



# Greenhouse Gas Emission Data and Methodology

RSM US LLP – JUNE 2023

## RSM & The Environment

The influence [RSM has on the environment](#) is two-fold: the effects of the operations of RSM's people and the network of RSM offices and the impacts the firm achieves through professional services rendered to clients. The impact RSM has on its clients is felt daily, and seen through continual progress toward a more sustainable future. The influence RSM has directly on the environment was a tougher question to answer – which is why RSM has developed a greenhouse gas ("GHG") inventory, which demonstrates:

1. Where RSM's GHG emissions currently have the biggest impact
2. How RSM is progressing on reducing its GHG emissions
3. How RSM's stakeholders can track RSM's progress

## Greenhouse Gas Emissions Overview

RSM is committed to transparently and accurately reporting its greenhouse gas emissions. Beginning in 2022, with guidance from RSM's [ESG advisory practice](#), the firm developed its baseline reporting year by collecting data from its operations in the U.S. to report on Scope 1, 2 and select Scope 3 (specifically, business travel) GHG emissions, developed using guidance from the GHG Protocol framework. RSM will set realistic and consistent emission reduction targets based off this baseline year data and will continue to expand data collection efforts across the full geographic footprint.

## RSM's carbon footprint

Jan. 1, 2022 – Dec. 31, 2022

<b>TOTAL Gross GHG EMISSIONS (MTCO2e)</b>	<b>32,471.31</b>
Scope 1 [MTCO2e]	4,830.10
<i>Natural Gas Utility</i>	<i>4,830.10</i>
Scope 2 [MTCO2e]	10,041.25
<i>Electricity Utility</i>	<i>9,823.70</i>
<i>Steam Utility</i>	<i>217.50</i>
<i>Cooling Utility</i>	<i>0.05</i>
Scope 3 [MTCO2e]	17,599.96
<i>Air Travel</i>	<i>10,628.45</i>
<i>Non-Air Travel</i>	<i>2,754.74</i>
<i>Accommodations</i>	<i>4,216.77</i>

This inventory only includes RSM US LLP offices located in the U.S.  
All MTCO2e are in metric tons.

## General Provisions

### Definitions

Unless otherwise indicated, defined terms used throughout this document have the following meanings:

- "RSM" and "the Company" refers to RSM US LLP
- "Document" refers to the RSM Greenhouse Gas Emission Data and Methodology document
- "ESG" refers to the term environmental, social, and governance
- "GHG" refers to greenhouse gas and the associated major emissions (carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and the F-gases (hydrofluorocarbons and perfluorocarbons) and sulfur hexafluoride (SF<sub>6</sub>) as defined by the U.S. Environmental Protection Agency)

### Objectives of the Document

This document has been prepared to provide guidance for RSM in managing GHG-related matters and to provide transparency for RSM's stakeholders into the development of RSM's GHG inventory.

RSM is committed to reviewing this document annually to:

- Ensure methodologies and approaches are consistent with industry-leading standards;
- Provide on-going guidance for the firm in managing its ESG strategy; and
- Ensure the RSM professionals calculating RSM's emissions follow guidance from the GHG Protocol Corporate Accounting and Reporting Standard.

## GHG Inventory Development Methodology

### Applying GHG Protocol

RSM applies the Greenhouse Gas Protocol to [calculate](#) its Scope 1, Scope 2, and select Scope 3 GHG emissions in metric tons of equivalent carbon dioxide emissions ("MTCO<sub>2</sub>e") across each emission category and office location using the following generalized formula.

$$\text{Emissions} = \text{Activity Data} \times \text{Emission Factor} \times \text{GWP}$$

Where:

- **Activity Data:** Represents the units of measure of electricity (kilowatt hours or kWh) and natural gas consumption (therms), as well as steam usage and cooling (MMBtu).
- **Emission Factor:** Represents the mass of resultant emissions per unit of activity data in question.
- **GWP:** Stands for 'global warming potential' and is used to convert the total emissions per activity data unit in question (from the emission factor) into metric tons of equivalent carbon dioxide or MTCO<sub>2</sub>e. GWP values were taken from the [EPA GHG Emissions Factor Hub](#) for 100-year time horizon GWP relative to CO<sub>2</sub>.

### Setting Boundaries

#### Organizational Boundary Setting

Based on RSM's portfolio of leased offices, a control approach methodology is used to define its organizational boundaries – whereby RSM accounts for the emissions that are generated from operations under its control – as detailed in Chapter 3 of the [GHG Protocol Corporate Accounting and Reporting Standard](#). To further define this consolidation approach, RSM uses an operational control/operating lease approach to develop the corporate GHG inventory over those emission sources that RSM has operational control.

#### Operational Boundary Setting

RSM's operational boundaries include Scope 1, Scope 2, and select Scope 3 emission sources (see Table 3.2.2a. Emissions Scope Sources below) – as detailed in Chapter 4 of the [GHG Protocol Corporate Accounting and Reporting Standard](#). Additional Scope 3 emissions that are not considered under the current operational boundaries might be introduced in the future based on data availability and/or stakeholder expectations.

Scope	Emissions Source(s)	Data Collection Source(s)
Scope 1	RSM U.S. office buildings	Survey responses, utility bills
Scope 2	RSM U.S. office buildings	Survey responses, utility bills
Scope 3	RSM business travel	RSM expense, travel management, hotel facilities

A sample of the survey sent to RSM office location managers is provided in the Appendix.

## Calculation Methodology

### Scope 1 Emissions

RSM's Scope 1 emission calculations focus on one of the four Scope 1 emission categories – namely, stationary combustion. To calculate these emissions, RSM collects natural gas usage data. The GHG Protocol guidance is then followed to convert the usage data into MTCO<sub>2</sub>e using the appropriate emission factors and GWP factors for natural gas listed by the Environmental Protection Agency (EPA).

For the remaining three categories:

- Mobile combustion: RSM does not own or lease any fleet vehicles and has no other sources of mobile combustion emissions;
- Process emissions: RSM does not have any industrial or manufacturing processes associated with business operations; and
- Fugitive emissions: The data for fugitive emissions is not readily available for office locations but may be included in future inventories as RSM improves data collection processes.

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## Scope 2 Emissions

RSM assumes all Scope 2 emissions arise from purchased electricity, cooling, and steam, and no emissions are associated with heating. To calculate these emissions, RSM collects electricity, steam, and cooling usage data. The GHG Protocol guidance is then followed to calculate location-based Scope 2 emissions by converting usage data into MTCO<sub>2</sub>e using the appropriate e-Grid emission factors and GWP factors for electricity based on office location listed by the Environmental Protection Agency (EPA). For calculating emissions from cooling, RSM utilizes emissions factors provided by EnergyStar's Greenhouse Gas Technical Reference document and assumes all offices providing cooling data utilize Electric Driven Chillers, based on location and building type. RSM currently reports on location-based emissions, as the data for market-based emissions is not readily available for office locations but may be included in future inventories as RSM improves data collection processes.

## Scope 3 Emissions

Specific Scope 3 emissions are selected based on materiality assumptions – specifically, which Scope 3 emissions have the biggest impact on RSM's day-to-day operations. Thus, the GHG Protocol's Corporate Value Chain (Scope 3) Accounting and Reporting Standard guidance is followed to calculate Scope 3 emissions for Category 6: Business Travel (leveraging both the distance- and spend-based approaches).

