixth-climate-assessment-outlines-climate-change-effects-on-oregon) (last visited on June 21, 2023).

1 elevations that previously were cool and moist enough to deter fire expansion.¹⁵¹

2
3 262.

4 The United Nations Environment Programme Report, authored by 52 international
5 scientists, linked global spread of landscape-scale wildfires to global overheating that is “turning
6 landscapes into tinderboxes, while more extreme weather means stronger, hotter, drier winds to
7 fan the flames.”¹⁵²

8
9 263.

10 More than a dozen rigorous peer-reviewed studies and meta-analyses (synthesis studies)
11 confirm the presence of a consistent pattern of increased wildfire events and severity in Oregon
12 that is attributable to fossil fuel induced ACC.¹⁵³

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14
15 ¹⁵¹ Id.

16 ¹⁵² United Nations Environmental Program, *Spreading like Wildfire: The Rising Threat of*
17 *Extraordinary Landscape Fires* (2022) [https://www.unep.org/resources/report/spreading-wildfire-](https://www.unep.org/resources/report/spreading-wildfire-rising-threat-extraordinary-landscape-fires)
[rising-threat-extraordinary-landscape-fires](https://www.unep.org/resources/report/spreading-wildfire-rising-threat-extraordinary-landscape-fires) (last visited June 20, 2023).

18 ¹⁵³ See Dennison, P. E., Brewer, S. C., Arnold, J. D., & Moritz, M. A. (2014). Large wildfire trends
19 in the western United States, 1984–2011. *Geophysical Research Letters*, 41(8), 2928-
20 2933. <https://doi.org/10.1002/2014GL059576> (increased Western wildfire attributed in part to
21 warmer and drier summer conditions (drought severity). For all ecoregions combined, the number
22 of large fires increased at a rate of seven fires per year, while total fire area increased at a rate of
23 355 km² per year.”); Westerling, A. L. (2016) Increasing western US forest wildfire activity:
24 sensitivity to changes in the timing of spring *Phil. Trans. R. Soc. B* 371: 2015017820150178
25 <http://doi.org/10.1098/rstb.2015.0178> (reaffirmed the tight association between wildfire activity
26 and the relatively high cumulative warm-season actual evapotranspiration and early spring snow
27 melt. Notably, there was a +1000% increase in wildfire activity from 2003-2012 and the increase
28 was attributed to spring and summer temperature increases.); Abatzoglou, J. T., & Williams, A. P.
(2016). Impact of anthropogenic climate change on wildfire across western US forests.
Proceedings of the National Academy of Sciences, 113(42), 11770-11775.
<https://doi.org/10.1073/pnas.1607171113> (“anthropogenic increases in temperature and vapor
pressure deficit significantly enhanced fuel aridity across western forests during 2000–2015,
contributing to 75% more forested area experiencing high fire-season fuel aridity and an average

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4 of 9 additional days per year of high fire potential. ACC accounted for ~55% of observed increases
5 in fuel aridity and wildfire potential in recent decades.”); Holden, Z. A., *et al.* (2018) Decreasing
6 fire season precipitation increased recent western US forest wildfire activity. *Proceedings of the
National Academy of Sciences*, 115(36), E8349-E8357. <https://doi.org/10.1073/pnas.1802316115>
7 (declines in summer precipitation and rain days associated with GHG increases are the primary
8 driver of increases in wildfire area in the West.); Abatzoglou, J. T., Rupp, D. E., & Sadegh, M.
9 (2021). Compound Extremes Drive the Western Oregon Wildfires of September 2020.
10 *Geophysical Research Letters*, 48(8), e2021GL092520. <https://doi.org/10.1029/2021GL092520>
11 (“the 2020 Labor Day fires in Oregon exceeded the area burned in any single year for at least the
12 past 120 years, contributing to hazardous air quality and massive smoke plumes. Unusually warm
13 conditions with limited precipitation occurred in the 60-days prior to the fires. Exceptionally strong
14 winds and dry air drove rapid rates of fire spread. The concurrence of these drivers created
15 conditions unmatched in the observational record.”); Mass, C. F., *et al.* (2021). The September
16 2020 Wildfires over the Pacific Northwest. *Wea. Forecasting*, 36, 1843–1865.
17 <https://doi.org/10.1175/WAF-D-21-0028.1> (“the Labor Day fires of 2020 were driven by strong
18 ... highly unusual winds. Wildfires produced dense smoke that initially moved westward over the
19 Willamette Valley and eventually covered the entire region. Air quality rapidly degraded to
20 hazardous levels, representing the worst levels in recent decades.”); Hawkins, L. R., *et al.* (2022).
21 Anthropogenic Influence on Recent Severe Autumn Fire Weather in the West Coast of the United
22 States. *Geophysical Research Letters*, 49(4), e2021GL095496.
23 <https://doi.org/10.1029/2021GL095496> (“ACC factors (fuel aridity, warmer temperatures during
24 dry wind events) increased fuel aridity and likelihood of extreme fire weather by 40% in northern
25 California and Oregon.”); Dahl, K., *et al.* (2023) *Environ. Res. Lett.* 18 064011. <https://doi.org/10.1088/1748-9326/acbce8> (linked increases in burned forest area
26 across the West and southwestern Canada to the vapor pressure deficit, meaning drier atmospheric
27 conditions produced drought-stressed plants and soils that readily burned. The study used a robust
28 global energy balance carbon-cycle model and a suite of downscaled climate models to “attribute
emissions to vapor pressure deficit from 1901–2021 and cumulative forest fire area from 1986–
2021. Emissions were responsible for 48% of long-term rise in vapor pressure deficit and,
correspondingly, 37% of the cumulative area burned. Emissions also contributed to nearly half the
increase in drought- and fire-danger since 1901.”); MacDonald, G., *et al.* (2023). Drivers of
California’s changing wildfires: a state-of-the-knowledge synthesis. *International Journal of
Wildland Fire* 32, 1039-1058. <https://doi.org/10.1071/WF22155> (Synthesizing the literature on
climate-wildfire attribution studies finding that there was a “striking increase in annual area burned
in the West related to increasing temperatures and the atmospheric vapor pressure deficit. ACC
was the main driver behind wildfire activity. The trend is projected to increase without reductions
in GHGs.); Marc Turco, M., *et al.* (2023). Anthropogenic climate change impacts exacerbate
summer forest fires in California. *Proceedings of the National Academy of Sciences*, 120(25),
e2213815120. <https://doi.org/10.1073/pnas.2213815120> (Used the latest simulations for climate
change attribution and detection studies showing that nearly all observed increases in burned area

1
2 264.

3 Anthropogenic climate change, induced by the burning of fossil fuels, has caused and
4 exacerbated wildfires in Oregon that harmed Multnomah County. ACC has increased the vapor
5 pressure deficit and the summer temperatures dramatically, two conditions that influence the
6 frequency and severity of wildfires. Other ACC factors contributing to increasing wildfire activity
7 include unusually strong winds, a higher incidence of lightning, longer fire seasons, and decreased
8 snowpack.
9

10 265.

11 The vapor pressure deficit and summer temperatures are likely to further increase in the
12 decades ahead, meaning even more extreme wildfire events are forecasted.

13 266.

14 Since 2020, wildfires have cost Oregon \$3 billion in structure losses in this decade alone.
15 The 2020 Labor Day wildfires were the most destructive urban-wildland fires on record, killing 11
16 people, destroying 4300 homes, and triggering \$422 million in federal aid.¹⁵⁴ All told, there were
17 21 fires in Oregon in summer/fall of 2020, 12 of which started over the Labor Day weekend,
18
19

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21
22 in California over the past half-century was attributed to ACC (summer temperature increases,
23 dryness). Model simulations using ACC factors alone accounted for 172% (range 84 to 310%)
24 more area burned than simulations with natural forcing only (no ACC in the model). Their results
25 indicate that observed increases in burned area was primarily due to greater fuel aridity (from
26 drying and summer temperatures).

27 ¹⁵⁴ Eckert, T, *\$422M federal grant approved to assist 2020 Oregon wildfire survivors*, OPB, Oct.
28 6, 2022 <https://www.opb.org/article/2022/10/06/federal-assistance-for-2020-oregon-wildfires-survivors/#:~:text=The%20U.S.%20Department%20of%20Housing,fires%20throughout%20Oregon%20in%202020>. (last visited on June 21, 2023).

1
2 producing “smoke waves” which detrimentally impacted smoke and air quality levels in
3 Multnomah County.

4 267.

5 Wildfire-generated toxic smoke plumes have caused damage to Multnomah County, its
6 residents, and its property. As carbon emissions continue, and global temperatures increase
7 Multnomah, County will suffer more extreme heat days, more poor air quality days, larger
8 wildfires, and more “smoke waves.”

9
10 268.

11 GHGs from Fossil Fuel Defendants’ emissions caused the fires to burn more severely and
12 more intensely, which in turned caused smoke penetration and related harm in and to Multnomah
13 County. Drought conditions are linked to climate-driven temperature increases across wide swaths
14 of the western United States, which evaporates soil of moisture which in turn makes heatwaves
15 more severe. Changes in climate will affect future fire frequency and severity.¹⁵⁵ Climate change
16 will result in longer wildfire seasons, increased wildfire frequency, larger burn zones, and
17 increased wildfire severity.¹⁵⁶

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22 ¹⁵⁵ Halofsky, J.E., Peterson, D.L. & Harvey, B.J. Changing wildfire, changing forests: the effects
23 of climate change on fire regimes and vegetation in the Pacific Northwest, USA. *fire ecol* 16, 4
24 (2020). <https://doi.org/10.1186/s42408-019-0062-8> (According to projections based on historical
25 records, current trends, and simulation modeling, protracted warmer and drier conditions will drive
26 lower fuel moisture and longer fire seasons in the future, likely increasing the frequency and extent
27 of fires...).

28 ¹⁵⁶ USDA Northwest Climate Hub, How do Climate and Wildfire Relate?
<https://www.climatehubs.usda.gov/hubs/northwest/topic/climate-change-and-wildfire-idaho-oregon-and-washington> (last visited June 13, 2023);

1
2 269.

3 Wildfires were sparked during the 2021 heat dome and thereafter.¹⁵⁷ Because of
4 Defendants’ acts or omissions related to the burning of fossil fuels, Multnomah County will suffer
5 harm from smoke penetration, including adverse health impacts on its citizens from the intense
6 smoke. As one climatologist described the matter, “it’s like someone poured gasoline on the
7 forest.”¹⁵⁸

8
9 ***E. Extreme Heat is Here to Stay and Is Caused By Defendants’ Activities – 2022
Heatwave***

10 270.

11 In 2022, Multnomah County experienced seven consecutive days of temperatures above
12 95 F from July 25 through July 31.¹⁵⁹

17
18
19 ¹⁵⁷ Bartusek, S., Kornhuber, K. & Ting, M. 2021 North American heatwave amplified by climate
20 change-driven nonlinear interactions. *Nat. Clim. Chang.* **12**, 1143–1150 (2022).
<https://doi.org/10.1038/s41558-022-01520-4>.

21 ¹⁵⁸ Burns, J, We know climate change set the conditions for Oregon fires. Dis it stoke the flames,
22 too? Sept. 21, 2020 [https://www.opb.org/article/2020/09/21/oregon-wildfires-climate-change-
role/](https://www.opb.org/article/2020/09/21/oregon-wildfires-climate-change-role/) (last visited on June 18, 2023); Abatzoglou, J. T., Rupp, D. E., O’Neill, L. W., & Sadegh,
23 M. (2021). Compound extremes drive the western Oregon wildfires of September
24 2020. *Geophysical Research Letters*, 48 <https://doi.org/10.1029/2021GL092520> (“studies suggest
25 that climate change has contributed to increased fuel aridity and longer fire seasons and the
probability of compound hot-dry extremes and climate projections suggest continued warming
with slight decreases in summer precipitation in the Pacific Northwest over the 21st century.”).

26 ¹⁵⁹ Ehrlich, A., Portland breaks record for consecutive days of temperatures 95 or higher July 31,
2022, [https://www.opb.org/article/2022/07/31/portland-breaks-record-for-consecutive-days-of-
temperatures-95-or-higher/](https://www.opb.org/article/2022/07/31/portland-breaks-record-for-consecutive-days-of-temperatures-95-or-higher/) (last visited on June 18, 2023).

1
2 271.

3 This heatwave took the lives of five Multnomah County residents.¹⁶⁰

4 272.

5 In 2022, the County recorded 172 heat-related illness Emergency visits, which was 40%
6 greater than the number of visits between 2016 and 2019.

7 273.

8 Defendants' activities have caused unprecedented and excessive heat to plague Multnomah
9 County.

10
11 *F. ACC Has Caused Droughts that Will Continue to Wreak Havoc on Multnomah*
12 *County*

13 274.

14 Over the last three years, a severe drought caused by the emissions from the burning of
15 Defendants' fossil fuel products has strained the water supply to communities, agriculture, and
16 ecosystems. Water availability is central to the state's economy, contributing significantly to the
17 resilience of agricultural and livestock production, public health, urban environments, energy
18 supply, fisheries, and industry.¹⁶¹

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24 ¹⁶⁰ Multnomah County, Medical Examiner confirms five heat deaths during summer 2022, March
25 7, 2023, [https://www.multco.us/multnomah-county/news/news-release-medical-examiner-
confirms-five-heat-deaths-during-summer-2022](https://www.multco.us/multnomah-county/news/news-release-medical-examiner-confirms-five-heat-deaths-during-summer-2022) (last visited June 21, 2023).

26 ¹⁶¹ Oregon Climate Assessment, January 2023, Fleischman, Editor, Oregon State University,
27 https://ir.library.oregonstate.edu/concern/technical_reports/gt54kw197 (last visited June 20,
28 2023).

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275.

Virtually all of Oregon is in a multiple-year drought, defined as drought that persists for more than one water year. Impacts on human and natural systems become more severe in each consecutive year of drought as groundwater, soils, and surface-water bodies continually dry without normal recharge.¹⁶²

276.

In 17 of the last 23 water years, Oregon’s precipitation was below normal. In terms of precipitation, water years 2001 and 2020 ranked as the third and fifth driest water years in Oregon since 1895.¹⁶³

277.

The average temperature in Oregon also was warmer than normal in 18 of the last 23 water years, which contributed to increases in evapotranspiration and drought frequency.¹⁶⁴

278.

For 2020, the drought was the most severe in Oregon’s recorded history. The 2020 drought was driven by a combination of low precipitation and high evapotranspiration, which in turn produced well above normal temperatures.¹⁶⁵

¹⁶² Id.
¹⁶³ Id.
¹⁶⁴ Id.
¹⁶⁵ Id.

1
2 279.

3 Yearly estimates of soil moisture from tree rings suggested that the years 2000–2021 were
4 the driest in Oregon since at least 800 CE. These years were characterized by low snowpack,
5 decreased summer streamflow, low precipitation during all seasons, and steadily rising evaporative
6 demand due to climate change-induced aridification.¹⁶⁶

7
8 280.

9 Persistent and severe droughts have occurred in Oregon since 2000. These droughts were
10 driven by ACC, which substantially contributed to low winter precipitation and snowpack and low
11 summer precipitation and high winter temperature. Low precipitation contributed to each drought,
12 but temperature and snowpack also affected drought severity and impacts. An estimated 19 percent
13 of the soil moisture deficits in the West from 2000–2021 were caused by fossil fuel induced
14 ACC.¹⁶⁷

15
16 281.

17 Evaporation is expected to increase in Oregon as temperatures increase. Warm air holds
18 more moisture than cool air, so projected increases in total evaporation are driven by projected
19 increases in vapor pressure deficit. Even if the net water balance (precipitation minus evaporation)
20 increases on average, the likelihood of drought, particularly during summer, increases as
21 precipitation becomes more intense and seasonal. The severity and duration of droughts are
22

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26 ¹⁶⁶ Id.

27 ¹⁶⁷ Id.

1
2 projected to increase across most of Oregon. Droughts are projected to be 11–33 percent longer
3 and at least 40 percent more severe by the end of the century.¹⁶⁸

4 ***G. Defendants Had Knowledge on the Impact of Their Fossil Fuel Activities—But***
5 ***Chose Windfall Profits Over Humanity***

6 282.

7 The connection between burning fossil fuels and atmospheric CO₂ pollution was first
8 suspected in the scientific literature in 1856.¹⁶⁹ The connection was confirmed in 1930.¹⁷⁰ In 1954,
9 scientists at the California Institute of Technology (“Cal Tech”) proposed to the API to commission
10 a study that would differentiate carbon molecules released from the burning of fossil fuels versus
11 natural sources.¹⁷¹ Cal Tech had already determined from tree ring studies that fossil fuels had
12 caused the atmospheric concentrations of CO₂ to rise by 5% in the past 100 years or so.¹⁷² In 1955,
13 the API funded the Cal Tech study, received the results, but never published the same.¹⁷³ In 1959,
14 the renown physicist Edward Teller appeared at an API meeting and warned that the combustion
15 of fossil fuels was contaminating the atmosphere, and would soon raise global temperatures
16 sufficiently to melt the polar ice caps and raise the sea level.¹⁷⁴

20
21
22 ¹⁶⁸ Id.

23 ¹⁶⁹ Franta, B. Early oil industry knowledge of CO₂ and global warming. *Nature Clim Change* **8**,
24 1024–1025 (2018). <https://doi.org/10.1038/s41558-018-0349-9>.

25 ¹⁷⁰ Id.

26 ¹⁷¹ Id.

27 ¹⁷² Id.

28 ¹⁷³ Id.

¹⁷⁴ Id.

1
2 283.

3 On March 29, 1958, Charles Keeling began recording daily carbon in the Earth's
4 atmosphere at the Mauna Loa observatory in Hawaii.¹⁷⁵ Keeling's first reading on March 29, 1958,
5 measured the atmospheric CO₂ concentration at 313 ppm.¹⁷⁶

6 284.

7 By the 1950s, the Fossil Fuel Defendants (herein also called "Oil Defendants") discovered
8 that climate change would present dangerous risks to the world's population.¹⁷⁷ In response, they
9 engaged in decades-long concerted effort to keep Multnomah County, and the rest of the United
10 States in the dark about those risks, while they reaped profits by false and deceptive consumer
11 advertising misinformation.
12

13 285.

14 In 1967, Shell, with assistance from Exxon, Chevron and BP, gathered ocean data
15 concerning its oil platforms in the Gulf of Mexico and studied wave, wind, barometric pressure,
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21 ¹⁷⁵ Britannica, Keeling Curve, BRITANNICA, <https://www.britannica.com/science/Keeling-Curve>
(last visited June 18, 2023).

22 ¹⁷⁶ ACS, The Keeling Curve: Carbon Dioxide Measurements at Mauna Loa, ACS,
23 <https://www.acs.org/content/acs/en/education/whatischemistry/landmarks/keeling-curve.html>
(last visited June 18, 2023).

24 ¹⁷⁷ American Institute of Physics. The discovery of Global Warming, AMERICAN INSTITUTE OF
25 PHYSICS, (2022) <https://history.aip.org/climate/index.htm#contents> (last visited June 20, 2023);
26 Craig Harmon, The Natural Distribution of Radiocarbon and the Exchange Time of Carbon
27 Dioxide Between Atmosphere and Sea, *Tellus*, 1-17 (9TH Ed. 1957); Roger Revelle & Hans E.
28 Seuss, Carbonates and carbon dioxide, *Memoirs of the Geological Society of America* 239–295
(1957).

1 storms, sea level, and current changes and trends on its six platforms in the Gulf of Mexico.¹⁷⁸ The
2 report was necessary to develop and calibrate environmental forecasting theories to protect the
3 industry's platforms. What they found out guided their marketing strategies for the next five
4 decades. There is also evidence that they built their offshore platforms higher to contend with
5 ocean rise from warming.
6

7 286.

8
9 Thus, more than fifty years ago, scientists for the Fossil Fuel Defendants concluded that
10 “doubling in CO₂ could increase average global temperature 1°C to 3°C by 2050....10°C predicted
11 at poles.” In the 1968 report for the American Petroleum Institute (API), attached as Exhibit 1, the
12 scientists stated:

- 13 a) “Significant temperature changes are almost certain to occur by the year
14 2000 and these could bring about climatic change...if the Earth’s
15 temperature increases significantly, a number of events might be
16 expected to occur including the melting of the Antarctic ice cap, a rise
17 in sea levels, warming of the oceans and an increase in photosynthesis.”
18 b) “It is clear that we are unsure as to what our long-lived pollutants are
19 doing to our environment; however, there seems to be no doubt that the
20 potential damage to our environment could be severe.”¹⁷⁹
21

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24 ¹⁷⁸ M. Patterson, An Ocean Data Gathering Program for the Gulf of Mexico, Society of Petroleum
25 Engineers (1969), (Available at: <https://www.onepetro.org/conference-paper/SPE-2638-MS>.) (last
26 visited June 20, 2023).

27 ¹⁷⁹ E. Robinson & R.C. Robbins, Final Report, Sources, Abundance, and Fate of Gaseous.
28 Atmospheric Pollutants, SRI Project PR-6755, prepared for American Petroleum Institute, at 109-
110.

1
2 287.

3 A 1969 supplemental report by scientists for API, projected that based on current fuel usage
4 at the time, atmospheric CO₂ concentrations would reach 370 ppm by the turn of the century.¹⁸⁰
5 They proved to be ominously correct. It was 369.34 ppm in 2000.¹⁸¹

6 288.

7 API's scientists connected the rise in atmospheric CO₂ concentrations to the use of fossil
8 fuels, warning that the temptations and consequences of ignoring CO₂ as a pollutant could be of
9 global importance as a factor that could change man's environment.¹⁸² This report was
10 disseminated to the oil industry through API, including to Oil Defendants Exxon, Shell, BP,
11 ConocoPhillips, Motiva and Anadarko (or their predecessors in interest) in a 1972 status report.¹⁸³

12 289.

13
14 In clandestine fashion, the oil industry began to prepare for climate change. In 1973 and
15 1974, Exxon obtained a patent for a cargo ship capable of breaking sea ice and for an oil tanker
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20 ¹⁸⁰ E. Robinson & R.C. Robbins, Sources, Abundance, and Fate of Gaseous Atmospheric Pollutants
21 Supplement, Stanford Research Institute (June 1969).

