

REPORT

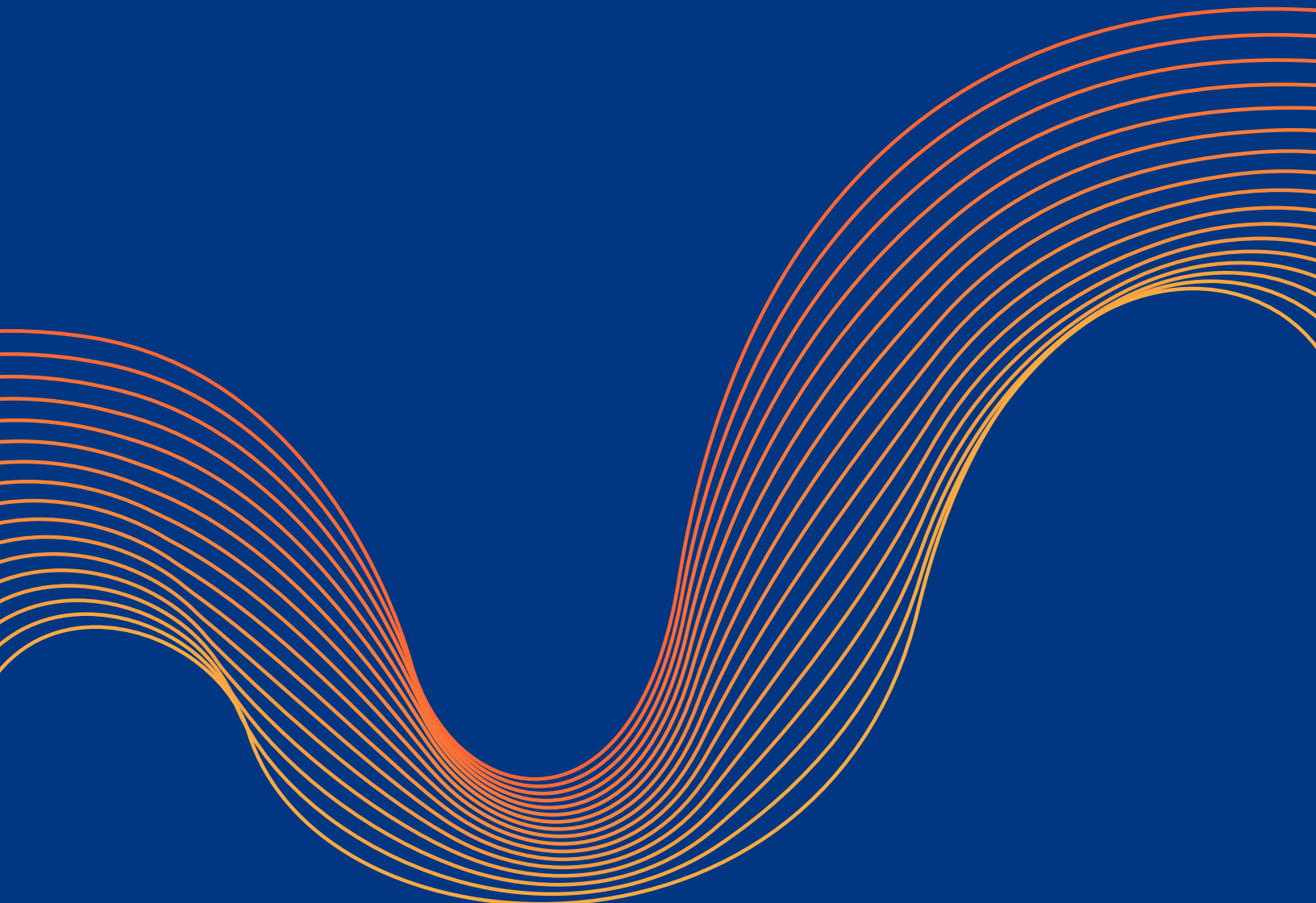


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# Cloudflare Emissions Inventory – 2020

July 26, 2021

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## CLOUDFLARE EMISSIONS INVENTORY

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### The following represents Cloudflare's comprehensive global greenhouse gas (GHG) emissions inventory for the calendar year 2020.

Cloudflare's calculations were prepared in accordance with the [GHG Protocol Corporate Standard, Greenhouse Gas Scope 2 Guidance](#), as well as ISO14064. The following inventory results were independently reviewed and verified for accuracy and completeness by [Sustainable Business Consulting \(SBC\)](#).

Emissions Category		Metric Tons (MT) Carbon Dioxide Equivalent (CO2e)	Percent of Calculated Total
Scope 1		0	0
Scope 2 (Location-based) <sup>1</sup>		13,955.15	100
	Facilities	754.27	5.4
	Network	13,200.88	94.6
Scope 2 (Market-based) <sup>2</sup>		0	100
Total (Market-based)		0	100

## Methodology

Cloudflare defined its organizational boundaries for the emissions inventory calculation using the control approach, and included all of its global operations.<sup>3</sup> Cloudflare's Scope 2 emissions are derived from purchased electricity. Cloudflare elected to subdivide its Scope 2 location-based reporting into facilities and network to further aid in transparency and comparability.

Usage data for Cloudflare's global network was collected from each of the points of presence (PoPs) in the network Cloudflare uses to provide its products to customers, which includes equipment located in more than 200 cities in 100 countries around the world.<sup>4</sup>

Usage data at Cloudflare facilities was measured in two ways.<sup>5</sup> All facilities that Cloudflare had access to electrical utility information reported actual usage. All facilities that did not have access to actual usage data used the average intensity method based on energy use intensity (EUI) factors provided by the [U.S. Energy Information Administration](#).

All network and facilities activity data was converted into emissions via grid average emissions factors. Emissions factor sources included the U.S. Environmental Protection Agency, U.K. DEFRA, and the International Energy Agency (IEA).

## Renewable Energy Purchases<sup>6</sup>

Cloudflare's market-based Scope 2 emissions are zero for 2020 as a result of the company's renewable energy 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. All purchases were consistent with [RE100 technical criteria](#).<sup>7</sup>

Cloudflare employed a regional purchasing methodology to account for energy used via its global operations that included purchases in the United States, Canada, the United Kingdom, the European Union, Brazil, Chile, India, Columbia, Malaysia, and South Africa, among others.

In 2020, Cloudflare also upgraded its corporate headquarters in San Francisco, California to [CleanPowerSF's SuperGreen service](#), which ensures those facilities are powered by 100% Green-e Energy certified renewable energy.

## SBC VERIFICATION LETTER

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Cloudflare  
101 Townsend St  
San Francisco, CA 94107

Sustainable Business Consulting  
3409 California Ave SW Unit C  
Seattle, WA 98116

June 25, 2021

Dear Patrick,

Sustainable Business Consulting (SBC) is pleased to provide an independent and impartial validation of Cloudflare's 2019 and 2020 Greenhouse Gas (GHG) footprint. This report provides Cloudflare with an independent third-party limited assurance that the 2019 and 2020 GHG Emissions reported are correct. In this report, the detailed verification framework and associated activities conducted to reach an assurance conclusion are discussed. The findings from this verification are reported here, along with a verification statement attesting to the accuracy of the Cloudflare's GHG emissions reporting. The verification statement is signed by the Lead Verifier and the Peer Reviewer.

This verified emissions report encompassed all of Cloudflare's operations for the 2019 and 2020 calendar years. This includes global network and facilities leased by Cloudflare. Cloudflare reports emissions in the two reporting scopes: Scope 1, direct emissions, Scope 2, indirect emissions. This successful third-party verification confirms the accuracy and completeness of the information provided to substantiate the 2019 and 2020 Cloudflare's GHG emissions reporting.

In providing this limited assurance, SBC has found no evidence that the Cloudflare's 2019 and 2020 GHG emissions reports are not correct, and not presented fairly in accordance with stated criteria.



**Nidhi Singh**

June 25, 2021

## REFERENCES

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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 Purchases](#).
3. Cloudflare's organization boundaries do not include Cloudflare's China network partners, which are not under Cloudflare's operational control.
4. 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 colocated in such a facility. Cloudflare's approach is based on guidance provided by [BSR and the Future of Internet Power](#).
5. Cloudflare facilities refers to Cloudflare controlled office space.
6. Sustainable Business Consulting's (SBC) review did not include Cloudflare renewable energy purchases. SBC's attestation is limited to Cloudflare's carbon emissions calculations.
7. Cloudflare expects to be fully aligned with [RE100 market boundary criteria](#) by the end of 2021.

## DOCUMENT TYPE

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