



REPORT

# Cloudflare Emissions Inventory – 2024

July 15, 2025

# Emissions Inventory

The following represents Cloudflare’s comprehensive global greenhouse gas (GHG) emissions inventory for the calendar year 2024.

Cloudflare’s calculations were prepared in accordance with the GHG Protocol [Corporate Standard, Greenhouse Gas Scope 2 Guidance](#), as well as ISO 14064. The following inventory results were independently reviewed and verified by [Shift Advantage](#).

Emissions Category		Carbon Dioxide Equivalent (CO <sub>2</sub> e) in Metric Tons (MT)	Percent of Calculated Total
Scope 1		198	100%
Scope 2 (Location-based)			
	Facilities	1611	3%
	Network	61,171	97%
Scope 2 (Market-based) <sup>1</sup>		0	100%
Scope 3 <sup>2</sup>		43,071	100%
Total (Market-based) <sup>3</sup>		43,071	100%

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1. Location-based emissions reflect the average emissions intensity of grids on which energy consumption occurs.  
 2. Market-based emissions reflect emissions from electricity that an organization has purposefully chosen. For more information on Cloudflare’s renewable energy purchases, see Renewable Energy and Offset Purchases.  
 3. Total (Market-based) emissions include Cloudflare’s 2023 verified offsets and renewable energy purchases.

# Methodology

## Scope 1 and Scope 2 emissions

Cloudflare defined its organizational boundaries using the control approach, and included all of its global operations<sup>4</sup>. Cloudflare Scope 1 emissions resulted from certain facilities that Cloudflare is a lessee that uses combustion fuels for heating. For those facilities, Cloudflare estimated its emissions using the average intensity method based on energy use intensity (EUI) factors provided by the US Energy Information Administration.

Cloudflare's Scope 2 emissions are derived from its purchased electricity, which Cloudflare has elected to subdivide into its facilities and its network to further aid in transparency and comparability. Activity data for the Cloudflare global network was collected and recorded on a monthly basis from each of its data center locations in more than 330 cities in 125 countries around the world<sup>5</sup>. Activity data at Cloudflare facilities was measured in two ways<sup>6</sup>. All facilities for which Cloudflare had access to electrical utility information reported actual usage. For facilities that did not have access to actual usage data, Cloudflare used the average intensity method based on energy use intensity (EUI) factors provided by the US Energy Information Administration.

All activity data was converted into emissions via grid average emissions factors. Emissions factor sources included the US Environmental Protection Agency, UK DEFRA, PG&E, and the International Energy Agency (IEA).

## Scope 3 emissions

Following successful completion of our initial Screening Assessment, Cloudflare is publishing its first Scope 3 emissions inventory for 2024. Our initial business objective is to focus on sources of supply chain emissions directly related to our network, products, and services. Focusing on these sources of supply chain emissions, in the near term, will allow Cloudflare's customers to have a more accurate accounting for their own emissions resulting from the use of our services.

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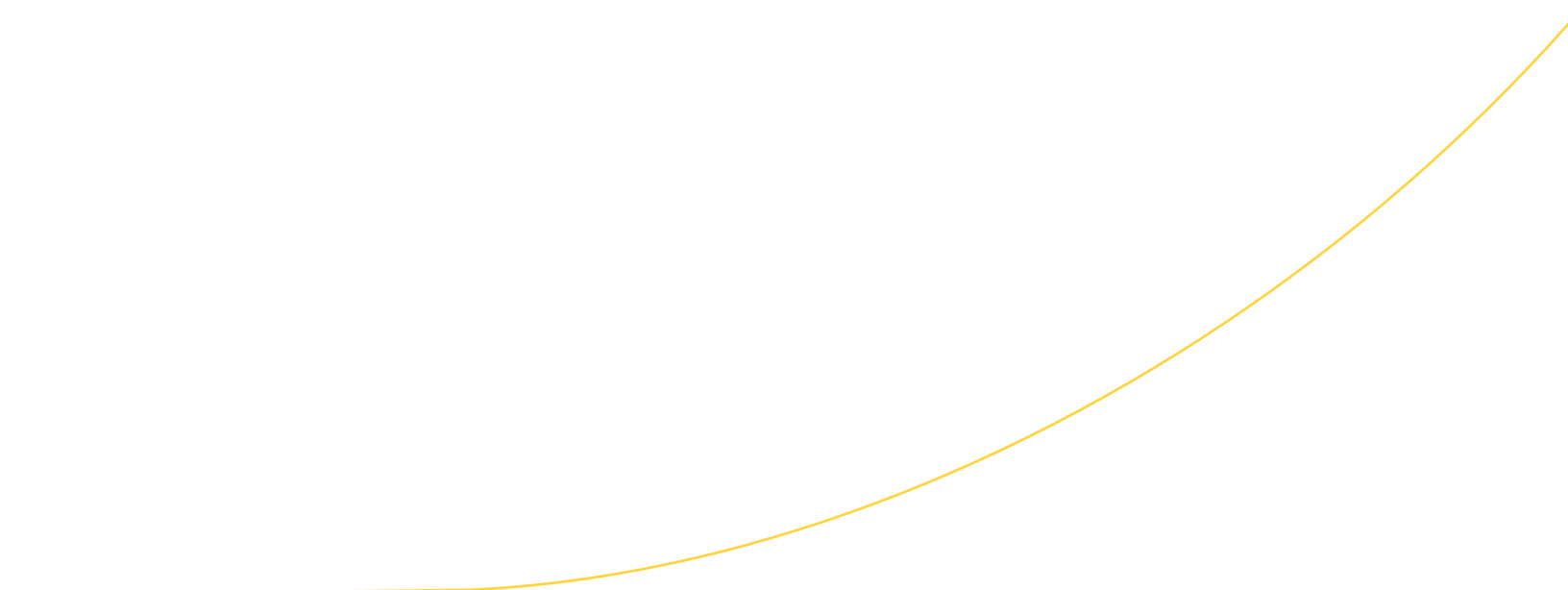
4. Cloudflare's organizational boundaries do not include Cloudflare's China network partners, which are not under Cloudflare's operational control.