22 ¹⁸¹ NASA Goddard Institute for Space Studies, Global Mean CO₂ Mixing Ratios (ppm):
23 Observations, NASA GODDARD INSTITUTE FOR SPACE STUDIES,
24 <https://data.giss.nasa.gov/modelforce/ghgases/fig1A.ext.txt> (last visited June 20, 2023).

25 ¹⁸² Elmer Robinson and R.C. Robbins, Sources, Abundance, and Fate of Gaseous Atmospheric
26 Pollutants Supplement, STANFORD RESEARCH INSTITUTE (Jun. 1969), [http://chr.gov.ph/wp-
27 content/uploads/2019/11/Exhibit-3I-Sources-Abundance-and-Fate-of-Gaseous-Atmospheric-
28 Pollutants-Supplement.pdf](http://chr.gov.ph/wp-content/uploads/2019/11/Exhibit-3I-Sources-Abundance-and-Fate-of-Gaseous-Atmospheric-Pollutants-Supplement.pdf) (last visited June 20, 2023).

¹⁸³ Committee for Air and Water Conservation American Petroleum Institute, Environmental
26 Research, A Status Report, Committee for Air and Water Conservation, AMERICAN PETROLEUM
27 INSTITUTE (Jan. 1972), <https://files.eric.ed.gov/fulltext/ED066339.pdf> (last visited Nov 15, 2022).

1
2 designed specifically for use in previously unreachable areas of the Arctic.¹⁸⁴ Chevron also
3 obtained a patent for a mobile arctic drilling platform designed to withstand significant interference
4 from lateral ice masses,¹⁸⁵ allowing for drilling in areas with increased ice flow movement due to
5 elevated temperature.

6 290.

7
8 Norske Shell, Royal Dutch Shell’s Norwegian subsidiary¹⁸⁶ factored rising sea levels into
9 plans for its “Troll A platform” to account for higher anticipated average sea levels and increased
10 storm intensity due to global warming over the platform’s 70-year operational life¹⁸⁷ at a cost of
11 nearly \$40 million.

12 291.

13 Exxon’s Henry Shaw stated in a memo to David Edward, Jr. in 1978, attached as Exhibit
14 2, that Exxon needed to understand the “CO₂ problem” and wanted to “assess the possible impact
15 of the greenhouse effect on Exxon business. Exxon must develop a credible scientific team that
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18 _____

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20 ¹⁸⁴ ExxonMobil Research Engineering Co., Icebreaking cargo vessel, GOOGLE PATENTS (Apr. 17,
21 1973), <https://patents.google.com/patent/US3727571A/en> (last visited June 20, 2023);
22 ExxonMobil Research Engineering Co., Tanker vessel, GOOGLE PATENTS (Jul. 17, 1973), (last
23 visited June 20, 2023).

24 ¹⁸⁵ Chevron Research & Technology Co., Arctic offshore platform, GOOGLE PATENTS (Aug. 27,
25 1974) <https://patents.google.com/patent/US3831385A/fi> (last visited June 20, 2023).

26 ¹⁸⁶ N.Y. Times, 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-
28 change.html](http://www.nytimes.com/1989/12/20/business/greenhouse-effect-shell-anticipates-a-sea-change.html) (last visited June 20, 2023).

¹⁸⁷ Id.; Amy Lieberman and Susanne Rust, Big Oil braced for global warming while it fought
regulations, L. A. TIMES (Dec. 31, 2015), <https://graphics.latimes.com/oil-operations/> (last visited
June 20, 2023).

1
2 can critically evaluate the information generated on the subject and be able to carry bad news, if
3 any, to the corporation.”¹⁸⁸

4 292.

5 From 1979 to 1982, the Exxon Research and Engineering (ER&E) Company pursued major
6 global warming-based projects.¹⁸⁹ Exxon’s described the projects thusly: “Establish a scientific
7 presence through research program in climate modeling; selective support of outside activities;
8 maintain awareness of new scientific developments.”¹⁹⁰

9 293.

10
11 At a presentation for Exxon’s Corporation Management Committee in 1978, attached as
12 Exhibit 3, Exxon was warned that CO₂ concentrations were building in the Earth’s atmosphere at
13 an increasing rate, that CO₂ emissions attributable to fossil fuels were retained in the atmosphere,
14 and that CO₂ was contributing to global warming.¹⁹¹ An Exxon executive expressed the concern
15

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17
18
19 ¹⁸⁸ Henry Shaw, Memo from Henry Shaw to Edward David Jr., The “Greenhouse Effect,” EXXON
20 RESEARCH AND ENGINEERING COMPANY (Dec. 7, 1978),
21 [https://www.climatefiles.com/exxonmobil/1978-exxon-memo-on-programs-developed-to-
measure-co2-uptake-and-request-credible-scientific-team/](https://www.climatefiles.com/exxonmobil/1978-exxon-memo-on-programs-developed-to-measure-co2-uptake-and-request-credible-scientific-team/) (last visited June 20, 2023).

22 ¹⁸⁹ G.H. Long, Atmospheric CO₂ Scoping Study, EXXON RESEARCH AND ENGINEERING COMPANY
23 (Feb. 5, 1981), [https://www.climatefiles.com/exxonmobil/1981-exxon-report-potential-climate-
change-research-programs/](https://www.climatefiles.com/exxonmobil/1981-exxon-report-potential-climate-change-research-programs/) (last visited June 20, 2023); A.M. Natkin, Memo Summarizing
24 Climate Modeling and CO₂ Greenhouse Effect Research, EXXON RESEARCH AND ENGINEERING
25 COMPANY, (Sept. 2, 1982), [https://www.climatefiles.com/exxonmobil/1982-exxon-memo-
summarizing-climate-modeling-and-co2-greenhouse-effect-research/](https://www.climatefiles.com/exxonmobil/1982-exxon-memo-summarizing-climate-modeling-and-co2-greenhouse-effect-research/) (last visited June 20, 2023).

26 ¹⁹⁰ A.J. Callegari, Corporate Research Program in Climate/CO₂-Greenhouse, EXXON CORPORATE
27 RESEARCH PROGRAM (Feb. 2, 1984), [https://www.climatefiles.com/exxonmobil/1984-exxon-
report-on-climate-modeling-and-co2-effects/](https://www.climatefiles.com/exxonmobil/1984-exxon-report-on-climate-modeling-and-co2-effects/) (last visited June 20, 2023).

28 ¹⁹¹ Id.

1
2 that humans have a “window of five to ten years before the need for hard decisions regarding
3 changes in energy strategies might become critical.”¹⁹² That was **55 years ago**.

4 294.

5 Steve Knisely was a summer intern at Exxon Research and Engineering in 1979 when
6 Exxon asked him to analyze how global warming might affect fuel use.¹⁹³ Knisley’s report,
7 attached as Exhibit 4, predicted that if nothing was done and that if fossil fuel use was not limited,
8 there would be noticeable temperature changes and 400 ppm of CO₂ in the atmosphere by 2010.
9 His prediction was remarkably accurate. There was 388.61 ppm carbon in the atmosphere on
10 January 16, 2010, per NASA data.¹⁹⁴

12 295.

13 Knisely even concluded that the fossil fuel industry might need to leave 80% of its
14 recoverable reserves in the ground to avoid doubling CO₂ concentrations.¹⁹⁵

16 296.

17 At this time, Exxon scientists expressed grave concern about the potential impacts of fossil
18 fuel-driven global warming and advocated internally for additional fossil fuel industry-generated
19
20

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22 ¹⁹² Id.
23 ¹⁹³ Lisa Song, Neal Banerjee and David Hasemyer, Exxon Confirmed Global Warming Consensus
24 in 1982 with In-House Climate Models, INSIDE CLIMATE NEWS (Sept. 22, 2015),
25 [https://insideclimatenews.org/news/22092015/exxon-confirmed-global-warming-consensus-in-
1982-with-in-house-climate-models/](https://insideclimatenews.org/news/22092015/exxon-confirmed-global-warming-consensus-in-1982-with-in-house-climate-models/) (last visited June 20, 2023).
26 ¹⁹⁴ NASA, Vital Signs, NASA GLOBAL CLIMATE CHANGE, [https://climate.nasa.gov/vital-
signs/carbon-dioxide/](https://climate.nasa.gov/vital-signs/carbon-dioxide/) (last visited June 20, 2023).
27 ¹⁹⁵ See Exhibit 4.

1
2 research considering the growing consensus that consumption of fossil fuel products was changing
3 the planet's climate.¹⁹⁶

4 297.

5 Indeed, on November 19, 1979, Exxon's Henry Shaw, the company's lead climate
6 researcher at the time, wrote an inter-office memorandum concerning "Research in Atmospheric
7 Science", attached as Exhibit 5, wherein he stated:

8 We should determine how Exxon can best participate in all these [atmospheric
9 science research] areas and influence possible legislation on environmental
10 controls. It is important to begin to anticipate the strong intervention of
11 environmental groups and be prepared to respond with reliable and credible data. It
12 behooves [Exxon] to start a very aggressive defensive program in the indicated
13 areas of atmospheric science and climate because there is a good probability that
14 legislation affecting our business will be passed. Clearly, it is in our interest for
such legislation to be based on hard scientific data. The data obtained from research
on the global damage from pollution, e.g., from coal combustion, will give us the
needed focus for further research to avoid or control such pollutants.¹⁹⁷

15 298.

16 That same year, Exxon's W.L. Ferrall summarized Exxon's internal findings in a memo
17 concerning "Controlling Atmospheric CO₂," [Exhibit 4] concluding that:

- 18 a) the increase [in CO₂ concentration] is due to fossil fuel combustion,
19
20 b) increasing CO₂ concentration will cause a warming of the earth's
surface.

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24 ¹⁹⁶ Id.

25 ¹⁹⁷ Henry Shaw, Memo to H.N. Weinberg about Research in Atmospheric Science, Inter-Office
26 Correspondence, EXXON CORP. (Nov. 19, 1979),
[https://www.climatefiles.com/exxonmobil/1979-exxon-memo-on-atmospheric-science-research-
to-influence-legislation/](https://www.climatefiles.com/exxonmobil/1979-exxon-memo-on-atmospheric-science-research-to-influence-legislation/) (last visited June 20, 2023).
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2 c) present trend of fossil fuel consumption will cause dramatic
3 environmental effects before the year 2050.”¹⁹⁸

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8 299.

9 Doubling of CO₂ concentration (using 1860 as a baseline), Ferrall predicted that “ocean
10 levels would rise four feet” and the “Arctic Ocean would be ice free for at least six months each
11 year, causing major shifts in weather patterns in the northern hemisphere.”¹⁹⁹

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14 300.

15 The American Petroleum Institute and scientists from Exxon, Mobil, Amoco (now BP),
16 Phillips (now ConocoPhillips), Texaco (now, Shell, Sunoco, Sohio (now BP)) as well as Standard
17 Oil (now BP) and Gulf Oil (now Chevron), began the “CO₂ and Climate Task Force” to monitor
18 and to freely share industry knowledge on climate research between 1979 and 1983.²⁰⁰

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21 301.

22 In 1979, API sent its members a background memo related to API’s CO₂ and Climate Task
23 Force’s efforts, stating that CO₂ concentrations were rising steadily in the atmosphere, and
24 predicting when the first clear effects of climate change might be felt.²⁰¹

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¹⁹⁸ W.L. Ferrall, Memo to R.L. Hirsch Controlling Atmospheric CO₂, EXXON RESEARCH AND ENGINEERING COMPANY (Oct. 16, 1979). <https://www.climatefiles.com/exxonmobil/1979-exxon-memo-on-potential-impact-of-fossil-fuel-combustion/> (last visited June 20, 2023).

¹⁹⁹ Id.

²⁰⁰ Id.

²⁰¹ Neela Banerjee, Exxon’s Oil Industry Peers Knew About Climate Dangers in the 1970s, Too, INSIDE CLIMATE NEWS (Dec. 22, 2015), <https://insideclimatenews.org/news/22122015/exxon-mobil-oil-industry-peers-knew-about-climate-change-dangers-1970s-american-petroleum-institute-api-shell-chevron-texaco/> (last visited June 20, 2023).

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2 302.

3 In 1980, API's CO₂ Task Force members discussed the oil industry's responsibility to
4 reduce CO₂ emissions by changing refining processes and developing fuels that emit less CO₂. The
5 minutes from the Task Force's meeting on February 29, 1980 included a summary of a presentation
6 on "The CO₂ Problem," which identified the "scientific consensus on the potential for large future
7 climatic response to increased CO₂ levels" as a reason for API members to have concern with the
8 "CO₂ problem" and informed attendees that there was "strong empirical evidence" that rise in CO₂
9 concentration was caused by anthropogenic release of CO₂, mainly from fossil fuel combustion
10 (emphasis added).²⁰² Those minutes are attached as Exhibit 6.
11

12 303.

13 Dr. Laurman warned the Fossil Fuel Defendants that the amount of CO₂ in the atmosphere
14 could double by 2038, which he said would likely lead to a 2.5° C (4.5° F) rise in global average
15 temperature, resulting in "major economic consequences." He then told the task force that climate
16 models predicted a 5° C (9° F) rise by 2067, with "globally catastrophic effects."²⁰³ A Texaco (now
17 Chevron) representative posited that the API CO₂ Task Force should develop ground rules for
18 energy release of fuels and the cleanup of fuels as they relate to CO₂ creation.
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25 ²⁰² American Petroleum Institute, AQ-9 Task Force Meeting Minutes, attached as Exhibit 6. AQ-9
26 refers to the "CO₂ and Climate" Task Force.

27 ²⁰³ Id.

1
2 304.

3 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 Worldwide Use." Such investigation was
7 to include the technical implications of energy source changeover, research timing, and
8 requirements.
9

10 305.

11 These Meeting Minutes from the February 29, 1980, meeting of the CO₂ and Climate Task
12 Force, reflected a dire prediction:

13 CLIMATE MODELING – CONCLUSIONS

- 14
- 15 • GLOBAL AVERAGED 2.5° C RISE EXPECTED BY 2038 AT A 3% p.a.
GROWTH RATE OF ATMOSPHERIC CO₂ CONCENTRATION
 - 16 • LARGE ERROR IN THIS ESTIMATE - 1 IN 10 CHANCE OF THIS
CHANGE BY 2005
 - 17 • NO REGIONAL CLIMATE CHANGE ESTIMATES YET POSSIBLE
 - 18 • LIKELY IMPACTS:
 - 19 1° C RISE (2005): BARELY NOTICEABLE
 - 20 2.5° C RISE (2038): MAJOR ECONOMIC CONSEQUENCES,
STRONG REGIONAL DEPENDENCE
 - 21 5° C RISE (2067): GLOBALLY CATASTROPHIC EFFECTS

22 306.

23 The Climate Task Force estimated that the Earth would warm up by 2.5° C by 2038. The
24 February 29, 1980, meeting of API's CO₂ and Climate Task Force concluded with the following
25 warning:

26 CONCLUSIONS

1
2 **AT A 3% PER ANNUM GROWTH RATE OF CO₂, A 2.5°C RISE BRINGS WORLD**
3 **ECONOMIC GROWTH TO A HALT IN ABOUT 2025.**²⁰⁴

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307.

Exxon scientist Roger Cohen warned his colleagues in a 1981 internal memorandum, attached as Exhibit 7, that “future developments in global data gathering and analysis, along with advances in climate modeling, may provide strong evidence for a delayed CO₂ effect of a truly substantial magnitude,” and that under certain circumstances it would be “very likely that we will unambiguously recognize the threat by the year 2000.”²⁰⁵ Cohen previously expressed concern that the memorandum mischaracterized potential effects of unabated CO₂ emissions from Defendants’ fossil fuel products: “[I]t is distinctly possible that the . . . [Exxon Planning Division’s] scenario will produce effects which will indeed be catastrophic (at least for a substantial fraction of the world’s population).”²⁰⁶

308.

In 1981, Exxon’s Henry Shaw prepared a summary of Exxon’s current position on the greenhouse effect, attached as Exhibit 8, for Edward David Jr., president of Exxon Research and Engineering, stating in relevant part that: “Atmospheric CO₂ will double in 100 years if fossil fuels grow at 1.4%”... there will be a “3° Celsius global average temperature rise and 10° Celsius at

²⁰⁴ Id. (emphasis added).

²⁰⁵ Roger W. Cohen, Exxon Memo to W. Glass about possible “catastrophic” effect of CO₂, Inter-Office Correspondence, EXXONMOBIL CORP. (Aug. 18, 1981), <https://www.mass.gov/files/documents/2016/10/tp/exxon-appendix-memo-support.pdf> (last visited (last visited June 20, 2023)).

²⁰⁶ Id.

1 poles if CO₂ doubles” and there will be “major shifts in rainfall/agriculture” and “polar ice may
2 melt.”²⁰⁷

3
4 309.

5 In 1982, another report prepared for API by scientists at the Lamont-Doherty Geological
6 Observatory at Columbia University, attached as Exhibit 9, recognized that atmospheric CO₂
7 concentration had risen significantly compared to the beginning of the industrial revolution from
8 about 290 parts per million to about 340 parts per million in 1981 and acknowledged that despite
9 differences in climate modelers’ predictions, all models indicated a temperature increase caused
10 by anthropogenic CO₂ within a global mean range of 4° C (7.2° F).

11
12 310.

13 Roger W. Cohen of Exxon Memo, summarizing findings of research in climate modeling,
14 Exxon Research Engineering Co. dated Sept. 2, 1982, report advised that there was scientific
15 consensus that “a doubling of atmospheric CO₂ from pre-industrial revolution value would result
16 in an average global temperature rise of (3.0 ± 1.5)° C [5.4 ± 2.7° F].” It went further, warning that
17 “[s]uch a warming can have serious consequences for man’s comfort and survival since patterns
18 of aridity and rainfall can change, the height of the sea level can increase considerably, and the
19 world food supply can be affected.”²⁰⁸

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24 ²⁰⁷ Henry Shaw, Exxon Memo to E. E. David, Jr. about “CO₂Position Statement, Inter-Office
25 Correspondence, EXXONMOBIL CORP. (May 15, 1981),
<https://docs.house.gov/meetings/GO/GO28/20190409/109294/HMTG-116-GO28-20190409-SD007.pdf> (last visited June 20, 2023).

26 ²⁰⁸ American Petroleum Institute, Climate Models and CO₂ Warming: A Selective Review and
27 Summary, Lamont-DOHERTY GEOLOGICAL OBSERVATORY (COLUMBIA UNIVERSITY) (Mar. 1982),

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2 311.

3 Also, in 1982, Exxon’s Environmental Affairs Manager, M.B. Glaser, distributed a primer
4 on climate change, attached as Exhibit 10, to a “wide circulation [of] Exxon management...
5 intended to familiarize Exxon personnel with the subject.”²⁰⁹ The primer also was “restricted to
6 Exxon personnel and not to be distributed externally.”²¹⁰

7
8 312.

9 Glaser submitted a chart to Exxon which reflected CO₂ in the atmosphere, and how the
10 temperature would increase by year:²¹¹

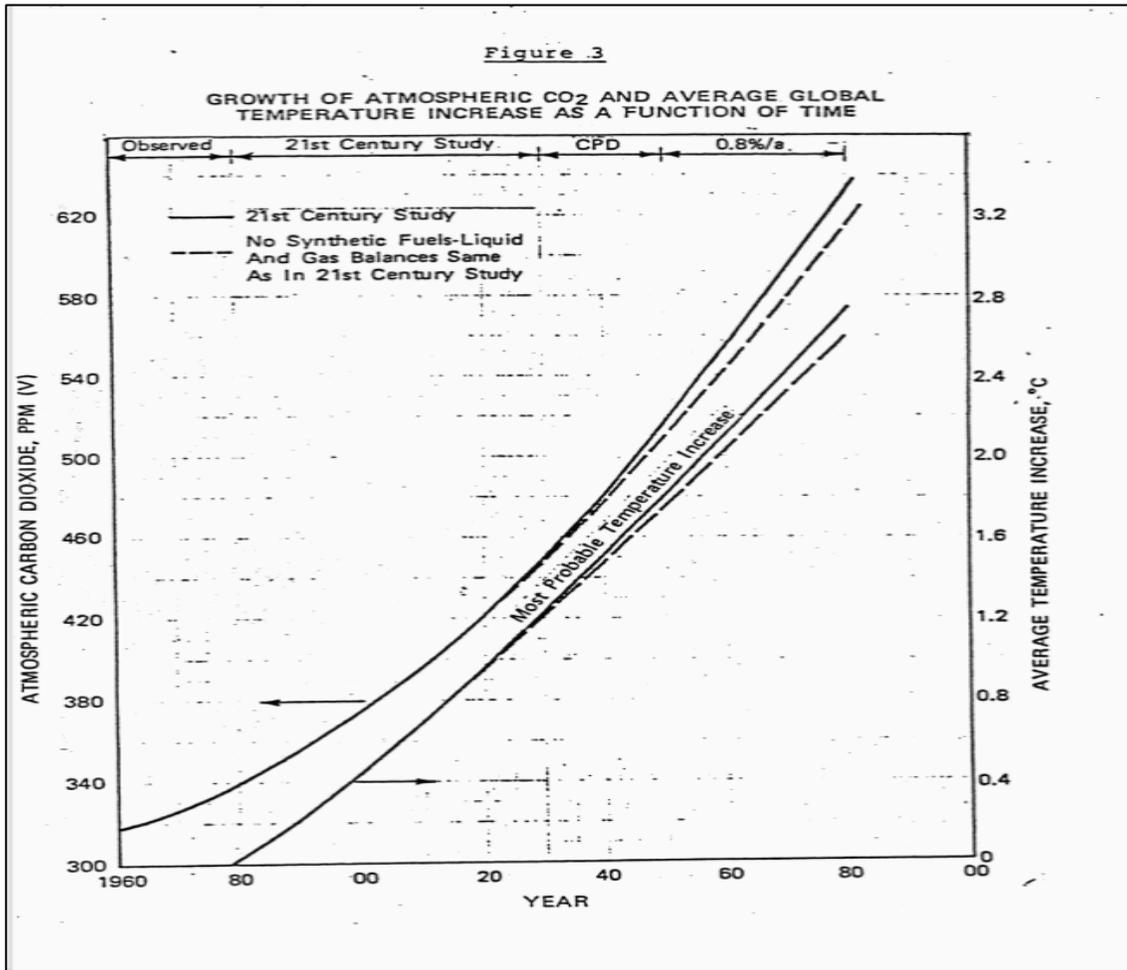
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22 <https://insideclimatenews.org/wp-content/uploads/2016/02/API-1982-Climate-models-and-CO2-warming.pdf> (last visited June 20, 2023).

