

# 2025 United Airlines environmental performance data

## Greenhouse gas emissions

	2025	2024	2023	2022	2021	2020	2019 (baseline)
	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e
<b>Direct (Scope 1) emissions</b>	<b>39,976,609</b>	<b>38,520,027</b>	<b>36,588,996</b>	<b>30,400,715</b>	<b>21,375,343</b>	<b>15,490,115</b>	<b>34,413,871</b>
Mainline aircraft direct emissions	39,832,745	38,388,474	36,453,056	30,263,431	21,253,384	15,392,536	34,263,990
Conventional jet fuel	39,830,741	38,387,484	36,452,528	30,263,216	21,253,316	15,392,491	34,263,908
Sustainable aviation fuel - CH <sub>4</sub> and N <sub>2</sub> O	2,005	990	528	215	68	45	82
Mainline vehicles (diesel, gasoline, CNG, LPG)	60,813	53,489	52,976	47,447	38,242	24,766	65,161
Facilities (natural gas combustion, engine test cells)	83,051	78,064	82,964	89,837	81,997	70,797	80,573
Dry ice from catering	0	0	0	0	1,720	2,015	4,147

	2025	2024	2023	2022	2021	2020	2019 (baseline)
	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e
<b>Biogenic emissions — outside of scopes</b>	<b>256,578</b>	<b>125,374</b>	<b>68,871</b>	<b>26,806</b>	<b>5,745</b>	<b>5,975</b>	<b>13,852</b>
Mainline aircraft emissions — CO <sub>2</sub> from sustainable aviation fuel <sup>1</sup>	256,578	125,374	68,871	26,806	5,745	5,975	13,852

	2025	2024	2023	2022	2021	2020	2019 (baseline)
	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e
<b>Total indirect (Scope 2) emissions (market-based)</b>	<b>143,722</b>	<b>134,497</b>	<b>144,019</b>	<b>149,252</b>	<b>160,794</b>	<b>175,087</b>	<b>189,682</b>
Electricity consumption (location-based)	172,010	160,201	160,340	166,757	183,311	196,066	201,690
Electricity consumption (market-based)	143,722	134,490	143,991	149,251	160,794	175,087	189,682
Steam consumption	0	7	28	0	0	0	0

	2025	2024	2023	2022	2021	2020	2019 (baseline)
	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e
<b>Other indirect (Scope 3) emissions</b>	<b>14,607,876</b>	<b>13,585,207</b>	<b>12,671,510</b>	<b>13,343,676</b>	<b>12,170,494</b>	<b>9,144,359</b>	<b>17,473,543</b>
3: Mainline aircraft fuel production	8,169,049	7,821,375	7,391,936	7,250,196	5,106,044	3,754,315	8,362,104
Conventional jet fuel	8,121,251	7,796,417	7,377,814	7,246,478	5,104,506	3,752,824	8,356,884
Sustainable aviation fuel	47,798	24,957	14,122	3,718	1,538	1,491	5,220
4: Regional aircraft direct emissions and fuel production	5,913,947	5,317,688	4,873,562	5,587,322	6,569,358	5,014,650	8,690,617
Regional aircraft and bus-operated flights flown under capacity purchase agreement — direct emissions	4,864,833	4,383,161	4,048,183	4,504,664	5,294,725	4,053,434	7,025,889
Regional vehicles (diesel, gasoline, CNG, LPG)	14,111	12,502	12,799	14,533	15,481	13,658	24,588
Regional aircraft flown under capacity purchase agreement — fuel production	991,793	894,682	789,189	1,030,688	1,202,863	908,708	1,640,141
Regional aircraft flown on an at-risk basis — fuel production	43,211	27,343	23,391	37,437	56,289	38,850	0
7: Employee commuting	128,018	123,171	125,795	111,108	52,278	80,980	176,205
14: Regional aircraft flown on an at-risk basis	210,374	139,246	122,425	163,902	243,553	162,170	0
15: Ownership stake in Azul Brazilian Airlines	186,405	183,190	156,432	229,912	199,099	132,220	244,605
15: United Airlines Ventures investments <sup>2</sup>	83	537	1,361	1,236	162	24	12