## Key Estimations & Assumptions

Where data for in-boundary emissions is not available, and a reasonable amount of effort has been used to gather the data, RSM uses available data to estimate emissions. The following assumptions are made and updated as new data and processes become available:

**Office data:** There are several instances of data estimation that is used throughout RSM's GHG emissions inventory relating to office data for Scope 1 stationary combustion and Scope 2 emissions:

- Where all data is absent for an office location, RSM uses a pro-rata extrapolation based on leased square-footage and RSM's five office regions using intensity factors, which estimate carbon dioxide equivalent emissions based on square footage (e.g., X MTCO<sub>2</sub>e / ft<sup>2</sup>). Where there are two or fewer offices in a particular region and leased square-footage category, the extrapolation takes into consideration other offices within that region in the most similar category of leased square footage.
- Where data is missing for a set of days within the calendar year, but was collected for a minimum of half of the month during which the days occurred, an estimated daily kWh or daily therm amount is calculated with available data from that office for the month and extrapolated to the remaining days.
- Where data is missing for more than half of a month, an estimated daily kWh or daily therm amount is calculated using available data from that office for the full calendar year and extrapolated to the remaining days.
- Where data is available for a full calendar year (365 days) for a period from December through January, actual data is used for the full calendar year.
- Where start or end dates are missing from one month of collected data, those dates are assumed based on the corresponding month from the following year.

**Air travel emissions:** RSM collects the number of miles for each flight taken by its professionals that was invoiced during calendar year 2022 and finds an emission factor in which the units were kg CO<sub>2</sub>, g CH<sub>4</sub> and g N<sub>2</sub>O per passenger-mile to match the raw data given. RSM leverages the EPA emission factors Table 10, "Scope 3 Category 6: Business Travel and Category 7: Employee Commuting", for the emissions factors of Air Travel – Short Haul (<300 miles), Air Travel Medium Haul (<=300 miles, <2300 miles), and Air Travel – Long Haul (>=2300 miles) and applies them to the proper categories of flight mileage raw data. Within the raw data provided, negative mileage values are to be assumed as "cancelled flights". As such, these mileage values are kept as negative, and when categorizing the flights into the three aforementioned categories to properly apply the emission factors, the sums of the negative values are included to account for the initial flight booking that an RSM professional did not actually fly.

**Non-air business travel:** RSM collects spend data for categories labelled, Car Rental Fuel, Car Rental, Hotel-lodging, Mileage, Public Transit, Taxi/Car Service and Airfare. As data is provided in U.S. dollar spend, RSM uses the emissions factors from the EPA that are provided for specific categories in units of kgCO<sub>2</sub>, g N<sub>2</sub>O, g CH<sub>4</sub> and kgCO<sub>2</sub>e other per 2018, purchaser price. RSM uses the percentage inflation of 18.14% from 2018 to 2022 to convert the units to 2022, purchaser price. RSM assumes that Car Rental Fuel, Car Rental, Mileage and Taxi/Car Service will all use the EPA emission factor from the category of "Transit and Ground Passenger Transportation". The difference in categorization of Car Rental Fuel and Car Rental; Car Rental Fuel is the dollars spent specifically

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in Fuel, whereas Car Rental takes into account any flat fee or per day rates on vehicles. RSM categorizes Car Rental with the same EPA emissions factor as Car Rental Fuel because the Car Rental data is not broken out by miles driven, and there is no indication of whether this dollar amount accounts for vehicles separate from those accounted for in Car Rental Fuel. As such, RSM recognizes the risk of double counting these emissions, and is creating guidance going forward for its professionals to identify specific costs associated with vehicles so they can be properly classified. For other categories, Hotel-Lodging leverages the emissions factor under the label "Accommodation", Public Transit leverages the emissions factor "Rail transportation", and Airfare leverages the emission factor "Airfare". Emissions from Airfare spending is included in the estimated emissions from dollars spend because it accounts for RSM's professionals who do not use the firm flight booking system. Instead, these people submit their flight booking as an expense, and subsequently are not included in the Air Travel Emissions data, and must be accounted for separately.

**Rail Carbon Detail:** RSM collects the number of miles for each rail taken by its professionals and finds an emission factor in which the units were kg CO<sub>2</sub>, g CH<sub>4</sub> and g N<sub>2</sub>O per passenger-mile to match the raw data given. RSM uses the Intercity Rail- National Average emissions factors from the EPA to account for emissions of all miles travelled. It is understood that there are various trips that would be categorized under the Northeast Corridor Emission factor (which would have far less emissions than the former); however, it is not possible for RSM to confirm individual data points to validate the corresponding rail trails.