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24 ²⁰⁹ M.B. Glaser, Exxon Memo to Management about “CO₂ ‘Greenhouse’ Effect”, EXXON
RESEARCH AND ENGINEERING CO. (Nov. 12, 1982),
25 <https://www.climatefiles.com/exxonmobil/1982-memo-to-exxon-management-about-co2-greenhouse-effect/> (last visited June 20, 2023).

26 ²¹⁰ Id.

27 ²¹¹ Id. at 7.

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313.

Glaser's primer collected science on climate change available at the time and confirmed fossil fuel combustion as a primary anthropogenic contributor to global warming. The report

1
2 estimated a CO₂ doubling around 2090 based on Exxon’s long-range modeled outlook.

3 314.

4 Glaser warned that “there are some potentially catastrophic events that must be
5 considered,” including increased sea surface temperatures, and the loss of Antarctic ice sheets.²¹²
6 It noted that some scientific groups were concerned “that once the effects are measurable, they
7 might not be reversible.”²¹³

8 315.

9
10 During the time the Task Force was in effect, the development of shale oil was of
11 paramount concern to API. It was discussed that the production of oil shale may generate 3-5 times
12 more carbon emissions.²¹⁴

13 316.

14 Director of Exxon’s Theoretical and Mathematical Sciences Laboratory Roger Cohen
15 agreed and wrote that “the time required for doubling of atmospheric CO₂ depends on future world
16 consumption of fossil fuels.” Cohen concluded that Exxon’s own results were “consistent with the
17 published predictions of more complex climate models” and “in accord with the scientific
18 consensus on the effect of increased atmospheric CO₂ on climate.”²¹⁵

19 317.

20 In October 1982, attended by members of API, Exxon Research and Engineering Company
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25 ²¹² Id.
26 ²¹³ Id.
27 ²¹⁴ Id.
28 ²¹⁵ Cohen, *supra*, Footnote 205.

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2 president E.E. David delivered a speech titled: “Inventing the Future: Energy and the CO₂
3 ‘Greenhouse Effect.’”²¹⁶ His remarks, attached as Exhibit 11, included the following statement:
4 “[F]ew people doubt that the world has entered an energy transition away from dependence upon
5 fossil fuels and toward some mix of renewable resources that will not pose problems of CO₂
6 accumulation.” He went on, discussing the human opportunity to address anthropogenic climate
7 change before the point of no return:
8

9 It is ironic that the biggest uncertainties about the CO₂ buildup are not
10 in predicting **what the climate will do, but in predicting what people**
11 **will do.** . . . [It] appears we still have time to generate the wealth and
knowledge we will need to invent the transition to a stable energy
system.²¹⁷

12 318.

13 Throughout the early 1980s, at Exxon’s direction, Exxon climate scientist Henry Shaw
14 forecasted emissions of CO₂ from fossil fuel use. Those estimates were incorporated into Exxon’s
15 21st century energy projections, attached as Exhibit 12, and were distributed among Exxon’s
16 various divisions.
17

18 319.

19 Shaw’s conclusions included an expectation that atmospheric CO₂ concentrations would
20 double in 2090 per the Exxon model, with an attendant 2.3–5.6° F average global temperature
21

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24 ²¹⁶ Dr. E. E. David, Jr., Inventing the Future: Energy and the CO₂ Greenhouse Effect: Remarks at
25 the Fourth Annual Ewing Symposium, Tenafly, NJ, EXXON RESEARCH AND ENGINEERING
26 COMPANY, (Oct. 26, 1982), [https://www.climatefiles.com/exxonmobil/inventing-future-energy-
co2-greenhouse-effect/](https://www.climatefiles.com/exxonmobil/inventing-future-energy-co2-greenhouse-effect/) (last visited June 20, 2023).

27 ²¹⁷ Id. (emphasis added).

1
2 increase. Shaw compared his model results to those of the U.S. EPA, the National Academy of
3 Sciences, and the Massachusetts Institute of Technology, indicating that the Exxon model predicted
4 a longer delay than any of the other models, although its temperature increase prediction was in
5 the mid-range of the four projections.²¹⁸

6
7 320.

8 During the 1980s, these Defendants additionally formed their own research units focused
9 on climate modeling. The API, including the API CO₂ Task Force, provided a forum for Defendants
10 to share their research efforts and corroborate their findings related to anthropogenic greenhouse
11 gas emissions.²¹⁹

12
13 321.

14 James J. Nelson, the former director of the task force, was interviewed by Inside Climate
15 News' Neela Banerjee and said that by 1983, the CO₂ and Climate Task Force was maneuvered by
16 API into lobbying against regulation. "They (API) were less interested in pushing the envelope of
17 science and more interested in how to make it more advantageous politically or economically for
18 the oil industry."²²⁰

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24 ²¹⁸ Neela Banerjee, More Exxon Documents Show How Much It Knew About Climate 35 Years
25 Ago, INSIDE CLIMATE NEWS (Dec. 1, 2015),
[https://insideclimateneews.org/news/01122015/documents-exxons-early-co2-position-senior-
26 executives-engage-and-warming-forecast](https://insideclimateneews.org/news/01122015/documents-exxons-early-co2-position-senior-executives-engage-and-warming-forecast) (last visited June 20, 2023).

27 ²¹⁹ Banerjee, *supra*, Footnote 201.

28 ²²⁰ *Id.*

1
2 322.

3 By the early 1980s the Defendants had initiated a five-point plan in response to their unique
4 knowledge of the danger faced by the world's population, as a result of the ever-increasing sale
5 and use of their products. First, hide or obfuscate the dangers of climate change; second, increase
6 supply and production; third, decrease prices; fourth, prevent non-carbon energy sources from
7 developing; and fifth, stop or deter regulation of the carbon industry.
8

9 323.

10 During this time, the Fossil Fuel Defendants' statements express an understanding of their
11 obligation to consider and mitigate the externalities of unabated promotion, marketing, and sale of
12 their fossil fuel products, but they failed to do so, leaving our planet exposed to dangers.
13

14 324.

15 Fossil Fuel Defendants have long understood grim truths about the global harm caused by
16 their products and expressed them in insular circles before working to sow public doubt about their
17 veracity. For example, in 1988, Richard Tucker, then president of Mobil Oil, observed to industry
18 colleagues:

19 [H]umanity, which has created the industrial system that has
20 transformed civilizations, is also responsible for the environment, which
21 sometimes is at risk because of unintended consequences of
22 industrialization.... Maintaining the health of this life-support system is
23 emerging as one of the highest priorities.... [W]e must all be
24 environmentalists. The environmental covenant requires action on many
25 fronts...the low-atmosphere ozone problem, the upper-atmosphere
26 ozone problem and the greenhouse effect, to name a few.... Our strategy
27 must be to reduce pollution before it is ever generated – to prevent
28 problems at the source. Prevention means engineering a new generation
of fuels, lubricants and chemical products.... Prevention means
designing catalysts and processes that minimize or eliminate the
production of unwanted byproducts.... Prevention on a global scale may
even require a dramatic reduction in our dependence on fossil fuels—

1
2 and a shift towards solar, hydrogen, and safe nuclear power. It may be
3 possible that—just possible—that the energy industry will transform
4 itself so completely that observers will declare it a new industry....
5 Brute force, low-tech responses and money alone won't meet the
6 challenges we face in the energy industry.²²¹

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325.

Also, in 1988, the Shell Greenhouse Effect Working Group issued a confidential internal report, "The Greenhouse Effect," attached as Exhibit 13, which acknowledged global warming's anthropogenic nature: "Man-made carbon dioxide released into and accumulated in the atmosphere is believed to warm the earth through the so-called greenhouse effect." The authors also noted the burning of fossil fuel as a primary driver of CO₂ buildup and warned that ocean warming would impact marine species populations and that "shifts in ranges and migration patterns could result in local losses of food source revenues and could require [fishing] operations in other (more distant) grounds."²²²

326.

In addressing "Socio-economic implications" of climate change, the authors noted that, "[w]hile the greenhouse effect is a global phenomenon, the consequences and many of the socio-economic implications will be regional and local" The authors went on to address specific impacts including "Changing air temperature."²²³

²²¹ Richard E. Tucker, High Tech Frontiers in the Energy Industry: The Challenge Ahead, AICHE NATIONAL MEETING (Nov. 30, 1988).

²²² Shell Internationale Petroleum, Greenhouse Effect Working Group, The Greenhouse Effect, SHELL INTERNATIONALE PETROLEUM (May 30, 1988) <https://www.climatefiles.com/shell/1988-shell-report-greenhouse/> (last visited June 20, 2023).

²²³ Id.

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2 327.

3 Local temperature change, the report stated, may necessitate local adaptation of the
4 buildings in which people live and work, technologies for heating or cooling, energy sources for
5 heating and cooling, new food preparation technologies, new cultivation techniques, etc. All such
6 adaptations are costly, and some would drastically change the way people live and work.²²⁴

7
8 328.

9 Given these and other socio-economic implications, the Shell Greenhouse Effect Working
10 Group advocated for a plan in which industry would work with governments to address the
11 problem:

12 With fossil fuel combustion being the major source of CO₂ in the atmosphere, a
13 forward-looking approach by the energy industry is clearly desirable, seeking to
14 play its part with governments and others in the development of appropriate
measures to tackle the problem.²²⁵

15
16 329.

17 Like early warnings by Exxon scientists, the Shell report notes that “by the time the global
18 warming becomes detectable it could be too late to take effective countermeasures to reduce the
19 effects or even to stabilize the situation.” The authors mention the need to consider policy changes
20 on multiple occasions, noting that “the potential implications for the world are...so large that
21 policy options need to be considered much earlier” and that research should be “directed more to
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26 ²²⁴ Id. at 27-28.

27 ²²⁵ Id. at 1.

1 the analysis of policy and energy options than to studies of what we will be facing exactly.”²²⁶

2
3 330.

4 The Fossil Fuel Defendants Exxon, Shell, BP, ConocoPhillips, Motiva, Valero, Total and
5 Anadarko (and their predecessors in interest) were at the forefront of carbon dioxide research for
6 much of the latter half of the 20th century. Collectively, they studied and developed cutting edge
7 and innovative technology, working with top researchers to produce exceptionally sophisticated
8 greenhouse gas studies and climate change models.

9
10 331.

11 The Fossil Fuel Defendants actively participated in committees, boards and groups for the
12 American Petroleum Institute, Western States Petroleum Association (and others) and received
13 numerous studies and updates from various committees regarding industry wide knowledge.

14
15 332.

16 The largest Fossil Fuel Defendants worked with McKinsey to create strategies that allowed
17 for exponential increase in the use of their products, artificial creation of energy dependence, and
18 control climate messaging to create doubt.

19
20 333.

21 Defendants failed to act reasonably to mitigate or avoid the dire adverse impacts their
22 scientists carefully predicted. Defendants instead adopted the position, as described below, that the
23 absence of meaningful regulations on the consumption of their fossil fuel products was the

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27 ²²⁶ Id.

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2 equivalent of a social license to continue the unfettered pursuit of profits from those products. This
3 position was an abdication of Defendants’ obligation to consumers and the public, including
4 Multnomah County, to act on their unique knowledge of the hazards of unabated production and
5 consumption of their fossil fuel products.

6 334.

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8 By 1988, Defendants had amassed a compelling body of knowledge about the role of
9 anthropogenic greenhouse gases—specifically those emitted from the normal use of Defendants’
10 fossil fuel products—in causing global warming, increased mean surface temperature, heatwaves,
11 and the attendant consequences for human communities and the environment.

12 335.

13 The Fossil Fuel Defendants possessed actual knowledge that their products were causing
14 global climate change and predicted dire effects on the planet. The Fossil Fuel Defendants were
15 faced with the decision of whether to take steps to limit the damages their fossil fuel products were
16 causing and would continue to cause for virtually every area of the globe, including Multnomah
17 County.
18

19 336.

20 It was also during this time that the Fossil Fuel Defendants were investing in offshore
21 platforms and needed to study climate change to protect their own assets from rising sea levels.
22 These investments included (among others), raising offshore oil platforms to protect against sea
23 level rise; reinforcing offshore oil platforms to withstand increased wave strength and storm
24 severity; and developing and patenting designs for equipment intended to extract crude oil and/or
25
26
27

1 natural gas in areas previously unreachable because of the presence of polar ice sheets.²²⁷ The
2 Defendants understood that to effectuate their conspiracy and enterprise, they must find more oil
3 and gas, produce more, maintain low prices, and stifle the alternative energy source companies
4 and the governmental regulators.
5

6 337.

7 Ordinary care required Defendants to have taken any of several steps to mitigate the
8 damages caused by their fossil fuel products, and their own comments reveal an awareness of the
9 steps they were required to take.
10

11 338.

12 Ordinary care required Defendants to have made reasonable warnings to consumers, the
13 public, and regulators of the dangers known to them of the unabated consumption of their fossil
14 fuel products and were required to have taken reasonable steps to limit the potential greenhouse
15 gas emissions arising out of those products.
16

17 339.

18 The Defendants acted carelessly and recklessly, rather than reasonably or with ordinary
19 care. Instead of acting to limit the potential greenhouse gas emissions, they mobilized with the
20 coal and fossil fuel dependent industries to manufacture and spread propaganda and deception
21 about climate science, contrary to their own internal scientific conclusions, to ensure
22

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25 ²²⁷ Amy Lieberman and Suzanne Rust, Big Oil braced for global warming while it fought
26 regulations, L.A. TIMES (Dec. 31, 2015), <https://graphics.latimes.com/oil-operations/> (last visited
27 June 20, 2023).

1 unencumbered emissions and the sale of their products to consumers worldwide and in Multnomah
2 County.
3

4 340.

5 Exxon instructed Duane Levine, Exxon’s manager of science and strategy development, to
6 give a primer to the company’s board of directors on February 22, 1989, which is attached as
7 Exhibit 14.
8

9 341.

10 Levine told the board of directors what they already knew ten years prior: There was
11 general consensus among scientists that the burning of fossil fuels could raise global temperatures
12 significantly by the middle of the 21st century — between 2.7 and 8.1° F — causing glaciers to
13 melt and sea levels to rise.”²²⁸ Speaking of impending regulation, Exxon’s LeVine warned
14 “arguments that we can’t tolerate delay and must act now can lead to irreversible and costly
15 Draconian steps.”²²⁹
16

17 342.

18 Levine quoted from the 1983 “Changing Climate Report” from the Natural Research
19 Council.²³⁰
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24 ²²⁸ Katie Jennings, Dino Grandoni and Susanne Rust, How Exxon went from leader to skeptic on
25 climate change research, L. A. TIMES (Oct. 23, 2015), [https://graphics.latimes.com/exxon-
26 research/](https://graphics.latimes.com/exxon-research/) (last visited June 20, 2023).

27 ²²⁹ Id.

28 ²³⁰ See, Exhibit 15.

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2 343.

3 In a 1989 internal newsletter, attached as Exhibit 15, Exxon’s resident climate expert Brian
4 Flannery confirmed that regulatory efforts to reduce the risk of climate change, would “alter
5 profoundly the strategic direction of the energy industry.” And he warned that the impact on the
6 company from those efforts “will come sooner ... than from climate change itself.”²³¹

7
8 344.

9 Reiterating the position taken a decade earlier, Joseph M. Carlson, Exxon Memo on “The
10 Greenhouse Effect” dated Aug. 3, 1988, attached as Exhibit 16, described the “Exxon Position,”
11 which included among others, two important tenets:

- 12 a) **emphasize the uncertainty** in scientific conclusions regarding the
13 potential enhanced Greenhouse Effect; and
14 b) **resist** the overstatement and sensationalization (sic) of potential
15 greenhouse effect which could lead to noneconomic development of
non-fossil fuel resources.²³²

16 ***H. The Global Climate Coalition: The Propaganda Machine***

17 345.

18 Though the Fossil Fuel Defendants are market competitors in some respects, they share a
19 common purpose to sell as many of their polluting products as possible and to deceive or
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23 ²³¹ Id.

24 ²³² Joseph M. Carlson, Exxon Memo on “The Greenhouse Effect”, EXXONMOBIL CORP. (Aug. 3,
25 1988).
26 <https://www.climatefiles.com/exxonmobil/566/#:~:text=In%20the%20document%2C%20Carlson%20states,can%20have%20disastrous%20environmental%20impacts> (last visited June 20,
27 2023).

1
2 overwhelm those who may wish to modify that behavior. In furtherance of that shared objective,
3 the Fossil Fuel and Coal Defendants converged and formed the “Global Climate Coalition”
4 (“GCC”) to fund and coordinate a multi-year, multi-million-dollar, multi-organization
5 misinformation campaign designed explicitly to undermine climate science and further their
6 business interests.

7
8 346.

9 Multnomah County alleges a pattern of conduct that includes the Defendants’ conscious
10 efforts to hide behind third parties, touted as “green” or “pro-environment.” This practice is a form
11 of greenwashing, sometimes referred to as “green sheen.” Greenwashing is a public
12 relations spin to promote the public’s perception that an organization’s products, aims, or policies
13 are environmentally friendly.²³³ Greenwashing was used when forming the Global Climate
14 Coalition and became a repetitive and effective scheme to deceive consumers.

15
16 347.

17 The GCC was formed in 1989 as a public relations and international lobbyist group of
18 businesses that opposed action to reduce greenhouse gas emissions and publicly challenged the
19 science behind global warming, even though the founders knew otherwise. The following is a list
20 of the founding members of the GCC on November 16, 1989:²³⁴

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22 _____

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24 ²³³ The Age of Persuasion, Season 5: It's Not Easy Being Green: Green Marketing, CBC RADIO
25 (Jan. 8, 2011).

26 ²³⁴ Global Climate Coalition, Global Climate Coalition Membership, GLOBAL CLIMATE COALITION
27 (Nov. 16, 1989), [https://www.climatefiles.com/denial-groups/global-climate-coalition-
collection/1989-membership/](https://www.climatefiles.com/denial-groups/global-climate-coalition-collection/1989-membership/) (last visited June 20, 2023).

Global Climate Coalition Membership

Aluminum Association	General Motors Corporation
American Electric Power Service Corporation	Georgia Pacific Corporation
American Gas Association	Hercules Inc.
American Iron & Steel Institute	IBM
American Mining Congress	Jefferson Energy Foundation
American Nuclear Energy Council	Maytag Corporation
American Paper Institute	Motor Vehicle Manufacturers Association
American Petroleum Institute	National Association of Manufacturers
Amoco Corporation	National Coal Association
ARCO	National Steel Corporation
Armco, Inc.	Occidental Chemical Corporation
Association of Home Appliance Manufacturers	Pacific Gas & Electric Company
Automobile Importers of America	Peabody Holding Company, Inc.
BHP - Utah International, Inc.	Petrochemical Energy Group
Business Roundtable	Petroleum Marketers Association of America
Chemical Manufacturers Association	Phillips Petroleum Company
Chrysler Corporation	Portland Cement Association
Clean Air Working Group	PPG Industries
Coalition Opposed to Energy Taxes	Process Gas Consumers Group
Consolidation Coal Company	Rubber Manufacturers Association
Consumers Power Company	Shell Oil Company
Council of Industrial Boiler Owners	Society of the Plastics Industry, Inc.
Dow Chemical Company	Southern Company Services, Inc.
E.I. Dupont de Nemours & Company, Inc.	Texaco, Inc.
Eastman Kodak	Union Carbide Corporation
Edison Electric Institute	UNOCAL Corporation
Electricity Consumers Resource Council	U.S. Chamber of Commerce
Ford Motor Company	U.S. Council for Energy Awareness
	U.S. Council for International Business

348.

The GCC, on behalf of Fossil Fuel Defendants and other fossil fuel companies, funded advertising campaigns and distributed material to misinform the public about climate change, with the specific purpose of preventing U.S. adoption of the Kyoto Protocol—an international treaty that commits state parties to reduce greenhouse gas emissions, based on the scientific

1
2 consensus that global warming is occurring—despite the leading role that the U.S. had played in
3 the Protocol negotiations.²³⁵

4 349.

5 From the outset, the corporate interests that controlled the central components of the GCC
6 were fossil fuel producers, including coal mining interests and oil companies, and fossil fuel
7 dependent industries, including coal-burning utilities, railroads who moved coal, automobiles, and
8 chemical companies. Approximately 53% of membership in the GCC centered around fossil fuel
9 activities, namely coal, oil, and auto companies. These companies also represented approximately
10 38% of board membership.²³⁶ The Defendants were integral to the foundation and purpose of the
11 GCC.
12

13 350.

14 The GCC was “reorganized” in 1992 by Phillips Petroleum (now ConocoPhillips), BHP
15 (now BP), Ford, National Mining Association, Shell, Texaco (now Chevron), Exxon, Chrysler
16 (now FCA), General Motors, the National Association of Manufacturers, the American Petroleum
17 Institute (Oil Defendants), the National Coal Association (Coal Defendants), among many other
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24 ²³⁵ Id.

25 ²³⁶ The Global Climate Coalition, Big Business Funds Climate Change Denial and Regulatory
26 Delay, CLIMATE INVESTIGATIONS CENTER (Mar. 25, 2019), [https://climateinvestigations.org/wp-
27 content/uploads/2019/04/The-Global-Climate-Coalition-Denial-and-Delay.pdf](https://climateinvestigations.org/wp-content/uploads/2019/04/The-Global-Climate-Coalition-Denial-and-Delay.pdf) (last visited June
28 20, 2023).

1
2 fossil fuel dependent companies.²³⁷

3 351.

4 The GCC, including its member corporations and member trade associations, represented
5 hundreds of thousands of businesses and was managed by Ruder Finn, a public relations firm.²³⁸

6 352.

7 Despite an internal primer stating that various “contrarian theories”—i.e., climate change
8 skepticism—do not “offer convincing arguments against the conventional model of greenhouse
9 gas emission induced climate change,” GCC excluded this section from the public version of the
10 backgrounder (talking points) and instead funded efforts to promote those same contrarian
11 theories. It does so to this day.²³⁹

12 353.

