








	2019	2020	2021	2022	Δ 2022-2019	GRI Indicator
Climate Change – Public Targets ¹						
Scope 1 + 2 (metric ton (mt) CO ₂ e) ^{1,2,3,4}	1,289,261	1,158,777	1,146,246	1,125,694	↓ 13%	305-3
Renewable Energy (%) ^{1,2}	9.5	4.8	7.8	6.9	↓ 27%	-
Scope 3 – Business travel (mt CO ₂ e) ^{5,11}	359,523	97,880	31,756	80,167	↓ 78%	305-3
Scope 3 – Upstream transportation & distribution (mt CO ₂ e) ^{5,9}	611,059	611,726	777,294	712,318	↑ 17%	305-3
Scope 3 – Suppliers of purchased goods and services by spend with science-based targets (%) ^{5,6}			19	29	-	305-3

Pfizer is committed to achieving the voluntary Net-Zero standard by 2040. Our near-term climate goals, approved by the Science Based Targets initiative, are to:

-  Reduce Scope 1+2 greenhouse gas (GHG) emissions **46%** by 2030 from a 2019 baseline
-  Source **80%** of electricity from renewables by 2025 and **100%** by 2030
-  Reduce GHG emissions from business travel **25%** by 2025 from a 2019 baseline
-  Reduce GHG emissions from upstream transportation and distribution **10%** by 2025 from a 2019 baseline
-  Catalyze **64%** of our suppliers of goods and services by spend to set science-based targets by 2025

	2019	2020	2021	2022	Δ 2022-2021	Δ 2022-2019	GRI Indicator
Climate Change – Additional Metrics ¹							
Scope 1 (mt CO ₂ e) ^{1,2,3}	702,830	649,357	661,930	650,587	↓ 2%	↓ 7%	305-1
Scope 2, market-based (mt CO ₂ e) ^{1,2,4}	586,432	509,420	484,316	475,107	↓ 2%	↓ 19%	305-2
Scope 2, location-based (mt CO ₂ e) ^{1,2,4}	566,328	494,640	480,923	489,611	↑ 2%	↓ 14%	305-2
Scope 1 + 2 Emissions Intensity (mt CO ₂ e/million USD Sales) ^{1,2,3,4}	31.5	27.8	14.1	11.2	↓ 20%	↓ 64%	305-4
Energy Consumed (MWh) ^{1,2}	4,358,082	4,269,349	4,316,528	4,324,679	0%	↓ 1%	302-1
Energy Intensity (MWh/ million USD Sales) ^{1,2}	106.5	102.5	53.1	43.1	↓ 19%	↓ 60%	302-3
Scope 3 – Purchased goods and services (mt CO ₂ e) ^{5,7}	3,794,093	2,526,537	3,374,782	8,247,663	↑ 144%	↑ 117%	305-3
Scope 3 – Capital goods (mt CO ₂ e) ^{5,7}	345,953	191,894	251,040	282,414	↑ 12%	↓ 18%	305-3
Scope 3 – Fuel-and-energy-related activities not in Scope 1 or 2 (mt CO ₂ e) ^{5,8}	252,909	203,093	269,938	262,990	↓ 3%	↑ 4%	305-3
Scope 3 – Waste generated in operations (mt CO ₂ e) ^{5,10}	9,624	13,858	8,849	8,701	↓ 2%	↓ 10%	305-3
Scope 3 – Employee commuting (mt CO ₂ e) ^{5,12}	60,645	48,414	38,805	38,557	↓ 1%	↓ 36%	305-3
Scope 3 – Upstream leased assets (mt CO ₂ e) ^{5,13}	36,273	30,522	29,452	30,449	↑ 3%	↓ 16%	305-3
Scope 3 – Downstream transportation and distribution (mt CO ₂ e) ^{5,14}	99,576	7,295	14,379	8,351	↓ 42%	↓ 92%	305-3
Scope 3 – Investments (mt CO ₂ e) ^{5,15}	33,892	36,839	36,178	6,939	↓ 81%	↓ 80%	305-3
Scope 3 – Total (mt CO ₂ e) ⁵	5,603,547	3,768,058	4,832,473	9,678,551	↑ 100%	↑ 73%	305-3



