

Booz Allen[®]

FY24 Greenhouse Gas Emissions

STATEMENT AND METHODOLOGY REPORT

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FY24 GREENHOUSE GAS EMISSIONS STATEMENT

Booz Allen's FY2024 greenhouse gas (GHG) emissions totaled 378,415.81 MTCO_{2e}. Scope 1 emissions increased from FY2023 to 192.6 MTCO_{2e}, mainly due to the addition of emissions related to on-site natural gas consumption in our leased facilities. Scope 2 emissions decreased by roughly 15% from FY23 to 10,445.8 MTCO_{2e}, primarily due to a reduction in our overall square footage footprint and increased availability of actual data through utility bills. Scope 3 emissions increased by roughly 260% from FY23 due to an expansion of scope and the addition of new categories. This includes expanding the calculation for emissions related to Category 1: Purchased Goods & Services to include non-sourcable goods and services; accounting for emissions from employees working from home in Category 7: Employee Commuting, and adding four new categories: Category 2: Capital Goods, Category 3: Fuel and Energy Related Activities, Category 4: Upstream Transportation & Distribution, and Category 15: Investments.

Scope 1: Fuel Combustion

Booz Allen's Scope 1 emissions are generated from the combustion of fuel in stationary sources, such as emergency generators and facility heating, as well as mobile sources like vehicles. In FY2024, Scope 1 emissions increased by over 1000% to 192.6 MTCO_{2e}. This significant change was primarily due to the inclusion of on-site natural gas consumption in our leased facilities, which was newly added this year.

Scope 2: Purchased Electricity

Booz Allen's Scope 2 emissions are generated from purchased electricity used in our facilities. In FY2024, these emissions decreased by 15% to 10,445.8 MTCO_{2e}, primarily due to a reduction in leased square footage from workspace consolidation. Compared to FY2020, this represents a roughly 30% decrease. Additionally, our NO_x emissions were calculated at 11,732.57 lb/MWh, and our SO_x emissions were calculated at 8,988.2 lb/MWh.

Scope 3: Value Chain

Booz Allen's Scope 3 emissions are from the following categories:

- Category 1- Purchased Goods and Services;
- Category 2- Capital Goods;
- Category 3 - Fuel and Energy Related Activities;
- Category 4 - Upstream Transportation & Distribution;
- Category 5 - Waste Generated in Operations;

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- Category 6 - Business Travel;
 - Category 7 - Employee Commuting; and
 - Category 15 - Investments

Overall, Scope 3 emissions increased 260% to 367,777.41 MTCO₂e from FY2023. This increase was driven by the addition of four new Scope 3 categories: Category 2 - Capital Goods, Category 3 - Fuel and Energy Related Activities, Category 4 - Upstream Transportation & Distribution, and Category 15 – Investments, which together contributed to an additional 8,059.41 MTCO₂e.

Following guidance from the Science Based Targets initiative (SBTi), we expanded the calculation for emissions related to Category 1 - Purchased Goods & Services to include non-sourceable goods and services, resulting in 216,607.61 MTCO₂e to Category 1 in FY24.

Emissions in Category 6 - Business Travel increased by approximately 110% to 43,805.85 MTCO₂e from FY2023, as our business travel continues returning to pre-COVID levels. This increase was particularly notable in air travel, hotel stays, reimbursed auto travel, and the associated emissions.

Emissions from Category 7 - Employee Commuting, increased by roughly 10% to 44,217.8 MTCO₂e from FY23, as we expanded the scope of this category to include emissions from telework. Based on our employee emissions survey data, more employees regularly worked from home this fiscal year compared to FY2023.