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14 The GCC’s financial information is not publicly available, though some has been
15 uncovered by researchers. GCC’s advocacy activities including political lobbying, aggressive and
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20 ²³⁷ Ian McGregor, *Organizing to Influence the Global Politics of Climate Change*, AUSTRALIAN
21 AND NEW ZEALAND ACADEMY OF MANAGEMENT CONFERENCE (2008),
<https://opus.lib.uts.edu.au/bitstream/10453/11492/1/2008000811OK.pdf> (last visited June 20,
22 2023).

23 ²³⁸ Wendy E. Franz, Science, skeptics, and non-state actors in the greenhouse, BELFER CENTER FOR
24 SCIENCE AND INTERNATIONAL AFFAIRS (Sept. 1998),
[https://www.belfercenter.org/sites/default/files/legacy/files/Science%20Skeptics%20and%20Non-
25 -State%20Actors%20in%20the%20Greenhouse%20-%20E-98-18.pdf](https://www.belfercenter.org/sites/default/files/legacy/files/Science%20Skeptics%20and%20Non-State%20Actors%20in%20the%20Greenhouse%20-%20E-98-18.pdf) (last visited June 20, 2023).

26 ²³⁹ Gregory J. Dana, Memo to AIAM Technical Committee Re: Global Climate Coalition (GCC)
27 – Primer on Climate Change Science – Final Draft, ASSOCIATION OF INTERNATIONAL AUTOMOBILE
28 MANUFACTURERS (Jan. 18, 1996),
[https://www.ucsusa.org/sites/default/files/attach/2015/07/Climate-Deception-Dossier-7_GCC-
Climate-Primer.pdf](https://www.ucsusa.org/sites/default/files/attach/2015/07/Climate-Deception-Dossier-7_GCC-Climate-Primer.pdf) (last visited June 20, 2023).

1
2 misleading promotion of promotion of climate change denialism, criticism of the processes of
3 international climate organizations, critiques of reliable but ominous climate models, and personal
4 attacks on scientists and environmentalists whose work confirms that GHGs are warming the
5 planet and thereby inducing devastating weather events.

6 354.

7
8 The effort included promoting their hazardous products through advertising campaigns and
9 the initiation and funding of climate change denialist organizations, designed to influence
10 consumers to continue using Defendants' fossil fuel products regardless of those products' damage
11 to communities and the environment.

12 355.

13 The Fossil Fuel Defendants took affirmative steps to conceal from the Multnomah County,
14 its residents, and the public, the foreseeable impacts of the use of their fossil fuel products on the
15 planet's climate and associated harms to people and communities. Using the GCC, these
16 Defendants embarked on a public relations campaign and colluded with Peabody, among others,
17 to deceive the public about the science connecting global climate change to fossil fuel products
18 and greenhouse gas emissions, to influence public perception of the existence of anthropogenic
19 global warming. Under the guise of the GCC, the Fossil Fuel Defendants were able to collude with
20 other members to accomplish what it could not fully do on their own: discredit scientific consensus
21 and foster deception. In doing so, they exponentially increased the sales of their products,
22 expanded consumer demand for them, and built an energy monopoly.
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2 356.

3 A key strategy in Defendants' efforts to discredit scientific consensus on climate change,
4 including the Intergovernmental Panel on Climate Change ("IPCC"), a body of scientists from
5 every major country created by the United Nations, was to bankroll and hide behind scientists who,
6 although sometimes accredited, held fringe opinions that were even more suspect given the sources
7 of their research funding, which was not publicly disclosed and contrary to the insiders' own
8 conclusions about their consumer products. These scientists obtained part or all their research
9 budget from Defendants directly or through Defendant-funded organizations like API,²⁴⁰ but failed
10 to disclose their fossil fuel industry underwriters in violation of common law fraud and consumer
11 protections laws.²⁴¹

12
13 357.

14 In 1991, the Coal Defendants formed another greenwashed front group, Information
15 Council on the Environment ("ICE"), with the express purpose of deceiving the public about
16 climate science. ICE was a U.S. organization created by the National Coal Association,
17 the Western Fuels Association, and Edison Electrical Institute. Defendant Peabody was a member.
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24 ²⁴⁰ Willie Soon & Sallie Baliunas, Proxy Climatic and Environmental Changes of the Past 1000
25 Years, 23 *Climate Research* at 88,105 (Jan. 31, 2003) <https://www.jstor.org/stable/24868339> (last
26 visited June 20, 2023).

27 ²⁴¹ Smithsonian, *Smithsonian Statement: Dr. Wei-Hock (Willie) Soon*, LEGISTORM (Feb. 26, 2015).
28 https://www.legistorm.com/stormfeed/view_rss/529271/organization/36823/title/smithsonian-statement-dr-wei-hock-willie-soon.html (last visited June 20, 2023).

1
2 358.

3 ICE launched a \$500,000 advertising and public relations campaign to determine if their
4 deceptive “science approach sells”²⁴² and, in ICE’s words, “reposition global warming as theory
5 (not fact)” a framing that makes clear that by 1991 global warming was an accepted scientific fact,
6 and that the group’s objectives to “reposition global warming as a theory” were pure propaganda,
7 not based in science. Patrick Michaels, Robert Balling and Sherwood B. Idso all lent their names
8 in 1991 to its scientific advisory panel.²⁴³
9

10 359.

11 The Coal Defendants’ publicity plan called for placing these three scientists, along with
12 fellow climate change denier S. Fred Singer, in broadcast appearances, op-ed pages, and
13 newspaper interviews by its public relations firm.²⁴⁴
14

15 360.

16 Another company was contracted to conduct opinion polls, which identified “older, less-
17 educated males from larger households who are not typically active information-seekers” and
18 “younger, lower-income women” as “good targets for radio advertisements” that would “directly
19 attack the proponents of global warming through comparison of global warming to historical
20

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23 ²⁴² See May 7, 1991, correspondence from E. Erie to O. Mark DeMichele.

24 ²⁴³ Kathy Mulvey & Seth Shulman, The Climate Deception Dossier Internal Fossil Fuel Industry
25 Memos Reveal Decades of Corporate Disinformation, UNION OF CONCERNED SCIENTISTS (July
26 2015), at 20, [https://www.ucsusa.org/sites/default/files/attach/2015/07/The-Climate-Deception-
27 Dossiers.pdf](https://www.ucsusa.org/sites/default/files/attach/2015/07/The-Climate-Deception-Dossiers.pdf) (last visited June 20, 2023).

28 ²⁴⁴ Matthew L. Wald, Pro-Coal Ad Campaign Disputes Warming Idea, N. Y. TIMES (Jul. 8, 1991),
[https://www.nytimes.com/1991/07/08/business/pro-coal-ad-campaign-disputes-warming-
idea.html](https://www.nytimes.com/1991/07/08/business/pro-coal-ad-campaign-disputes-warming-idea.html) (last visited June 20, 2023).

1
2 or mythical instances of gloom and doom.”²⁴⁵

3 361.

4 ICE used print campaigns to influence public opinion. One such campaign showed a sailing
5 ship about to drop off the edge of a flat world into the jaws of a waiting dragon. The headline read:
6 “Some say the earth is warming. Some also said the earth was flat.” Another featured a cowering
7 chicken under the headline, “Who Told You the Earth Was Warming . . . Chicken Little?” Another
8 ad was targeted at Minneapolis readers and asked, “If the earth is getting warmer, why is
9 Minneapolis getting colder?”
10

11 362.

12 The images appearing below are some examples of ICE-funded print advertisements
13 challenging the validity of climate science and intended to obscure the scientific consensus on
14 anthropogenic climate change and reduce political inertia to address it.²⁴⁶
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26 ²⁴⁵ Id.
27 ²⁴⁶ Mulvey & Shulman, *supra*, Footnote 24.

The most serious problem with catastrophic global warming is—it may not be true.



Some forecasters say the Earth's temperature is rising. They say that catastrophic global warming will take place in the years ahead.

But the U.S. Department of Agriculture—in the first update in 25 years of its "Plant Hardiness Report"—determined that on both coasts of this country, winter temperatures are 5 to 10 degrees cooler than previously reported.

The evidence can be seen in the increase in cold damage to Florida orange groves and California eucalyptus. And a moving frost line has led to a shorter growing season in some parts of the South.

Now, most of us aren't climatologists. But facts like these simply don't jibe with the theory that catastrophic global warming is taking place. Which seems to say we need more research. And more evidence.

If you care about the Earth—but want to keep a cool head about it—now is your chance to get more facts.

Call the Information Council for the Environment, 1-800-346-6369 extension 512. We'll send you a free packet of information on global climate change. Or just mail us the coupon below.

Because the best environmental policy is a policy based on fact.

Please send me your FREE information packet on global climate change.

name _____
address _____
city _____



Information Council for the Environment
1-800-346-6369



The twentieth century has seen many predictions of global destruction. In the 1930's, some scientists claimed we were in the middle of a disastrous warming trend. In the mid 1970's, others were sure we were entering a new Ice Age. And so on. It's the same with global warming. There's no hard evidence it is occurring. In fact, evidence the Earth is warming is weak. Proof that carbon dioxide has been the primary cause is non-existent. Climate models cannot accurately

predict far-future global change. And the underlying physics of the climatic change are still wide open to debate. If you care about the environment, but don't care to be pressured into spending money on problems that don't exist, make sure you get the facts. Write: Informed Citizens for the Environment, P.O. Box 1513, Grand Forks, North Dakota 58306 or call (701) 746-4573. We'll send you the facts about global warming.



Who told you the earth was warming... Chicken Little?



Chicken Little's hysteria about the sky falling was based on a fact that got blown out of proportion. It's the same with global warming. There's no hard evidence it is occurring. In fact, evidence the Earth is warming is weak. Proof that carbon dioxide has been the primary cause is non-existent. Climate models cannot accurately predict far-future global change. And the underlying physics of climatic change are still wide open to debate.



363.

The goals of ICE's advertising campaign were to undermine the science, manufacture deception and dupe public opinion regarding the realities of global warming. A memo from Richard Lawson, president of the National Coal Association, asked members to contribute to the ICE campaign with the justification that policymakers are prepared to act on global warming, noting that opinion polls revealed 60% of Americans believed global warming was a serious

1
2 environmental problem and that “our industry cannot sit on the sidelines in this debate.”²⁴⁷ The
3 ICE propaganda strategy is attached as Exhibit 17.

4 364.

5 In December 1992, the Global Climate Coalition’s Executive Director, John Shales, wrote
6 in a letter to *The New York Times*: “...there is considerable debate on whether or not man-made
7 greenhouse gases (produced primarily by burning fossil fuels) are triggering a dangerous ‘global
8 warming’ trend.” The letter in full:

9
10 **To the Editor:**

11 “Cheapest Protection of Nature May Lie In Taxes, Not Laws” (Science
12 Times, Nov. 24) echoes the theme that bad taxes become good taxes
13 (alias “green fees”) when they tax “bad” things. According to the article,
14 these include fossil fuels, traffic and household garbage.

15 While tax policy can affect behavior, misguided tax policy can dampen
16 economic prosperity in attempting to solve problems that might not exist
17 or that could be solved in less onerous ways. The World Resources
18 Institute study you cite asks Americans to pay higher energy prices to
19 prevent catastrophic global warming.

20 But there is considerable debate on whether or not man-made
21 greenhouse gases (produced primarily by burning fossil fuels) are
22 triggering a dangerous “global warming” trend. At an international
23 meeting of climate experts in 1990, an intergovernmental panel on
24 climate change concluded that "it is impossible to prove a cause-and-
25 effect relationship" between man-made emissions and global warming.
26 In the 1992 supplement to that report, the scientists stated, “It is still not

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247 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 (2011), at 136–66, <https://doc.lagout.org/Others/Cambridge.University.Press-How.Well.Do.Facts.Travel.2010.RETAiL.EBook.pdf> (last visited June 19, 2023).

1
2 possible to attribute with high confidence all, or even part of, the
observed global warming to the enhanced greenhouse effect.”

3
4 We know that climate change over the last 100 years is well within the
planet's natural variation (the global climate has never been “stable”). If
5 scientists don't agree that man-made global warming is a problem, does
6 the United States want to pay the costs incurred from an energy tax,
including a diminished competitive position with our trading partners?
7 A major Japanese Government agency has backed away from a carbon
tax because of its impact on industry. You cite a \$5 trillion price tag in
8 the study.

9 The American business community has made significant improvements
10 in energy efficiency and now spends approximately \$100 billion a year
complying with environmental regulations. These improvements have
11 resulted in a substantial reduction in greenhouse gas emissions.

12 A green fee is a carbon tax, and a carbon tax is an energy tax. That
13 translates into higher prices, lost jobs, reduced paychecks and slower
growth.²⁴⁸

14 365.

15 That year, in 1992, the GCC distributed a video entitled *The Greening of Planet Earth*,²⁴⁹
16 to media, policy makers and its competitors, several Middle Eastern oil-producing countries, which
17 claimed that increasing atmospheric carbon dioxide could boost crop yields and solve world
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23 ²⁴⁸ John Schlaes, What Global Warming?, N.Y. TIMES (Dec. 22, 1992),
<https://www.nytimes.com/1992/12/22/opinion/1-what-global-warming-250692.html> (last visited
24 June 20, 2023).

25 ²⁴⁹ A sequel, entitled, *The Greening of Planet Earth Continues*, was released in 1998. The video
26 was narrated by Sherwood Idso. The Greening Earth Society, now defunct, was a public relations
27 organization which denied the effects of climate change and the impacts of increased levels of
carbon dioxide. The Society published the *World Climate Report*, a newsletter edited by Patrick
28 Michaels of the Cato Institute.

1
2 hunger. These claims were inconsistent with climate models by the Fossil Fuel Defendants that
3 predicted global climatic catastrophe.²⁵⁰

4 366.

5 Amidst this propaganda to muddy the waters of climate change facts, the United Nations
6 began preparation for the 1992 Earth Summit in Rio de Janeiro, Brazil. The Summit was a major,
7 newsworthy gathering of 172 world governments, of which 116 sent their heads of state. On May
8 9, 1992, the United Nations Framework Convention on Climate Change (“UNFCCC”) adopted an
9 international environmental treaty providing protocols for future negotiations aimed at
10 “stabiliz[ing] greenhouse gas concentrations in the atmosphere at a level that would prevent
11 dangerous anthropogenic interference with the climate system.” The treaty was opened for
12 signature at the Earth Summit in Rio de Janeiro on June 14, 1992.

14 367.

15 Candace Crandall of Science & Environmental Policy Project (“SEPP”) registered at the
16 IPCC’s Rio Earth Summit as a “publicist” for the “science team” while the GCC ran an industry-
17 wide collaborative delay and disinformation program to try to block decisions being taken at the
18 Summit. These actions were coordinated by public relations giant Burson-Marsteller. The main
19 anti-IPPC operation in Rio at the 1992 Earth Summit was run by the Global Climate Coalition.²⁵¹

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24 ²⁵⁰ Amy Lieberman and Susanne Rust, Big Oil braced for global warming while it fought
25 regulations, L. A. TIMES (Dec. 31, 2015), <https://graphics.latimes.com/oil-operations/> (last visited
26 June 19, 2023).

27 ²⁵¹ The Center for Media and Democracy, Candace C. Crandall, CENTER FOR MEDIA AND
28 DEMOCRACY (CMD) https://www.sourcewatch.org/index.php/Candace_C._Crandall (last visited
June 19, 2023).

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2 368.

3 These world events marked a shift in public discussion of climate change, and the initiation
4 of international efforts to curb anthropogenic greenhouse emissions—developments that had stark
5 implications for, and would have diminished the profitability of, Defendants’ fossil fuel products.

6 369.

7 The GCC’s indoctrination, which focused on concealing, discrediting, and/or
8 misrepresenting information that tended to support restricting consumption of (and thereby
9 decreasing demand for) Defendants’ fossil fuel products, enabled Defendants to accelerate their
10 business practice of exploiting fossil fuel reserves, and concurrently externalize the social and
11 environmental costs of their fossil fuel products.
12

13 370.

14 These activities stood in direct contradiction to the Fossil Fuel Defendants’ prior
15 recognition that the science of anthropogenic climate change was clear and that the greatest
16 uncertainties involved responsive human behavior, not scientific understanding of the issue.
17

18 371.

19 A 1994 Shell report titled “The Enhanced Greenhouse Effect: A Review of the Scientific
20 Aspects”, attached as Exhibit 18, warned of the potentially dramatic economic effects of “ill-
21 advised policy measures” relating to climate change. While this 1994 report recognized the IPCC
22 conclusions as the mainstream view, the author emphasized scientific uncertainty and that the
23 “evolution of energy systems indicates that policies to curb greenhouse gas emissions beyond ‘no
24 regrets’ measures could be premature, divert resources from more pressing needs and further
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1
2 distort markets.”²⁵²

3 372.

4 When the GCC became a standalone organization in 1995, independent from the National
5 Association of Manufacturers, the membership grew, adding at least eight new utilities and seven
6 new oil and coal corporations as members. At the same time, the budget tripled, with tax documents
7 showing three million dollars in corporate and trade association dues in tax years 1996 and 1997,
8 compared to one million dollars in dues from the years 1994 and 1995.²⁵³

9
10 373.

11 In 1995, GCC assembled an advisory committee of scientific and technical experts to
12 compile an internal, 17-page report on climate science entitled *Predicting Future Climate Change:
13 A Primer*, attached as Exhibit 19, which stated: “The scientific basis for the Greenhouse Effect and
14 the potential impact of human emissions of greenhouse gases such as CO₂ on climate is well
15 established and cannot be denied.”

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17 374.

18 But that is not the message Defendants and their co-conspirators promoted to consumers,
19 investors, or the public. Even though these GCC members knew that their products caused
20 catastrophic effects, including extreme changes in heat, GCC disseminated climate denial claims
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24 ²⁵² P. Langcake, *The Enhanced Greenhouse Effect: A review of the Scientific Aspects*, ROYAL
25 DUTCH SHELL (Dec. 1994), <https://www.climatefiles.com/shell/1994-shell-enhanced-greenhouse-effect-review-scientific-aspects/> (last visited June 19, 2023).

26 ²⁵³ Climate Investigations Center, *Global Climate Coalition Documents: Big Business Funds
27 Climate Change Denial and Regulatory Delay*, CLIMATE INVESTIGATIONS CENTER,
<https://climateinvestigations.org/global-climate-coalition-documents/> (last visited June 19, 2023).

1
2 that relied largely on the *World Climate Review* and its successor, the *World Climate Report*, which
3 was edited by Patrick Michaels, funded by the Western Fuels Association²⁵⁴ and promoted by
4 the Greening Earth Society, purportedly debunking the catastrophic effects of their products on
5 our atmosphere.

6 375.

7
8 The Greening Earth Society (“GEC”) was a public relations organization which promoted
9 a thesis that there was considerable scientific doubt about the effects of climate change and
10 increased atmospheric accumulation of carbon dioxide. The Western Fuels Association created the
11 GEC and shared office space with it. The GEC promoted the views of climate skeptics such as
12 Patrick Michaels, Fred Singer, and Richard Lindzen.²⁵⁵ In 1996, the GEC published a report
13 titled “Changing Weather? Facts and Fallacies about Climate Change”, attached as Exhibit 20. The
14 GEC publicly opposed IPCC’s scientific consensus to further the business objectives of its fossil
15 fuel benefactors rather than for intellectually honest or science-based reasons.
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22 ²⁵⁴ Wendy E. Franz, Science, skeptics, and non-state actors in the greenhouse, BELFER CENTER FOR
23 SCIENCE AND INTERNATIONAL AFFAIRS (Sept. 1998),
[https://www.belfercenter.org/sites/default/files/legacy/files/Science%20Skeptics%20and%20Non-
24 -State%20Actors%20in%20the%20Greenhouse%20-%20E-98-18.pdf](https://www.belfercenter.org/sites/default/files/legacy/files/Science%20Skeptics%20and%20Non-State%20Actors%20in%20the%20Greenhouse%20-%20E-98-18.pdf) (last visited June 19, 2023).

25 ²⁵⁵ David Levy and Sandra Rothenberg, Corporate Strategy and Climate Change: Heterogeneity
26 and Change in the Global Automobile Industry, BELFER CENTER FOR SCIENCE AND
27 INTERNATIONAL AFFAIRS (Sept. 30, 1999),
[https://www.belfercenter.org/publication/corporate-strategy-and-climate-change-heterogeneity-
28 and-change-global-automobile](https://www.belfercenter.org/publication/corporate-strategy-and-climate-change-heterogeneity-and-change-global-automobile) (last visited June 19, 2023).

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2 376.

3 In July 1996, at a Washington, D.C. press conference on the eve of the second United
4 Nations Climate Change conference in Geneva, GEC's executive director said, "The time for
5 decision is not yet now."²⁵⁶

6 377.

7 In 1996, Exxon released a publication, attached as Exhibit 21, titled "Global Warming:
8 Who's Right? Facts about a debate that's turned up more questions than answers." Exxon CEO
9 Lee Raymond stated that "taking drastic action immediately is unnecessary since many scientists
10 agree there's ample time to better understand the climate system."

11 378.

12 In the publication, another article described the greenhouse effect as "unquestionably real
13 and definitely a **good thing**," while ignoring the severe consequences that would result from the
14 influence of the increased CO₂ concentration on Earth's climate. Exxon downplayed the
15 greenhouse effect as simply "what makes the earth's atmosphere livable."

16 379.

17 In this 1996 publication, Exxon contradicted its own internal reports and peer reviewed
18 science, attributing the rise in temperature since the late 19th century to "natural fluctuations that
19 occur over long periods of time" rather than to the anthropogenic emissions that Exxon and other
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25 ²⁵⁶ John H Cushman Jr., Report says global warming poses threat to public health. N. Y. TIMES,
26 (Jul. 8, 1996) [https://www.nytimes.com/1996/07/08/world/report-says-global-warming-poses-](https://www.nytimes.com/1996/07/08/world/report-says-global-warming-poses-threat-to-public-health.html)
27 [threat-to-public-health.html](https://www.nytimes.com/1996/07/08/world/report-says-global-warming-poses-threat-to-public-health.html) (last visited June 20, 2023).

1
2 scientists had confirmed were responsible. The article also falsely and cynically challenged the
3 accuracy of computer models that projected the future impacts of unabated fossil fuel product
4 consumption, including those developed by Exxon’s own employees for the company’s use.

5 380.