	2019	2020	2021	2022	Δ 2022-2021	Δ 2022-2019	GRI Indicator
Water ^{1,16}							
Water withdrawal excluding non-contact cooling water (million m ³)	13.5	12.9	12.7	12.3	↓ 3%	↓ 9%	303-3
Water withdrawal including non-contact cooling water (million m ³)	34.8	32.4	27.5	28.8	↑ 5%	↓ 17%	303-3
Third-party water (million m ³)	8.7	8.2	8.0	8.0	0%	↓ 8%	303-3
Surface water withdrawal (million m ³)	0.8	0.8	0.9	0.9	↑ 4%	↑ 10%	303-3
Groundwater withdrawal (million m ³)	25.3	23.3	18.6	19.9	↑ 7%	↓ 21%	303-3
Brackish/seawater withdrawal (million m ³)	0	0	0	0	↑ 4%	↑ 9%	303-3
Water discharged (million m ³)	31.7	29.4	24.6	25.8	↑ 5%	↓ 19%	303-4
Water consumed (million m ³)	3.0	3.0	2.9	3.0	↑ 2%	↓ %	303-4
Waste ^{1,17}							
Hazardous waste generated (million kg)	86.4	83.1	75.1	76.7	↑ 2%	↓ 11%	306-3
Hazardous waste diverted from disposal (million kg)	16.8	11.6	11.9	7.5	↓ 37%	↓ 55%	306-4
Hazardous waste incinerated with energy recovery (million kg)	39.8	43.6	41.6	47.6	↑ 14%	↑ 20%	306-5
Hazardous waste incinerated without energy recovery (million kg)	22.2	23.1	17.7	17.1	↓ 4%	↓ 23%	306-5
Hazardous waste landfilled (million kg)	0.2	0.1	0.1	0.0	↓ 28%	↓ 76%	306-5
Hazardous waste other treatment (million kg)	7.4	4.7	3.9	4.5	↑ 18%	↓ 40%	306-5
Hazardous waste diverted from disposal (%)	19	14	16	10	-	-	306-4
Non-hazardous waste generated (million kg)	37.7	36.9	38.5	35.0	↓ 9%	↓ 7%	306-3
Non-hazardous waste diverted from disposal (million kg)	17.2	17.4	22.6	19.0	↓ 16%	↑ 11%	306-4
Non-hazardous waste incinerated with energy recovery (million kg)	4.4	4.4	4.8	5.0	↑ 5%	↑ 15%	306-5
Non-hazardous waste incinerated without energy recovery (million kg)	0.9	1.3	0.6	0.6	↑ 10%	↓ 32%	306-5
Non-hazardous waste landfilled (million kg)	15.1	13.7	10.2	10.1	↓ 2%	↓ 33%	306-5
Non-hazardous waste other treatment (million kg)	0.1	0.2	0.2	0.2	↓ 3%	↑ 78%	306-5
Non-hazardous waste diverted from disposal (%)	46	47	59	54	-	-	306-4
Air Emissions ^{1,18}							
Refrigerant losses (metric ton (mt) CO ₂ e)	-	-	-	20,175	-	-	305-6
Volatile organics (thousand kg)	371.6	379.6	295.8	308.3	↑ 4%	↓ 17%	305-7



	2019	2020	2021	2022	Δ 2022-2021	Δ 2022-2019	GRI Indicator
Health & Safety							
Fatalities	0	0	0	0		-	403-9 403-10
Recordable injuries & illnesses	392	260	248	251	↑ 1%	↓ 36%	403-9 403-10
Lost time injuries & illnesses	161	121	115	107	↓ 7%	↓ 34%	403-9 403-10
Hours worked (millions)	198.7	189.6	165.4	169.6	↑ 3%	↓ 15%	403-9 403-10
Total Injury & Illness Rate (Recordable cases per 200,000 hours worked) ¹⁹	0.39	0.27	0.30	0.30	-	↓ 23%	403-9 403-10
Total Lost Time Injury & Illness Rate (Lost time cases per 200,000 hours worked) ¹⁹	0.16	0.13	0.14	0.13	↓ 7%	↓ 19%	403-9 403-10
Fleet Safety (Collisions per million km driven)	7.31	6.29	7.60	7.98	↑ 5%	↑ 9%	-
Compliance							
Number of EHS penalties paid ²⁰	2	4	1	7	-	-	307-1
EHS Penalties paid (currency equivalent USD) ²⁰	12,500	4,400	50	15,500	-	-	307-1
Supplier EHS assessments (number performed)	102	46	122	116	-	-	308-2

NOTES

↓=decrease (reduction) ↑=increase

Notes

¹ Pfizer's organizational boundaries for environmental performance include all owned sites and leased facilities where Pfizer has operational control. Environmental data are baseline adjusted to reflect acquisitions and divestitures, reported absolute, using boundaries per the World Resources Institute (WRI) Greenhouse Gas (GHG) Protocol. Data presented represents information available as of May 2023, including certain estimates and assumptions. There may be differences in baseline and subsequent reporting year values due to changes in the business that require baseline adjustments conducted in accordance with the GHG Protocol. Historical estimates may periodically be subject to revision due to data source restatements and updates to methodology.



NOTES

Climate Change

Scope 1 & 2

- ² Data has been adjusted to reflect divestitures and emission factor updates. Baseline year data (2019) has been independently verified to the limited assurance level; 2022 data is independently verified to the reasonable assurance level.
- ³ Scope 1 emissions include CO₂, CH₄, N₂O, SF₆, and HFCs using IPCC Fifth Assessment Report (AR5-100 year) Global Warming Potential (GWP) rates; volatile organic emissions are calculated using an emission factor representative of solvents typically used by Pfizer sites.
- ⁴ Scope 2 emissions are reported in accordance with GHG Protocol Scope 2 Guidance as location- and market-based emissions. Location-based emissions are calculated based on the average emissions intensity of the grid for the region where energy is consumed. Market-based emissions are calculated based on the electricity procured by individual locations, with emission factors derived from contractual instruments.