METHODOLOGY

Scope 1: Fuel Combustion

For Booz Allen owned vehicles, the local Booz Allen office associated with the vehicle provided the vehicle's make, model, and mileage data used to calculate emissions. We converted this data into CO₂, CH₄, and N₂O emissions using World Resources Institute (WRI) GHG Protocol Mobile Combustion Emissions Calculation Tool, which relies on global warming potential values from the 2014 IPCC Fifth Assessment Report.¹

Booz Allen directly purchases and consumes diesel fuel for use in emergency generators on a small number of our sites. Emissions from these generators were estimated by combining run times with average consumption data and diesel combustion emissions factors from US EPA GHG Emission Factors Hub².

This year, we expanded our scope to include natural gas, as we were able to access natural gas utility bills for two Booz Allen facilities. We used natural gas consumption and combustion data from US EPA GHG Emission Factors Hub to calculate emissions.

Our Scope 1 emissions methodology and calculations were verified by Industrial Ecology Consultants.

Scope 2: Purchased Electricity

By the end of FY2024, Booz Allen's global real estate holdings comprised approximately 2.2 million square feet of leased space. Booz Allen neither owns nor manages the buildings we occupy. We calculate emissions associated with purchased electricity using a combination of actual electricity data and estimates based on square footage, building type, and location.

In FY2024, actual electricity consumption (kWh) data from utility invoices was available for 21 of our U.S. Booz Allen facilities, covering nearly 48% of our total leased square footage. After determining kWh consumption, we used region-specific emissions factors from the U.S. Environmental Protection Agency's (EPA) 2024 Emissions and Generation Resource Integrated Database (eGRID)³ to calculate each building's emissions. We converted nitrogen dioxide and methane emissions to CO₂e using global warming potentials from the United Nations Intergovernmental Panel on Climate Change Fifth Assessment Report. The emissions calculations include CO₂, CH₄, and N₂O.

The remainder of our purchased electricity emissions data is calculated by estimating electrical consumption based on total occupied square footage, facility type, and building location. For both U.S. and international facilities, we determine the average kilowatt hours (kWh) per square foot of the buildings in our portfolio by using data from the U.S. Energy Information Administration's (IEA) 2018 Commercial Buildings Energy Consumption Survey (CBRECS)⁴. We then estimate annual kWh

¹ World Resources Institute (2015). *GHG Protocol tool for mobile combustion. Version 2.6*. Available for download at: <https://ghgprotocol.org/calculation-tools-and-guidance>

² U.S. Environmental Protection Agency. Emissions and Generation Resource Integrated Database (eGRID). January 2024. <https://www.epa.gov/egrid/summary-data>

³ U.S. Environmental Protection Agency. Emissions and Generation Resource Integrated Database (eGRID). January 2024. <https://www.epa.gov/egrid/summary-data>

⁴ Energy Information Agency (EIA). Commercial Building Energy Consumption Survey. Conditional Energy Intensity. 2018. <https://www.eia.gov/consumption/commercial/data/2018/index.php?view=consumption>

consumption of our facilities by multiplying CBRECS averages by the number of square feet in each leased Booz Allen facility. To convert kWh into emissions, we use region-specific emissions factors from the U.S. Environmental Protection Agency's (EPA) 2024 Emissions and Generation Resource Integrated Database (eGRID) for U.S. facilities (which include CO₂, N₂O, and CH₃), and International Energy Agency (IEA) ⁵ emissions factors specific to each country (includes CO₂).

Our Scope 2 emissions methodology and calculations were verified by Industrial Ecology Consultants.

Scope 3: Value Chain

CATEGORY 1 - PURCHASED GOODS AND SERVICES, CATEGORY 2 - CAPITAL GOODS, AND CATEGORY 4 - UPSTREAM TRANSPORTATION AND DISTRIBUTION

In FY2024, we expanded upon our use of spend data for calculating emissions from purchase goods and services. This year we also used spend data to calculate emissions from Category 2 - Capital Goods and Category 4 -Upstream Transportation and Distribution.