6 Exxon’s article contradicted the numerous reports circulated among Exxon’s staff, and by
7 the API, by stating that “the indications are that a warmer world would be far more benign than
8 many imagine . . . moderate warming would reduce mortality rates in the US, so a slightly warmer
9 climate would be more healthful.” Raymond concluded his preface by attacking advocates for
10 limiting the use of his company’s fossil fuel products as “drawing on bad science, faulty logic, or
11 unrealistic assumptions”—despite the important role that Exxon’s own scientists had played in
12 compiling those same scientific underpinnings.²⁵⁷

14 381.

15
16 Joining with Exxon, API published a report in the 1996 titled “Reinventing Energy: Making
17 the Right Choices”, attached as Exhibit 22, warning against concern over CO₂ buildup and any
18 need to curb consumption or regulate the industry. The same API that less than 20 years earlier had
19 concluded that global warming from fossil fuel emissions could cause “globally catastrophic”
20 effects now wrote that “there is no persuasive basis for forcing Americans to dramatically change
21 their lifestyles to use less oil.” The authors discouraged the further development of certain
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25 ²⁵⁷ Exxon Corp., Global warming: who’s right? (1996), EXXON CORP,
26 <https://www.climatefiles.com/exxonmobil/global-warming-who-is-right-1996/> (last visited June
27 20, 2023).

1
2 alternative energy sources, writing that “government agencies have advocated the increased use of
3 ethanol and the electric car, without the facts to support the assertion that either is superior to
4 existing fuels and technologies” and that “policies that mandate replacing oil with specific
5 alternative fuel technologies freeze progress at the current level of technology, and reduce the
6 chance that innovation will develop better solutions.” The report denies the human connection to
7 climate change, saying that no “scientific evidence exists that human activities are significantly
8 affecting sea levels, rainfall, surface temperatures or the intensity and frequency of storms,”
9 concluding that “facts don’t support the arguments for restraining oil use.”²⁵⁸
10

11 382.

12 Every Thursday from 1985 to 2000, Mobil bought a full-page in the *New York Times* and
13 used its ad space to publish what appeared to be scientific articles.²⁵⁹ At the same time, in 1996,
14 Exxon, while publicly denying the threat of global warming, designed its drilling rigs off the Nova
15 Scotia coast to account for a 0.5-meter anthropogenic rise in sea levels that climate models
16 predicted would likely occur during the expected 25-year lifespan of the structures.²⁶⁰
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22 ²⁵⁸ American Petroleum Institute, *Reinventing Energy*, AMERICAN PETROLEUM INSTITUTE (1996)
23 [https://www.climatefiles.com/trade-group/american-petroleum-institute/1996-reinventing-
energy/](https://www.climatefiles.com/trade-group/american-petroleum-institute/1996-reinventing-energy/) (last visited June 20, 2023).

24 ²⁵⁹ Connor Gibson, *How Exxon Used the New York Times to Make You Question Climate Science*,
25 *ECOWATCH* (Sept. 2, 2017) <https://www.ecowatch.com/exxon-new-york-times-2479595376.html>
(last visited June 20, 2023).

26 ²⁶⁰ Amy Lieberman and Susanne Rust, *Big Oil braced for global warming while it fought*
27 *regulations*, *L. A. TIMES* (Dec. 31, 2015), <https://graphics.latimes.com/oil-operations/> (last visited
28 June 20, 2023).

1
2 384.

3 In 1997, Mobil paid for an ad/article published in the *New York Times* proclaiming:

4 Let's face it: The science of climate change is too uncertain to mandate
5 a plan of action that could plunge economies into turmoil...We still
6 don't know what role man-made greenhouse gases might play in
7 warming the planet.²⁶²

8 385.

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

14 Some people who argue that we should drastically curtail our use of
15 fossil fuels for environmental reasons...my belief [is] that such
16 proposals are neither prudent nor practical. With no readily available
17 economic alternatives on the horizon, fossil fuels will continue to supply
18 most of the worlds and this region's energy for the foreseeable future...
19 Governments also need to provide a stable investment climate...They
20 should avoid the temptation to intervene in energy markets in ways that
21 give advantage to one competitor over another or one fuel over another.
22 We also have to keep in mind that most of the greenhouse effects comes
23 from natural sources....Leaping to radically cut this tiny sliver of the
24 greenhouse pie on the premise that it will affect climate defies common
25 sense and lacks foundation in our current understanding of the climate
26 system. Let's agree there's a lot we really don't know about how climate

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28 ²⁶² Dino Grandoni, ExxonMobil asked people to 'read the documents' it produced on climate
change. So, these Harvard researchers did. THE WASHINGTON POST (Aug. 24, 2017)
<https://www.washingtonpost.com/news/powerpost/wp/2017/08/24/exxonmobil-asked-people-to-read-the-documents-it-produced-on-climate-change-so-these-harvard-researchers-did> (last
visited June 20, 2023).

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2 will change in the 21st century and beyond....It is highly unlikely that
3 the temperature in the middle of the next century will be significantly
4 affected whether policies are enacted now or 20 years from now. It's bad
5 public policy to impose very costly regulations and restrictions when
6 their need has yet to be proven.²⁶³

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12 386.

13 In 1997, the GCC launched an advertising campaign in the US against
14 any agreement aimed at reducing greenhouse gas emissions internationally. This was run through
15 an organization called the Global Climate Information Project ("GCIP"), which was sponsored by
16 the GCC and the American Association of Automobile Manufacturers, among others. The GCIP
17 was represented by Shandwick Public Affairs, the second-largest PR firm in the United States.²⁶⁴

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28 387.

The GCIP's ads were produced by Goddard Claussen/First Tuesday, a California-based PR
firm, which falsely claimed "It's Not Global and It Won't Work." Among other things, the ads
indicated that "Americans will pay the price ... 50¢ more for every gallon of gasoline," even though
there was no proposal for such a tax. There was no treaty at that point, and no government

²⁶³ Lee R. Raymond, Energy – Key to growth and a better environment for Asia-Pacific nations, WORLD PETROLEUM CONGRESS (Oct. 13, 1997), <https://www.climatefiles.com/exxonmobil/1997-exxon-lee-raymond-speech-at-world-petroleum-congress/> (last visited June 20, 2023).

²⁶⁴ Shandwick Public Affairs is a division of Weber Shandwick Worldwide (WSW) was, in 2004, the world's largest public relations company. A subsidiary of the Interpublic Group, it was formed as the product of the mergers of Weber Public Relations and Shandwick Worldwide in late 2000. In 2001, Weber Shandwick merged with BSMG to become the largest PR operation in the world. Other Shandwick clients include Browning-Ferris Industries, Central Maine Power, Georgia-Pacific Corp., Monsanto Chemical Co., New York State Electric and Gas Co., Ciba-Geigy, Ford Motor Company, Hydro-Quebec, Pfizer, and Procter & Gamble. SourceWatch, Weber Shandwick, THE CENTER FOR MEDIA AND DEMOCRACY, https://www.sourcewatch.org/index.php/Weber_Shandwick (last visited June 20, 2023).

1
2 proposals, then or now, that have suggested a “50 cent gallon gas tax.” The ads are attached hereto
3 as Exhibit 23.

4 388.

5 In August 1997, a few months before the Kyoto Conference on Climate Change, the GCC
6 helped launch a massive advertising campaign designed to prevent the United States from
7 endorsing any meaningful agreement to reduce global carbon emissions. This group, including in
8 its ranks these Defendants, some of the world’s most powerful corporations and trade associations
9 involved with fossil fuels, concentrated its efforts on a series of television ads that attempted to
10 confuse and frighten Americans.

12 389.

13 In the 1990s, Defendant Koch began funding Climate Denial Groups including those
14 named herein. By estimates, Koch spent \$145,556,729 from 1997 to 2018 on directed campaigns
15 to spread doubt and continue to amass profits.²⁶⁵

17 390.

18 Mobil’s 1997 advertorial below²⁶⁶ argued that economic analysis of emissions restrictions
19 was faulty and inconclusive and therefore a justification for delaying action on climate change.

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24 ²⁶⁵ Greenpeace, Koch Industries: Secretly Funding the Climate Denial Machine,
<https://www.greenpeace.org/usa/fighting-climate-chaos/climate-deniers/koch-industries/> (last
25 visited on June 19, 2023).

26 ²⁶⁶ Mobil, When Facts Don’t Square with the Theory, Throw Out the Facts, N.Y. TIMES, (Aug. 14,
27 1997) at A31, <https://www.documentcloud.org/documents/705550-mob-nyt-1997-aug-14-whenfactsdonsquare.html>? (last visited June 19, 2023).

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



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

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

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

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

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

The second study, conducted by Argonne National Laboratory under a contract with the Energy Department, examined what would

happen if the U.S. had to commit to higher energy prices under the emission reduction plans that several nations had advanced last year. Such increases, the report concluded, would result in "significant reductions in output and employment" in six industries—aluminum, cement, chemical, paper and pulp, petroleum refining and steel.

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

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

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

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

Mobil The energy
to make a difference.

<http://www.mobil.com>

©1997 Mobil Corporation

An example of one of Mobil's advertisements in the *New York Times*, published on November 7, 1997, is reproduced below:

Display Ad 26 -- No Title
 New York Times (1923-Current file); Nov 6, 1997;
 ProQuest Historical Newspapers: The New York Times (1851-2008) with Index (1851-1993)
 pg. A31

Science: what we know and don't know



As the debate over climate change heats up, science is being upstaged by the call for solutions. At stake is a complex issue with many questions. Some things we know for certain. Others are far from certain.

First, we know greenhouse gases account for less than one percent of Earth's atmosphere. The ability of these gases to trap heat and warm Earth is an important part of the climate system because it makes our planet habitable. Greenhouse gases consist largely of water vapor, with smaller amounts of carbon dioxide (CO₂), methane and nitrous oxide and traces of chlorofluorocarbons (CFCs).

The focus of concern is CO₂. While most of the CO₂ emitted by far is the result of natural phenomena—namely respiration and decomposition, most attention has centered on the three to four percent related to human activities—burning of fossil fuels, deforestation. The amount of carbon dioxide in the atmosphere has risen in the last 100 years, leading scientists to conclude that the increase is a result of man-made activities.

Although the linkage between the greenhouse gases and global warming is one factor, other variables could be much more important in the climate system than emissions produced by man.

The UN-sponsored Intergovernmental Panel on Climate Change (IPCC) thought it had found the magic bullet when it concluded that the one-degree Fahrenheit rise in global temperatures over

the past century may bear a "fingerprint" of human activity. The fingerprint soon blurred when an IPCC lead author conceded to the "uncertainty inherent in computer climate modeling."

Nonetheless, nations at Kyoto are being asked to embrace proposals that could have potentially huge impacts on economies and lifestyles. Nations are being urged to cut emissions without knowing either the severity of the problem—that is, will Earth's temperature increase over the next 50-100 years?—or the efficacy of the solution—will cutting CO₂ emissions reduce the problem?

Within a decade, science is likely to provide more answers on what factors affect global warming, thereby improving our decision-making. We just don't have this information today.

Answers to questions on climate change will require more reliable measurements of temperature at many places on Earth, better understanding of clouds and ocean currents along with greater computer power.

This process shouldn't be short-circuited to satisfy an artificial deadline, like the conference in Kyoto. Whatever effect increased concentrations of man-made gases may have, it will develop slowly over decades. Thus, there is time for scientists to refine their understanding of the climate system, while governments, industry and the public work to find practical means to control greenhouse gases, if such measures are called for. Adopting quick-fix measures at this point could pose grave economic risks for the world.

Carbon Dioxide Emissions



Category	Percentage
Human Activities	3%-4%
Natural Phenomena	96%-97%



Mobil The energy to make a difference.

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

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2 392.

3 The GCC had an active subcommittee named the “Global Climate Coalition Science and
4 Technology Assessment Committee” (STAC). In 1996, members of this subcommittee on science
5 and technology were represented by Ford, Exxon, API, the NMA, BHP, and many others.

6 393.

7 At STAC’s June 20, 1996 meeting, which was held at the API headquarters, notes were
8 prepared and distributed by the Association of International Automobile Manufacturers (AIAM),
9 released talking points from Bronson Gardner to Jim Pinto and distributed to the STAC committee
10 for addressing whether 1995 was “really that much hotter than normal or whether the data was
11 ‘blown out of proportion’” giving STAC and the GCC talking points for downplaying record
12 setting temperatures.²⁶⁷

14 394.

15 In 1997 alone, the GCC spent \$13 million opposing the Kyoto Protocol.²⁶⁸

16
17 **1. The GCSCT Action Plan--Double Down on Deception**

18 395.

19 Members of the GCC created a task force which met at a “workshop” held at the API
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24 ²⁶⁷ Howard J. Feldman, 1996 GCC STAC June Meeting Minutes, GLOBAL CLIMATE CHANGE
25 COALITION (Jun. 20, 1996), <https://www.documentcloud.org/documents/5689156-AIAM-051229.html> (last visited June 20, 2023).

26 ²⁶⁸ Maggie Farley, Showdown at Global Warming Summit, L. A. TIMES (Dec. 7, 1997),
27 <https://www.latimes.com/archives/la-xpm-1997-dec-07-mn-61743-story.html> (last visited June
28 20, 2023).

1
2 headquarters in late March of 1998.²⁶⁹ A memorandum titled the “Global Climate Science
3 Communication Team Action Plan” (“GCSCT” Action Plan) and written by API’s Joe Walker
4 memorializing the workshop’s goals, strategies and tactics was emailed to the GCSCT team
5 members on April 3, 1998, and is attached hereto as Exhibit 24.

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7 396.

8 The email from Joe Walker with the GCSCT Action Plan which detailed a scheme on how
9 the GCC would achieve “Victory” by duping consumers through front groups, promoters, and
10 media strategists:

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26 ²⁶⁹ The e-mail is undated but refers to a workshop that occurred the Friday before. As the
27 attachment is dated April 3, 1998.

1
2
3 **Joe Walker**

4 **To: Global Climate Science Team**
5 **Cc: Michelle Fross; Susan Moya**
6 **Subject: Draft Global Climate Science Communications Plan**

7
8 *As promised, attached is the draft Global Climate Science Communications Plan that we developed during our workshop last Friday. Thanks especially to those of you who participated in the workshop, and in particular to John Adams for his very helpful thoughts following up our meeting, and Alan Caudill for turning around the notes from our workshop so quickly.*

9
10 *Please review the plan and get back to me with your comments as soon as possible.*

11 *As those of you who were at the workshop know, we have scheduled a follow-up team meeting to review the plan in person on Friday, April 17, from 1 to 3 p.m. at the API headquarters. After that, we hope to have a "plan champion" help us move it forward to potential funding sources, perhaps starting with the global climate "Coordinating Council." That will be an item for discussion on April 17.*

14 *Again, thanks for your hard work on this project. Please e-mail, call or fax me with your comments. Thanks.*

15 **Regards,**
16 **Joe Walker**

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19 397.

20 The cover page of the GCSCT Action Plan, setting forth its goals, current reality, and when
21 "victory" would be achieved, is infamously known as the "Victory Memo:"

Global Climate Science Communications

Action Plan

Project Goal

A majority of the American public, including industry leadership, recognizes that significant uncertainties exist in climate science, and therefore raises questions among those (e.g. Congress) who chart the future U.S. course on global climate change.

Progress will be measured toward the goal. A measurement of the public's perspective on climate science will be taken before the plan is launched, and the same measurement will be taken at one or more as-yet-to-be-determined intervals as the plan is implemented.

Victory Will Be Achieved When

- Average citizens "understand" (recognize) uncertainties in climate science; recognition of uncertainties becomes part of the "conventional wisdom"
- Media "understands" (recognizes) uncertainties in climate science.
- Media coverage reflects balance on climate science and recognition of the validity of viewpoints that challenge the current "conventional wisdom"
- Industry senior leadership understands uncertainties in climate science, making them stronger ambassadors to those who shape climate policy
- Those promoting the Kyoto treaty on the basis of extant science appear to be out of touch with reality.

Current Reality

Unless "climate change" becomes a non-issue, meaning that the Kyoto proposal is defeated and there are no further initiatives to thwart the threat of climate change, there may be no moment when we can declare victory for our efforts. It will be necessary to establish measurements for the science effort to track progress toward achieving the goal and strategic success.

398.

The GCSCT Action Plan named the following members, a who's who of fossil fuel industry insiders and advocates, as having contributed to the Plan's development: John Adams, John Adams

1
2 Associates; Candace Crandall, Science and Environmental Policy Project;²⁷⁰ David Rothbard,
3 Committee for A Constructive Tomorrow; Jeffrey Salmon, The Marshall Institute;²⁷¹ Lee Garrigan,
4 Environmental Issues Council;²⁷² Lynn Bouchey and Myron Ebell, Frontiers of Freedom;²⁷³ Peter
5 Cleary, Americans for Tax Reform;²⁷⁴ Randy Randol, Exxon Corp.; Robert Gehri, The Southern
6
7

8
9
10 ²⁷⁰ Candace Crandall was the wife of S. Fred Singer and registered for the Rio conference as a
11 “publicist” for a science team at the Rio Conference where GCC participated in 1992.

12 ²⁷¹ Also known as “The George C. Marshall Institute” (GMI) is a “non-profit” organization funded
13 by the profits from oil and gas interests and co-founded by Frederick Seitz in 1984. It has received
14 substantial funding from Exxon's Exxon Education Foundation. SourceWatch, *George C.*
15 *Marshall Institute*, THE CENTER FOR MEDIA AND DEMOCRACY,
16 https://www.sourcewatch.org/index.php/George_C._Marshall_Institute (last visited June 20, 2023).

17 ²⁷² The Environmental Issues Council (EIC) was established in 1993 by a number of leading U.S.
18 industry trade associations to serve as a “new ally against ill-conceived environmental regulation.”
19 SourceWatch, *Environmental Issues Council*, THE CENTER FOR MEDIA AND DEMOCRACY,
20 https://www.sourcewatch.org/index.php/Environmental_Issues_Council (last visited June 20, 2023).
21 Environmental Issues Council website no longer active. The EIC included membership of the
22 Independent Petroleum Association of America (IPAA) “has represented independent oil and
23 natural gas producers for three-quarters of a century.”

24 United States Environmental Protection Agency (EPA), *Oil and Gas, Resources*, UNITED STATES
25 ENVIRONMENTAL PROTECTION AGENCY (EPA)
26 <https://archive.epa.gov/sectors/web/html/oilandgas.html#:~:text=IPAA%20is%20a%20national%20trade,three%2Dquarters%20of%20a%20century> (last visited June 20, 2023).

27 ²⁷³ According to a 2003 *New York Times* report, Frontiers of Freedom, which has about a \$700,000
28 annual budget, received \$230,000 from Exxon in 2002, up from \$40,000 in 2001, according to
Exxon documents. George Landrith, Frontiers of Freedom’s President told the *New York Times* “They've determined that we are effective at what we do” and that Exxon essentially took
the attitude, “We like to make it possible to do more of that.”

Jennifer Lee, *Exxon Backs Groups That Question Global Warming*, THE NEW YORK TIMES (May
28, 2003), <https://www.nytimes.com/2003/05/28/business/exxon-backs-groups-that-question-global-warming.html>
(last visited June 20, 2023).

²⁷⁴ ATR is a member of the American Legislative Exchange Council (“ALEC”).

Noble Ellington, *National Chairman Of ALEC Responds To Report*, Interview with Terry Gross
in Fresh Air, NPR (Jul. 21, 2011), <https://www.npr.org/2011/07/21/138575665/national-chairman-of-alec-responds-to-report>
(last visited June 20, 2023).

1
2 Company;²⁷⁵ Sharon Kneiss, Chevron Corp.; Steve Milloy, The Advancement of Sound Science
3 Coalition;²⁷⁶ and Joseph Walker, American Petroleum Institute.

4 399.

5 Defendants borrowed propagandist strategies right out of the playbook of prior denialist
6 campaigns. This team mirrored a front group created by the tobacco industry, known as “The
7 Advancement of Sound Science Coalition,” whose purpose was to *mislead consumers* that
8 cigarette smoke was not carcinogenic.

9
10 400.

11 The GCSCCT’s membership included Steve Milloy (a key player on the tobacco industry’s
12 front group) for Exxon. Between 2000 and 2004, Exxon donated \$110,000 to Milloy’s efforts and
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19 ²⁷⁵ Southern Company has been a corporate funder of the American Legislative Exchange Council
20 (ALEC) Clearinghouse on Environmental Advocacy and Research, project of the Environmental
21 Working Group. Information of the American Legislative Exchange Council archived
22 organizational profile by Wayback Machine, (Dec. 2, 2000).

23 ²⁷⁶ The Advancement of Sound Science Coalition (“TASSC”) is a now-defunct, industry-funded
24 PR front group run by the APCO Worldwide public relations firm. It worked to hang the label of
25 "junk science" on environmentalists and health activists. TASSC was created in 1993 as a front
26 for Philip Morris which was attempting to discredit ETS (Environmental Tobacco Smoke) research
27 as a long-term cause of increased cancer and heart problems in the community -- especially among
28 office workers and children living with smoking parents. APCO billed the tobacco company
\$25,000 a month to run the operation. Chevron, Exxon and GM were all funders of TASSC which
promoted climate change denial. Bob Burton and Sheldon Rampton, *Thinking Globally, Acting
Vocally: The International Conspiracy to Overheat the Earth*, PR WATCH (1997)
<https://www.prwatch.org/files/pdfs/prwatch/prwv4n4.pdf> (last visited June 20, 2023).

1
2 another organization, the Free Enterprise Education Institute, and \$50,000 to the Free Enterprise
3 Action Institute, both registered to Milloy's home address.²⁷⁷

4 401.

5 The GCSCT Action Plan set out its goals: sow confusion for consumers, make global
6 warming into a "non-issue," defeat the Kyoto Protocol, and ensure "there are no further initiatives
7 to thwart the threat of climate change."²⁷⁸

8
9 **2. Climate Science Messaging without Scientists or Science**

10 402.

11 There were no **scientists** on the "Global Climate **Science** Communications Team."
12 (GCSCT). The GCSCT Action Plan's purpose was clear---keep consumers buying their products
13 and further industry objectives by directing the future of US global climate change policy.

14 403.