For all emissions factors, the Global Warming Potentials of CH<sub>4</sub>, N<sub>2</sub>O and CO<sub>2</sub> are taken from the EPA data set on emissions factors for 2022.

## Baseline Recalculation

Based on availability of data, RSM has selected calendar year 2022 (January 1, 2022 – December 31, 2022) as the firm's GHG emission baseline.

Per the GHG Protocol, several activities might trigger a base-year recalculation activity. RSM has determined that a fixed baseline year will apply.

To maintain relevant data that is accurate, consistent, complete and transparent, any one of the following triggers would necessitate a recalculation of the fixed baseline year:

- Overall GHG emissions changes following a "significance threshold" of a 10% increase or decrease.
- Structural changes that will have a significant impact on GHG emissions that trigger a base-year recalculation include mergers, acquisitions and/or divestments. If structural changes occur in the middle of a year, base-year emissions will be recalculated for the entire year.
- Changes in the methodology of the GHG emissions calculations that may trigger a base year recalculation include changes to emissions factors, more accurate data collection processes, updated methodologies or processes and/or potential boundaries and scope changes.
- Significant data errors or a number of cumulative errors that are collectively significant. This might also arise from a change or error discovery in the process of emissions that must be extrapolated.

## APPENDIX

### Basic property information

What is the address and square footage (sq ft) for the RSM leased space? If the rental space is in multiple buildings, include all addresses and total square footage in each

<b>Rental Property Address(es)</b>		<b>Sq ft leased by RSM</b>	
<b>Total Sq Ft of building(s)</b>		<b>% total space RSM leases</b>	

### Energy utility

Complete the below fields for all the energy utilities used at this location.

Energy Utilities	Does the property use this utility?	Is the utility meter(s) or pro rata share?	If pro rata share, what % is billed to RSM?	Who manages the acct with the utility company?
Electricity	___ Yes ___ No	___ Metered ___ Pro rata share	___ %	___ Property ___ RSM
Natural Gas	___ Yes ___ No	___ Metered ___ Pro rata share	___ %	___ Property ___ RSM
Steam	___ Yes ___ No	___ Metered ___ Pro rata share	___ %	___ Property ___ RSM
Other	___ Yes ___ No	___ Metered ___ Pro rata share	___ %	___ Property ___ RSM

## Communications with RSM office location managers

### Actions Needed

- **Contact property management** – For the information and data you do not have, download and use this template email and RSM Energy Utility Request Form to request it from the building property manager. Customize the email to include the data you need and consider prepopulating the form with any answers you already have.
- **Energy Utility Data Collection** – Collect documentation with usage data, create a folder for the office in this OneDrive and upload documents. Monthly data is needed for all energy utilities (e.g. electricity, natural gas, steam, etc.) used in the office during 2022.
  - Documents can include invoices from an energy company or property management (highly preferred) or Excel/email with a data chart with the monthly usage breakdown.
  - Examples of usage data units:
    - Electricity: kWh, TWh
    - Natural Gas and Steam: BTU, MMBTU, Therm, CCF

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## FAQs

- **Criteria for offices** – Energy utility data is needed for all RSM offices located in U.S. during calendar year 2022. If an office location moved during that 12-month period, data should be collected and submitted for both the old and new locations.
- **Energy Utilities** – This includes electricity, natural gas, steam or other energies used to power the office.
- **Metered** – When utility meter(s) are used to measure the actual usage for RSM office space.
- **Pro rata share** – When utility meter(s) capture usage for more than RSM office. Property management handles utilities and bills RSM a percentage based on square footage.
- **Renewable energy**
  - Renewable energy agreements (Power Purchase Agreement) – A contract to buy renewable energy at agreed upon volumes and prices.
  - Solar on-site – The building has its own solar panels to provide energy for the building.

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