For all three spend-based Scope 3 categories (1, 2, and 4), emissions were calculated using our FY24 spend data and US EPA Environmentally Extended Input Output Model (USEEIO) emissions factors. Booz Allen spend data was adjusted for inflation and then mapped to corresponding North American Industry Classification System (NAICS) codes⁶ to apply the correlating USEEIO emissions factors. It should be noted that Booz Allen's accounting taxonomy, which generally aligns with UN Standards Products and Services Code, does not directly align with the NAICS taxonomy. Therefore, approximations in correlating Booz Allen spend data to NAICS codes were used in mapping.

Following the guidance from the Science Based Targets initiative (SBTi), these calculations now include both sourceable and non-sourceable spend. In contrast, previous years' calculations of Category 1 Emissions only included sourceable spend.

Equation: *Emissions (kg CO₂e) = spend by category (\$) × inflation adjustment × Emission factor for Equivalent USEEIO category (kg CO₂e/\$)*

CATEGORY 3 - FUEL AND ENERGY RELATED ACTIVITIES

Category 3 emissions include the upstream impacts of fuels, which are not covered in Scopes 1 and 2. These impacts encompass life cycle emissions from the extraction, processing, and transportation of fuels, as well as grid losses from electricity use. Emissions from electricity transmission and distribution (T&D) losses associated with the electricity grid by state were calculated using percent grid loss data from the U.S. EPA eGRID2022 and IEA.

Equation: *Emissions from Upstream Fuels and Energy consumed =*
$$\sum (kWh \text{ of electricity consumed} \times \text{electricity life cycle emission factor (kg(CO}_2\text{e)/kWh)}) \times \text{T\&D loss rate (\%)} + \sum \text{electricity use (kWh)} \times \text{upstream impact of fuels for electricity ((kgCO}_2\text{e)/kWh)} + \sum \text{natural gas (therms)} \times \text{upstream impact of natural gas ((kgCO}_2\text{e)/gal)}$$

⁵ International Energy Agency. September 2022. <https://www.iea.org/data-and-statistics/data-product/emissions-factors-2022>

⁶ Ingwersen, W. AND M. Li. Supply Chain Greenhouse Gas Emission Factors for US Industries and Commodities. U.S. Environmental Protection Agency, Washington, DC, EPA/600/R-20/001, 2020. v1.2. April 20, 2023 <https://catalog.data.gov/dataset/supply-chain-greenhouse-gas-emission-factors-v1-2-by-naics-6>

CATEGORY 5 - WASTE GENERATED IN OPERATIONS

We calculated waste generation intensity using our headquarters' waste data, square footage, and utilization data. This intensity was extrapolated to all facilities based on each location's square footage and utilization rate.

Equation: *Waste generation intensity for McLean ((short tons MSW generated)/(square foot)) × utilization rate × square foot of each facility = short ton of waste type generated (kg or lbm)*

CATEGORY 6 - BUSINESS TRAVEL

Our calculations include estimated emissions from employee business travel, which we define as work-related air travel, car rentals, billable personal miles, and hotel stays.

Most of these estimates were provided directly by our travel providers, who work closely with us to track the environmental impact of each trip. However, a small portion of our travel data was not included in the below methodology due to a recent acquisition not being fully integrated into our travel system. In this case, spend per category and USEEIO factors were used to estimate CO₂e emissions.

AIR TRAVEL

We used GHG Protocol emissions factors to estimate CO₂ emissions for all domestic and international flights recorded by our travel service provider. Flights were categorized by length (long-, medium-, and short-haul), mileage, seat class, and type of aircraft.⁷

However, a small minority of our employees were unable to make their travel plans using our travel service provider, so their data is not included. Additionally, the data does not account for flights that were cancelled or rerouted, or had changes in travel plans (e.g., some flights were not taken but remained in the system).

AUTOMOBILE RENTALS

Our main rental car agencies (National, Enterprise, Avis, and Hertz) used EPA Climate Leaders emissions factors to estimate CO₂e emissions associated with domestic and international reserved car mileage. We receive this data in reports identifying miles traveled, vehicle class, type of fuel, duration of travel, and other key information. Rental cars reserved by employees using other vendors or methods were not included, as this data was unavailable.

