EA Engineering, Science, and Technology, Inc., PBC

2024

CARBON FOOTPRINT REPORT

Issued September 2025

OPENNESS | PRUDENCE | BALANCE | CHALLENGE

COVER PHOTOGRAPH ATTRIBUTION

About the Photograph

The image shows an inverted view of the Sun River and surrounding Cascade County landscape in Montana, captured through a lensball—a photographic tool that refracts and miniaturizes scenes for a unique perspective. Photograph by Scott Graham, CPG (Helena, Montana).

About the Photographer

Scott Graham is a Senior Hydrogeologist with EA, specializing in subsurface investigations and remediation at abandoned mine sites. A Certified Professional Geologist, he has more than 15 years of experience with EA and previously served with the Montana Department of Environmental Quality. Beyond his technical expertise, Scott is an avid photographer, former U.S. Air Force Public Affairs Specialist, and a lifelong Boston Red Sox fan.

1.0 About EA

Headquartered in Hunt Valley, Maryland, EA Engineering, Science, and Technology, Inc., PBC (EA) is a 100 percent employee-owned, public benefit corporation (PBC) that provides remediation, environmental compliance, natural resources, infrastructure engineering, and technology solutions to a wide range of public and private sector clients. In calendar year (CY) 2024, EA maintained a normalized headcount of 709 employees, based on full-time equivalents (FTEs)[1], working across a network of 27 commercial offices in the U.S. including Alaska, Hawaii, and the territory of Guam.

First initiated in 2009, EA has published carbon footprint reports biennially from CY 2009 through CY 2015, with each report summarizing two full CYs. Beginning in CY 2016, EA transitioned to annual reporting as an industry best practice for transparency.

2.0 Greenhouse Gas Inventory Assessment and Management

2.1 Accounting Standards and Management Plan

This greenhouse gas (GHG) analysis has been prepared in accordance with the GHG Protocol Corporate Accounting and Reporting Standard[2] (hereafter referred to as the "Standards"), developed and published by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI). These Standards are the most widely used international accounting tools for governments and businesses to identify, quantify, and manage GHG emissions.

The Standards require accounting for the "Kyoto Protocol" GHG emissions—carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and nitrogen trifluoride (NF_3)—which are reported in terms of carbon dioxide equivalents (CO_2e). Other gases with global warming potential may be included, but EA does not use or generate any other gases outside of those listed. This report accounts for CO_2 emissions, which represent the majority of GHG emissions from most sources, as well as CH_4 and N_2O (which together are referred to as the Big Three). EA also accounts for HFCs used in refrigeration and air conditioning.

EA maintains an *Inventory Management Plan* (IMP) to ensure consistent analysis of data from year to year and to track changes in accounting procedures. In conjunction with EA's use of the U.S. Environmental Protection Agency (EPA) Simplified GHG Emissions Calculator (SGEC)[3] to determine its yearly carbon footprint, the EPA Center for Corporate Climate Leadership's Simplified IMP Form (August 2020 version) is also used for EA's IMP. The IMP serves multiple functions—it describes data collection procedures and data quality control measures; identifies data and other factors used to estimate GHG emissions associated with EA's business activities; summarizes EA's operations; details data collected for each GHG scope area; quantifies emissions calculation methods used; and outlines data management methods and

1. Calculations in this report that rely on personnel totals (e.g., solid waste and wastewater) are completed using a normalized FTE total of 709. Normalized FTE is calculated as EA's total Occupational Safety and Health Administration labor hours reported in 2024 divided by 2,080 (the number of hours in a typical full-time year assuming 52 standard 40-hour work weeks): 1,474,306 hours ÷ 2,080 hours per FTE = 708.8 FTE.
2. WRI and WBCSD. 2004. *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard. Revised Edition.* March. Available at: https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf.
3. EPA Center for Corporate Climate Leadership. Simplified GHG Gas Emissions Calculator, September 2024 version. Available at: https://www.epa.gov/climateleadership/simplified-ghg-emissions-calculator.

verification process controls calculations. The IMP is an internal control document that is updated annually by EA's Carbon Footprint Work Group, or more often as best practices dictate. The IMP is used to ensure annual GHG accounting and reporting are relevant, complete, consistent, transparent, and accurate.

2.2 Emissions Scopes

EA accounts for direct and indirect GHG emissions from its business operations in accordance with defined GHG scopes delineated in the Standards, as follows:

Scope 1: Direct Emissions—Direct GHG emissions from sources controlled or owned by EA. GHG emissions from EA's business operations include emissions from fleet vehicle operations, boat operations, and portable power generators; emissions associated with combustion of fuels used for heating offices and other buildings; and emissions of refrigerants from building heating and cooling systems. Emissions from energy use in residential "satellite offices" (i.e., officially designated home offices used by EA employees who do not work from an established commercial office) and remote telework are not included in Scope 1. These emissions are included in Scope 3, Category 7 (Employee Commuting).

Scope 2: Indirect Purchased Energy Emissions—Indirect GHG emissions associated with purchased electricity, steam, heating, and cooling for EA's energy use. Energy is generated off site and purchased from a utility or similar supplier. Indirect GHG emissions arise from purchased energy (e.g., electricity, steam, heat, and cooling) and are the result of EA's company-wide energy use to heat, cool, and power commercial offices, laboratories, and warehouse spaces. EA's calculations for Scope 2 use location-based methods that rely on regional emissions factors reflecting the regional average carbon intensity of the grids where EA offices are located. Emissions arising from energy use at residential "satellite offices" and by remote teleworkers are addressed in Scope 3, Category 7 (Employee Commuting).

Scope 3: Other Indirect Emissions—Indirect GHG emissions associated with the upstream (i.e., purchased or acquired) and downstream (i.e., connected with company service offerings) aspects of EA's value chain. GHG emissions from other elements of EA's business operations arise by means of assets not owned or controlled by EA, and include all emissions sources not addressed within EA's Scope 1 and Scope 2 boundaries. EA's Scope 3 emissions are comprised of the Scope 1 and Scope 2 emissions attributed to upstream (purchased or acquired) and downstream (connected with EA's service offerings) vendors, contractors, service providers, and others within EA's value chain. For most organizations, including EA, Scope 3 emissions represent the vast majority of GHG emissions.

Prior to 2021, EA's carbon footprint analysis captured GHG emissions associated with some aspects of its value chain, including emissions arising from the following upstream and downstream components:

- Employee commutes to and from EA commercial office locations and from employee business travel using personal vehicles;
- Employee business travel, inclusive of air, rail, rental car, employee-owned vehicles, public transit, and rideshare services;
- Emissions arising from disposal of solid wastes, including recycling and composting, generated at EA offices and other work locations (e.g., at temporary field or project offices);

- Emissions arising from potable water consumption and wastewater treatment at EA office and warehouse locations;
- Emissions arising from shipment of samples, work products, and other materials to and from EA offices and to client or project sites; and
- Emissions associated with elements of the supply and delivery chain and other activities

Beginning in CY 2021, EA elected to extend its Scope 3 emissions assessment to include complete quantification of its value chain GHG emissions. In accordance with GHG Protocol's *Corporate Value Chain (Scope 3) Accounting and Reporting Standard*[4] and the *List of Corrections for Scope 3 Standard*[5], EA evaluated all 15 elements of the value chain not otherwise included in Scope 1 and Scope 2 emissions. This is considered by WBCSD and WRI to represent a complete organizational carbon footprint. Based on criteria outlined in the Scope 3 Standard, EA's Carbon Footprint Work Group determined that categories 10, 11, 13, 14, and 15 do not apply to EA's operations and are therefore not included in EA's value chain emissions calculations.

Scope 3 emissions within an organization's value chain are comprised of eight upstream and seven downstream categories of GHG emissions, identified in ***Table 1*** with examples of EA's contributions to the category. EA's Scope 3 value chain includes emissions from EA commercial offices and laboratories.

Table 1. Scope 3 Supply Chain Categories and Representative Emissions Sources

Scope 3 Category	Representative Emissions Sources
1. Purchased Goods and Services	Vendors, service providers, and subcontractors.
2. Capital Goods	Laboratory and field equipment, boats and generators, and information technology equipment (e.g., computers, printers, and scanners).
3. Fuel- and Energy-Related Activities	Fuel, purchased electricity, transmission emissions, and distribution emissions associated with upstream production and transportation. Fuel consumption is accounted for in EA's Scope 1 emissions, and purchased electricity is accounted for in EA's Scope 2 emissions.
4. Upstream Transportation and Distribution	Transportation and distribution emissions associated with delivery of purchased goods and services (e.g., delivery of office supplies, laboratory materials, and computer shipments).
5. Waste Generated in Operations	Solid waste generated during day-to-day office and field operations, historically accounted for in EA's Scope 3 emissions calculations, along with offsets associated with recycling and composting activities.
6. Employee Business Travel	Historically accounted for in EA's Scope 3 emissions calculations along with carbon credits typically purchased to offset a component of EA's annual employee business travel emissions. This category includes air, rail, rental car, and ride share emissions associated with any EA travel.

4. WRI and WBCSD. 2011. *Corporate Value Chain (Scope 3) Accounting and Reporting Standard.* September. Available at: https://ghgprotocol.org/sites/default/files/standards/Corporate-Value-Chain-Accounting-Reporing-Standard_041613_2.pdf.
5. WRI and WBCSD. 2013. *List of Corrections for Scope 3 Standard.* 2011. *Corporate Value Chain (Scope 3) Accounting and Reporting Standard: Supplement to the GHG Protocol Corporate Accounting and Reporting Standard*. May. Available at: https://ghgprotocol.org/sites/default/files/2022-12/List%20of%20Corrections%20for%20Scope%203%20Standard.pdf.

Scope 3 Category	Representative Emissions Sources
7. Employee Commuting *Note: EA calculates this category as Employee Commuting and Telework.*	Previously, employee commutes have been incorporated into EA's Scope 3 emissions calculations through an annual voluntary employee commuting survey. With an expanded hybrid workforce, EA also incorporates Scope 3 emissions associated with remote and hybrid work to account for emissions associated with EA "work from home" operations.
8. Upstream Leased Assets	Life-cycle emissions associated with construction of leased assets such as commercial office space, including refrigerant production.
9. Downstream Transportation and Distribution	Limited to transportation and delivery of products sold (e.g., shipping of technical reports prepared for clients).
10. Processing of Sold Products	Not applicable to EA's operations.
11. Use of Sold Products	Not applicable to EA's operations.
12. End-of-Life Treatment of Sold Products	Waste treatment and disposal of products such as technical reports produced in hard copy and electronic (e.g., compact disc or universal serial bus) format.
13. Downstream Leased Assets	Not applicable to EA's operations.
14. Franchises	Not applicable to EA's operations.
15. Investments	Not applicable to EA's operations.

2.3 Updates to Previous Year's Calculations

The following updates and refinements have been made to EA's calculations for the reporting year:

1. *Headquarters Office Space*—In 2024, EA completed a 50 percent reduction of our headquarters office space by consolidating operations into a single floor within the Leadership in Energy and Environmental Design-certified building that EA leases in Hunt Valley, Maryland. This reduction is accounted for in calculations that incorporate square-footage data and represents EA's transition to a hybridized employment model.

2. *Employee Commute Survey*—EA's annual employee commuting survey featured several enhancements over previous data collection efforts for Scope 3, Category 7. The survey collecting 2024 data included more detailed questions to better capture the footprint of home office configuration, including the primary types of heating and cooling used, and the presence of any renewable energy systems. These additions enable a more accurate calculation of household energy consumption attributable to remote work and provide a more comprehensive picture of the household energy characteristics of employees.

3. *Fuel- and Energy-Related Activities*—In previous reporting cycles, Fuel- and Energy-Related emissions (Scope 3, Category 3) were estimated using a generalized conversion method that resulted in overestimation. To improve accuracy and consistency, calculations for this category have been refined to incorporate emissions factors specific to diesel volumes. EA will not be restating prior years' results, as they remain valid within the context of the methodology applied at the time and continue to provide a consistent basis for year-over-year comparison. The refined method will be applied prospectively, with updated emissions factors documented in EA's *Inventory Management Plan* to ensure transparency and demonstrate ongoing process improvement.

3.0 2024 Carbon Footprint Reporting

EA has used the EPA Center for Corporate Climate Leadership SGEC tool since 2019. The SGEC is a spreadsheet-based, menu-driven tool for calculating GHG emissions. The tool is updated by EPA, as warranted, to improve utility and representativeness. For this assessment, EA employed the September 2024 update to the tool. Since the SGEC tool does not account for GHG emissions from water and wastewater, EA has opted to include a customized entry in the tool to account for these contributions.

3.1 Reporting Overview

Under the EPA Mandatory GHG Reporting Rule (Part 98 of Title 40 of the Code of Federal Regulations), most GHG sources are only required to report to EPA if their direct emissions (i.e., Scope 1) exceed 25,000 metric tons of CO_2e ($MTCO_2e$) per year. Since 2009, EA has calculated and publicly reported its GHG emissions (carbon footprint) in accordance with the Standards. EA's gross GHG emissions continue to increase due to consistent organic company growth and the inclusion of total supply chain emissions, as discussed in ***Section 2.2*** and noted in ***Table 1***. However, EA's direct (Scope 1) emissions remain well under the 25,000-$MTCO_2e$ threshold for mandatory reporting to EPA; therefore, EA is not considered a major source of GHG emissions.

This report incorporates actual utility data (i.e., electricity, natural gas, water, and wastewater) for EA's corporate headquarters location (Hunt Valley, Maryland) as well as office-specific utility data from many of EA's nationwide commercial offices. Where office-specific utility usage data were not available, assessments of office-specific emissions were based on extrapolation of Hunt Valley utility usage data, adjusted for regional energy use intensity and other factors.

3.2 Purchased Offsets

Carbon offsets are reduction credits that, once acquired, decrease net emissions from an organization. Renewable Energy Certificates (RECs)[6], are used to offset an organization's Scope 2 emissions. They do not account or take credit for emissions that were prevented as a result of limiting or eliminating a specific emissions-generating activity. In 2024, EA offset approximately 1,120.3 $MTCO_2e$ through purchased carbon offsets that fall into three categories:

1. *Air Travel Offsets (Annual Purchase)*—EA purchased 259.3 $MTCO_2e$ of verified carbon offsets from TerraPass[7] to partially offset the impact of business air travel. All TerraPass carbon offsets, which support U.S.-based projects, have been verified by independent third parties and standards including the Gold Standard, Verified Carbon Standard, Climate Action Reserve, and American Carbon Registry. This is an increase over purchases from previous years to account for continued headcount growth and to increase EA's air travel offsets to cover approximately 25 percent of EA's total business travel.

6. RECs are tradeable assets that represent the environmental attributes of 1 megawatt hour (MWh) of renewable electricity. RECs are sold separately from actual power generated to consumers who want to "green" their existing power sources by contributing to the use of renewable energy sources.
7. Available at: https://www.terrapass.com/.

2. *Waste Offsets*—In the third and fourth quarters of CY 2023, EA began the process of rightsizing its Hunt Valley, Maryland, headquarters office square footage by approximately 50 percent to accommodate its workforce more efficiently in the post-COVID hybrid work environment. This construction was completed early during the second quarter of CY 2024. To offset a portion of the waste generated during the final stages of the redesign and construction, EA purchased 100 $MTCO_2e$ of Green-e® Climate Certified Carbon Offsets from TerraPass.

3. *RECs (Annual Purchase)*—A REC is a tradeable asset that represents the environmental attributes of 1 megawatt hour (MWh) of renewable electricity. RECs are sold separately from actual carbon-free power generated, to entities who want to invest in responsible renewable energy projects. To offset 2024's Scope 2 emissions, EA has matched 100 percent of its purchased non-renewable electricity with 2,500 MWh of 100 percent U.S.-sourced renewable energy through the purchase of Green-e Certified RECs from Sterling Planet[8]. Purchase of these RECs offset approximately 761.0 $MTCO_2e$[9] of EA's carbon emissions.

Copies of EA's 2024 certificates for purchased offsets are provided in *Appendix A.*

3.3 Evaluating Emissions Related to Adoption of Artificial Intelligence Tools

Generative Artificial Intelligence (genAI) tools, including large language models (LLMs) such as ChatGPT, Gemini, and Microsoft CoPilot, are increasingly being implemented in the Architecture, Engineering, and Construction industry. However, LLMs are energy-intensive. Training these models requires substantial computational power, resulting in high electricity consumption. Moreover, running and fine-tuning these models demands ongoing energy use, which can strain electric grids and increase water usage required for cooling data centers. One study suggests that a single LLM prompt could require 10 times as much electricity as a conventional search engine query[10].

The environmental impact of each prompt is not limited to electricity use; it also includes water consumption for cooling and indirect emissions from hardware manufacturing and infrastructure[11]. As a result, corporations adopting genAI face the challenge of balancing the operational efficiencies gained against the environmental costs of the technology. Despite growing awareness, there is no standardized method or industry-accepted emissions factor for calculating the environmental footprint of genAI use. Key variables (e.g., model size, prompt complexity, data center energy source, and cooling methods) are typically proprietary and not publicly disclosed.

For firms such as EA using cloud-based genAI tools services, the emissions from running LLMs are not attributable directly to the company. Rather, these emissions are attributed to technology suppliers, specifically falling under Category 1, Purchased Goods and Services. As emissions data related to genAI use becomes available from AI developers, EA will assess how to incorporate these impacts into our

8. Available at: https://sterlingplanet.com/.
9. Calculated by converting 2,500 MWh to 2,500,000 kWh and multiplying by EA's average office emissions rate of 0.671081 pounds of CO_2 avoided per kWh, resulting in 1,677,703 pounds of CO_2 avoided. Converted to metric tons using the factor 1 pound = 0.453592 kilograms, yielding approximately 760.992 $MTCO_2e$.
10. Capgemini Research Institute. Developing Sustainable Gen AI. Capgemini Research Institute, January 2025. PDF file. Available at : https://www.capgemini.com/wp-content/uploads/2025/01/Final-Web-Version-Report-Sustainable-Gen-AI-2.pdf.
11. Zewe, Adam. "Explained: Generative AI's Environmental Impact." MIT News, Massachusetts Institute of Technology, January 17, 2025. Available at: https://news.mit.edu/2025/explained-generative-ai-environmental-impact-0117.

Scope 3 emissions inventory and will continue refining our carbon accounting practices to ensure that our footprint factors in the emissions impacts of these emerging digital tools.

4.0 Summary of EA's 2024 Carbon Footprint

In 2024, EA's total operational carbon footprint was estimated at a gross total of 19,389.7 $MTCO_2e$, representing a 14.2 percent decrease from 2023 gross emissions of 22,590.6 $MTCO_2e$. This decrease is largely due to calculation refinements associated with Fuel- and Energy-Related Activities (Scope 3, Category 3), where emissions declined from 3,643 $MTCO_2e$ in 2023 to 751.7 $MTCO_2e$ in 2024 through application of diesel-specific emissions factors to remove overestimation.

Figure 1 provides a comparison of EA's gross Scope 1, 2, and 3 emissions (represented as $MTCO_2e$) for CYs 2023 and 2024. Additionally, *Appendix B* provides EA's full emissions summary generated from the use of EPA's Center for Corporate Climate Leadership SGEC.

Figure 1. Comparison of Gross $MTCO_2e$ by Scope—Calendar Year 2024 and 2023
(Shown as total $MTCO_2e$ and percentage of overall emissions for each year)

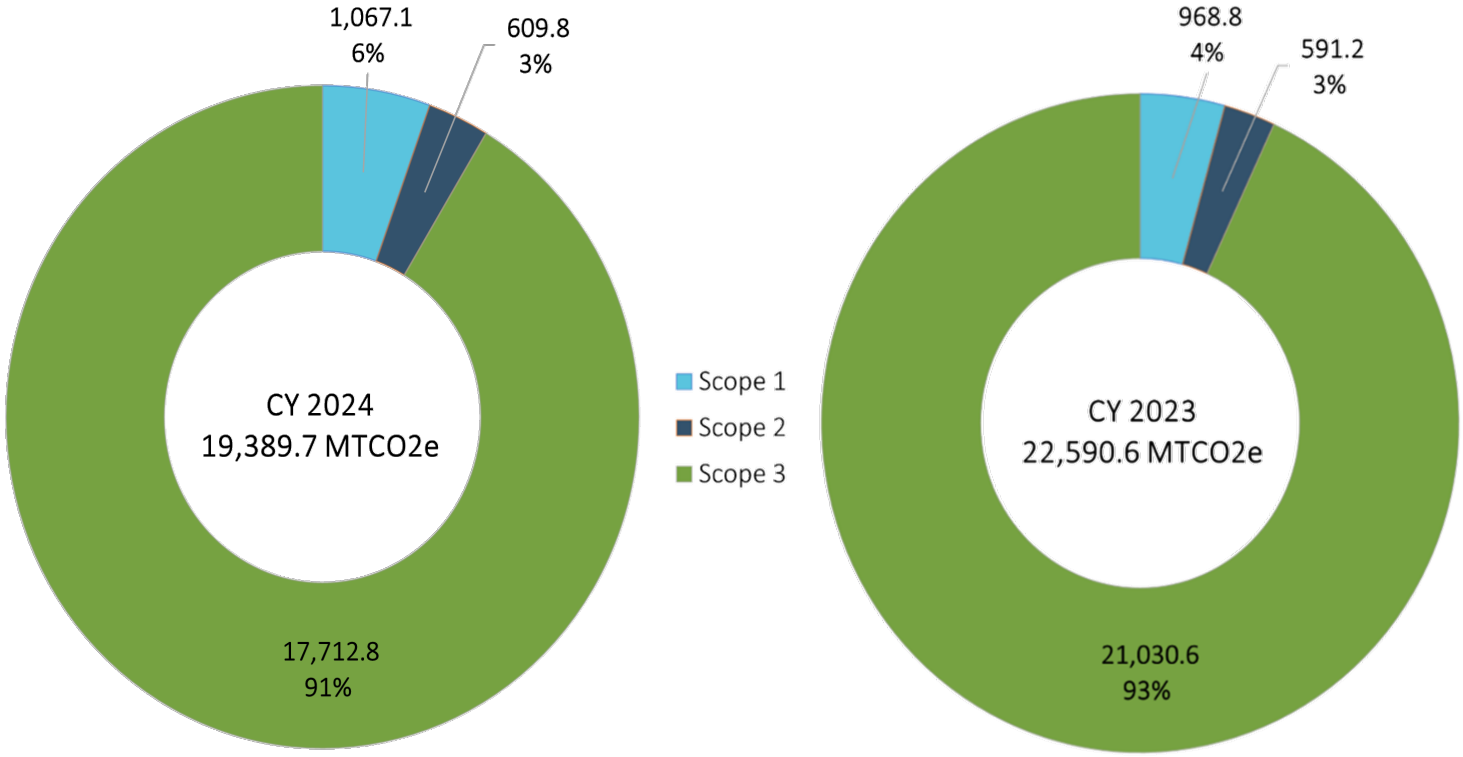


Figure notes: Pie charts depict comparison of gross emissions and associated percentages for all emissions scopes included within EA's Carbon Footprint for CY 2024 (on the left) and 2023 (on the right). Corresponding data for the comparisons are included in Table 2 (page 8) and Table 3 (page 10).

A total of 5.8 percent (1,120.3 $MTCO_2e$) of 2024 gross emissions were offset, resulting in net operational GHG emissions of 18,269.4 $MTCO_2e$. ***Scope 3 activities accounted for 91.4 percent of EA's gross carbon footprint***, consistent with industry benchmarks indicating that Scope 3 typically represents 70 to 90 percent of total emissions[12], and with GHG Protocol findings that service-based and professional services firms frequently report even higher proportions[13].

In 2024, EA's top three emissions sources were:

1. ***Purchased Goods and Services*** (Scope 3, Category 1; 14,141.5 $MTCO_2e$)
2. ***Employee Business Travel*** (Scope 3, Category 6; 1,131.6 $MTCO_2e$)
3. ***Employee Commuting and Home Offices*** (Scope 3, Category 7; 1,098.6 $MTCO_2e$)

Table 2 summarizes EA's carbon footprint trends in $MTCO_2e$ and FTEs over the past three years.

Table 2. Carbon Footprint Trends at EA over the Last Three Years

Calendar Year	2024	2023	2022
Gross Emissions[(a)]	19,389.7	22,590.6	24,825.5
Carbon Offsets[(a)]	-1,120.3	-1,238.4	-948.6
Net Emissions[(a)]	18,269.4	21,352.2	23,876.9
Number of FTE Employees	709	687	659

Notes: (a) Results reported in $MTCO_2e$

Figure 2 (next page) illustrates EA's total 2024 Carbon Footprint for all emissions sources (expressed as percent total of each category of emissions) and *Table 3 (page 10)* summarizes the findings of EA's CY 2024 Carbon Footprint Report.

12. Available at: https://www.cnbc.com/2021/08/18/apple-amazon-exxon-and-the-toughest-carbon-emissions-to-capture.html.
13. GHG Protocol. *Trends Show Companies Are Ready for Scope 3 Reporting with U.S. Climate Disclosure Rule.* World Resources Institute, 2023. Available at: https://ghgprotocol.org/sites/default/files/Trends%20Show%20Companies%20Are%20Ready%20for%20Scope%203%20Reporting%20with%20U.S.%20Climate%20Disclosure%20Rule.pdf

Figure 2. 2024 Carbon Footprint Sources Expressed by Percentage of Gross Emissions

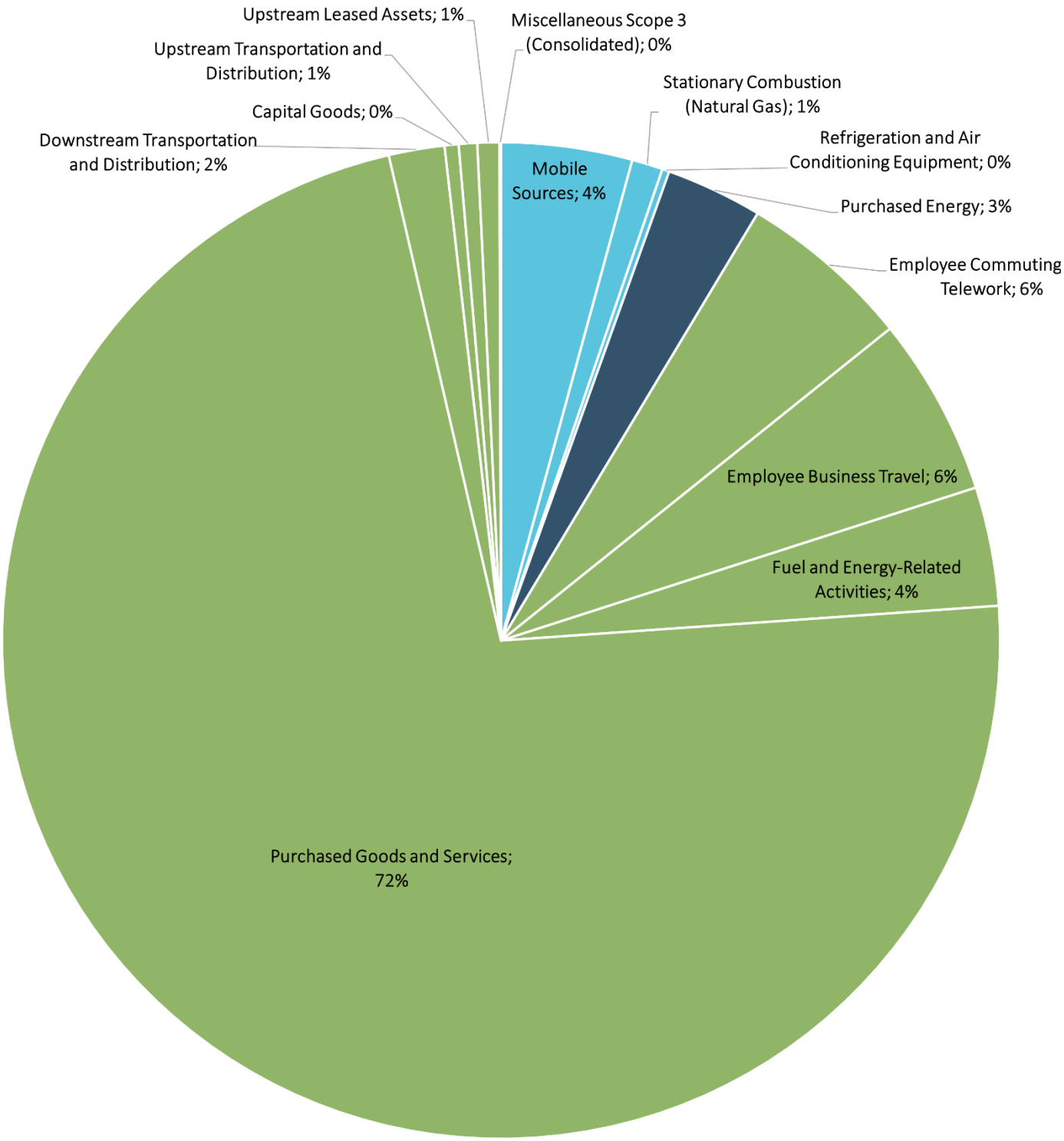


Figure notes: Pie chart depicts EA's overall carbon footprint illustrating the percentage of each individual emissions type as part of the company's gross emissions. Corresponding data for the percentages are included in ***Table 3****.*

Scope 3 emissions categories in ***Table 3*** *that account for less than 0.1 percent of EA's total emissions each have been consolidated into a "Miscellaneous Scope 3" data wedge that includes Solid Waste Disposal, End-of-life Treatment of Sold Products, Potable Water, Upstream Transportation and Distribution, and Wastewater Treatment.*

Table 3. Summary of Emissions and Offsets Contributing to EA's 2024 Carbon Footprint

Emissions Sources	2024 Total ($MTCO_2e$)	2024 Total (Percent)	2023 Total ($MTCO_2e$)
Scope 1: Direct GHG Emissions			
Mobile Sources	826.8	4.3	735.8
Stationary Combustion (Natural Gas)	195.6	1.0	174.7
Refrigeration and Air Conditioning Equipment	44.7	0.2	58.3
Fire Suppression	0.0	0.0	0.0
Purchased Gases	0.0	0.0	0.0
Scope 2: Indirect Purchased Energy Emissions			
Purchased Electricity and Steam	609.8	3.1	591.2
Scope 3: Other Indirect GHG Emissions			
Purchased Goods and Services	14,141.5	72.9	14,903.7
Capital Goods	88.3	0.5	148.2
Employee Commuting and Home Offices	1,098.6	5.7	872.8
Employee Business Travel[(a)]	1,131.6	5.8	1,027.3
Solid Waste Disposal	4.3	0.0	3.7
Downstream Transportation and Distribution (Shipping)	352.2	1.8	302.8
Upstream Transportation and Distribution	0.6	0.0	0.6
End-of-Life Treatment of Sold Products	1.1	0.0	1.1
Potable Water	1.5	0.0	3.7
Upstream Leased Assets	138.7	0.7	117.3
Fuel- and Energy-Related Activities	751.7	3.9	3,643.0
Wastewater Treatment	2.7	0.0	6.4
Gross Emissions (All Scopes)	***19,389.7***	***100***	***22,590.6***
Purchased Carbon Offsets[(b)]			
Air Travel Offsets	*(259.3)*	NA	*(200)*
Solid Waste Offsets	*(100)*	NA	*(100)*
Renewable Energy Certificates[(c)]	*(761.0)*	NA	*(938.4)*
Total Reduction	*(1,120.3)*	*(5.8)*	*(1,238.4)*
NET EMISSIONS[(c)]	*18,269.4*	NA	*21,352.2*

Notes:

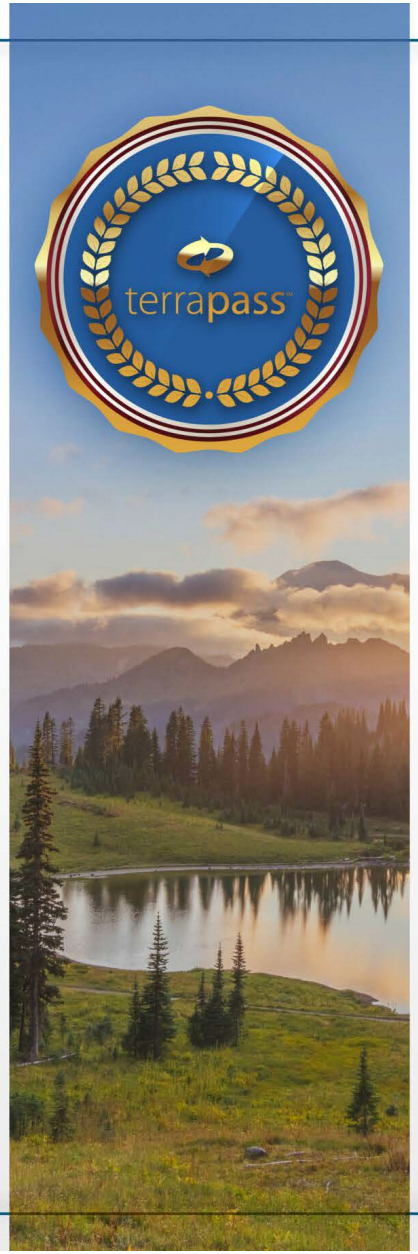
NA = Not applicable

(a) Air, rail, and rental car travel data provided by EA's corporate travel agent, Safe Harbors.

(b) Offsets result in a decrease in net emissions and are denoted by parentheses. Net emissions represent the sum of EA's Scope 1, 2, and 3 emissions less earned and purchased offsets.

(c) 1 REC represents 1 MWh (1,000 kWh) of renewable energy. In 2024, EA consumed approximately 1,945.8 MWh of purchased electricity, corresponding to 592.3 $MTCO_2e$ of Scope 2 emissions, plus an additional 17.5 $MTCO_2e$ from steam. RECs are purchased in advance of the company's annual carbon footprint calculation, with quantities estimated based on the prior year's energy use. For 2024, EA purchased 2,500 MWh (2,500,000 kWh) of RECs, resulting in offsets of 761.0 $MTCO_2e$—equivalent to offsetting 17 percent more emissions than were generated by EA's actual Scope 2 energy consumption for the year.

Appendix A. 2024 Renewable Energy Certificates and Offsets



CERTIFICATE
OF SUSTAINABILITY

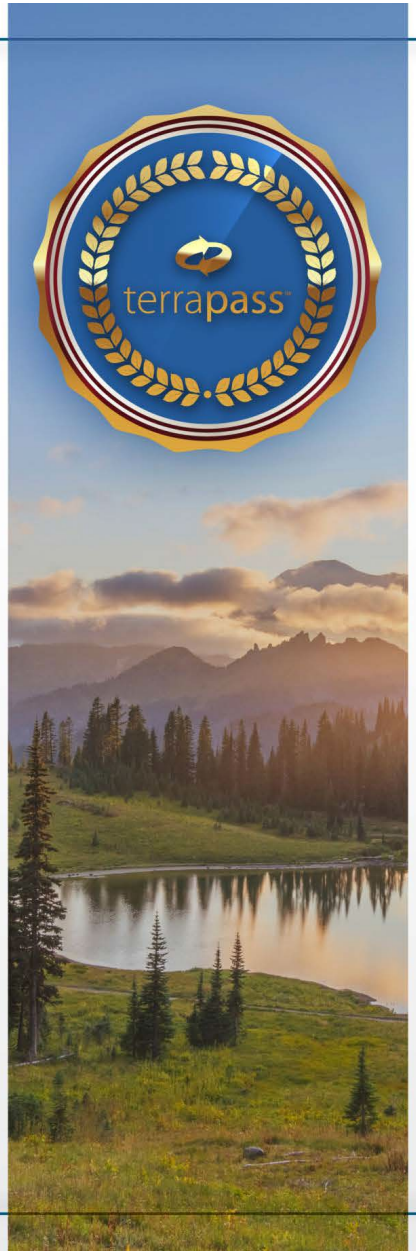
PROUDLY PRESENTED TO

EA Engineering, Science, and Technology, Inc., PBC

257 mT OF CARBON OFFSETS FROM THE BUSINESS CARBON OFFSET PACKAGE

powered by terrapass™

BBXLSEIS-tpus-995725	11/27/2024
CERTIFICATE NUMBER	DATE



CERTIFICATE
OF SUSTAINABILITY

PROUDLY PRESENTED TO

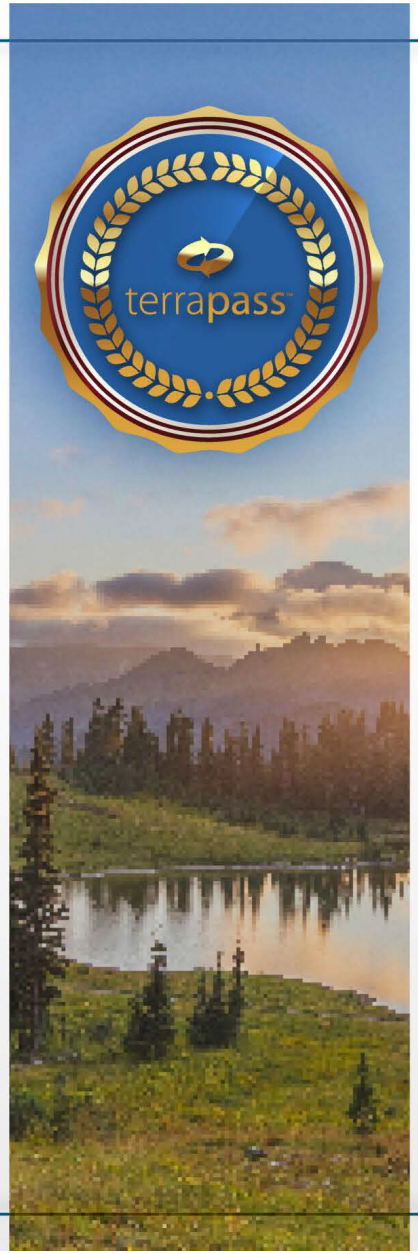
EA Engineering, Science, and Technology, Inc., PBC

FOR YOUR CARBON OFFSET PURCHASE FROM THE TERRAPASS FLIGHT CARBON OFFSET PACKAGE

powered by terrapass™

WNIA3JSR-tpus-992609	09/27/2024
CERTIFICATE NUMBER	DATE

Note added by EA: Flight Carbon Offset for 8,001 - 10,000 air miles, equivalent to approximately 5,000 lbs of carbon or ~2.3 $MTCO_2e$.



CERTIFICATE
OF SUSTAINABILITY

PROUDLY PRESENTED TO

EA Engineering, Science, and Technology, Inc., PBC

100 MT OF GREEN-E® CLIMATE CERTIFIED CARBON OFFSETS

Green-e Climate CERTIFIED

powered by terrapass™

PUGMXT7H-tpus-995725	11/27/2024
CERTIFICATE NUMBER	DATE

CERTIFICATE

OF ENVIRONMENTAL STEWARDSHIP

STERLING PLANET

CERTIFIES THAT

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC., PBC

HAS MATCHED **100%** OF ELECTRICITY USE WITH

2,500,000 KILOWATT-HOURS OF STERLING GREEN™ WIND RENEWABLE ENERGY

TERM OF DELIVERY: 1.1.2024 – 12.31.2024
DATE OF CERTIFICATE ISSUANCE: 11.11.2024
SERIAL NUMBER: 20241104000001

STERLING PLANET CHAIRMAN

THIS PURCHASE OF RENEWABLE ENERGY CERTIFICATES (RECS) AVOIDS ~ 2,297,789 POUNDS OF CARBON DIOXIDE EMISSIONS AND ALSO ADVANCES THE U.S. ECONOMY, ENERGY SECURITY AND ENERGY INDEPENDENCE.

Green-e® Energy CERTIFIED

Appendix B. Center for Corporate Climate Leadership

Simplified Greenhouse Gas Emissions Calculator—Emissions Summary

Back to Intro

EPA CENTER FOR CORPORATE CLIMATE LEADERSHIP
U.S. Environmental Protection Agency

Emissions Summary

Guidance

The total GHG emissions from each source category are provided below. You may also use this summary sheet to fill out the *Annual GHG Inventory Summary and Target Tracking Form* (.xls) as this Calculator only quantifies one year of emissions at a time. The form is available here: https://www.epa.gov/climateleadership/target-setting

By entering the data below into the appropriate cell of the *Annual GHG Inventory Summary and Target Tracking Form*, you will be able to compare multiple years of data.

If you have multiple Calculator files covering sub-sets of your inventory for a particular reporting period, sum each of the emission categories (e.g. Stationary Combustion) to an organizational total, which then can be entered into the *Annual GHG Inventory Summary and Target Tracking Form*.

(A) Enter organization information into the orange cells. Other cells on this sheet will be automatically calculated from the data entered in the sheets in this workbook. Blue cells indicate required emission sources if applicable. Green cells indicate scope 3 emission sources and offsets, which organizations may optionally include in its inventory.

(B) The "Go To Sheet" buttons can be used to navigate to the data entry sheets.

Organizational Information:

Organization Name:	EA Engineering, Science, and Technology, Inc., PBC
Organization Address:	225 Schilling Circle, Suite 400 Hunt Valley, 21031
Inventory Reporting Period:	*Calendar Year 2024* Start: *1/1/2024* End: *12/31/2024*
Name of Preparer:	EA Carbon Footprint Work Group (Lead: John Kumm, PE, BCEE, CC-P)
Contact Information of Preparer:	410-584-7000
Date Prepared:	Jul-25

Summary of Organization's Emissions:

Scope 1 Emissions

	CO_2-e (metric tons)
Stationary Combustion	195.6
Mobile Sources	826.8
Refrigeration / AC Equipment Use	44.7
Fire Suppression	0.0
Purchased Gases	0.0

	CO2-e (metric tons)		
	Gross	Offsets	Net
Scope 1 Summary	1,067.1		1,067.1

Scope 2 Emissions

Location-Based Scope 2 Emissions	CO_2-e (metric tons)
Purchased and Consumed Electricity	592.3
Purchased and Consumed Steam	17.5

	CO_2-e (metric tons)		
	Gross	Offsets	Net
Location-Based Scope 2 Summary	609.8	761.0	-151.2

Scope 1 & 2 Summary

	CO_2-e (metric tons)	
	Gross	**Net**
Total Scope 1 & Location-Based Scope 2	1,676.9	915.9
Total Scope 1 & Market-Based Scope 2	N/A	N/A

Scope 3 Emissions

	CO_2-e (metric tons)		
	Gross	**Offsets**	**Net**
Business Travel	1,131.6	259.3	872.3
Employee Commuting and Home Office Emissions	1,098.6		1,098.6
Downstream Transportation and Distribution (Shipping)	352.2		352.2
Upstream Transportation and Distribution	0.6		0.6
Upstream Leased Assets	138.7		138.7
Waste	4.3	100	-95.7
Potable Water	1.5		1.5
Wastewater Treatment	2.7		2.7
Fuel & Energy Related Activities (Upstream Fuel Production)	751.7		751.7
End-of-Life Treatment of Sold Products (Paper Products)	1.1		1.1
Purchased Goods and Services	14,141.5		14,141.5
Capital Goods	88.3		88.3

Scope 3 Summary

	CO_2-e (metric tons)	
	Gross	**Net**
Total Scope 3	17,712.8	17,353.5

Required Supplemental Information

	CO_2-e (metric tons)
Biomass CO_2 Emissions from Stationary Sources	0
Biomass CO_2 Emissions from Mobile Sources	0