## Scope 1, 2 and 3 emissions

	2025	2024	2023	2022	2021	2020	2019 (baseline)
	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e	metric tons CO <sub>2</sub> e
Total Scope 1, 2, and 3 emissions (market-based)	<b>54,728,208</b>	<b>52,239,731</b>	<b>49,404,525</b>	<b>43,893,642</b>	<b>33,706,631</b>	<b>24,809,561</b>	<b>52,077,096</b>

## Carbon emissions intensity rates

	2025	2024	2023	2022	2021	2020	2019 (baseline)
United-specific metric tons CO <sub>2</sub> e per million RTKs <sup>3</sup>	1,044.7	1,041.9	1,056.9	1,097.7	1,317.3	1,533.4	1,208.1
General-use customer metric tons CO <sub>2</sub> e per million RTKs <sup>4</sup>	1,047.9	1,044.4	1,058.3	1,098.4	1,317.5	1,533.8	1,208.3
Revenue tonne-kilometers (RTKs – millions)	51,885	49,711	46,361	39,526	25,212	15,934	42,760
United-specific metric tons CO <sub>2</sub> e per million ASMs <sup>5</sup>	165.1	167.3	169.0	176.2	187.5	200.9	181.9
General-use customer metric tons CO <sub>2</sub> e per million ASMs <sup>6</sup>	165.6	167.7	169.3	176.2	187.6	201.0	181.9
Available seat-miles (ASMs – millions)	330,284	311,185	291,333	247,858	178,684	122,804	284,999

	2025	2024	2023	2022	2021	2020	2019 (baseline)
Conventional jet fuel - mainline aircraft (gallons – millions)	4,131	3,977	3,779	3,139	2,205	1,600	3,562
Sustainable aviation fuel - mainline aircraft (gallons – millions)	27.7	13.6	7.3	2.9	0.6	0.6	1.2
Lifecycle reduction from SAF	85.0%	83.5%	82.4%	88.2%	83.4%	79.3%	62.0%
Emissions reductions from SAF (metric tons CO <sub>2</sub> e)	270,267	126,174	68,370	29,362	5,953	5,883	8,517
Conventional jet fuel — regional aircraft (gallons – millions)	504	453	418	466	523	404	729
Electricity (MWh)	496,215	463,619	434,790	435,259	447,714	477,751	489,197
Natural gas (MM BTUs)	1,476,808	1,390,794	1,481,604	1,628,722	1,494,698	1,264,964	1,432,250

	2025 tons	2024 tons	2023 tons	2022 tons	2021 tons	2020 tons	2019 (baseline) tons
<b>Total NO<sub>x</sub> emissions</b>	21,233	20,233	11,554	16,144	11,626	8,565	16,410
Mainline aircraft (jet fuel)	20,039	19,106	10,356	14,948	10,813	7,660	14,720
Vehicles (diesel, gasoline, CNG, LPG)	1,126	973	1,197	1,196	813	905	2,035
Facilities (natural gas combustion, engine test cells)	68	154	156	153	121	130	148

	2025 tons	2024 tons	2023 tons	2022 tons	2021 tons	2020 tons	2019 (baseline) tons
<b>Total SO<sub>2</sub> emissions</b>	1,859	1,770	1,251	1,414	1,022	731	1,427
Mainline aircraft (jet fuel)	1,858	1,769	1,250	1,413	1,022	730	1,426
Vehicles (diesel, gasoline, CNG, LPG)	0	0	0	0	0	0	0
Facilities (natural gas combustion, engine test cells)	1	1	1	1	1	1	1

	2025 tons	2024 tons	2023 tons	2022 tons	2021 tons	2020 tons	2019 (baseline) tons
<b>Total CO emissions</b>	15,340	13,479	16,089	16,759	10,507	9,207	21,153
Mainline aircraft (jet fuel)	10,598	9,824	9,027	7,805	5,503	3,743	8,010
Vehicles (diesel, gasoline, CNG, LPG)	4,736	3,574	6,977	8,864	4,921	5,388	8,175
Facilities (natural gas combustion, engine test cells)	6	81	85	91	83	76	83