To determine emissions from employees on their personal vehicles, we retrieved mileage data from employee reimbursements allocated for personal vehicle travel for work engagements. We then converted the reported automobile mileage into CO₂e emissions using GHG Protocol's tool for calculating CO₂ emissions from mobile sources.⁸ The emissions factors and global warming potential values used are from the 2014 IPCC Fifth Assessment Report.

HOTELS

For hotel reservations made with our travel service provider, we receive an annual report with the number of rooms, room nights, and country of each hotel stay. We use the United Kingdom Government

⁷ Factors and calculations for conversion are for global data (<https://ghgprotocol.org/about-us>).

⁸ World Resources Institute (2015). *GHG Protocol tool for mobile combustion. Version 2.6*. Available for download at: <https://ghgprotocol.org/calculation-tools-and-guidance>

GHG Conversion factors for Company Reporting to convert the number of room nights per country to estimated CO₂e emissions. A small minority (less than 5%) of hotel stays took place in countries without available emissions factors, so these rooms were not included in the calculation.

CATEGORY 7 - EMPLOYEE COMMUTING

COMMUTING

We use data from our annual employee emissions survey to estimate emissions from employees' commutes. The survey captures a wide range of data on employees' daily commutes, including distance, mode of transportation, and average number of commuting days per week.

Using the average-data method from the WRI GHG Protocol's Technical Guidance for Calculating Scope 3 Emissions⁹, we determine annual average commuting distance by multiplying the daily commute distance by the average number of days worked per year (excluding weekends and days spent on business travel, vacation, or working from home). We then combine the annual average commuting distance with conversion factors provided by EPA's Emission Factors for Greenhouse Gas Inventories and AR5 - IPCC Fifth Assessment to determine the total CO₂e emissions produced for each mode of transportation. These CO₂e emissions are then combined to create an aggregate commuting footprint.

The survey is voluntary and has traditionally experienced low participation rates, which limits our ability to draw inferences from year-over-year trends. However participation rates are increasing, and the data appears to be stabilizing. The emissions from the survey respondents were extrapolated out to account for the remaining employee population's commute, comprising 34,200 employees in total.

TELEWORK

Due to Booz Allen Hamilton's hybrid working situation, emissions from telework were also included in this category. Telework data was combined with emission factors from Anthesis and the US EPA using the formula below.

Equation: *Emissions from telework (kg CO₂e) = number of employees × days per week teleworking × 52 weeks × electricity consumption per person per day × incremental to baseline intensity × grid emission factor + number of employees × days per week teleworking × 52 weeks × natural gas consumption per person per day × incremental to baseline intensity × kWh natural gas to GHG equivalent factor*

CATEGORY 15 - INVESTMENTS

Emissions from investments were calculated using FY2024 revenue data for all portfolio companies. This calculation also considered Booz Allen Hamilton's percentage ownership in these companies and their industry-level classifications.

Equation: *Emissions (kg CO₂e) = portfolio company revenue (\$) × percentage ownership (%) × emission factor for Equivalent USEEIO category (kgCO₂e/\$)*

Our Scope 3 emissions methodology and calculations were verified by Industrial Ecology Consultants.

⁹ GHG Protocol, 2013. *Technical Guidance for Calculating Scope 3 Emissions. Category 7: Employee Commuting.* Available for download at: <https://ghgprotocol.org/scope-3-calculation-guidance-2>