15 The GCSCT Action Plan allocated an initial budget of \$7.9 million, most of which would
16 fund efforts to inject fake science and bold-faced lies into the global climate debate.²⁷⁹ From 1998
17 to 2008, Exxon alone invested more than \$20 million to think tanks that dedicated a large amount
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21
22 ²⁷⁷ Seth Shulman et al. Smoke, Mirrors & Hot Air: How ExxonMobil Uses Big Tobacco's Tactics
23 to Manufacture Uncertainty on Climate Science, UNION OF CONCERNED SCIENTISTS, (Jan. 2007),
24 at 19,

25 https://www.ucsusa.org/sites/default/files/2019-09/exxon_report.pdf (last visited Nov. 15, 2022).

26 ²⁷⁸ Joe Walker, Global Climate Science Communications Action Plan, GLOBAL CLIMATE SCIENCE
27 COMMUNICATIONS TEAM (GCSCT) (Apr. 3, 1998), [https://insideclimatenews.org/wp-
28 content/uploads/2015/12/Global-Climate-Science-Communications-Plan-1998.pdf](https://insideclimatenews.org/wp-content/uploads/2015/12/Global-Climate-Science-Communications-Plan-1998.pdf) (last visited
Nov 15, 2022).

²⁷⁹ Id.

1 of effort to undermining the scientific consensus on climate change in fulfillment of the purpose
2 of the GCSCT Action Plan.²⁸⁰
3

4 404.

5 Naomi Oreskes and Erik M. Conway, authors of *Merchants of Doubt*, similarly note:

6 In 2005...Chris Mooney documented how in just a few years Exxon
7 Mobil had channeled more than \$8 million to forty different
8 organizations that challenged the scientific evidence of global warming.
9 The organizations did not just include probusiness and conservative
10 think tanks, but also “quasi-journalistic outlets like
11 TechCentralStation.com (a website providing ‘news, analysis, research,
12 and commentary’ that received \$95,000 from ExxonMobil in 2003), a
13 *FoxNews.com* columnist, and even religious and civil rights groups”.
14 Mooney also noted how former ExxonMobil chairman and CEO Lee
15 Raymond served as vice-chairman of the board of trustees for the
16 American Enterprise Institute, which received \$960,000 in funding from
17 ExxonMobil, and how in 2002, ExxonMobil explicitly earmarked
18 \$60,000 for “legal activities” by the Competitive Enterprise Institute.

19 Mooney described what happened when scientists released the
20 comprehensive *Arctic Climate Impact Assessment*, which concluded
21 that the Arctic was warming at twice the rate of the rest of the
22 world...The report was blasted in a column by Steve Milloy, now
23 working as a columnist for *FoxNews.com* and serving as an adjunct
24 scholar at the Cato Institute, which received \$75,000 from
25 ExxonMobil....Milloy had received money from ExxonMobil: \$40,000
26 to The Advancement of Sound Science Center and \$50,000 to the Free
27 Enterprise Action Institute—both of which are registered to Milloy’s
28 home address.²⁸¹

23 ²⁸⁰ Global Climate Science Communications Team, Global Climate Science Communications
24 Action Plan, GLOBAL CLIMATE SCIENCE COMMUNICATIONS TEAM,
25 <https://insideclimatenews.org/wp-content/uploads/2015/12/Global-Climate-Science-Communications-Plan-1998.pdf> (last visited June 20, 2023).

26 ²⁸¹ Naomi Oreskes & Erik M. Conway, *Merchants of Doubt: How a Handful of Scientists Obscured
27 the Truth on Issues from Tobacco Smoke to Global Warming*, BLOOMSBURY PRESS (2010), at 246-
28 247.

1
2 405.

3 GCC members, through its GCSCT Action Plan, doubled down on disseminating these
4 contrarian theories, particularly through ghostwriters, front groups and think tanks. It needed to
5 flood the public with false science, media blitzes, advertorials, and doubt. The multi-million-dollar,
6 multi-year proposed budget included public outreach and the dissemination of educational
7 materials to schools to begin to erect a barrier against further efforts to impose Kyoto-like measures
8 in the future.²⁸²

9
10 406.

11 Imperial Oil (now Exxon) CEO Robert Peterson also falsely denied the established
12 connection between Defendants' fossil fuel products and ACC in the Summer 1998 Imperial Oil
13 Review, attached as Exhibit 25, "A Cleaner Canada":

14 [Climate change] has absolutely nothing to do with pollution and air
15 quality. Carbon dioxide is not a pollutant but an essential ingredient of
16 life on this planet.... [T]he question of whether or not the trapping of
17 'greenhouse' gases will result in the planet's getting warmer...has no
18 connection whatsoever with our day-to-day weather. There is absolutely
19 no agreement among climatologists on whether or not the planet is
20 getting warmer, or, if it is, on whether the warming is the result of man-
21 made factors or natural variations in the climate.... I feel very safe in
22 saying that the view that burning fossil fuels will result in global climate
23 change remains an unproved hypothesis.²⁸³

24
25 ²⁸² Global Climate Science Communications Team, *supra*, Footnote 280.

26 ²⁸³ Robert Peterson, A Cleaner Canada, IMPERIAL OIL REVIEW (1998),
27 <https://www.climatefiles.com/exxonmobil/imperial-oil/1998-imperial-oil-article-a-cleaner-canada-by-robert-peterson/> (last viewed June 20, 2023).

1
2 407.

3 In the early 1990s, both API and Exxon funded and promoted the work of Fred Seitz,²⁸⁴
4 Fred Singer, and Singer’s Science and Environmental Policy Project²⁸⁵ (“SEPP”). Singer’s wife,
5 Candace Crandall, the Executive Director at SEPP, registered at the Rio conference as a ‘publicist’
6 for a “science team” in 1992.²⁸⁶ Neither Seitz nor Singer was trained in climate science, but both
7 had previously been hired by industry, including tobacco companies, to create doubt in the public
8 mind—again, where there should have been none.²⁸⁷
9

10 408.

11 The GCSCT Action Plan went into high gear. Taking money from the GCC and its
12 members, Seitz, Singer, and SEPP were used to attack climate science, and specifically the IPCC
13 conclusions and process. In 1998, Seitz helped organize and distribute the “The Global Warming
14 Petition Project” (also known as the “Oregon Petition”). Launched from Oregon, the Oregon
15

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17
18 ²⁸⁴ George C. Marshall Institute, Recent Founders, GEORGE C. MARSHALL INSTITUTE,
19 <http://web.archive.org/web/20000823170917/www.marshall.org/funders.htm> (last visited June
20 20, 2023).

21 ²⁸⁵ Exxon Education Foundation, Corporate Giving Source: Dimensions, EXXONMOBIL (1997);
22 ExxonMobil, Foundation Form 990, DEPARTMENT OF THE TREASURY INTERNAL REVENUE
23 SERVICE (IRS) (2000), [https://www.documentcloud.org/documents/1019871-2000-exxonmobil-foundation-](https://www.documentcloud.org/documents/1019871-2000-exxonmobil-foundation-form-990)
24 [form-990](https://www.documentcloud.org/documents/1019871-2000-exxonmobil-foundation-form-990) (last visited June 20, 2023).

25 ²⁸⁶ The Center for Media and Democracy, Candace C. Crandall, CENTER FOR MEDIA AND
26 DEMOCRACY (CMD) https://www.sourcewatch.org/index.php/Candace_C._Crandall (last visited
27 June 20, 2023).

28 ²⁸⁷ D. Hevesi, Frederick Seitz, 96, Dies; Physicist Who Led Skeptics of Global Warming, THE NEW
YORK TIMES (Mar. 03, 2008),
<https://www.nytimes.com/2008/03/06/us/06seitz.html#:~:text=Frederick%20Seitz%2C%20a%20renowned%20physicist,confirmed%20by%20his%20son%2C%20Joachim> (last visited June 20,
2023).

1
2 Petition was created to misinform and deceive the public about the scientific results and the
3 consensus of climate change, urging the United States government to reject the global
4 warming Kyoto Protocol of 1997 and similar policies.²⁸⁸

5
6 409.

7 The petition, attached as Exhibit 26, was formatted to appear sanctioned by the National
8 Academy of Scientists and sent to thousands of American scientists. Supposedly signed by 17,000
9 “scientists,” the petition claimed to find “no convincing scientific evidence that human release of
10 greenhouse gases is causing or will, in the foreseeable future, cause catastrophic heating of the
11 Earth’s atmosphere and disruption of the Earth’s climate.” The list of signatories was filled not
12 with 17,000 actual scientists, but fictitious names, deceased persons, and celebrities.²⁸⁹

23
24 ²⁸⁸ Sander van der Linden et al., *Inoculating the Public against Misinformation about Climate*
25 *Change*, GLOBAL CHALLENGES (2017),
<https://onlinelibrary.wiley.com/doi/epdf/10.1002/gch2.201600008> (last visited June 20, 2023).

26 ²⁸⁹ Michael E. Mann. *The Hockey Stick and the Climate Wars*. Columbia University Press (2012),
27 at 66.

1
2 411.

3 The petition was organized and circulated by Arthur B. Robinson, president of the Oregon
4 Institute of Science and Medicine (described as “a small independent research group”) in 1998,
5 and again in 2007.²⁹¹

6 412.

7 Frederick Seitz, then chairman of the George C. Marshall Institute, wrote a supporting
8 cover letter, attached as Exhibit 27, signed as “Past President National Academy of Sciences USA,
9 President Emeritus Rockefeller University.”²⁹² The National Academy held a press conference to
10 disclaim the mailing and distance itself from its former president.²⁹³ Between 1998 and 2008, the
11 George C. Marshall Institute received a total of \$715,000 in funding from ExxonMobil alone.²⁹⁴

12 413.

13 The petition also included a 12 page “review article” with information about global
14 warming. The article, attached as Exhibit 28, is titled “Environmental Effects of Increased
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21 ²⁹¹ Devin Henry, Climate change petition pits scientists against each other, THE MINNESOTA DAILY
22 (May 28, 2008), <https://mndaily.com/222080/news/world/climate-change-petition-pits-scientists-against-each-other/> (last visited June 20, 2023).

23 ²⁹² Gary J. Weisel, Skeptics, Naysayers, Anomalies, and Controversies in Eds. Brian C. Black et
24 al., Climate Change: An Encyclopedia of Science and History, ABC-CLIO (2013) at 1241.

25 ²⁹³ Id.

26 ²⁹⁴ Ed Pilkington, Palin fought safeguards for polar bears with studies by climate change sceptics,
27 THE GUARDIAN (Sep. 30, 2018),
28 <https://www.theguardian.com/world/2008/sep/30/uselections2008.sarahpalin1#:~:text=The%20Republican%20Sarah%20Palin%20and,species%2C%20the%20Guardian%20can%20disclose>
(last visited June 20, 2023).

1 Atmospheric Carbon Dioxide” by Arthur B. Robinson, Noah E. Robinson, Sallie
2 Baliunas, and Willie Soon.²⁹⁵

3
4 **3. Fossil Fuel Defendants Attempt To Sanitize Carbon Front Groups**
5 **From Their Image**

6 414.

7 Despite the success that Fossil Fuel Defendants accomplished through their front groups,
8 publicly they attempted to distance themselves from the deception, and that facade was also
9 deceptive.

10 415.

11 John Browne, Chairman of British Petroleum, in a speech at Stanford University on May
12 19, 1997, announced that “the time to consider the policy dimensions of climate change is not
13 when the link between greenhouse gases and climate change is conclusively proven, but when the
14 possibility cannot be discounted and is taken seriously by the society of which we are part. We in
15 BP have reached that point.” BP itself withdrew from the GCC, but stayed as a member of API,
16 which is a member of GCC. Shell also formally withdrew, but its trade groups did not.

17 416.

18 In February 1999, Atlantic Richfield Company, then a division of BP, CEO Michael Bowlin
19 acknowledged in a speech he delivered at an energy industry conference, “We’ve embarked on the
20
21

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23
24
25 ²⁹⁵ W. Soon, S. L. Baliunas, A. B. Robinson & Z. W. Robinson (Oct. 26, 1999). Environmental
26 Effects of Increased Atmospheric Carbon Dioxide, CLIMATE RESEARCH,
27 https://www.researchgate.net/publication/260851815_Environmental_Effects_of_Increased_Atmospheric_Carbon_Dioxide (last visited June 20, 2023).

1 beginning of the Last Days of the Age of Oil.”²⁹⁶ Bowlin discussed the need to convert our carbon-
2 based energy economy into a hydrogen-based energy economy. However, BP maintained
3 membership and private participation with the GCC through its trade association, API.
4

5 417.

6 The companies who publicly left GCC then formed the Pew Center for Environmental
7 Change (“C2ES”) and appointed a “Business Environmental Leadership Council” (“BELC”) in
8 1998 with the following statement: “We accept the views of most scientists that enough is known
9 about the science and environmental impacts of climate change for us to take actions to address its
10 consequences.”²⁹⁷
11

12 418.

13 But they did not. Publicly, the companies left GCC and formed the BELC to address the
14 growing public outrage for blatantly funding climate denial and hid behind their trade associations
15 to continue to profit. This two-faced position would dominate for decades, all to the detriment of
16 Multnomah County, Oregon residents, and consumers.
17

18 419.

19 While the GCC members formed the new Pew Center to appease the public, the companies
20 met privately and formed the “Global Climate Science Communications Team” (GCST), setting
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22

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25 ²⁹⁶ Id.

26 ²⁹⁷ Center for Climate and Energy Solutions, Business Environmental Leadership Council, CENTER
27 FOR CLIMATE AND ENERGY SOLUTIONS, www.c2es.org/our-work/belc/ (last visited June 20, 2023).

1
2 out their marketing battle plan to undermine the science they knew was accurate regarding climate
3 change.

4 420.

5 In 2000, the GCC announced that it was restructuring as an association of trade associations
6 and would henceforth only include trade associations in its membership. The companies, which
7 had abandoned the GCC, as one journalist noted, like “rats leaving a sinking ship,” and adopted
8 scientific consensus on climate change through the Pew Center were still represented by their trade
9 associations in the GCC, which funded climate denial of that scientific consensus.
10

11 421.

12 In 1998, API distributed a roadmap memo after the “Victory” memo, (Exhibit 24), outlining
13 the fossil fuel industry’s plan to use scientists as spokespersons for the industry’s views.
14

15 422.

16 The GCSCT Action Memo outlined five distinct hierarchal levels:

- 17 a) **Global Climate Coalition:** a group of trade associations representing
18 the Defendants and many others.
- 19 b) **Organizers of the GCSCT:** GCC members API (Shell, Chevron, BP,
20 ConocoPhillips, Motiva, and Anadarko), Exxon, with CEI (Koch),
21 CFACT, Lynn Bouchey, Myron Ebell, SEPP, and others.
- 22 c) **Funders:** National Mining Association (Peabody) API (Shell, Chevron,
23 BP, ConocoPhillips, Motiva, Anadarko and others), Business Round
24 Table (all Defendants), Independent Petroleum Association of America
25 and Edison Electric Institute (EEI).
- 26 d) **Allocators:** ALEC (Koch), CEI (Koch), CFACT (Koch), Frontiers of
27 Freedom, and The Marshall Institute.
- 28 e) **Promoters:** Heartland Institute, CFACT (Koch), ALEC (Koch),
Frontiers of Freedom, the (George) Marshall Institute, SEPP, CO₂, CEI

1
2 (Koch), Myron Ebell, Marc Morano, Lord Christopher Monckton,
3 Sherwood Idso, ICE, Fred Singer, Willie Soon, among many others.

4 423.

5 The GCSCT Action Memo stresses how the Defendants individually and collectively have
6 utilized propaganda to combat the perception and reality that pollution from their fossil fuel
7 products is destructive to our planet and those who live on it.

8 424.

9 Defendants have funded and continue to fund dozens of think tanks, front groups, and dark
10 money foundations as the GCC marketers, pushing climate change denial. These include the
11 Competitive Enterprise Institute, the Heartland Institute, Frontiers for Freedom, Committee for a
12 Constructive Tomorrow, and the Heritage Foundation.

13 425.

14 From 1998 to 2014, Exxon alone spent almost **\$31 million** funding numerous organizations
15 to undermine the scientific consensus that Defendants' fossil fuel products were causing climate
16 change.²⁹⁸ Several Defendants have been linked to other groups that undermine the scientific basis
17 linking Defendants' fossil fuel products to climate change, including the Frontiers of Freedom
18 Institute and the George C. Marshall Institute.
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24
25 ²⁹⁸ Union of Concerned Scientists, ExxonMobil Foundation & Corporate Giving to Climate Change
26 Denier & Obstructionist Organizations, UNION OF CONCERNED SCIENTISTS,
27 <https://www.ucsusa.org/sites/default/files/attach/2015/07/ExxonMobil-Climate-Denial-Funding-1998-2014.pdf>
(last visited June 20, 2023).

1
2 **4. Fossil Fuel Defendants Use Advertorials to Sow Public Doubt Through**
3 **Deception**

4 426.

5 Researchers who scoured through advertorials and published internal documents of
6 ExxonMobil concluded that “in essence, these public statements reflect only the ‘doubt’ side of
7 ExxonMobil’s mixed internal dialogue.”²⁹⁹ Geoffrey Supran and Naomi Oreskes’ “Assessing
8 ExxonMobil’s climate change communications (1977–2014)”, attached as Exhibit 29, concluded
9 that Exxon’s peer-reviewed literature overwhelmingly acknowledges anthropogenic global
10 warming as real, and human caused.

11 427.

12
13 Exxon’s non-peer reviewed documents, including industry targeted speeches, reports, and
14 company pamphlets, contain more references designed to misinform. The predominant stance
15 taken in ExxonMobil’s propaganda, however, according to the researchers is ‘Doubt’. According
16 to the researchers, of the 72% of climate change advertorials by Exxon that took a position, 81%
17 of those take the position of ‘Doubt’, with the remainder split between ‘Acknowledge’ (11.5%)
18 and ‘Acknowledge and Doubt’ (7.5%).

19 428.

20
21 Roughly 80% of Exxon’s external communications designed to hit big audiences—its
22 consumers—emphasized uncertainty, while more than 80% of internal and scientific
23

24
25
26 ²⁹⁹ Geoffrey Supran and Naomi Oreskes, Assessing ExxonMobil’s climate change communications
27 (1977–2014), Environ. Res. Lett., (2017), <https://iopscience.iop.org/article/10.1088/1748-9326/aa815f> (last visited June 20, 2023).

1
2 communications designed to be seen by no one other than internal communications or a very small
3 number of academic audiences agree with the real scientific consensus that fossil fuels caused
4 climate change and that it was very dangerous.

5 429.

6 The Researchers concluded:

7 Available documents show a discrepancy between what ExxonMobil’s
8 scientists and executives discussed about climate change privately and
9 in academic circles and what it presented to the general public. The
10 company’s peer-reviewed, non-peer-reviewed, and internal
11 communications consistently tracked evolving climate science: broadly
12 acknowledging that AGW is real, human-caused, serious, and solvable,
13 while identifying reasonable uncertainties that most climate scientists
14 readily acknowledged at that time. In contrast, ExxonMobil’s
15 advertorials in the NYT overwhelmingly emphasized only the
16 uncertainties, promoting a narrative inconsistent with the views of most
17 climate scientists, including ExxonMobil’s own. This is characteristic
18 of what Freudenberg et al term the **Scientific Certainty
19 Argumentation Method (SCAM)**—a tactic for undermining public
20 understanding of scientific knowledge.³⁰⁰ Likewise, the company’s
21 peer-reviewed, non-peer-reviewed, and internal documents
22 acknowledge the risks of stranded assets, whereas their advertorials do
23 not. In light of these findings, we judge that ExxonMobil’s AGW
24 communications were misleading; we are not in a position to judge
25 whether they violated any laws.³⁰¹

26 ³⁰⁰ William R. Freudenburg, Robert Gramling and Debra J. Davidson, Scientific Certainty
27 Argumentation Methods (SCAMs): Science and the Politics of Doubt, *SOCIOLOGICAL INQUIRY*
28 (2008), <https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1475-682X.2008.00219.x> (last visited
Nov. 15, 2022); Robert N. Proctor and Londa Schiebinger, *Agnology—The Making and
Unmaking of Ignorance*, STANFORD UNIVERSITY PRESS (2008).

³⁰¹ Supran & Oreskes, *supra*, Footnote 299.

1
2 432.

3 Defendants' propaganda has been successful. A 2007 Yale University-Gallup poll found
4 that while 71% of Americans personally believed global warming was happening, only 48%
5 believed that there was a consensus among the scientific community, and 40% believed there was
6 a lot of disagreement among scientists over whether global warming was occurring.³⁰⁴

7
8 433.

9 The purpose of undermining public opinion was mercantile: to continue to sell enormous
10 amounts fossil fuel for astronomical profits products, irrespective of the extreme weather changes
11 those products cause by their use, and the GCC and its members were—and are—successful in
12 fulfilling that objective.

13
14 434.

15 IPCC published its Fourth Assessment Report in 2007, in which it concluded that “there is
16 very high confidence that the net effect of human activities since 1750 has been one of
17 warming.”³⁰⁵ The IPCC defined “very high confidence” as at least a 9 out of 10 chance.³⁰⁶ Despite
18 these findings, and the fact that the Fossil Fuel Defendants understood that causal relationship
19

20
21
22 ³⁰⁴ American Opinions on Global Warming: A Yale/Gallup/Clearvision Poll, YALE PROGRAM ON
23 CLIMATE CHANGE COMMUNICATION (July 31, 2007),
<https://climatecommunication.yale.edu/publications/american-opinions-on-global-warming/> (last
24 visited June 20, 2023).

25 ³⁰⁵ Intergovernmental Panel on Climate Change (IPCC), Summary for Policymakers in Climate A
26 report of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on
Climate Change, CAMBRIDGE UNIVERSITY PRESS (2007), at 3,
<https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg1-spm-1.pdf> (last visited June 18, 2023).

27 ³⁰⁶ Id.

1
2 decades earlier, the Defendants continued to market their products by funding climate change
3 denialism and undermining scientific consensus to keep consumer demand high.

4 435.

5 Exxon acknowledged its own previous success in sowing uncertainty—when there should
6 have been none—and slowing mitigation through funding of climate denial groups. In its 2007
7 Corporate Citizenship Report, Exxon declared: “In 2008, we will discontinue contributions to
8 several public policy research groups whose position on climate change could divert attention from
9 the important discussion on how the world will secure the energy required for economic growth in
10 an environmentally responsible manner.”³⁰⁷ Despite this pronouncement, Exxon continued to
11 support several such groups after the report’s publication.
12

13 **6. Western States Petroleum Association—A Front Group with An**
14 **Oregonian Audience**

15 436.