5. Cloudflare's network energy data includes compute and networking hardware under Cloudflare's operational control. The calculations do not include energy used to power data center facilities (which house PoPs) not owned or controlled by Cloudflare, nor any other equipment collocated in such a facility. Cloudflare's approach is based on guidance provided by [BSR and the Future of Internet Power](#).

6. Cloudflare facilities refers to Cloudflare-controlled office space.

To that end, Cloudflare is reporting on the following categories: Category 1. Purchased Services, Category 2. Capital Goods/Assets, Category 4. Upstream, and Category 5. Waste Generated in Operations. For purchased goods and services, capital goods/assets, and transportation and distribution Cloudflare used the average spend method to calculate associated emissions.

For waste generated in operations, Cloudflare used the supplier specific method to calculate its associated emissions. Unfortunately, Cloudflare was not able to obtain data from two of its three suppliers. Cloudflare did receive data from one supplier, which indicated less than 1 MT ton in CO<sub>2</sub>e waste. This is the result of reselling and recycling credits applied by the supplier in their reporting to Cloudflare. Cloudflare intends to continue to report waste generated in its operations, including additional outreach to suppliers that were not able to provide actionable data in 2024. As a result, reported emissions associated with waste may vary in future reporting.



## Renewable Energy and Offset Purchases<sup>7</sup>

Cloudflare’s market-based Scope 2 emissions are zero for 2024 as a result of the company’s renewable energy and offset purchases. Cloudflare purchased renewable energy attribute certificates (I-RECs, RECs, REGO, and others) through its partner 3Degrees, equivalent to Cloudflare’s global facilities and network energy usage.

Cloudflare’s purchasing methodology is based on RE100’s technical and geographic criteria. To that end, in 2024, Cloudflare generally purchased renewable energy in the same locality as it consumed in its operations, including in the United States, Canada, the United Kingdom, the European Union, Brazil, Chile, India, Colombia, Costa Rica, Honduras, Mexico, Malaysia, Thailand, Turkey, Vietnam, Morocco, Nigeria, and South Africa.

In certain cases, in part due to the geographically distributed nature of the Cloudflare network, the company purchased equivalent renewable energy products in the same region, or in the case of certain island nations, Verra-certified offsets. Cloudflare also procured Verra-certified offsets to account for its Scope 1 emissions.

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7. Shift Advantage’s review did not include Cloudflare renewable energy purchases. Their attestation is limited to Cloudflare’s carbon emissions calculations.

## **Stakeholder Letter**

Cloudflare  
101 Townsend St  
San Francisco, CA 94107

Shift Advantage  
3004 NE 47th Ave.  
Portland, OR 97213

6/23/2025

Dear Patrick,

Shift Advantage is pleased to provide consulting and advisory services to Cloudflare to support the calculation of Cloudflare's 2024 greenhouse gas emissions. Shift Advantage conducted this independent and impartial limited level of assurance verification of Cloudflare's annual emissions disclosure data in accordance with the standard ISO 14064-part 3 2nd Edition, 2019-04, Annex A against criteria as set forth in the Greenhouse Gas Protocol. This letter is to clarify matters set out in the assurance report. It is not an assurance report and is not a substitute for the assurance report. This letter and the assurance report, including the opinion(s), are solely for Cloudflare's benefit. Shift Advantage consents to the release of this letter but without accepting or assuming any liability on Shift Advantage's part to any other party who has access to this letter or assurance report.

The assurance report covers Cloudflare's 2024 calendar year operations. For Cloudflare's GHG emissions report Cloudflare uses an operational control approach that includes global offices and data centers. Cloudflare's emissions report covers Scope 1, Scope 2, and a portion of Scope 3 GHG emissions (3.1- Purchased Goods and Services, 3.2- Capital Goods, 3.4- Upstream Transportation and Distribution, and 3.5- Waste).

*Madison Spinelli*

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