APPENDIX A: BOOZ ALLEN GREENHOUSE GAS EMISSIONS HISTORICAL STATEMENT

	FY20 - BASELINE ¹⁰	FY22	FY23	FY24
SCOPE 1	33.26	40.54	17.24	192.60
Fleet	2.62	7.92	4.50	8.41
Stationary Combustion	30.65	32.62	12.74	184.19
SCOPE 2 (Location-Based)	15,113.48	14,298.82	12,292.18	10,445.80
Domestic U.S.	14,746.53	14,052.82	12,105.21	10,367.13
International	366.95	246.00	186.97	78.67
SCOPE 3	147,664.87	19,312.34	101,879.05	367,777.41
Category 1: Purchased Goods and Services	55,870.71		37,625.77	271,453.06
Category 2: Capital Goods				4,486.00
Category 3: Fuel-and-Energy-Related Activities	2,860.91			2,892.00
Category 4: Upstream Transportation and Distribution	135.45			495.00
Category 5: Waste Generated in Operations	2,601.69		3,085.37	234.03
Category 6: Business Travel	35,158.50	12,009.64	20,822.46	43,813.11
Category 7: Employee Commuting	46,100.77	7,302.70	40,345.45	44,217.80
Category 8: Upstream Leased Assets	4,936.84			
Category 15: Investments				186.41
GRAND TOTAL	162,811.62	33,651.70	114,188.47	378,415.81

Note: All values are measured in metric tons CO₂-equivalent.

¹⁰ FY20 baseline emissions are restated in accordance with SBTi's methodology guidance.

APPENDIX B: BOOZ ALLEN GREENHOUSE GAS EMISSIONS REDUCTION TARGETS

In FY2024, Booz Allen Hamilton approved near and long-term science-based emissions reduction targets with the SBTi. We committed to reduce absolute Scope 1 and 2 GHG emissions 50.4% by FY2032, using FY2020 as the base year. Additionally, Booz Allen Hamilton committed to reducing absolute Scope 3 GHG emissions from purchased goods and services, fuel and energy related activities, upstream transportation and distribution, waste generated in operations, business travel, employee commuting, upstream leased assets, and investments 50.4% within the same timeframe.

The SBTi has verified our net-zero science-based target for 2050. We committed to reduce absolute Scope 1 and 2 GHG emissions 90% by FY2050, again using FY2020 as the base year. We also committed to reduce absolute Scope 3 GHG emissions by 90% within the same timeframe, covering the same categories as mentioned above.

APPENDIX C: LIST OF ABBREVIATIONS

ABBREVIATIONS	DEFINITIONS
KGCO₂E/GAL	Kilogram Carbon Dioxide Equivalent per Gallon
KWH	Kilowatt-hour
LBM	Pound-mass
LB/MWH	Pounds per Megawatt-hour
MSW	Municipal Solid Waste
MTCO₂E	Metric Tons Carbon Dioxide Equivalent

APPENDIX D: INDUSTRIAL ECOLOGY CONSULTANTS ASSURANCE STATEMENT OF VERIFICATION OF THE GREENHOUSE GAS INVENTORY



Industrial Ecology Consultants

Assurance Statement of Verification of the Greenhouse Gas Inventory for Booz Allen Hamilton

Verification Scope

Industrial Ecology Consultants (IEC) has conducted a verification of **Booz Allen Hamilton's** Fiscal-year (FY) 2024 (April 2023 - March 2024) Greenhouse Gas Inventory (GHGI) to the World Business Council for Sustainable Development (WBCSD) GHG Protocol and ISO 14064-3 *Greenhouse gases — Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions*. IEC conducted a review of **Booz Allen Hamilton's** GHGI using documentation and calculations provided by **SCS global Services (SCS)** as the basis for the evaluation.

Verification Objectives

- Evaluate Booz Allen Hamilton's Direct GHG Emissions (Scope 1); Indirect GHG emissions from imported energy (Scope 2) and indirect value chain emissions (Scope 3) for FY2024 operations.
- Develop a GHGI Assurance Statement for Booz Allen Hamilton's GHGI for FY2024

Verification Criteria

- World Business Council for Sustainable Development / World Resources Institute (WBCSD/WRI) – GHG Protocol Revised Edition, March 2004 and Accounting and Reporting Standard Amendment, February 2013
- World Business Council for Sustainable Development / World Resources Institute (WBCSD/WRI) – GHG Protocol – Scope 2 Guidance – Amendment to the GHG Protocol Standard, 2015
- World Business Council for Sustainable Development / World Resources Institute (WBCSD/WRI) – GHG Protocol – A Corporate Value Chain (Scope 3) Accounting and Reporting Standard – 2011
- ISO 14064-3:2019 Greenhouse gases — *Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions*

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Assurance Statement of Verification of the Greenhouse Gas Inventory for Booz Allen Hamilton

Total Scope 1, Scope 2, Scope 3 categories Verified:

The total Scope 1, Scope 2, and Scope 3, Emissions for Booz Allen Hamilton for FY2024 (April 1st, 2023-March 31st, 2024) are **378,415 metric tonnes CO₂ equivalent**.

Scope	Subcategory	tCO ₂ e	% Contribution
Scope 1	Mobile sources	8	0.00%
	Stationary sources	184	0.05%
	Refrigeration	-	
Scope 2	Purchased electricity	10,446	3%
Scope 3	Purchased goods and services	271,453	72%
	Capital goods	4,486	1.2%
	Fuel and energy related activities	2,892	0.8%
	Upstream transportation and distribution	495	0.1%
	Waste generated in operations	234	0.1%
	Business travel	43,813	12%
	Employee commuting	44,218	12%
	Investments	186	0.0%
	TOTAL		378,415

Verification Opinion

This Verification Statement documents that Industrial Ecology Consultants (IEC) has conducted verification activities in conformance with ISO 14064-3: *Specification with guidance for the validation and verification of greenhouse gas assertions*. This statement attests that IEC can provide **a reasonable level of assurance** for the Scope 1 and Scope 2 subcategories and **a limited level of assurance** for the Scope 3 subcategory for Booz Allen Hamilton's GHGI for FY2024 in accordance with the requirements of the WBCSD GHG Protocol. IEC further finds Booz Allen Hamilton's GHGI data collection and calculations to be materially correct and a fair representation of the Scope 1, Scope 2 and Scope 3 GHG emissions associated with their FY2024 operations.

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Assurance Statement of Verification of the Greenhouse Gas Inventory for Booz Allen Hamilton

Statement of Independence

Industrial Ecology Consultants is an independent professional services company that specializes in life cycle assessment and greenhouse gas management services including assurance with over 17 years history in providing these services.

No member of the verification team has a business relationship with Booz Allen Hamilton, its Directors or Managers beyond that required of this assignment. We conducted this verification independently and to our knowledge there has been no conflict of interest.

Industrial Ecology Consultants has implemented a [Code of Ethics](#) across the business to maintain high ethical standards among staff in their day-to-day business activities.

The verification team has extensive experience in conducting assurance over life cycle assessment and greenhouse gas information, systems and processes, has over 30 years combined experience in this field and an excellent understanding of the GHG Protocol standard methodology for the verification of greenhouse gas emissions data.

Verification Date: September 4, 2024

Thomas P. Gloria PhD
Chief Sustainability Engineer
Industrial Ecology Consultants

Certificate Number: IEC-GHGI-24006

Digitally signed by
Thomas Gloria
Date: 2024.09.04
15:52:55 -0400

About Booz Allen

Trusted to transform missions with the power of tomorrow's technologies, Booz Allen Hamilton advances the nation's most critical civil, defense, and national security priorities. We lead, invest, and invent where it's needed most—at the forefront of complex missions, using innovation to define the future. We combine our in-depth expertise in AI and cybersecurity with leading-edge technology and engineering practices to deliver impactful solutions. Combining more than 100 years of strategic consulting expertise with the perspectives of diverse talent, we ensure results by integrating technology with an enduring focus on our clients. We're first to the future—moving missions forward to realize our purpose: Empower People to Change the World®.