16 The GCSCT Action Plan mentions developing and utilizing grass root organizations three
17 times (pages 4, 5 and 7) in a PowerPoint presentation leaked in November of 2014 from the
18 Western States Petroleum Association (“WSPA”),³⁰⁸ the top lobbyist for the oil industry in the
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23 ³⁰⁷ ExxonMobil, 2007 Corporate Citizenship Report, EXXONMOBIL (Dec. 31, 2007),
https://grist.org/wp-content/uploads/2009/07/community_ccr_2007.pdf (last visited June 20,
2023).

24 ³⁰⁸ Western States Petroleum Association (WSPA) is a non-profit trade association that represents
25 companies that account for the bulk of petroleum exploration, production, refining, transportation
26 and marketing in the six western states of Arizona, California, Hawaii, Nevada, Oregon, and
27 Washington. Founded in 1907, WSPA is the oldest petroleum trade association in the United States
of America. WSPA's headquarters are located in Sacramento, California. Additional WSPA

1 western United States (including Oregon) and the oldest petroleum trade association in the country.
2
3 The WPSA “activates” and funds front groups that are designed to change public opinion on
4 climate change.³⁰⁹

5 437.

6 The WPSA front groups, with names like the “Oregonians For Sound Fuel Policy” and
7 “Fed Up At The Pump,” appeared to be grassroots groups representing consumer interests, but
8 were really part of WPSA’s multimillion dollar public relations campaign to further the oil
9 industry’s propaganda machine.³¹⁰

11 438.

12 The slide below identifies groups that were “activated” by the WPSA. Many of the names
13 are clearly “greenwashed” to hide the group’s and WPSA’s real purpose of working against climate
14 policy. The actions of some of these groups were conducted in, or directed to, Multnomah County.
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20
21 locations include offices in Torrance; Santa Barbara; Bakersfield; Scottsdale, Arizona; and
22 Olympia, Washington.

23 Western States Petroleum Association, About, WESTERN STATES PETROLEUM ASSOCIATION,
24 <https://www.wspa.org/about/> (last visited June 20, 2023).

25 ³⁰⁹ Bloomberg, Leaked: The Oil Lobby's Conspiracy to Kill Off California's Climate Law.
26 BLOOMBERG (Nov. 25, 2014), <https://www.bloomberg.com/news/articles/2014-11-25/leaked-the-oil-lobbys-conspiracy-to-kill-off-californias-climate-law?leadSource=verify%20wall> (last
27 visited June 20, 2023).

28 ³¹⁰ Matt Connolly, California’s Friendly Neighborhood Citizens Groups Are Really Just Big Oil in
Disguise, MIC (Nov. 26, 2014) <https://www.mic.com/articles/105196/california-s-friendly-neighborhood-citizens-groups-are-really-just-big-oil-in-disguise> (last visited June 20, 2023).

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In 2014, WSPA has activated a significant number of campaigns and coalitions that have contributed to WSPA's advocacy goals and continue to respond to aggressive anti-oil initiatives in the West.

Each campaign was structured to address specific state or local issues and provide an excellent opportunity for the petroleum industry to educate consumers and voters in all of WSPA's five Western states.

WSPA has also invested in several coalitions that are best suited to drive consumer and grassroots messages to regulators and policymakers.



Invest
Engage
Guide



9

439.

This leaked presentation from WSPA revealed a stealth campaign to change public opinion and keep the consumers lulled into purchasing their products.

440.

Most of the publications questioning climate change came not from scientific journals, but from industry-funded think tanks masquerading as scientific. A study by Professors Peter Jacques and Mark Freeman, political scientists at University of Central Florida, found that 92.2% of the

1
2 skepticism literature was published by GCC-funded think tanks or authors affiliated with those
3 think tanks.³¹¹

4 441.

5 Even though Exxon was aware as early as 1979 that fossil fuels affected climate change
6 and that its fossil fuels posed an existential threat to the future, Exxon continued funding front
7 groups, providing over \$2 million in funding from 1998 to 2005.³¹²

8 442.

9
10 The GCSCT also funded Willie Soon, another lead climate skeptic.³¹³ Soon co-authored
11 the article which accompanied the Oregon Petition, *supra* ¶ 410. Most infamously, Soon wrote one
12 of the few denialist articles to be published in a peer-reviewed scientific journal.³¹⁴ But that article
13 quickly turned into a scandal where the editorial staff quit. Despite this, Soon earned a “Courage
14 in Defense of Science Award” from The Heartland Institute.³¹⁵

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18 ³¹¹ James Hoggan & Richard Littlemore, *Climate Cover-Up: The Crusade to Deny Global Warming*, on 81 (2009).

19 ³¹² Seth Shulman et al. *Smoke, Mirrors & Hot Air: How ExxonMobil Uses Big Tobacco’s Tactics to Manufacture Uncertainty on Climate Science*, UNION OF CONCERNED SCIENTISTS, (Jan. 2007),
20 https://www.ucsusa.org/sites/default/files/2019-09/exxon_report.pdf (last visited June 20, 2023).

21 ³¹³ Note-many of the articles authored by Lord Monckton cited by the Heartland Institute are co-
22 authored with Willie Soon.

23 ³¹⁴ Justin Gillis and 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> (last visited June 20, 2023).

24 ³¹⁵ Heartland holds climate conferences and publishes literature that has the “vener of scientific
25 credibility.” John Abrahams, *Fossil fuel funded report denies the expert global warming consensus*, The Guardian (Feb. 22, 2016), <https://www.theguardian.com/environment/climate-consensus-97-per-cent/2016/feb/22/fossil-fuel-funded-report-denies-the-expert-global-warming-consensus> (last visited June 20, 2023); For its International Conference on Climate Change, the
26 Heartland Institute offers to pay \$1,000 to any scientist willing to help generate international media
27

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2 443.

3 From 2005 to 2015, Soon received \$1.2 million from the fossil fuel industry (including
4 Exxon Mobil, the API, and others)³¹⁶

5 444.

6 Soon’s peer reviewed article, published in *Climate Research* in 2003, concluded that “the
7 20th century is probably not the warmest nor a uniquely extreme climatic period of the last
8 millennium.” The paper was immediately debunked in a publication by 13 climate scientists, who
9 pointed out that Soon’s data measured changes in moisture, not changes in temperature, and
10 confused regional changes in temperature with global changes.
11

12 445.

13 Following the 2003 publication, nearly half of *Climate Research*’s editorial board resigned
14 in protest, citing the failure of the journal’s peer review process to catch these glaring errors.
15 Furthermore, the journal’s parent company stated that *Climate Research* “should have been more
16 careful and insisted on solid evidence and cautious formulations before publication.”³¹⁷
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23 attention for the proposition that rapid warming is not supported by sound science. James Hoggan
24 & Richard Littlemore, *Climate Cover-Up: The Crusade to Deny Global Warming*, on 81 (2009).

25 ³¹⁶ Gillis *et al.*, *supra*, Footnote 314.

26 ³¹⁷ Richard Monastersky, *Storm Brews Over Global Warming*. THE CHRONICLE OF HIGHER
27 EDUCATION (Sep. 2003),
<https://www.chronicle.com/article/storm-brews-over-global-warming/> (last visited Nov. 14,
28 2022).

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2 446.

3 It was also subsequently discovered that Soon’s research budget for the article was funded
4 by the API, which Soon did not disclose in his paper.³¹⁸

5 447.

6 Soon has also advanced the claim that polar bears do better in a warmer climate. In 1998,
7 Soon argued that “For polar bears...you do want to watch out for ice. Too much ice is really bad
8 for polar bears...I would suggest that the current [ice] condition today is nowhere optimal for the
9 polar bear, which means it can grow a little bit warmer.”³¹⁹ In reality, global warming melts sea
10 ice, which threatens the polar bears’ survival by reducing their food supplies and forcing them to
11 swim longer distances.
12

13 448.

14 The Heartland Institute promotes Willie Soon on its current website, claiming Soon’s bio
15 and account of his work “debunks lies of the generously funded environmental left’s attacks on an
16 honest climate scientist.”³²⁰
17

18 449.

19 Soon, who is a part-time employee at the Smithsonian Institution, had failed to disclose his
20 oil industry funding in 11 papers since 2008, which violated the disclosure rules of at least 8 of the
21

22
23
24 ³¹⁸ Suzanne Goldenberg, Work of prominent climate change denier was funded by energy industry,
THE GUARDIAN, (Feb. 21, 2015) [https://www.theguardian.com/environment/2015/feb/21/climate-
change-denier-willie-soon-funded-energy-industry](https://www.theguardian.com/environment/2015/feb/21/climate-change-denier-willie-soon-funded-energy-industry) (last visited Nov. 14, 2022).

25 ³¹⁹ Skeptical Science, How will global warming affect polar bears?, SKEPTICAL SCIENCE,
26 <http://bit.ly/1UhCSHn> (last visited Nov. 14, 2022).

27 ³²⁰ As of May 21, 2019.

1
2 journals. Correspondence between Soon and his corporate funders, obtained by the *NY Times*,
3 shows that Soon described his scientific papers as ‘deliverables,’ a project management term
4 denoting services delivered on a specific timeline in exchange for funding.³²¹

5 450.

6 Articles by Soon, and others appear on Heartland Institute’s “Policybot” promoting climate
7 change denial.

8 451.

9
10 Heartland holds climate conferences and publishes literature that has the “vener of
11 scientific credibility.”³²² For its International Conference on Climate Change, the Heartland
12 Institute offers to pay \$1,000 to any scientist willing to help generate international media attention
13 for the proposition that rapid warming is not supported by sound science.³²³

14 452.

15 Heartland also sponsored a “petition-style attack” on the consensus viewpoint that fossil
16 fuels cause global warming.³²⁴ Heartland published a ‘report’ on its website titled, “500 Scientists
17 Whose Research Contradicts Man-Made Global Warming Scares.”³²⁵ The “report” listed all five
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22 ³²¹ Gillis *et al.*, *supra*, Footnote 314.

23 ³²² John Abrahams, Fossil fuel funded report denies the expert global warming consensus, *The*
24 *Guardian* (Feb. 22, 2016), [https://www.theguardian.com/environment/climate-consensus-97-per-](https://www.theguardian.com/environment/climate-consensus-97-percent/2016/feb/22/fossil-fuel-funded-report-denies-the-expert-global-warming-consensus)
25 [cent/2016/feb/22/fossil-fuel-funded-report-denies-the-expert-global-warming-consensus](https://www.theguardian.com/environment/climate-consensus-97-percent/2016/feb/22/fossil-fuel-funded-report-denies-the-expert-global-warming-consensus) (last
26 visited Nov. 14, 2022).

27 ³²³ Hoggan & Littlemore, *supra*, Footnote 311 at 86.

28 ³²⁴ *Id.* at 94.

³²⁵ *Id.*

1
2 hundred scientists as “coauthors”, implying that “each of the five hundred had a hand in [the]
3 report or, at the very least, signed off on its conclusions.”³²⁶

4 453.

5 Immediately after the report’s release, the scientists listed on the report began protesting.
6 “I am horrified to find my name on such a list. I have spent the last 20 years arguing the opposite,”
7 wrote David Sugden, a professor of geography at the University of Edinburgh.³²⁷ “I don’t believe
8 any of my work can be used to support any of the statements listed in the article,” said Robert
9 Whittaker, a professor of biogeography at the University of Oxford.³²⁸ And Gregory Cutter, a
10 professor of ocean and atmospheric sciences at Old Dominion University wrote, “I have NO doubts
11 ... the recent changes in global climate ARE man-induced. I insist that you immediately remove
12 my name from this list”³²⁹

14 454.

15 To support its denialism methods, Heartland received nearly a million dollars from Exxon
16 and \$13.5 million in dark money contributions from Donors Trust, a known front group for oil
17 money.
18

19 455.

20 In a December 2019 expose of Heartland’s dark money funding from Donors Trust to
21 undermine scientific consensus on climate change, Heartland’s chief strategist, James Taylor, told
22

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25 ³²⁶ Id.

26 ³²⁷ Id.

27 ³²⁸ Id.

28 ³²⁹ Id.

1
2 undercover reporters that Donors Trust is now directing between two thirds and three quarters of
3 its budget to Heartland to support its climate-skeptical positions and claims that this is his personal
4 doing.³³⁰

5 456.

6 On March 19, 2020, Heartland announced it was launching a new website, Climate at a
7 Glance” to “prepare you for climate crisis claims” and hired a 19-year-old German woman named
8 Naomi Seibt to serve as the face of a new campaign for what Heartland calls “climate alarmism.”³³¹

9
10 **7. In Pursuit of Profits: The Enterprise Targets School Children**

11 457.

12 The GCSCT recognized that the tide might turn against fossil fuels unless they could reach
13 the next generation and it needed to deceive schoolteachers and students about climate science.

14 458.

15 So, under the guise of “present[ing] a credible, balanced picture of climate science,” they
16 opted to push out materials for teachers and their students that directly countered the scientific
17 evidence. At this point, Children will be the most affected by climate change, having to endure
18 more years of weather extremes and dire effects caused by the Defendants’ deception through these
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23 ³³⁰ Katarina Huth, The Heartland Lobby, CORRECTIVE (Feb. 11, 2020), [https://correctiv.org/en/top-](https://correctiv.org/en/top-stories-en/2020/02/11/the-heartland-lobby/)
24 [stories-en/2020/02/11/the-heartland-lobby/](https://correctiv.org/en/top-stories-en/2020/02/11/the-heartland-lobby/)
(last visited June 20, 2023).
25 ³³¹ Nicholas Kusnetz, Heartland Launches Website of Contrarian Climate Science Amid Struggles
26 with Funding and Controversy, INSIDE CLIMATE NEWS (Mar. 13, 2020),
<https://insideclimatenews.org/news/13032020/heartland-institutute-climate-change-skeptic/> (last
27 visited June 20, 2023).

1
2 front groups.

3 459.

4 Page 7 of the GCSCT Action Plan targeted children, tomorrow's consumers:

- 5
- 6 • Organize under the GCSDC a "Science Education Task Group" that will
7 serve as the point of outreach, to the National Science Teachers
8 Association (NSTA) and other influential science education
9 organizations. Work with NSTA to develop school materials that present
10 a credible, balanced picture of climate science for use in classrooms
11 nationwide.
 - 12 • Distribute educational materials directly to schools and through
13 grassroots organizations of climate science partners (companies,
14 organizations that participate in this effort).

15 460.

16 This insidious directive has been implemented in lockstep. On March 27, 2017, the
17 Heartland Institute mailed a book titled "Why Scientists Disagree about Global Warming: The
18 NIPCC Report on Scientific Consensus", in addition to a DVD and letter to over 200,000 teachers,
19 attached as Exhibit 30.

20 461.

21 The material would be sent to an additional 25,000 teachers every two weeks, until every
22 public-school science teacher in the nation has a copy, Heartland president and CEO Joseph Bast
23 said in an interview to PBS in 2017.³³² Heartland claims on its website, that it reached over 300,000
24 K-12 science teachers.

25 _____
26 ³³² Katie Worth, Climate Change Skeptic Group Seeks to Influence 200,000 Teachers, PBS (Mar.
27 28, 2017), <https://www.pbs.org/wgbh/frontline/article/climate-change-skeptic-group-seeks-to-influence-200000-teachers/> (last visited June 20, 2023).

1
2 462.

3 The campaign elicited immediate derision from the National Center for Science Education
4 (NCSE), a nonprofit in Oakland, California that monitors climate change education in
5 classrooms.³³³ “It’s not science, but it’s dressed up to look like science,” said NCSE executive
6 director Ann Reid. “It’s clearly intended to confuse teachers.”³³⁴

7
8 **8. Oregon and the Heartland Institute**

9 463.

10 The Defendants’ deception campaign was vigorously executed in Oregon and targeted to
11 mislead the Plaintiff and its residents.

12 464.

13 Gordon Fulks is a prolific climate denier and is a policy advisor to the Heartland Institute,
14 which as described above, provides a medium through which Defendants have propagated false
15 and misleading denials and downplays of the causal relationship between carbon pollution and
16 extreme climate change. At the behest of benefactors that included Fossil Fuel Defendants, Fulks
17 has published editorials in the Oregonian that deny the existence of any scientific consensus that
18 carbon pollution causes warming of the planet.³³⁵ He writes, “The many objections from real
19 scientists will be countered with fictitious claims of ‘consensus.’ (Should that, too, be questioned
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21

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24 ³³³ Id.

25 ³³⁴ Id.

26 ³³⁵ Fulks, G. J., Kitzhaber is allowing climate malpractice: Guest opinion, The Oregonian,
27 https://www.oregonlive.com/opinion/2015/01/kitzhaber_is_allowing_climate.html (last visited
28 June 20, 2023).

1 — based on studies that show widely divergent scientific opinions — the political formula calls
2 for stonewalling.) Never mind that science proceeds from openly discussed logic and evidence.
3 The scientifically illiterate will not understand and can be easily fooled with unsupportable claims
4 that each succeeding year is the ‘warmest ever.’”

5
6 465.

7
8 In another piece in the Oregonian, Fulks dismissed scientific support for anthropogenic
9 climate change as a “storm of alarmism” based on faulty science. “The problems with classical
10 greenhouse gas theory escape those who view science as politics (consensus) or as religion
11 (belief),” he wrote.³³⁶

12 466.

13 Thus, in these and other ways, Defendants’ deception was directly targeted at the Plaintiff
14 and its inhabitants. These lies created enough doubt as to whether extreme weather events from
15 anthropogenic climate change could harm those *in the County*, and thereby left the community and
16 its leadership unprepared for extreme heat events that Defendants’ products and deception then
17 caused.
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25 ³³⁶ Fulks, G. J., “The Changing Climate of Climate Change,” The Oregonian, January 19,
26 2013. Archive.ph URL: <https://archive.ph/wip/70ONn> (last visited June 20, 2023).
27

Had the Defendants exercised ordinary care rather than a plan to deceive the Plaintiff and the public while simultaneously causing extreme harm to the Plaintiff and to the planet, they would have taken several steps that they refused to take. These measures include, not exhaustively,

- a) Public and full-throated endorsement of the scientific validity of the existence of anthropogenic climate change and the catastrophic harm it can cause. The Defendants unequivocal, forward-facing acceptance of that information would have altered the debate from *whether* to combat global warming to *how* to combat it; and avoided much of the public confusion that has ensued over the last several decades.
- b) Forthrightly communicating with Defendants' shareholders, consumers, banks, insurers, the public, regulators, and the Plaintiff that the problem to be mitigated is the accumulation of excessive amounts of GHGs in the atmosphere from the use of Defendants' products, rather than "alarmist" concerns about it.
- c) Refraining from affirmative efforts, whether directly, through coalitions, or through front groups, to distort public debate, and to cause many consumers and business and political leaders to think the relevant science was far less certain that it was.
- d) Sharing their internal scientific research with the public, and with other scientists and business leaders, to increase public understanding of the scientific underpinnings of climate change and its relation to Defendants' fossil fuel products.
- e) Supporting and encouraging policies to avoid dangerous climate change and demonstrating responsible corporate leadership in addressing the challenges of transitioning to a low carbon economy.
- f) Prioritizing alternative sources of energy through sustained investment and research on renewable energy sources to replace dependence on Defendants' hazardous fossil fuel products.
- g) Adopting their shareholders' concerns about Defendants' need to protect their businesses from the inevitable consequences of profiting from their fossil fuel products. Over the period of 1990–2015, Defendants' shareholders proposed hundreds of resolutions to change Defendants' policies and business practices regarding climate change. These

1 included increasing renewable energy investment, cutting emissions,
2 and performing carbon risk assessments, among others.

3 468.

4 Instead, the Defendants knowingly created a public nuisance that caused negative public
5 health impacts in the County, and in many regions across the globe, which each Defendant treated
6 as public relations problem to be spun rather than an existential human threat to be solved. In so
7 doing, they caused catastrophic harm to Plaintiff that will continue and grow worse. As the
8 frequency and intensity of extreme heat events and wildfires in Multnomah County will increase,
9 so too will the harms inflicted upon the County.
10

11 **IV. DAMAGES**

12 469.

13 As a sovereign entity, the County is charged with protecting the health, security, and
14 welfare of its residents. It operates as a steward that safeguards the fabric of the community, its
15 ecosystems and way of life, including those for future generations. In its exercise of its police
16 powers, the County is empowered to take actions to prevent the pollution of the County's property
17 and resources, to prevent and abate nuisances, and to prevent and abate hazards to public health,
18 safety, welfare, and the environment.
19

20 470.

21 The Country provides services that are essential to the health, safety, and welfare of its
22 residents, including, not exhaustively: emergency planning, early warning and disaster
23 management; health care, police and fire protection; flood controls; maintenance of bridges, and
24 protection of public outdoor space.
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2 471.

3 Populations, property, and transportation infrastructure within the County have been and
4 will continue to be damaged by Defendants' misconduct. The County has taken steps to prepare,
5 mitigate, repair, and adapt to the hazards facing its residents, public property, and infrastructure,
6 and will and must continue to do so, as ACC continues to increase the frequency and severity of
7 extreme heat events, wildfires, drought, storms, and other hazards threatening the public's physical
8 and mental health.
9

10 472.

11 Because of Defendants' carbon pollution and misconduct, ACC has and will continue to
12 impact the County's ability, without the infusion of substantial resources, to deliver services
13 including health care, social services, climate resiliency and sustainability programs, and disaster
14 relief, especially for its most vulnerable residents.
15

16 **A. *Damage: Substantial Cost Incurred to Respond to Extreme Heat Events***

17 473.

18 The County incurred the following costs in responding to the 2021 heat dome and 2022
19 heatwave:

- 20 a) The County established numerous emergency shelters to provide relief
21 to thousands of heat-stressed residents, including the supply of portable
22 air conditioning units, fans and fresh water, as well as staffing to provide
23 social services and medical care.
24 b) The County responded to hundreds of heat-related illness or urgent care
25 visits, in addition to a drastic increase in heat related hospitalizations
26 over previous years.
27 c) The County Coroner determined that the 2021 heat dome was
28 responsible for 69 heat related deaths in the County, which the coroner

1 ruled were caused by hyperthermia. In 2022, five residents perished
2 from extreme heat.³³⁷

3 **B. Damage: Added Costs to Protect Residents and Property from Wildfires And**
4 **Smoke**

5 474.

6 In September of 2020, the County experienced a spike in medical visits for respiratory
7 issues caused by poor air quality because of ACC-related wildfire smoke. Asthma-related health
8 related visits in Multnomah County increased by nearly one-third in the four weeks during and
9 after wildfires in 2020.

10 475.

11 In 2022, the County responded to thousands of urgent care clinic visits as a result of poor
12 air quality arising from waves of wildfire smoke.

13 476.

14 The number of wildfire smoke related healthcare visits and hospitalizations has continued
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23 ³³⁷ The United States EPA has quantified the value of a human *life* at \$10.05 million for the social
24 cost of a life taken prematurely because of GHG driven climate change. According to that metric,
25 **the societal cost of the combined loss of the 69 lives in 2021 and 5 lives in 2022 because of**
26 **extreme heat is \$743,700,000.** See EPA Draft of Report on the Social Cost of Greenhouse Gases:
27 Estimates Incorporating Recent Scientific Advances (September
28 2022). https://www.epa.gov/system/files/documents/2022-11/epa_scghg_report_draft_0.pdf (last
visited June 20, 2023).

1
2 to increase along with the frequency and severity of wildfires since 2020.

3 477.

4 The County expects increased costs from increased wildfire risk due to climate change.
5 The County’s response, prevention, mitigation and/or recovery costs are increasing and will
6 continue to increase.

7
8
9 **C. Damage: Substantial Costs Incurred For Public Health Emergency Response
and Preparedness**

10 478.

11 The County has invested substantial sums to prepare for severe public health emergencies
12 from extreme heat and wildfires, including protocols for bolstering the County’s Emergency
13 Response Plan and for training and testing health care professionals.

14
15 479.

16 The County has invested substantial sums in developing and strengthening emergency
17 plans that increase preparedness within the county and the region, ensure that critical operations
18 will continue during an emergency, and provide for staff training, workshops and disaster plan
19 management and coordination.

20
21 480.

22 The County has invested substantial sums to coordinate disaster preparedness activities
23 within the county, including training, exercise and equipment procurement, and collaboration with
24 cities, special districts, and non-governmental organizations. During ACC related disasters, the
25 Emergency Management program activates an emergency command center to facilitate the
26 appropriate response using the staff and resources available.
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481.

The County has incurred substantial costs in leasing, staffing, and operating an emergency supply depot designed specifically to store disaster relief materials and vehicles for use in climate related disasters such as heat domes, this was not needed before 2021.

482.

The County has invested substantial sums to fund programs to identify and eliminate environmental hazards that contribute to racial and ethnic disparities.

483.

The County has incurred substantial costs in recruiting and retaining a Climate Resilience Coordinator, whose job is to coordinate policy interventions with other city, county and state agencies relating to climate change risks. The job description includes updating wildfire mitigation zones, weatherization of low-income dwellings, development of best practices for public buildings to mitigate extreme heat and smoke conditions, develop strategies to reduce heat islands and develop partnerships with under-resourced East County cities.

484.

The County has incurred substantial costs in funding initiatives in the East County to support community climate resiliency efforts which investigate needed upgrades in services and physical infrastructure to safely and timely respond to ACC-related disasters. Significant funds have been spent to monitor and assess the services and infrastructure that underserved and marginalized communities need to enhance the community's tolerance for natural disasters.

485.

The County has incurred substantial costs in funding the purchase and installation of 1,000

1
2 portable air conditioners and 10,000 emergency cooling kits, intended for at risk households. The
3 County has created and funded a Cooling Support Program for the purpose of providing air
4 conditioners and other life sustaining materials to low-income residents.

5 486.

6 The County has incurred substantial costs in providing emergency shelters, assistance and
7 street outreach for vulnerable homeless youth, veterans, and families during extreme weather
8 events.

9
10 487.

11 The County has incurred substantial costs to fund, recruit, hire and train an Emergency
12 Analyst to support the County’s shelter and disaster resource center functions. The Emergency
13 Analyst works within the Department of County Human Services and works with County Health
14 Department and focuses on the implementation of the County’s post 2021 heat dome employee
15 incentive program to develop a robust pool of staff and volunteers who will be available to staff
16 and service emergency shelters during and after ACC-related disasters.

17
18 488.

19 The County has incurred substantial costs to fund outreach efforts to reduce the burden on
20 limited emergency response capacity during an extreme emergency by collaborating with local
21 businesses, non-governmental organizations, faith-based groups and volunteer groups, as well as
22 community members, to encourage resilience and create a coordinated disaster response.

23
24 ***D. Damage: Substantial Costs Incurred in Monitoring, Educating and Mitigating
ACC Impacts***

25 489.

26 The County has incurred substantial costs in creating, staffing, supplying, and operating
27

1
2 the Multnomah County Office of Sustainability, which was established in 2010 in response to the
3 escalating climate emergency for the purpose of studying, planning, implementing and
4 coordinating the County’s growing need for modernized social, environmental, and economic
5 policies and programs. The mission of the Office of Sustainability is to grow and nourish a county
6 that is equitable, livable, healthy, resilient, and low carbon.

7
8 490.

9 The County has incurred substantial costs in staffing and equipping a program that provides
10 low-income households with energy efficient heat pumps to replace wood burning stoves. Heat
11 pumps provide cooling during heat events and reduce greenhouse gas emissions as well as
12 particulate emissions from the burning of wood. The program continues the Wood Stove
13 Replacement Program which, in the interest of improving air quality and public health, exchanges
14 wood stoves for new energy efficient furnaces or heat pumps.

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16 491.

17 The county has incurred substantial costs and will continue to do so to assess the need for
18 expansion of County services in low-income East County neighborhoods and build satellite county
19 facilities with culturally specific social services that meet the growing needs of East side
20 communities as ACC-driven extreme weather events escalate.

21
22 492.

23 The County has incurred substantial costs and will continue to do so to design, staff, equip
24 and operate Environmental Health Community Programs, the purpose of which is to identify and
25 mitigate ACC-driven environmental health hazards that contribute to racial and ethnic inequities.
26 The program allocates staffing and material resources to lower income communities who are
27

1 disproportionately impacted by ACC. Expenditures include monitoring and assessing ACC health
2 and environmental impacts.

3
4 493.

5 The County has incurred substantial costs in assessing damage to County-owned property
6 and infrastructure for the purpose of “climatizing” air filtration, air conditioning and other systems
7 and components with repairs, replacements, and upgrades to protect the health and safety
8 employees and visitors. The County has incurred substantial costs in modernizing, weatherizing,
9 repairing and upgrading Heating Ventilation Air Conditioning systems to maintain compliance
10 with indoor air quality systems and Oregon Occupational Safety and Health Administration
11 standards.

12
13 494.

14 The County has incurred substantial costs in creating, staffing, equipping, and operating a
15 Climate Justice Program, the goal of which is to collaborate with frontline communities and
16 resiliency experts to develop a new climate action community justice framework that continues
17 and builds upon the results of the 2015 Climate Action Plan.

18
19 ***E. Damage: Substantial Costs Incurred In Preparing for and Responding to***
20 ***Extreme Heat and Wildfire Events***

21 495.

22 In addition to the costs to repair and maintain climate change-damaged County owned
23 property, bridges, public buildings, and in addition to the costs of providing healthcare, shelters,
24 custodial care and autopsies for the climate casualties, the County has incurred additional
25 substantial costs because of the extreme heat events, wildfires and drought described herein, which
26 include:
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- 2 a) Costs of increased electrical power and potable water consumption;
- 3 b) Costs from the loss of productivity from county employees and
- 4 contractors who were unable to work outside because of hazardous
- 5 temperatures and /or air quality;
- 6 c) Costs of training first responders;
- 7 d) Costs associated with employing and dispatching public safety officers,
- 8 911 operators, and first responders;
- 9 e) Costs for providing mental-health services, treatment, counseling, and
- 10 rehabilitation services;
- 11 f) Loss of tax revenue;
- 12 g) Loss of tourism revenue;
- 13 h) Losses from diminished property values;
- 14 i) Losses from damaged or destroyed natural resources, including trees,
- 15 wildlife, and marine life, crops, and vegetation;
- 16 j) Losses from increased heat-related mental illness, increased violence,
- 17 increased property crimes and increased utilization of county health
- 18 services and the criminal justice system;
- 19 k) Costs of increased property, casualty and disaster risk insurance costs;
- 20 l) Costs of implementing nature-based climate solutions, e.g.,
- 21 reforestation and drought tolerant, native plant landscaping;
- 22 m) Loss of enjoyment and use of a habitable climate;
- 23 n) Costs of treating people with ACC-related ground level ozone
- 24 impairment and harmful exposure to allergens, salmonella and other
- 25 infectious pathogens;
- 26 o) The increased costs of maintaining the County's infrastructure, such as
- 27 its bridges over the Willamette River the lifelines between the west and
- 28 east sides of the city and County;
- p) The costs of population displacement and migration of climate refugees
- from southern states or nations.

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496.

The actual damages incurred by the County, because of Defendant’s misconduct which substantially contributed to and caused the extreme heat, wildfire and other disasters described herein exceed \$50,000,000.

F. The County will Incur Substantial Costs to Prepare for, Prevent, Mitigate, and Abate the Climate Change Nuisance

497.

The costs of studying, consulting with experts, preparing for, mitigating, adapting to, and abating the ongoing nuisance caused by Defendants will be enormous. The programs and adaptation measures that County has undertaken, as described herein, are only the beginning of an adequate response to dealing with increased risks from ACC. These costs are occurring now and being borne by taxpayers to protect the safety, health, and lives of residents, and the County’s property and infrastructure. The costs will continue to grow for decades to come as the climate calamity worsens without drastic reductions in GHG emissions.

498.

The costs will include, not exhaustively:

- a) The costs to monitor and assess climate change impacts and devise remedial actions;
- b) The costs to prepare for, adapt to and abate the health impacts on the County for the increased frequency and duration of extreme heat events, wildfires and wildfire-generated smoke, droughts, storms and other disasters caused by Defendants’ misconduct;
- c) The costs to protect, upgrade, weatherize and fortify transportation systems and structures, levees, roads, utility networks, sewage and potable water systems, school buildings, railways, and bridges;

- 1
- 2 d) The costs of creating wildfire defensive spaces and home hardening to
- 3 reduce the risk of wildfire destruction;
- 4 e) The costs to expand health emergency and clinical care services and
- 5 shelters;
- 6 f) The costs to design, purchase, install and operate air conditioning and
- 7 air filtration systems and weatherize at-risk buildings and residences;
- 8 g) The costs for the county to draw down atmospheric carbon by planting
- 9 more trees and biomass, expanding open spaces, protecting slopes and
- riverbanks from erosion, preserving forests, expanding the tree canopy
- in dense urban areas to mitigate heat islands, and converting to carbon
- neutral energy systems.

10 499.

11 All Defendants acted individually and in concert with other Defendants and propagandists

12 for the purpose of deceiving Plaintiff and its citizens as to how the manufacture, distribution, sale,

13 and use of its fossil fuel products would affect the atmosphere and change the County's weather

14 from mild and predictable to extreme, erratic, destructive, and deadly.

15 500.

16 As a result of each Defendant's misconduct alleged herein, Plaintiff has suffered extreme

17 and destructive heat events, degraded air quality from wildfire, increased medical costs for fire

18 and heat-related services, increased burden on the County infrastructure, drought, loss of

19 agricultural production, loss of snowpack and water resources, causing economic damages

20 exceeding \$50,000,000.

21 501.

22 As a result of each Defendant's misconduct alleged herein, Plaintiff will incur future

23 economic damages from reoccurring extreme and destructive heat events, degraded air quality

24 from wildfire, increased medical costs for fire and heat-related services, increased burden on the

25

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1 County infrastructure, drought, loss of agricultural production, loss of snowpack and water
2 resources, in the amount of no less than \$1.5 Billion.

3
4 **V. FIRST CLAIM FOR RELIEF: INTENTIONAL AND NEGLIGENT CREATION**
5 **OF PUBLIC NUISANCE**

6 502.

7 Plaintiff realleges and reaffirms the allegations set forth in paragraphs 1-501 as if fully
8 restated in this count.

9 503.

10 Defendants' actions were intentional, reckless, deceitful, or negligent as detailed
11 throughout this First Amended Complaint.

12 504.

13 Plaintiffs and its citizens have possessory interests in the lands of Multnomah County.
14 Plaintiff and its citizens have a right to enjoy those lands and the air above same.

15 505.

16 Defendants' intentional and negligent acts in production, promotion, refining, marketing,
17 consulting, and sales of fossil fuel-based consumer products in Multnomah County and elsewhere
18 have caused the losses, death, and destruction of County property, lands, and resources resulting
19 from the extreme weather event known as the 2021 heat dome resulting wildfires, and their
20 aftermath. Defendants created a public nuisance that is unreasonable, harmful, and disruptive to
21 health, safety, the County's fiscal health, and general welfare of Multnomah County.

22 506.

23 Defendants knew or should have known that their deliberate, reckless, and deceitful
24 promotion of fossil fuels that emit GHGs would lead to extreme heat events that cause a public
25

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2 nuisance that is harmful to health, obstructs free use of the County lands and property and will
3 require enormous financial resources to abate.

4 507.

5 Extreme weather events caused by Defendants GHG emissions activity are an unreasonable
6 interference with a public right common to the public, including public health, the right to
7 enjoyment of life and property, and excessive expenditure of taxpayer resources. Extreme heat in
8 a moderate climate causes unreasonable interference with each of these rights common to the
9 public.
10

11 508.

12 The harms and future risks imposed upon Plaintiff and its inhabitants from climate shift
13 and extreme heat events in the County that Defendants caused far outweigh any social utility that
14 Defendants create through their fossil fuel business activities *when coupled* with the Defendants'
15 deception of the damage that is wrought therefrom.
16

17 509.

18 Multnomah County has suffered harm and will continue to suffer harm that is different
19 from the type of harm suffered by the general public, including damage to County resources, and
20 expenditures of treasury funds to protect the health and welfare of its citizens and ecosystem.
21

22 510.

23 Each Defendant's conduct was a cause of the harm to Multnomah County.

24 511.

25 Defendants' conduct was malicious, wanton, and willful.
26
27

1
2 512.

3 Multnomah County seeks abatement of the extreme weather events through a provision of
4 resources necessary to adequately prepare the County and its citizens for a new normal—heat
5 domes, blocking events, periods of high heat and/or wildfire so severe that they kill and sicken
6 inhabitants, destroy property, and weaken--sometimes cripple--critical infrastructure.

7
8 513.

9 Adequate abatement will require, not exhaustively, renovating buildings to withstand
10 extreme heat, fitting cooling units into buildings, providing cooling units in the community,
11 providing additional cooling shelters for heat emergencies, installing air filtration systems,
12 planting of greenspaces to reduce temperature in heat islands, reroofing buildings with materials
13 that better manage heat, repave roads and fortify bridges.

14 **VI. SECOND CLAIM FOR RELIEF: NEGLIGENCE**

15
16 514.

17 Plaintiff realleges and reaffirms each and every allegation set forth in all the preceding
18 paragraphs as if fully restated in this count.

19
20 515.

21 Fossil Fuel and Coal Defendants knew or should have known of effects the GHG emissions
22 from the intended use of their products would have on the atmosphere, including the likelihood of
23 extreme weather events like the 2021 PNW heat dome.

24
25 516.

26 Defendants were negligent in the following respects:
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28

- 1
- 2 a) They continued to extract, process and sell fossil fuel products which
- 3 they knew or should have known would cause injury to Plaintiff and
- 4 others;
- 5 b) They failed to warn Plaintiff and others of the foreseeable consequences
- 6 of using their fossil fuel products;
- 7 c) They concealed from the public and government regulators their
- 8 knowledge and research concerning the effects of the extraction,
- 9 refining and use of their products;
- 10 d) They suppressed and failed to develop or encourage development by
- 11 others of alternative means of producing renewable energy systems and
- 12 sources.
- 13 e) They developed, designed, tested, inspected, distributed, labeled and
- 14 marketed their fossil fuel products and advertised their business
- 15 practices to their shareholders in a manner designed to conceal,
- 16 downplay and obfuscate the long-term effects of the widespread use of
- 17 their products.

18 517.

19 Plaintiff's injuries were the foreseeable results of Defendants' negligence.

20 **VII. THIRD CLAIM FOR RELIEF: FRAUD AND DECEIT**

21 518.

22 Plaintiff realleges and reaffirms each and every allegation set forth in all the preceding

23 paragraphs as if fully restated in this count.

24 519.

25 Fossil Fuel Defendants and Coal Defendants, jointly through the Trade Group Defendants

26 and Other Defendants (McKinsey) engaged in fraud, deceit, or intentional misrepresentation.

27 520.

28 From 1969 to present, Defendants, individually and through both legitimate and

illegitimate means, engaged in a nationwide—including in Oregon—marketing campaign and civil

1
2 conspiracy with the purpose and intent to make material representations that were false.
3 Defendants made these representations knowing they were false.

4 521.

5 Defendants intended that Multnomah County, its citizens and persons across the country
6 relied on their misrepresentations and excessively purchase, use, and consume their products.

7 522.

8 Multnomah County, and its citizens did justifiably rely on Defendants decades-long
9 assertions that burning their fossil fuel products would not cause climate change that would harm
10 the County or its residents, and would not increase the probability and severity of extreme weather
11 events in the County.
12

13 523.

14 Multnomah County and its residents' reliance on Defendants' misrepresentations,
15 fraudulent statements, and deceptive statements led to Multnomah County being unprepared for
16 the 2021 heat dome, suffering the loss of property, infrastructure, financial resources, lives, and
17 health.
18

19 524.

20 Multnomah County is entitled to its past damages and future damages due to the fraud and
21 deceits committed by Defendants. The Fossil Fuel Defendants and Coal Defendants knew that
22 their acts, omissions, fraud and deceit would preclude Multnomah County and its citizens from
23 adequately preparing for the regional climate shift that has occurred due to Fossil Fuel Defendants
24 and Coal Defendants GHG emissions. The regional climate shift includes but is not limited to,
25 extreme heat events with greater frequency and intensity, extended drought conditions that lead to
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27

1
2 greater intensity and longer wildfires resulting in smoke penetration pollution in Multnomah
3 County. These extreme weather events have heat smothered the County and caused millions of
4 dollars in damages. Fossil Fuel Defendants and Coal Defendants fraudulently concealed their
5 knowledge that the continued and increased use of their products would cause climate shifts
6 resulting in extreme heat waves and heat domes of greater than 40° F over the mean temperature.

7 **VIII. FOURTH CLAIM FOR RELIEF: TRESPASS**

8 525.

9
10 Plaintiff realleges and reaffirms each and every allegation set forth in all the preceding
11 paragraphs as if fully restated in this count.

12 526.

13 Plaintiff is the owner, in lawful possession, of real property and has sovereign
14 responsibilities for Multnomah County.

15 527.

16
17 Defendants have engaged in intentional conduct that has caused and contributed to climate
18 change, thus causing airborne particulate from extreme wildfires to enter Plaintiffs' property.

19 528.

20 Defendants have engaged in intentional conduct that has caused and contributed to climate
21 change, resulting in a radical shift in climate patterns that has caused waters, from extreme rain
22 events and excessive snowpack melting, to enter Plaintiff's property.

23 529.

24
25 Multnomah County has not granted permission to Defendants to damage its property nor
26 enter nor intrude upon it with fire, smoke, water, or intense heat created by Defendant's

1
2 misconduct.

3 530.

4 Defendants knew that the use of their products would both cause climate change—extreme
5 weather events, more intense fires causing smoke intrusion—and cause these invasions of
6 Plaintiff’s property and that they lacked permission for these invasions but intruded anyway.

7 531.

8 These invasions are now occurring and will continue to occur causing harm to the County.
9 Defendants’ trespasses are the cause of injury and losses to the County.

10 532.

11 The County’s real property has been and continues to be damaged by these intrusions.

12 **IX. RELIEF REQUESTED**

13 WHEREFORE, Plaintiff prays for a judgment and an order against each Defendant as follows:

- 14 a) That the acts alleged herein be adjudged and decreed to be unlawful and
- 15 that the Court enter a judgment declaring them to be so;
- 16 b) Finding Defendants, and each of them, liable for causing, creating,
- 17 assisting in the creation of, contributing to, and/or maintaining a public
- 18 nuisance;
- 19 c) Compensatory award for past damages in the amount of \$50,000,000
- 20 according to proof, of the costs of actions Multnomah County has
- 21 already taken, expenditures made, and losses incurred to protect the
- 22 public health, safety, and property of the County and its residents from
- 23 extreme heat weather events and wildfire smoke;
- 24 d) The entry of an order that will abate the nuisance by the establishment
- 25 of an abatement fund remedy to be paid for by the Defendants in the
- 26 amount of at least \$50 Billion for the costs of studying and planning on
- 27 a countywide scale for the renovations, replacements, retrofits and
- 28 revised programs that are reasonably necessary to reduce the ongoing
- harms caused by the Defendants, the implementation of which
- will reasonably prepare the County and its residents for foreseeable

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2 negative impacts arising from the increased frequency and severity of
3 extreme heat, wildfire, drought and other ACC-related consequences.
4 The planning, approval and implementation will take considerable time,
5 staffing and resources, during which time the nuisance is expected to
6 continue to worsen, even if carbon emissions worldwide ceased
7 altogether, as the current hazardous levels of GHG in the atmosphere
8 will remain aloft for decades where said pollution will continue to
cause extreme events, absent massive but untested and unproven
technological carbon capture programs. The abatement funds will be
necessary to essentially “weatherize” the County to prepare for and
safeguard against the continued infliction of harms from ACC-driven
extreme weather events, for which Defendants are liable;

- 9 e) Compensatory award for future damages in the amount of no less than
10 \$1.5 Billion, according to proof, for the damages Defendants will cause
11 to Plaintiff before an abatement plan to reduce or prevent future harms
can be implemented;
- 12 f) Awarding attorneys’ fees as permitted by law;
- 13 g) Awarding costs and expenses as permitted by law;
- 14 h) Awarding pre-judgment and post-judgment interest as permitted by law;
15 and
- 16 i) Awarding such additional relief as may be just and proper.
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2 Dated this 8th day of August 2023.

3 **THOMAS, COON, NEWTON & FROST**

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