Scope 3

- ⁵ 2022 data is verified to the limited assurance level.
- ⁶ Supplier engagement – Tracking of the Scope 3 supplier engagement goal was initiated in 2021. We have expanded this goal to include companies publicly committed to setting science-based targets through the Science Based Target Initiative (SBTi), along with companies with SBTi-approved targets.
- ⁷ Purchased goods and services & capital goods – Emissions calculated based on spend using emission factors determined using average data methodology and DEFRA 2011 Table 13 emission factors adjusted for inflation. Calculated emissions increased primarily due to increased spend related to COVID-19 vaccine packaging and cold-chain distribution as well as PAXLOVID production.
- ⁸ Fuel-and-energy-related activities – Fuel-related emissions calculated using UK Government GHG Conversion Factors for Company Reporting (2022). Emissions associated with production of electricity, heat and steam calculated using both UK Government GHG Conversion Factors and IEA Emission Factors 2022 Edition. Transmission & distribution emissions include CO₂ only.
- ⁹ Upstream transportation & distribution – Includes emissions calculated using GHG Protocol Cross Sector emission factors and data reported directly by logistics suppliers. Upstream transportation emissions are calculated from Pfizer and third-party datasets. We recently revised our methodology to more accurately capture source data and have applied this methodology to our 2019-2022 calculations. In 2022, we experienced increases in emissions related in part to continued worldwide distribution of the COVID-19 vaccine, shipped predominantly by air using cold-chain technologies, but also reduced emissions by transitioning shipments of other products from air to ocean in addition to other volume-related reductions.
- ¹⁰ Waste generated in operations – Emissions calculated using UK Government GHG Conversion Factors for Company Reporting (2022).
- ¹¹ Business travel – Emissions calculated by Pfizer's travel partner, Advito, using a proprietary methodology certified under ISO 14064-1:2018 & 2019.
- ¹² Employee commuting – Emissions estimated using US EPA Climate Leaders GHG 2022, DEFRA, and IEA emission factors. Includes estimated emissions for colleagues working remotely.
- ¹³ Upstream leased assets – Emissions estimated using the GHG Protocol Quantis Scope 3 Evaluator.
- ¹⁴ Downstream transportation and distribution – Emissions provided for the US and Europe only, calculated using Emission Factors from Cross-Sector Tools – GHG Protocol – March 2017. Reduction in emissions in the US related in part to changes in contractual agreements with one of our main customers. We continue to look for better ways to estimate the emissions for this category.
- ¹⁵ Investments – Emissions data provided by Pfizer's joint venture operations where we have influence and/or operational control. In June 2022, Pfizer announced plans to exit ownership interest in Haleon, a former joint venture with GSK and now an independent company. Emissions for this new company are no longer included.



NOTES

Water

¹⁶ Pfizer strives to reduce freshwater use from its internal operations. Our Water Stewardship position statement describes our efforts to be good stewards of water with a particular focus on water stressed areas. To learn more about our efforts, see our [position statement](#). In 2022, the increase in water withdrawal, including non-contact cooling water demand, was due primarily to an increase in non-contact cooling water use at our Kalamazoo, Michigan manufacturing plant as product mix returns to its pre-pandemic composition.

Waste

¹⁷ Pfizer strives to reduce waste from its operation through applying a hierarchy of control of handling waste: reduce, reuse, recycle, disposal. Each site has established targets to improve the circularity of their waste and we benchmark our performance against others in our industry. In 2022, changes in hazardous and non-hazardous waste generation were related to the return of product mix to pre-pandemic composition. Data for hazardous waste diverted from disposal for 2019 & 2020 has been updated to reflect updated methodology for accounting for reused solvent.

Air Emissions

¹⁸ In 2022, Pfizer expanded reporting to include all refrigerant losses in accordance with the GHG Protocol. Historically, Pfizer reported ozone depleting potential of ozone depleting compounds, a subset of refrigerants. Refrigerant losses reported for years prior to 2022 cannot be compared to this year's data.

Health & Safety

¹⁹ Pfizer's global total injury & illness rate and total lost time injury rate is based on OSHA recording criteria. In 2022, Pfizer's total injury & illness rate remained unchanged compared to 2021. In 2022, lost time injury & illness rate was lower than in 2021.

Compliance

²⁰ Compliance with all applicable environmental, health and safety (EHS) laws in the jurisdictions where we operate, complemented by our internal EHS Standards, is a foundation of our EHS program. Pfizer is dedicated to maintaining full EHS compliance, and when potential non-compliance is identified, including when identified through self-assessment and compliance assurance programs, prompt corrective action is required. Our internal EHS Standards and routine internal EHS audits assist in maintaining compliance and providing a strong driver for continuous improvement. All alleged non-compliance events listed in the table have been resolved.