	2025 metric tons	2024 metric tons	2023 metric tons	2022 metric tons	2021 metric tons	2020 metric tons	2019 (baseline) metric tons
<b>Waste – total</b>	68,488	79,759	56,317	25,176	31,407	26,667	53,832
Hazardous and non-hazardous waste generation	23,785	42,002	19,303	22,399	24,253	15,602	26,621
Catering – municipal waste	44,703	37,757	37,014	2,776	10,367	11,066	27,210
<b>Recycling – total</b>	12,953	14,839	9,209	6,112	5,818	4,468	8,332
Non-catering – recycled	3,338	8,882	5,047	5,255	4,446	3,302	4,489
Catering – recycled	9,615	5,957	4,158	857	1,372	1,166	3,843

	2025 millions of gallons	2024 millions of gallons	2023 millions of gallons	2022 millions of gallons	2021 millions of gallons	2020 millions of gallons	2019 (baseline) millions of gallons
<b>Billed water consumption<sup>7</sup></b>	379	390	429	329	661	484	521

The reporting period is January 1, 2025-December 31, 2025. The reporting boundary includes facilities and equipment under United Airline's operational control. It excludes de minimis emissions from subsidiaries and joint ventures.

Our GHG Emissions Footprint is calculated using methodologies from the GHG Protocol and ISO14064-1. CO<sub>2</sub>e emissions include carbon dioxide, methane, and nitrous oxide aggregated in accordance with the GHG Protocol using IPCC AR6 Global Warming Potentials (GWPs). The footprint consists of the following:

- Scope 1: Direct GHG emissions generated by United's operations including the combustion of conventional jet fuel and SAF by mainline and regional aircraft (tank-to-wake), fuel consumed by ground support equipment, and natural gas used in our facilities and airport spaces.
- Scope 2: Indirect GHG emissions from the use of purchased electricity and steam used in our facilities and airport spaces.
- Scope 3: Indirect GHG emissions from: Category 3, fuel- and energy-related activities (well-to-tank); Category 4, upstream transportation and distribution; Category 7, employee commuting; Category 14, franchises; and Category 15, investments.
- Biogenic: CO<sub>2</sub> emissions from the combustion of SAF which contains biologically sequestered carbon dioxide.

GHG emissions factors sourced from: IATA, The Climate Registry (February 2025 release); International Energy Agency (September 2025 release); The U.S. EPA GHG Emission Factors Hub and eGRID (January 2025 release). The data presented herein reflecting United's 2025 GHG emissions footprint has been internally validated by United Airlines Internal Audit Department and externally verified by a third-party verification party, Normec Verifavia. United obtains this third-party verification of our GHG emissions on an annual basis. Historic data is provided for informational purposes and has not been externally reassured as of the date of this report. Normec Verifavia conducts our emissions verification and provides an ISO 14064-3 limited assurance on our GHG emissions for reporting.

[Download our GHG Emissions Verification Report https://crreport-uat.united.com/appendix/environment-data/](https://crreport-uat.united.com/appendix/environment-data/)

#### Footnotes:

1. United accounts emissions reductions associated with the use and combustion of sustainable aviation fuel (SAF) to be a Scope 1 reduction, as it is in-sector and a sustainable alternative to the conventional jet fuel usage that is accounted in the gross emissions of this Scope.
2. United Airlines Ventures investments at a demo or commercial stage, with most not yet operating at a stage that would produce material GHG emissions.
3. Intensity metric used to track progress against United's near-term 2035 target. Includes Scope 1, Scope 2 and Scope 3 category 3 and 4 GHG emissions. This intensity figure considers all SAF for which United claimed Scope 1 emissions reductions, including SAF for which specific United customers or other third parties have retained Scope 3 end-user attributes. This intensity should not be used for reporting by United's general-use customers.
4. General-use customer intensities consider only SAF for which United has claimed Scope 1 emissions reductions and maintained ownership of Scope 3 end-user attributes, enabling the use of this figure for reporting by United's general-use customers.
5. Includes Scope 1, Scope 2 and Scope 3 category 3, 4, 7 and 14 GHG emissions. This intensity figure considers all SAF for which United claimed Scope 1 emissions reductions, including SAF for which specific United customers or other third parties have retained Scope 3 end-user attributes. This intensity should not be used for reporting by United's general-use customers.
6. General-use customer intensities consider only SAF for which United has claimed Scope 1 emissions reductions and maintained ownership of Scope 3 end-user attributes, enabling the use of this figure for reporting by United's general-use customers.
7. Does not account for all United locations or locations shared with other companies (e.g., airport terminals) and as a result may change considerably from year to year.

Totals may not add up due to rounding.

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