

# **BATTELLE**

## **2025 IMPACT REPORT**



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# ABOUT BATTELLE

At Battelle, we apply science and technology to solve what matters most. Since our founding in 1929, we have served the national security, health and energy industries to make the world a better place. As an independent, nonprofit charitable trust, we drive positive change through our applied research and technology work, and through our philanthropic investments in STEM education and other charitable causes that strengthen the communities where our employees work and live.

In fiscal year 2024, our consolidated revenue was \$13.3 billion, with over \$12 billion of that revenue coming from funding directed to the operation of national laboratories. This report covers Battelle corporate operations and its Applied Science and Technology group with revenues of \$1 billion.

## OUR MISSION

The foundation of our organization's vision and mission can be traced back to the work of steel industrialist Gordon Battelle. In his 1923 Last Will & Testament, Gordon Battelle stated:

“ Translate scientific discovery and technology advances into societal benefits ... for the purpose of education in connection with and the encouragement of creative and research work in the making of discoveries and inventions ... to do the greatest good for humanity... ”

## OUR VALUES

Our values comprise the attitudes, characteristics and behaviors that guide our decision-making and actions, enabling us to be our best. They signify how we work with one another and with clients, and they help ensure that we're all working toward the same goal and purpose. Our values include:

- Unity
- Creativity
- Collaboration
- Excellence
- Appreciation

## OUR CORE CAPABILITIES

At major technology centers across the United States, Battelle applies science and technology across disciplines including:

- Biology
- Chemistry
- Materials science
- Engineering
- Cyber innovations
- Data analytics
- Product development
- Environmental sciences
- Large systems integration

## ABOUT THIS REPORT

The information presented in this report represents key sustainability initiatives Battelle has implemented and/or completed to date. The results of Battelle's materiality assessment, performed through engagement with internal and external stakeholders, have informed the selection of the topics.

This report was prepared in accordance with the Global Reporting Initiative (GRI) standards framework and the Sustainability Accounting Standards Board (SASB) industry standards for Professional and Commercial Services. Performance data included within this report is current as of September 30, 2024, unless otherwise stated. Data within this report does not apply to Battelle's national laboratory management and operations, which are governed through their own structures.

## TRANSPARENCY

We demonstrate our commitment to ethical business conduct to all our stakeholders through financial transparency. Battelle's tax filings, including our Form 990 disclosures from the previous three years, are available on our [website](#). In addition, our commitment to maintaining good credit has been recognized by S&P Global Ratings with an AA- issuer credit rating, as of December 2024.

# 2024 HIGHLIGHTS

## ENVIRONMENT

### ENERGY

Significant reductions in the amount of research space Battelle occupies and energy efficiency improvements within our owned facilities, such as replacements of older equipment and adjustments to HVAC operations for spaces with reduced use, have led to an 10.5% reduction in our overall energy intensity when compared to FY21 usage.<sup>1</sup>

### WASTE

We continue to make progress toward our goal of diverting 75% of general solid waste by 2035, and in fiscal year 2024, we diverted 52% of our annual general solid waste excluding capital construction projects<sup>2</sup>.

### WATER

We work to monitor and improve our management of water. From fiscal year 2021 through fiscal year 2024, we reduced water use by 10%.<sup>2</sup>

## SOCIAL

### OUR CULTURE

In fiscal year 2024, our annual culture survey, which helps us better understand how employees feel about working at Battelle, continues to show strength in what we do, and this year's results showed we particularly excelled in the area of customer and quality focus.

### SUPPORTING MILITARY AND VETERAN TALENT

Battelle was awarded Gold Status Military Friendly Employer, in which we were also evaluated by our ability to recruit, hire, retain and promote the advancement of veterans and military employees.

### STEM EDUCATION AND PHILANTHROPY

Our science, technology, engineering and math (STEM) education and philanthropy efforts reached 1.66 million students in fiscal year 2024<sup>3</sup>, which is in line with our commitment to deliver quality STEM education experiences to 1 million students every year.

## GOVERNANCE

### SMALL BUSINESS SUSTAINMENT

Our dedication to small businesses is unwavering. Throughout 2024, we have committed approximately 63.5% of our spend to small businesses across various socio-economic categories as defined by the Small Business Administration. In addition, we have a dedicated department within our procurement team that supports small business outreach to ensure we continue to leverage and support the small business community.

### CYBERSECURITY

We validated our approach to secure software supply chain security by formally attesting to the Secure Software Development Framework (SSDF). The SSDF is a core set of high-level secure software development practices integrating security into the software development process.



2025 Military Friendly® Employer Gold designation.



Greatest Workplaces for Parents and Families, 2024.



America's Best Large Employers 2024, Forbes.



2024 Top Internship Programs, National Intern Day.



2024 The Power 125, Columbus Business First.



The Business 40 Under 40 2024, Columbus Business First.



Corporate Citizenship, Columbus Business First.



Top AI Execs to Watch in 2024, Washington Exec.



Top Execs to Watch in 2024, Washington Exec.



Wash100 Award 2024, GovConWire.

<sup>1</sup> Energy intensity is reported in kBtu per area of owned facility. The energy included in the ratio is from the electricity and natural gas used on site to operate the facilities.

<sup>2</sup>Reported data covers our Columbus, Ohio, headquarters; West Jefferson, Ohio, research facility; and the Battelle Eastern Science and Technology (BEST) Center.

<sup>3</sup>This data includes Battelle-managed national laboratories.

# OUR APPROACH TO IMPACT

Within Battelle, our efforts to make our operations more sustainable are aligned with our mission of using science to do the greatest good for humanity and helps us to:

- Reaffirm our core mission of using science and technology to make the world safer and healthier.
- Exceed employee expectations regarding our commitment to fostering a supportive community of peers who are dedicated to world-class science.
- Keep pace with regulatory requirements.
- Respond to customer requirements to support sustainable practices and foster a culture of safety and belonging.

Taken together, the results of these activities are intended to bring more transparency and trust as we work with our employees, partners, customers and community stakeholders.

## STAKEHOLDER ENGAGEMENT

In fiscal year 2022, we conducted a formal materiality assessment to understand the topics that are a priority to our stakeholders and that pose the greatest risks or opportunities to our business. Our materiality assessment incorporated feedback from employees, senior leadership and government partners as well as an analysis of internal and external topics, peer and industry performance, and alignment with our business priorities.

From that assessment, we identified our priority topics and now measure relevant goals and progress made with senior-level oversight.

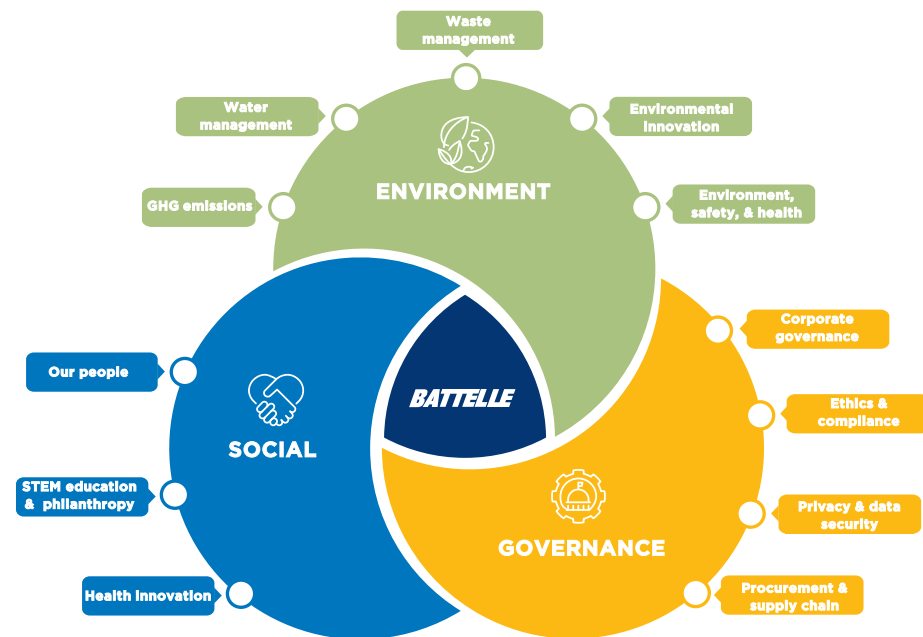
## GOVERNANCE FRAMEWORK

We advance our impact strategy through sound policies, leadership and oversight. Our [Board of Directors](#) receives annual updates on the progress of our impact strategy and topic-specific updates quarterly, either with the full board or to the board's committees that have oversight into key topic areas, including the Human Resources, Compensation and Governance Committee, Science & Technology and Community Benefit Committee and Audit Committee. Regular oversight is delegated to the president and chief executive officer (CEO) and members of the [Senior Leadership Team \(SLT\)](#). SLT members are responsible for developing Battelle policies, procedures, systems, organizational structure and management oversight for topic areas relevant to their functional expertise.

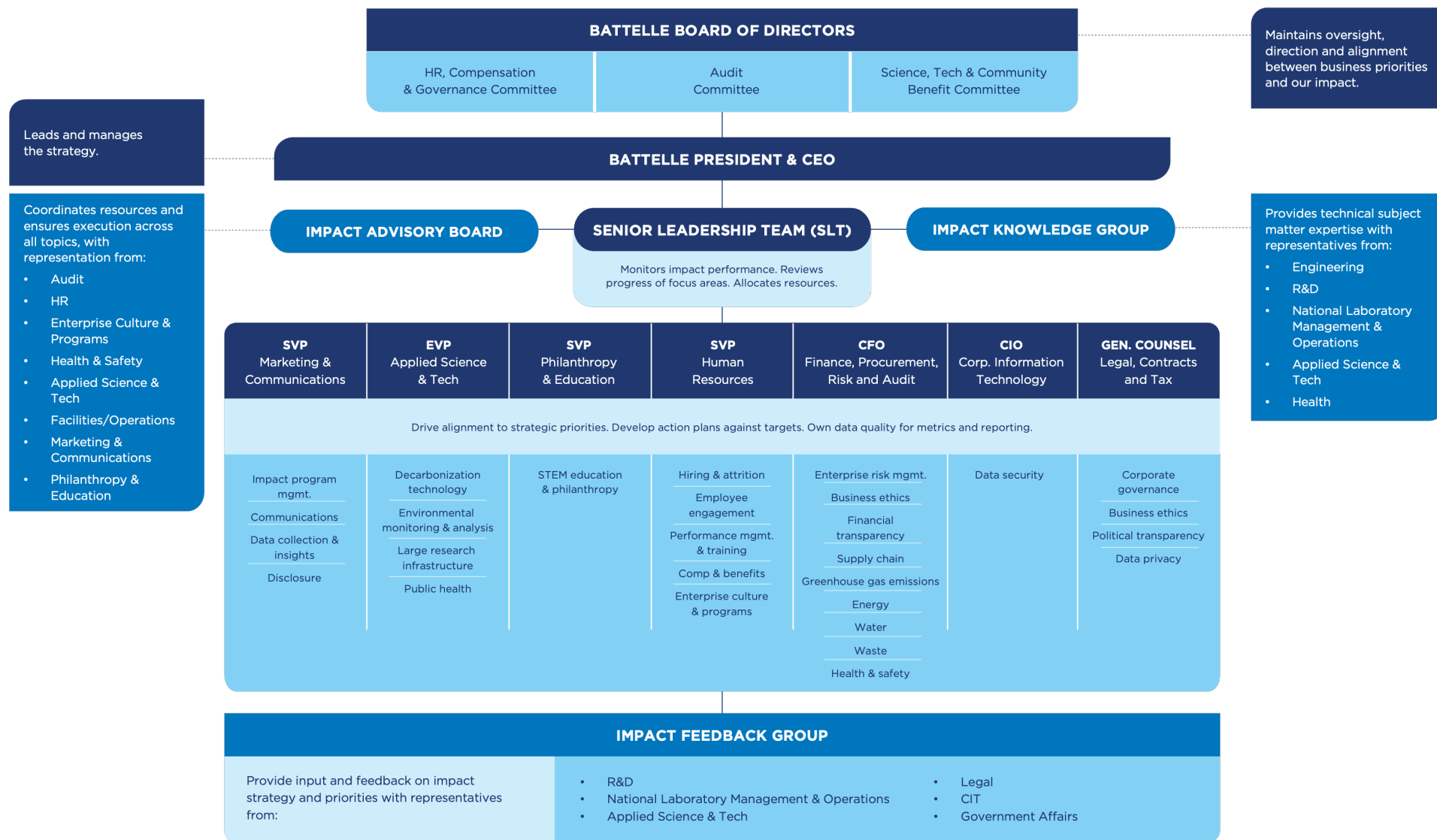
We formalized a cross-functional impact advisory board in fiscal year 2022 that reports to the senior vice president (SVP) of Marketing and Communications, who is a member of the SLT, and provides high-level related direction across the organization. Our Governance Framework was updated to reflect organizational changes that occurred in fiscal year 2024.

We also created two feedback groups: 1) employees interested in impact efforts; and 2) a knowledge group of scientists and engineers with deep technical expertise in relevant areas. These groups of Battelle leaders and subject matter experts help inform our current and projected policies and procedures.

See Our Governance Framework on the next page.



# OUR GOVERNANCE FRAMEWORK



Leads and manages the strategy.

Coordinates resources and ensures execution across all topics, with representation from:

- Audit
- HR
- Enterprise Culture & Programs
- Health & Safety
- Applied Science & Tech
- Facilities/Operations
- Marketing & Communications
- Philanthropy & Education

Maintains oversight, direction and alignment between business priorities and our impact.

Provides technical subject matter expertise with representatives from:

- Engineering
- R&D
- National Laboratory Management & Operations
- Applied Science & Tech
- Health

**BATTELLE**

# ENVIRONMENT

We develop innovative solutions for our clients to address environmental challenges while promoting responsible consumption of resources in operating our business. We also comply with all applicable environmental laws and regulations and incorporate leading practices such as greenhouse gas (GHG) reduction measures, efficient use of resources and minimizing waste generation in our operations.

Applying science to  
environmental challenges

Our environmental footprint

Employee health and safety



# APPLYING SCIENCE TO ENVIRONMENTAL CHALLENGES

Battelle builds upon its decades of multidisciplinary scientific expertise to create discoveries for positive environmental impact. From safely eliminating polyfluoroalkyl substances (PFAS), or “forever chemicals,” to helping bring a national network of hydrogen infrastructure to scale, our work is essential in addressing environmental issues. We study and monitor ecological trends, research the most effective ways to eliminate dangerous environmental pollutants and examine ways to reuse our Earth’s precious resources.



## Supporting resilience

We help our clients assess environmental conditions and develop strategies that prioritize human life, economics and national security through our market-based solutions including:

- **Aquatic environments** where we work with public and private organizations to understand aquatic and terrestrial ecosystems so that decision-makers can implement policies for streams, rivers and lakes amid shifting patterns of human activity.
- **Air quality** where we provide government agencies and private businesses with the solutions they need to address air quality concerns, from program design and management to quality assurance.
- **Crop protection** where we help maintain food supplies across the globe. We offer agricultural crop science services and solutions to global companies covering safety testing, precision application technologies, agrochemical formulation challenges and other aspects of farming operations, ensuring they operate safely and productively.
- **Water quality** where we help government agencies and businesses identify PFAS contamination, assess the environmental impact and track the chemicals to their source.

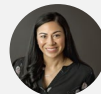
## Carbon utilization

We support a variety of projects that include targeted technologies aimed at solving specific problems, such as preventing and removing atmospheric carbon dioxide (CO<sub>2</sub>), as well as broader areas of innovation around emerging technologies to help support a low-carbon energy future.

### CARBON STORAGE SOLUTIONS

Today's global energy sector demands new and unique ways to improve operations and control costs, while meeting sustainability goals and standards. Industry advancements require a balance of trusted science and forward-thinking technology to forge new frontiers. We develop and help integrate new approaches to solving some of the most complex problems in the energy sector. Battelle has three decades of experience with geologic carbon dioxide storage, engaging in projects worldwide to safely sequester CO<sub>2</sub>. We maintain a deep understanding of the evolving policies, financial incentives and regulations that are shaping this industry.

“ Choosing the right partner to drill the sequestration wells is imperative. A knowledgeable and experienced service provider can help mitigate risks, reduce costs and ensure proper well design and drilling execution in the long term. We have safely executed more than 100 carbon capture and storage projects across 25 states in the U.S. ”



- Darlene Zybala, Geologist

### TECHNOLOGY HUBS

We are managing the development of new technology hubs to accelerate innovation on key technologies related to the transition to alternative energy sources.

A Battelle-led consortium was selected in October 2023 to begin planning the early steps for the Appalachian Regional Clean Hydrogen Hub in West Virginia, Ohio and Pennsylvania, increasing the use of hydrogen in industrial processes. This project was awarded in August of 2024. The Appalachian Regional Clean Hydrogen Hub (ARCH2) will help spearhead the development of a regional clean hydrogen economy in Appalachia.



We were selected in August 2023 along with our clean technology partners to pursue the development of the Project Cypress Direct Air Capture (DAC) Hub located in Southwest Louisiana to remove CO<sub>2</sub> from the atmosphere and safely store it underground.

## Large research infrastructure

We are always working to build partnerships to support additional research, both in the lab and in the field. Our employees lend their expertise to a wide variety of important environmental projects and initiatives.

### ECOLOGICAL DATA COLLECTION AND ANALYSIS INFRASTRUCTURE: NATIONAL ECOLOGICAL OBSERVATORY NETWORK (NEON)

Battelle has operated NEON on behalf of the National Science Foundation (NSF) since 2016. NEON provides the global scientific community with open-source ecological data from land, atmospheric, aquatic and remote sensing systems across the U.S., making it the only continental-scale observatory in the world. Observatory sensor data, which is used by federal agencies such as The National Aeronautics and Space Administration (NASA) and National Oceanic and Atmospheric Administration (NOAA), in addition to the ecological academic research community, makes NEON a critical asset for ecology and environmental science. The observatory provides access to more than 400,000 samples and specimens collected by ecologists at 81 field sites, including sites in Alaska, Hawaii and Puerto Rico.

A 30-year project, NEON allows for robust documentation and analysis of ecological trends that inform our understanding of Earth's ecosystems, charting a path for a future of responsible resource and land management.

The data generated informs policymakers, researchers, educators and others in making land use decisions and educating the next generation of scientists. NEON's 182 data products have served as the basis for more than 1,000 scientific papers and been cited in more than 17,000 other papers.



### RECENT NEON-SUPPORTED RESEARCH HIGHLIGHTS

- Monitoring carbon release associated with wildfires.**  
 Fire ecologist Dr. Jennifer Balch of the University of Colorado Boulder uses NEON infrastructure and data to study how forests recover after wildfires as well as their contribution to carbon levels in the atmosphere.
- Studying the evolutionary impact of hurricanes on fish.**  
 Researchers from Pace University have leveraged data from a pair of aquatic field sites in Puerto Rico to observe the impact of recent hurricanes on the ecological evolution of four fish species.
- Analyzing tick-borne pathogens.**  
 Using NEON's data on tick abundance, diversity and pathogen infection, a team of researchers is working to understand how tick dynamics and pathogen prevalence may shift in connection with changes related to land use.

## POLAR RESEARCH INFRASTRUCTURE: ARCTIC GATEWAY

Since 2020, we have managed the Arctic Research Support and Logistic Services (ARSLS) contract for the NSF. The project provides crucial support for researchers working in Alaska, Canada, Greenland, and other Arctic areas. Services include supporting scientific research in these challenging environments by providing or arranging for local guides, remote communications equipment, snowmachines, Arctic vessels, aircraft and other shared logistical resources.

These services are vital for researchers to safely study this remote and harsh landscape in order to build our understanding of how changes in the Arctic could affect emerging shipping lanes, geopolitical boundaries and global commerce.



## Research and development-enabled products and technology



“Tackling PFAS contamination requires innovative solutions that address every stage of the chemical lifecycle. From identifying sources to deploying advanced technologies like the PFAS Annihilator, clients are empowered to protect critical resources. We are making significant progress in the fight against ‘forever chemicals.’”



- Shalene Thomas, Sr. Emerging Contaminants Program Manager

## ELIMINATING PFAS

Widely used across industries in products such as product coatings, packaging and firefighting foam, per- and polyfluoroalkyl substances (PFAS), or “forever chemicals,” degrade slowly in the environment, leading to their accumulation in our water, soil and food systems.

Our technologies and services help government agencies and businesses identify PFAS contamination, assess the environmental impact and track the chemicals to their source. In fiscal year 2024, our work to address PFAS evolved to embrace a more holistic approach. With a greater focus on [PFAS product stewardship and safety services](#), we support our clients in understanding the impact of PFAS in their processes and products, testing those products in our Norwell, Massachusetts lab, and proactively identifying mitigation strategies and alternatives.

Key highlights of our progress in fiscal year 2024 include:

- Supporting [Revive Environmental](#) in deploying the PFAS Annihilator™, a leading product capable of destroying PFAS by breaking them down into benign materials.
- Prioritizing product stewardship by providing clients with comprehensive services to address PFAS in their products, including safety evaluations, alternatives and lifecycle impact assessments.
- Deploying our PFAS Signature® tool at a large scale to identify the source of PFAS in areas of co-mingled sources, which is critical to assessing and mitigating impact.

## UPCYCLING: FINDING CREATIVE SOLUTIONS FOR PLASTIC

Battelle is currently researching new ways to recycle plastics for new uses, a process known as upcycling. We combine chemical, biological and materials science with system engineering to break plastic down into its original molecular components. Our processes and hardware allow this material to be used in the production of new items without generating the emissions associated with new plastic manufacturing.

For example, Battelle recently developed waste upcycling technology tailored for end-of-life textiles, in a program called GreenLoop. This technology can convert raw textiles, including mixed-material fibers and dyes, into recyclable-by-design and biodegradable bioplastic that can be used for a variety of applications, including in the textile industry. We are currently investigating the versatility of GreenLoop for upcycling contaminated food packaging.

## UPCYCLING: CREATING PRODUCTS OUT OF WASTE

Military forward operating bases produce tons of waste. The Defense Advanced Research Projects Agency (DARPA) ReSource program aimed to turn that waste into lubricants and other valuable products. Battelle is one of several organizations that lead part of the program that is one step closer to making this version of a circular economy a reality. In three years, the project has moved from bench-scale feasibility studies using limited materials to one-kilogram demonstrations using a broader range of inputs, thanks to the focused efforts and breakthroughs made by dozens of researchers at Battelle.

The ReSource program, which concluded in 2024, culminated in Battelle delivering a reconfigurable platform system and exploring other military use cases, such as a deployed system for food biomanufacturing in the field from waste or scavenged resources.

## ENHANCING CIRCULARITY FOR SOLAR TECHNOLOGY

We are leading a solar technology circularity project with the NSF to address solar panel waste, currently estimated to be near 9.8 million metric tons between 2030 and 2060<sup>4</sup>. To address the material recovery solutions for this circularity challenge, our program has three key initiatives:

1. The creation of groundbreaking technologies for material condition assessment.
2. The ability to sort through solar products at their end of life, aimed at boosting reuse and repair.
3. The development of silicon upcycling technology to support photovoltaic recycling.

Our ultimate goal is to enhance material recovery through an end-of-life management model to facilitate decision-making in a reverse supply chain that promotes a viable [circular economy](#) and reduces economic and environmental strain. Through this program, Battelle is creating tools to enable onshoring of the critical materials supply chain.

## THE ENVIRONMENTAL MONITORING AND REMEDIATION TECHNOLOGY ASSESSMENT INITIATIVE (EMRTAI)

In 2024, Battelle began a partnership with the U.S. Environmental Protection Agency (EPA) to lead the EMRTAI, which is an EPA-funded initiative focused on driving technological innovation in characterizing and recovering critical minerals in waste materials at Superfund legacy hard rock mines and mineral processing sites.



<sup>4</sup>Source: Photovoltaic waste assessment of major photovoltaic installations in the United States of America. [Renewable Energy, Volume 11, pp. 1188-1200, April 2019.](#)

## Emerging innovation

### REPURPOSING RARE EARTH ELEMENTS FOR REUSE

To reduce supply chain vulnerability, the Department of Defense (DOD) has interest in the development of environmentally friendly methods that enable rare earth element repurposing within the United States. DARPA launched the [Environmental Microbes as a BioEngineering Resource](#) (EMBER) program to develop bio-based technologies for the separation, purification and conversion of rare earth elements into manufacturing-ready forms. The four-year program includes phases for developing microorganisms and biomolecules suitable for separating rare earth elements, improving the efficiency of the separation process using actual source materials and executing a pilot-scale biomining demonstration. As one of three teams selected to support the EMBER program, Battelle will focus on selecting and optimizing the microbes and proteins to be used in the process.

### ADDRESSING INVASIVE SPECIES CONTRIBUTING TO ALGAL BLOOMS

The rise of invasive species is likely to become a more frequent challenge. Invasive species, including biofouling algal blooms like *Didymosphenia geminata* (DidyG) and other algal diatoms, can get transported to new locations by attaching to ship hulls and become pests in new algaculture systems. By attaching to ship hulls, algal diatoms also make the process of shipping, a major contributor to global carbon dioxide emissions, worse by decreasing fuel efficiency.

To help solve this challenge, Battelle is running an Independent Research and Development (IRAD) program to improve material innovation and resilience through biocidal treatments to address algal diatoms for fuels, food and custom chemicals.



# OUR ENVIRONMENTAL FOOTPRINT

Managing our facilities and business operations sustainably is a responsibility we take seriously. We continually seek ways to reduce our impact on the environment and create more efficient operations. We evaluate and measure our greenhouse gas and other emissions, energy use, water use and nonhazardous and hazardous waste to identify new opportunities to reduce our environmental footprint.



## Greenhouse gas emissions

Most of our carbon footprint comes from research operations at three Battelle-owned facilities. Since 2011, we have tracked our Scope 1 and Scope 2 greenhouse gas (GHG) emissions at our Columbus and West Jefferson, Ohio, campuses and our Aberdeen, Maryland, facilities. We are focused on reducing GHG emissions in our facilities by 50% by fiscal year 2035. Our fiscal year 2015 baseline for this goal is consistent with guidance from the Science-Based Targets initiative (SBTi) and reflects the facility space reduction projects that began in fiscal year 2014. Since 2015, our GHG emissions have decreased by 33% due to grid improvements, facility area reduction and efficiency improvements.

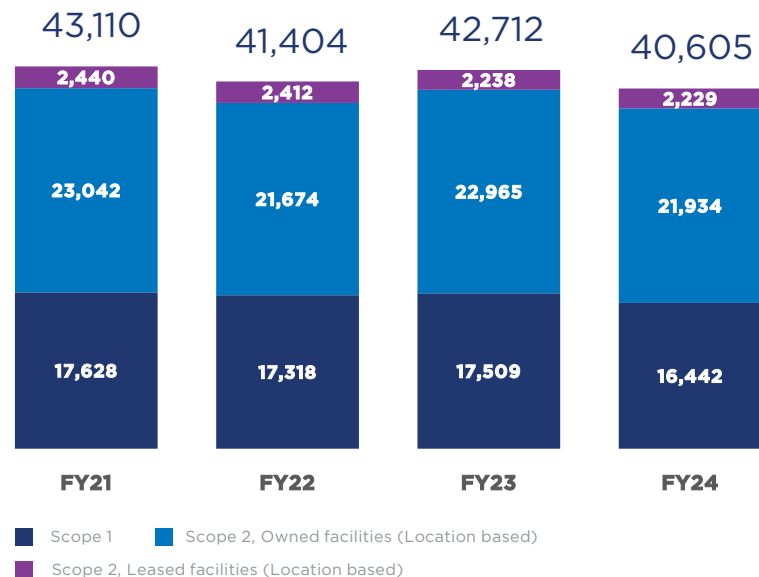
Our goal will be achieved through a reduction in square footage and improvements to our facilities through the modernization of buildings, systems and industrial controls.

We also lease facilities at other locations and have a management role at eight national laboratories on behalf of the Department of Energy (DOE) and Department of Homeland Security (DHS). For the purposes of this report, the footprint of the locations in which Battelle leases a facility on behalf of our contractual agreement with our clients is not included.

Large construction projects such as new buildings and major renovations include a sustainability review to identify opportunities to incorporate best practice energy-efficient design strategies. Dedicated sustainability projects to reduce energy use and minimize the impact of our facilities are also developed. Some key initiatives include:

- Optimizing laboratory ventilation rates.
- Replacing older constant speed HVAC equipment with variable speed systems.
- Replacing older fluorescent lighting with LEDs.
- Implementing real-time metering of electricity and natural gas consumption.
- Implementing energy-efficient control strategies for our building automation system to reduce the energy consumption of HVAC systems.

## GREENHOUSE GAS (GHG) EMISSIONS (METRIC TONS CO<sub>2</sub>E)<sup>5</sup>



In fiscal year 2024, we saw a 5% decrease in our GHG emissions from the previous year, primarily driven by reduced use of the corporate jet and improved emissions associated with the electric grid. For additional details on our Scope 1 and Scope 2 emissions, please see the data tables in the [appendix](#).

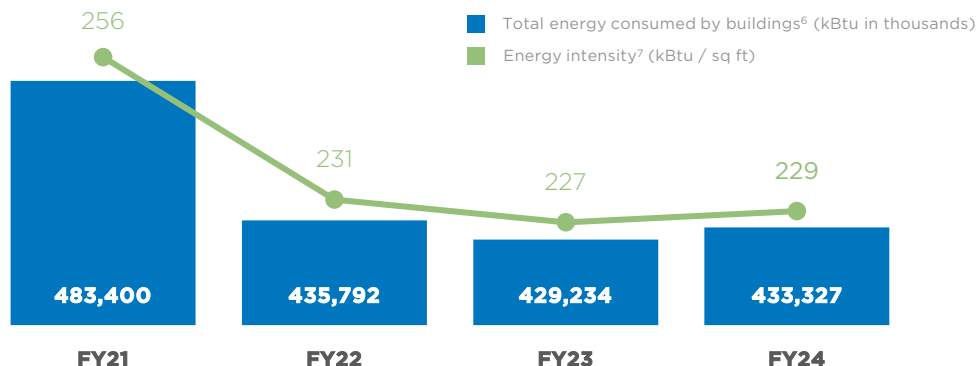
<sup>5</sup> Scope 1 emissions are calculated using emission factors from version 4.1 of the GHG Protocol tool for stationary combustion. The gases included in the calculation are CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O. Battelle has estimated energy usage for leased facilities using published values for average energy consumption per square foot of floor area provided by the Energy Information Administration's Commercial Building Energy Consumption Survey (CBECS). Scope 2 emissions are calculated using EPA output emissions factors by activity type. The gases included in the calculation are CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O.

## Energy management

We are committed to monitoring and improving our energy management. Electricity, natural gas and fuel oil usage within our buildings account for nearly 95% of our energy consumption, with jet fuel and fleet vehicles making up the remaining portion of the total. Significant reductions in the amount of research space Battelle occupies and energy efficiency improvements within our owned facilities, such as replacements of older equipment and adjustments to HVAC operations for spaces with reduced use, have led to an 10.5% reduction in our overall energy intensity when compared to FY21 usage.<sup>6</sup> We carefully monitor these sources of energy consumption and continue to explore ways to mitigate increases as our business grows.

For additional details on our energy usage, please see the data tables in the [appendix](#).

### ANNUAL ENERGY USAGE VS. ENERGY INTENSITY



<sup>6</sup> Reported data covers energy consumed by our owned buildings (electricity and natural gas).

<sup>7</sup> Energy intensity is reported in kBtu per area of owned facility. The energy included in the ratio is from electricity and natural gas, the energy sources used on site to operate the facilities. Fuel oil is also used occasionally to operate the facilities; however, Battelle does not currently have a means of tracking when fuel oil is consumed. Current fuel oil consumption is reported based on when fuel oil is purchased. The fuel oil purchased in FY24 is only 0.5% of the total site energy consumption and would have a negligible impact on the energy intensity ratio.



### REDUCING FUTURE ENERGY USE

Battelle is laying the groundwork for future energy savings by earmarking \$1 million for capital construction projects, implementing enhanced energy efficiency strategies and purchasing energy-saving equipment. This comes in addition to several recent projects that will reduce energy use in the years ahead:

- We began early planning to increase the efficiency and reliability of the chilled water infrastructure at the King Avenue location by replacing equipment, piping and controls. Construction of the first of three major phases began in the second quarter of FY25. The next phases are expected to occur over FY26 and FY27.
- We began design and construction of several projects at the West Jefferson campus in FY24 to reduce energy and increase safety by installing new air handlers with energy recovery, new laboratory air valves, a new exhaust system and updated controls.
- We are in the process of updating our building automation system (BAS) infrastructure at both the King Avenue and West Jefferson locations. Modern BAS systems will enable implementation of advanced monitoring and control strategies in future fiscal years to reduce the energy use of the HVAC systems.
- We started the construction phase of a project, in fiscal year 2024, to update a 25-year-old pneumatic laboratory air flow control system on the King Avenue campus and replace constant speed lab exhaust fans with variable speed fans. This project will enable more flexibility in air flow requirements and allow for the use of new air flow strategies that reduce energy use. As part of the design phase, a cross-functional team from our Facilities, Environment, Safety and Health, and Applied Science and Technology groups completed a laboratory ventilation risk assessment of approximately 60 laboratory spaces in accordance with guidelines published by the International Institute for Sustainable Laboratories. This project approach will be repeated for other buildings on campus with similar systems that need an upgrade.
- We have implemented an energy assessment procedure for laboratory space that becomes vacant so we can minimize energy use when the space is unoccupied.

## Waste and materials management

Given the scale and scope of our operations, our waste and hazardous materials management program has a robust approach to safe and effective disposal and treatment.

### GENERAL SOLID WASTE MANAGEMENT

We continue to make progress toward our goal of diverting 75% of general solid waste away from landfill by 2035 through improved tracking of construction waste, setting standards for construction waste diversion and composting.

For fiscal year 2024, we diverted 456 tons of material from landfills. An improvement we are working toward to track progress against the landfill diversion goal is understanding the quantity of material that goes to landfill from our construction projects. In fiscal year 2024, we implemented detailed tracking of both landfill material and materials diverted from landfill for capital construction projects, beginning with the renovation of one of our office buildings. We plan to continue this practice for all major capital construction projects going forward.

During the office renovation, furniture from two floors was salvaged for reuse across Battelle's campus to assist with building new workstations for employees. Material from items that could not be salvaged were broken

down and sorted to allow recyclable material to be diverted from landfill.

We found that 52% of our waste was diverted from landfill, excluding capital construction projects.

In fiscal year 2023, we implemented composting for the King Avenue location's cafeteria kitchen food and packaging waste. We now have a third-party vendor that develops quarterly waste reports to track the compost more accurately. This improved tracking yielded an increase in compost quantity by three times, relative to fiscal year 2023. For additional details on our waste management, please see the data tables in the [appendix](#).

### FY24 GENERAL SOLID WASTE BY TREATMENT<sup>8</sup> (TONS)

**RECYCLING - GENERAL**  
359.5 TONS

42%

**LANDFILL - GENERAL**  
336.4 TONS

40%

**RECYCLING - CONSTRUCTION**  
91.3 TONS

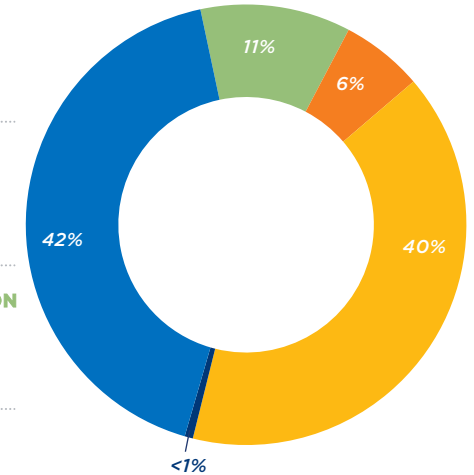
11%

**LANDFILL - CONSTRUCTION**  
53.9 TONS

6%

**COMPOSTED**  
5.2 TONS

<1%



#### RECYCLING AT BATTELLE

- We implemented tracking of construction recycling and landfill materials on a major office renovation project and will continue this standard for future construction projects.
- We started tracking the amount of compost material taken from the cafeteria kitchen each week and will use this data to evaluate an expansion of our composting program.

<sup>8</sup> Reported data covers waste at our Columbus, Ohio, headquarters; West Jefferson, Ohio, research facility; and the Battelle Eastern Science and Technology (BEST) Center.

## REGULATED WASTE MANAGEMENT

Given the scale, scope and complexity of Battelle’s research and facility operations, the safe and compliant management of chemicals, material and laboratory waste is of the utmost importance. Battelle maintains robust and effective controls to ensure the safe storage and disposal of all regulated wastes. It starts with a state-of-the-art chemical inventory program, where incoming chemical containers are individually affixed with a unique bar code. This allows for effective and efficient tracking of individual chemical containers in real time throughout their life cycle and through disposal.

All regulated wastes are collected, processed and managed by Battelle’s Hazardous Waste Operations organization, which is equipped with purpose-built waste management facilities and equipment, and staffed by highly trained and qualified individuals with decades of waste management experience.

Battelle tracks regulated wastes in the following categories:

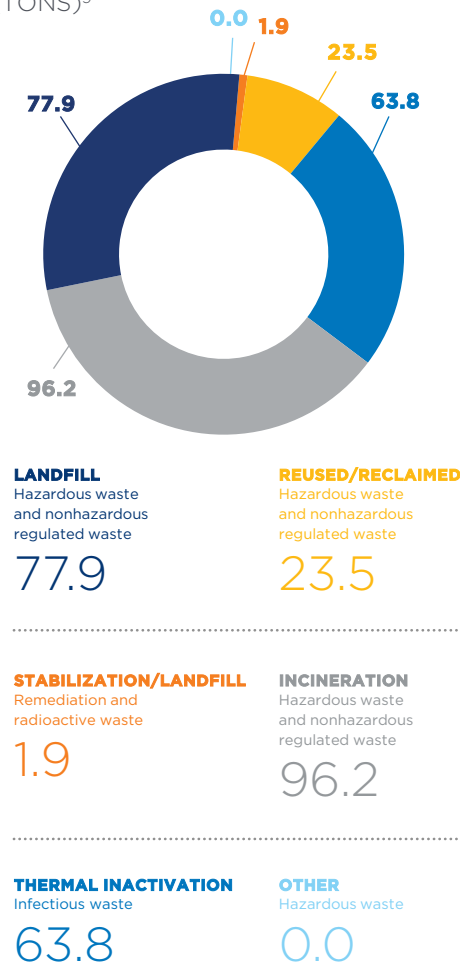
- **Low-level radiological waste** is generated in laboratories dedicated to radiological research. The waste is collected and centrally stored in approved facilities prior to off-site disposal through a licensed contractor with specialty disposal capabilities.
- **Nonhazardous regulated laboratory waste** consists of discarded personal protective equipment, nonrecyclable plastic and glassware, disposable wipes and similar single-use materials. These materials are disposed off-site at local permitted waste management facilities.
- **Infectious waste** consists of discarded animal bedding and tissue. It is collected and placed into refrigerated storage prior to being sent off-site for thermal inactivation and disposal.
- **Hazardous waste** is stored in centrally located waste management units until transported off-site for appropriate treatment.
- **Environmental remediation waste** is generated during site cleanup activities related to legacy operations.

In fiscal year 2024 our team managed the safe storage, transportation and responsible disposal of:

- Approximately 41.3 tons of hazardous waste, reflecting an 18% decrease year over year. This decrease is related to operational adjustments within Battelle as well as reuse and reclamation practices. All reported hazardous waste was treated by reported methods in fiscal year 2024.
- Approximately 156.2 tons of nonhazardous waste, which indicates a 48% increase from the previous year. The increase was related to a laboratory limestone treatment tank clean-out project, the disposal of a large volume of legacy pesticides and more accurate accounting of regulated laboratory waste disposal volumes from our new disposal vendor.

For additional details on our waste management, please see the data tables in the [appendix](#).

## FY24 REGULATED WASTE BY TREATMENT (TONS)<sup>9</sup>



<sup>9</sup> Reported data covers our corporate headquarters in Columbus, Ohio; A research facility in West Jefferson, Ohio; the Battelle Eastern Science and Technology (BEST) Center in Aberdeen, Maryland; and our analytical lab in Norwell, Massachusetts.

Our waste operations organization periodically conducts reviews of our waste vendors. During these reviews, small teams are dispatched to conduct on-site inspections to ensure our waste is being properly handled and disposed. As part of the assessment process, we evaluate the vendor's current compliance status through a review of the U.S. EPA's Enforcement and Compliance History database and their current financial condition by reviewing their Dunn & Bradstreet profile and rating.

We monitor and manage our day-to-day operations closely for both reportable and nonreportable spills. In fiscal year 2024, we had fourteen nonreportable spills and one reportable spill. The reportable spill involved the release of 300 gallons of sodium hypochlorite (bleach) during a sanitary drain line repair and decontamination effort. The increase in non-reportable spills over previous years is largely attributed to greater vigilance in identifying and reporting very small spills of lubricating oil from contractor/delivery vehicles in the Battelle-owned parking lots.

### ANNUAL SPILL DATA<sup>10</sup>

	FY22	FY23	FY24
<b>NONREPORTABLE SPILLS</b>	7	8	14
<b>REPORTABLE SPILLS</b>	0	0	1

<sup>10</sup>Our nonreportable spills consisted of small volumes (< 5 gallons) of hydraulic oil, diesel fuel, gasoline, ethylene glycol and other common materials that were captured and contained. Reportable spills are defined as environmental releases subject to federal, state or local regulatory reporting requirements. Reported data covers our corporate headquarters in Columbus, Ohio; A research facility in West Jefferson, Ohio; the Battelle Eastern Science and Technology (BEST) Center in Aberdeen, Maryland; and our analytical lab in Norwell, Massachusetts.

### Environmental risk management

In addition to our efforts in environmental scientific innovation and improvements in our business operations, we continually monitor for risks to our business and operations to promote resilience and business continuity.

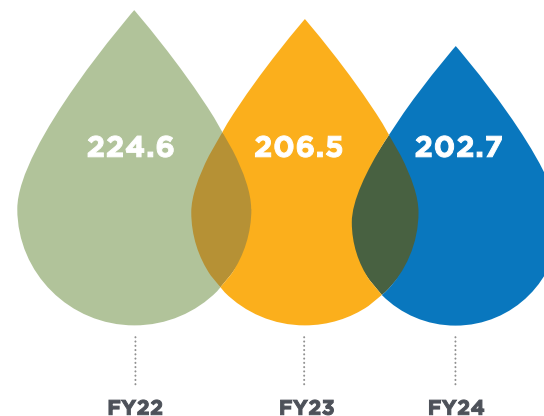
### Water management

We monitor our water use, working to improve our management of this vital resource. From fiscal year 2022 through fiscal year 2024, we had a 10% water use reduction due in part to reductions in the amount of utilized research space. In our occupied spaces, we have committed to the installation of low-flow and water-efficient fixtures when upgrading or installing new fixtures.

At our West Jefferson, Ohio, and Norwell, Massachusetts, facilities, we have initiated a best-in-class practice of issuing internal permits for wastewater discharge to ensure Battelle does not introduce pollutants that would interfere with the operation of publicly owned treatment facilities.

### ANNUAL WATER CONSUMPTION

Total water consumption from all areas (megaliters)<sup>11</sup>



<sup>11</sup> Reported data covers water use at our Columbus, Ohio, headquarters; West Jefferson, Ohio, research facility; and the Battelle Eastern Science and Technology (BEST) Center.

# EMPLOYEE HEALTH AND SAFETY

We are committed to supporting the health and well-being of our people in our facilities and beyond the workplace. Our Environment, Safety and Health team operates proactive programs and initiatives throughout the organization to safeguard our employees from laboratory risks or other occupational hazards.

## Chemical and biological safety

Our work often is based in research involving biologics and chemicals. We protect our workforce and the communities in which we operate through policies, procedures and robust safety programming.

We require formal planning, rigorous processes and stringent management procedures prior to the use of hazardous chemicals or biological materials, and we have safety, health and emergency response representatives readily available to answer technical questions about lab safety. We also provide personal protective equipment and require its use during any operations that involve hazardous research materials.

All employees who work with biological materials complete our mandatory Biosafety Bootcamp. This weeklong, intensive on-site training course covers the basics of biosafety and working in high-containment areas. The information employees learn in this course is critical for maintaining a safe operating environment in our high-containment labs.



## Occupational health and safety management system

Safety is integrated into our operations through the conduct of program and task-specific hazard analysis that evaluates operational risks and implements appropriate engineering and administrative control strategies to address and mitigate risk. Our safety program is modeled on the Voluntary Protection Program (VPP), an Occupational Safety and Health Administration (OSHA) cooperative program that focuses on hazard prevention and control, worksite analysis, and effective training as well as management commitment and employee involvement.

Multiple facilities have achieved the highly coveted VPP Star status. Our staff also serve as special government employees supporting OSHA evaluations of other VPP sites.



Our occupational health medical surveillance program covers all employees engaged in activities that pose a risk of injury or illness. Employees in this program must complete an ergonomics and exposure assessment form outlining their duties and identifying potential occupational hazards and exposures. This form also informs safety training requirements, industrial hygiene monitoring efforts and the application of appropriate engineering and administrative controls.

We offer multiple pathways for reporting concerns, including access to management, or safety and health representatives, a web-based incident reporting tool and a 24-hour ethics hotline where issues can be raised

anonymously. Our management oversight and reporting teams include:

- The Facilities and Support Operations team, which oversees the safety of our operations.
- The Health Services team, which provides screenings, pre-work consultations and, if needed, treatment or medical referrals to employees injured at work.
- The Emergency Operations team, which conducts regular situation-based drills in partnership with local first responders to build capabilities should an incident occur.

We strongly encourage the reporting of all near misses, occupational injuries, illnesses, work-related hazards and other conditions. We thoroughly investigate all incidents to fully understand the underlying causes and implement appropriate corrective and preventative measures. Our health and safety policies protect any employee who reports hazards or hazardous conditions from retaliation.

We evaluate our safety performance against applicable and relevant benchmarks, including the most current injury and illness rates for scientific research and development companies reported annually by the Bureau of Labor and Statistics, the DOE and the DHS national laboratories, which have similar risk profiles. Our health and safety management

system covers all Battelle staff and operations regardless of location, excluding the national laboratories that we operate on behalf of the DOE and DHS.

The increase in the total recordable incident rate from FY23 to FY24 is attributed to an increase in the number of relatively minor insect bites and poison ivy exposures related to the execution of field-based ecological studies. Reducing employee exposure is a current point of emphasis for Battelle.

We expect all Battelle staff members working at client sites to follow our safety requirements as well as any safety requirements of the client site. For additional details on our workforce health and safety metrics, please see the data tables in the [appendix](#).

### WORKFORCE HEALTH AND SAFETY METRICS<sup>12</sup>

	FY22	FY23	FY24
<b>TOTAL RECORDABLE INCIDENT RATE (TRIR)</b>	0.77	1.04 <sup>13</sup>	1.42
<b>FATALITY RATE</b>	0.00	0.00	0.00
<b>DAYS AWAY, RESTRICTED, OR TRANSFERRED (DART) RATE</b>	0.29	0.40	0.45

<sup>12</sup>Note: All rates inclusive of contractors working under direct Battelle supervision. TRIR calculated by the (Number of OSHA recordable incidents) X 200,000 / (Total number of hours worked)

<sup>13</sup> An OSHA Recordable incident that occurred in FY23 at an off-site location was added after the FY23 fiscal year closed.

**BATTELLE**

# SOCIAL

It takes talented people to develop and deploy innovative technologies and solutions to benefit the world. At Battelle, we are committed to attracting, training and retaining some of the brightest science, engineering, technology and business minds in the world by intentionally building a workforce from a wide range of backgrounds and experiences. We also take care of our workforce by ensuring their health and safety as well as the strength of our communities' public health through research solutions.

We also invest in our communities through STEM education programs and activities and provide philanthropic support to help prepare the next generation of bright minds to solve tomorrow's challenges.

## Our people

## Engagement and belonging

## Solving societal challenges



# OUR PEOPLE

Our success at innovating and advancing technology depends on our ability to have the best and most engaged talent in the industry. We call our employees Solvers, and they are the key to our success. Our strength is rooted in our Solvers who take on the world's most pressing real-world problems. We aim to unite people from various areas of expertise to foster innovation and success in a workplace that encourages innovation, collaboration and unique ideas.

## Mission First Culture

### WE ARE SOLVERS

We are committed to a Mission First Culture that thrives on curiosity and collaboration. We aim to empower top talent through fostering a supportive community of peers who are dedicated to world-class science. Battelle's culture is driven by a purpose to be a powerful force in science and innovation, delivering solutions aimed at advancing society.

We strive to provide a workplace environment built on respect, collaboration and innovation, where every Solver is valued for their unique contributions. By cultivating an environment of openness, safety and belonging, we empower our Solvers to share ideas, take on new challenges and aim to achieve their full potential. Our commitment to a Mission First Culture extends beyond professional development — we strive to create a space where individuals are supported and inspired to make a meaningful impact and grow at Battelle.

### OUR GUIDING PRINCIPLES

UNITY

CREATIVITY

COLLABORATION

EXCELLENCE

APPRECIATION

Our guiding principles define our purpose, shaping our approach to problem-solving, grounding us in mutual respect for our partnerships and directing our efforts toward addressing global challenges. These principles are brought to life when our team's collective strengths come together to make a meaningful impact beyond ourselves.

### FISCAL YEAR 2024 ANNUAL CULTURE SURVEY HIGHLIGHTS

In fiscal year 2024, the annual culture survey results reflected continued progress in top-level performance categories, known as the essential dimensions of our annual Corporate Culture Profile Survey. All dimensions remained above the level at which they would be considered a notable concern — above a score of 65 out of 100.

The essential dimensions measure our culture's health. Battelle's culture continues to show strength in what we do, specific to our business interactions and performance. While some survey results remained steady, most categories across the organization showed improvements, including our customer and quality focus; our orientation toward performance; our ability to be agile, innovative and growth oriented; and our continued growth in collaboration and trust among colleagues.

## ESSENTIAL DIMENSIONS OF A HEALTHY CULTURE

### CUSTOMER AND QUALITY FOCUS



### AGILITY/INNOVATION/GROWTH



### PERFORMANCE ORIENTATION



### COLLABORATION AND TRUST



## Performance management, learning and development

We are committed to helping our employees develop the skills they need to remain engaged in solving the world's biggest challenges as they advance their careers.

Our Career Enablement program helps employees understand their roles in the organization and assess and determine what skills they need to develop for the next phase of their careers. The program includes a series of curated events for employees to learn more about career paths at Battelle and increase transparency around compensation design and philosophy.

We also offer employees ongoing role-specific training.

### ENCOURAGING HIGH PERFORMANCE

We strongly encourage ongoing career discussions, proactive career development and internal mobility. We offer formal and informal opportunities for professional and personal growth while exposing employees to various perspectives and new ways of thinking. Our annual process for encouraging high performance includes the following:

- Managers and employees hold midyear and end-of-year performance review conversations to discuss performance feedback and goals. Managers receive tools, resources and training on the process to support positive outcomes for employees and teams.
- Employees receive an annual performance rating and compensation adjustment, which is reviewed both internally and externally for reasonableness and fairness.

- Managers attend performance rating and talent calibration sessions led by HR to ensure there is fairness in performance ratings and to highlight the talents and skills of employees across the organization.
- Employees are asked to sign a form at the end of the performance review discussion to confirm they have completed their review.

Our goal is to create an environment where all employees and managers exchange information that results in understanding and continuous improvement through effective performance discussions.

“ At Battelle, we succeed because of the passion and talent of our people. We aim to empower our employees to grow their skills, advance their careers and stay inspired as they take on the world's toughest challenges. We strive to create an environment where every individual feels supported and equipped to reach their full potential, driving both personal and collective success. ”



- Rebecca Nguyen, Manager, Enterprise Culture & Programs

### EMPLOYEE LEARNING AND DEVELOPMENT HIGHLIGHTS

We offer a variety of programs so our Solvers can continue learning and growing throughout their careers at Battelle. Through these programs, employees are able to apply their innovative thinking to new challenges:

- Our Science and Technology Engagement Partnership (STEP) program offers employees opportunities to broaden their experience and gain a more comprehensive view of our business by leveraging a complimentary discipline to help tackle challenges outside of their typical areas of focus.
- Battelle Innovation Gathering (BIG) offers employees a unique opportunity to submit innovation ideas for competition.
- Our Emerging Scientists and Engineers Council solicits innovation grant proposals from employees for ideas to solve a particular challenge. Winning proposals receive grants to put their proposals into action.



## Hiring and employee attraction

We are committed to recruiting applicants who are both qualified for the positions available and who demonstrate potential to support our customer's future needs. Our recruitment and selection practices comply with all applicable employment laws, and we are committed to providing equal employment opportunities to all applicants and employees. We do this by:

- Posting positions for an appropriate length of time for applicants to find and respond to open positions.
- Identifying both requirements and desired skills and experiences of qualified applicants.
- Advertising positions internally and externally across a range of channels.
- Ensuring the data we request from applicants complies with state and federal standards.



### FAIR HIRING AND ADVANCEMENT

Our workforce delivers innovative solutions and represents a wide range of disciplines, experience and perspectives. To ensure fairness in our hiring process, we have implemented the following practices:

- The formation of a cross-functional team with members from HR and within the business who work to mitigate bias in recruiting.
- The implementation of tools and resources to promote fairness and consistency in hiring and advancement.
- The support of sponsorships and participation in career fairs to welcome Solvers across many disciplines and at every stage of their career.
- The implementation of continuous learning opportunities for members of the HR team and business leaders to promote safety and belonging at all levels and in all working environments.

### BUILDING A TALENT PIPELINE

Battelle hosted 101 students from 52 universities, representing 34 majors as part of its 2024 summer intern class. Of the 101 individuals, 29 were interns for more than one semester and Battelle retained 12 beyond their summer experience who either continued as interns or were hired into full-time positions.

Battelle's summer intern class in 2024 included:

- Top 3 Majors
  - Computer Science
  - Environmental Studies
  - Mechanical/Electrical Engineering

“ At Battelle, connecting students with meaningful opportunities to grow their skills and gain real-world experience is a core focus. Programs that foster mentorship, research and hands-on learning enable students from diverse backgrounds to transition seamlessly from the classroom to impactful careers. By investing in the next generation of innovators, the future of discovery and problem-solving continues to take shape. ”



- Jared Murray, Recruiter

## Compensation and benefits

As part of our effort to attract and retain the brightest science, engineering, technology and business minds in the world, we offer competitive compensation and a total rewards package.

We offer numerous benefits intended to support the overall well-being of our employees and their families. These include:

- Medical and prescription drug benefits, including healthcare navigation, access to musculoskeletal and telehealth providers for employees enrolled in the medical plan.
- Access to group accident and life insurance.
- Short-term disability coverage.
- Retirement savings plan with a competitive company match.
- Emergency travel assistance (personal travel and business).
- Emergency financial assistance.
- Always Giving, our charitable giving matching program.

Generous paid time off policies, including:

- Up to four weeks of 100% paid parental leave offered to parents, including adoptive parents.
- Up to \$30,000 (lifetime maximum) for fertility services.
- Paid military leave.
- Eight paid holidays.
- Jury duty leave.
- Bereavement leave.
- The annual option to buy-back a portion of PTO to be paid via paycheck.

Access to assistance programs that support health, family, finances and wellness, including:

- Employee assistance program.
- InShape, our comprehensive wellness program supporting physical, mental, emotional and financial fitness.
- Physical well-being incentives rewarding employees and their partners with medical premium credits upon completion of healthy activities.

- Tuition reimbursement.
- Public Service Loan Forgiveness program.
- Student loan support via Candidly.
- Backup childcare and dependent adult care solutions.
- Adoption assistance, including \$5,000 per child, for up to three children.
- Voluntary supplementary benefits such as flexible and health savings options (when eligible), vision insurance, dental insurance, additional life insurance, accidental injury insurance, accidental death and dismemberment insurance, critical illness insurance, identity protection, legal benefits plans, long-term disability insurance, pet insurance and a savings program covering pet-related expenses and services.



### PAY EQUITY

We are committed to maintaining pay equity for all employees through an annual pay equity analysis in partnership with an independent, third-party consultant, ensuring we continue to compensate our employees fairly and equitably.

- In fiscal year 2024, Battelle continued its commitment to pay equity by completing a 2024 analysis.
- We continued our My Compensation Sessions designed to help employees better understand their compensation, including transparency regarding pay structures and the Battelle job framework.
- We conducted a detailed analysis of roles compared with market indexes to inform pay rate increases, where determined appropriate.

# ENGAGEMENT AND BELONGING

Our culture creates a safe environment for employees to solve some of the world’s most complex problems. When our employees, clients and stakeholders feel a sense of belonging as their authentic selves, we create a work environment that attracts talented people, nurtures their careers, helps them succeed and keeps them engaged.

Understanding the need to foster a safe, respectful environment across the organization, Battelle leadership developed a Guide to Civility in the Workplace to support productive discourse and belongingness.

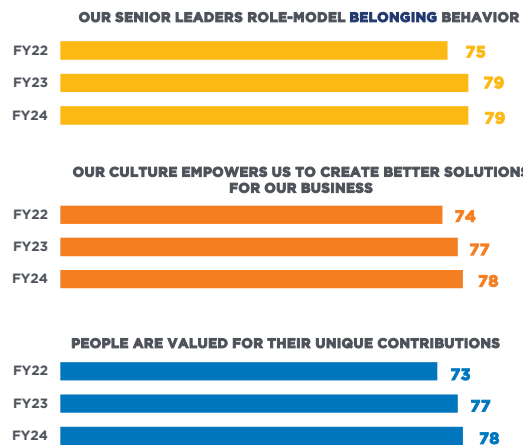
In our annual culture survey, we saw that Battelle employees continue to share year-over-year improvements in how employees experience Battelle’s work to foster a culture of belonging. We strive to be a workplace for all employees and value the annual feedback received across all essential dimensions of our annual Corporate Culture Profile Survey. (See the [Employee engagement and retention](#) section to read more about the annual culture survey.)

“ An environment where employees feel valued and supported is key to solving complex challenges. Fostering allyship and creating opportunities for growth ensures our teams are equipped with the tools they need to succeed and make a meaningful impact. ”



- Juan Alvarez,  
EVP of National Laboratory  
Management & Operations

## ANNUAL CULTURE SURVEY: RESPECT AND BELONGING



## BATTELLE AWARDED GOLD STATUS MILITARY FRIENDLY EMPLOYER



We earned the 2025 Military Friendly® Employer Gold designation. Based on a survey of more than 1,200 companies and public data sources, Military Friendly evaluated possible organizations for the award. Additionally, methodology, criteria and weightings of those candidates were determined by VIQTORY, a service-disabled, veteran-owned small business.

“ We know the value of employing veterans because they have been contributing to our success for the nearly 100 years we’ve been in operation. