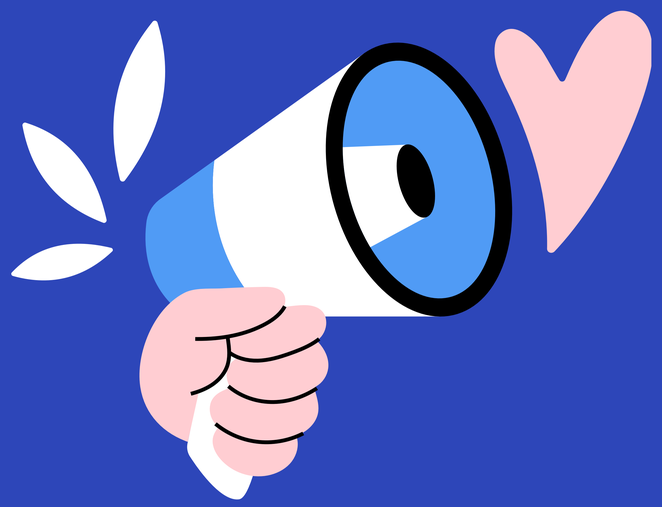
Our approach to addressing the growing climate crisis centers around two areas of impact:

1. We're committed to reaching net-zero GHG emissions by 2030.

2. We're leveraging our platform to raise awareness and drive engagement among our millions of listeners and creators.



In 2023, we focused on identifying levers we can use to reduce our climate impact together with key partners, industry associations, and academic institutions.

We're tackling our largest sources of emissions by building long-term solutions within the relevant areas of the business. In addition, through our internal Climate Champion network of advocates, we continue to implement company-wide initiatives and investments that can both grow the business and reduce our climate impact.

Much work remains to be done. As we work toward our net-zero goal, we continue to focus on innovative, collaborative, scalable, and sustainable actions.

Reducing Our Climate Impact

As a digital platform with limited ownership of physical assets, 98.3% of Spotify's GHG emissions are Scope 3, falling outside our direct control. We continue to work across our value chain to understand how we can better track emissions and set tangible reduction pathways.

DIMPACT: We continue to partner with DIMPACT, a collaborative project that brings together world-class researchers from the University of Bristol and several of the most innovative media and technology companies, and presented at their conference during London Tech Week 2023. Our current collaboration focuses on end-use-device energy efficiency and decarbonization solutions, as well as tools for measuring and reducing digital ad emissions. This work has allowed us to better track our emissions and improve efficiency with clear accountability.

Ad Net Zero: We joined the advertising industry's coalition working to reduce the carbon impact of developing, producing, and running advertising. This new partnership is helping us develop practical steps and tools toward reducing our emissions within our marketing organization.

Carbon Removal & Avoidance

We take an impact-first approach to carbon removal and avoidance. In 2023, rather than directly compensating for our yearly emissions with carbon credits, we instead contributed to climate projects that deliver decarbonization, nature protection, and carbon removal in line with global climate targets. We did not receive any carbon offsets associated with these donations, nor did we incorporate any emissions reductions from such projects into our calculations of our GHG emissions metrics. As we continue to build our carbon removal and avoidance strategy, we seek to support projects with the largest potential long-term and catalytic effects for our planet, including grassroots organizations and nascent solutions that need investment to scale.

2023 Emissions

In 2023, Spotify's total GHG emissions were 280,355 metric tons of CO_2e, a decrease in absolute terms of 15% compared to 2022.* Our per-employee and per-revenue CO_2e intensity have also decreased.

We measure and report our GHG emissions according to the GHG Protocol, which divides emissions into three scopes:

*2022 emissions have been restated to align with our revised 2023 methodology. Refer to the Reporting Principles & Data chapter for further details.

**Scope 2 emissions are calculated using the market-based approach but do not reflect the acquisition of energy attribute certificates (EACs). Refer to the chapter Reporting Principles & Data for further information on our methodology.

Scope 1
1,053 tCO_2e / 0.4%

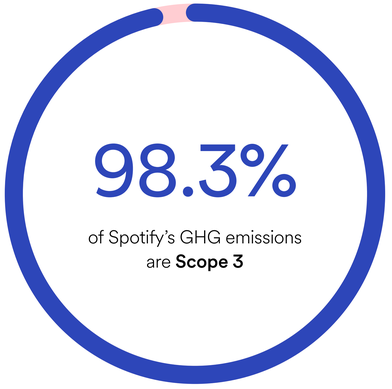
Those from sources directly owned or controlled.

Scope 2**
3,767 tCO_2e / 1.3%

Those caused by the electricity or energy purchased for heating and cooling leased buildings.

Scope 3
275,535 tCO_2e / 98.3%

Those created along the value chain, not directly controlled.



Scope 3 Breakdown by Category	
1: Purchased goods and services	86.8%
6: Business travel	9.3%
7: Employee commuting	1.9%
2: Capital goods	1.1%
3: Fuel- and energy-related activities	0.7%
8: Upstream leased assets	0.1%
5: Waste generated in operations	0.1%

Scope 3 Category 1 Breakdown	
Marketing	37.6%
Cloud	29.9%
Goods and services	27.0%
Offices	2.8%
Employees	2.7%

Climate Data

Method(s) for Collecting Climate Data and Calculating GHG Emissions
The climate impact is measured using a combination of activity and spend data to calculate emissions results, and the methodology has been refined throughout the year. The calculations follow the GHG Protocol Corporate Accounting and Reporting Standard (Revised Edition), GHG Protocol Scope 2 Guidance, and the Corporate Value Chain (Scope 3) Accounting and Reporting Standard (collectively, the GHG Protocol).

Scope 1 and 2 GHG Emissions
Our emissions include all Scope 1 (direct) and Scope 2 (indirect) emissions from our operations (e.g., offices). Scope 1 emissions represent direct emissions from heating fuels (such as natural gas) and refrigerants used in our offices. Scope 2 emissions represent indirect emissions from purchased electricity for our offices. For both Scope 1 and Scope 2 emissions calculations, actual data from third-party utility bills (e.g., actual natural gas usage, electricity consumption) is used. Where actual utility data is not available, estimated heating/cooling/electricity usage is calculated based on office square footage and consumption benchmarks (e.g., Department of Energy's Building Performance Database, IEA Efficiency Indicators). A market-based approach has been applied to calculate Scope 2 emissions using contract-specific emissions factors where available, data on grid-residual emissions factors, or location-based emissions factors where there are no contracts or residual emissions factors.

Emissions tCO_2e	2022** / % of Emissions	2023 / % of Emissions
Scope 1	295 / 0.1%	1,053 / 0.4%
Scope 2*	4,141 / 1.2%	3,767 / 1.3%
Scope 3	327,162 / 98.7%	275,535 / 98.3%
Total Emissions	331,598 / 100.0%	280,355 / 100.0%
Scope 3 Breakdown by Category		
Category 1: Purchased goods and services	269,499 / 82.4%	239,019 / 86.8%
Category 2: Capital goods	6,991 / 2.1%	3,072 / 1.1%
Category 3: Fuel- and energy-related activities	1,700 / 0.5%	1,837 / 0.7%
Category 5: Waste generated in operations	85 / <0.1%	226 / 0.1%
Category 6: Business travel	44,352 / 13.6%	25,730 / 9.3%
Category 7: Employee commuting	4,373 / 1.3%	5,305 / 1.9%
Category 8: Upstream leased assets	162 / <0.1%	346 / 0.1%

*

*Scope 2 and 3 emissions are calculated using the market-based approach. Spotify will acquire energy attribute certificates (EACs) for its nonrenewable office and home office electricity. Figures above reflect total emissions before acquisition of such energy attribute certificates.

**2022 emissions have been revised to align with the following updates within our revised 2023 methodology: exclusion of Scope 3 Category 11 Use of sold products and revised measurement of cloud emissions within Scope 3 Category 1 Purchased goods & services. (R efer to Methodology Changes section below for further details). In 2023, we refined certain assumptions associated with our office-related emissions that have not been reflected in the prior year data.

Climate Data

Scope 3 GHG Emissions
Our Scope 3 emissions reflect all other indirect emissions across our value chain. This includes the following categories:

- **Category 1:** Purchased goods and services
  This includes emissions associated with marketing services, profes ction of original podcast content by our own podcast studios, cloud computing, and other purchased goods and services. Our Scope 3 boundary does not include activities related to the production of licensed music, podcast, or audiobook content.
- **Category 2:** Capital goods
- **Category 3:** Fuel- and energy-related activities (not included in Scope 1 or Scope 2)
- **Category 5:** Waste generated in operations
- **Category 6:** Business travel
- **Category 7:** Employee commuting
- **Category 8:** Upstream leased assets

Scope 3 emissions are primarily calculated using a spend-based approach, which estimates emissions by using financial spend data as a proxy and applying industry-standard emissions factors (e.g., U.S. Environmentally Extended Input-Output (EEIO) Models published by the United States Environmental Protection Agency (EPA)) or supplier-specific emissions factors (sourced from company-specific data reported through the Climate Disclosure Project (CDP), where available.

Certain Scope 3 categories, such as business travel-related emissions, for example, are based on activity data (e.g., flight logs obtained from travel agents). Because we're committed to accuracy and transparency, we will continue to refine our methodology and sources of data, focusing on key areas of our Scope 3 emissions, such as marketing and cloud computing. The following Scope 3 categories are relevant to Spotify for the reporting year but not included in reported emissions due to limited availability of relevant information:

- **Category 11:** Use of sold products
- **Category 15:** Investments

The following Scope 3 categories are not relevant to Spotify for the reporting year and therefore are not included in reported emissions:

- **Category 4:** Upstream transportation and distribution
- **Category 9:** Downstream transportation and distribution
- **Category 10:** Processing of sold products
- **Category 12:** End-of-life treatment of sold products
- **Category 13:** Downstream leased assets
- **Category 14:** Franchises

Changes in Spotify's GHG emissions can be attributed to activity changes and/or methodology changes including updated emissions factors. See below for examples of such changes in 2023.

Scope 3 Category 1 Breakdown	2022 / % of Scope 3 Category 1	2023 / % of Scope 3 Category 1
Marketing	101,670 / 37.7%	89,998 / 37.6%
Cloud	70,257 / 26.1%	71,513 / 29.9%
Goods and Services	83,982 / 31.2%	64,520 / 27.0%
Offices	4,854 / 1.8%	6,639 / 2.8%
Employees	8,736 / 3.2%	6,349 / 2.7%

Climate Data

Activity Changes

- Reduction in company-wide business travel, resulting in lower emissions from business travel.
- Lower marketing spend, resulting in lower emissions from marketing activities.
- Decrease in capital expenditures, resulting in lower emissions associated with purchased capital goods.

Methodology Changes

- Market and societal developments; e.g., the International Energy Agency's 2022 electricity emissions factors show that electricity generation has become lower-emitting on average, using an increasing proportion of renewables and decreasing reliance on coal-fired power plants.
- Improvements in GHG Emission Accounting Methodologies:
  - In 2023, we revised our methodology for measuring the emissions associated with our cloud computing. For our primary cloud provider, we now leverage customer-specific emissions information provided by the vendor instead of calculating emissions by using our cloud computing spend as a proxy. Our remaining cloud-related emissions continue to be calculated using a spend-based approach. Prior-year data has been updated to reflect this change, resulting in total cloud-related emissions for 2022 of 70,258 tCO_2e (an approximately 168% increase in total cloud-related emissions previously reported). Previously reported 2022 cloud-related emissions were 26,218 tCO_2e.

  - In 2023, we revised our methodology to exclude Scope 3 Category 11 Use of sold products from our emissions boundary. For Spotify, this category represents emissions associated with the end user's device energy usage, app downloads, and data transfer energy usage for streaming content downloaded over networks. We are committed to transparency in our sustainability reporting and strive to include all relevant Scope 3 emissions categories within our boundary. However, due to the current lack of industry-specific and widely accepted measurement methodologies for Scope 3 Category 11 as it relates to streaming-related emissions, this category is excluded from our reported emissions inventory. Prior-year data has been revised to reflect this change. Previously reported 2022 end-use emissions were 103,920 tCO_2e. We will continue to actively engage with industry stakeholders in an effort to develop guidance on measurement approaches and drive consistency and transparency across industry reporting. We will continue to monitor developments in this area.

As we continue on our climate journey, we will strive to refine and evolve the data and methodology for measuring our climate impact. As techniques for calculating emissions improve, historical data points may be adjusted to reflect new information and/or changes to accounting methodologies. Our focus will be on improving granularity of data and using more activity data for measurement as it becomes available.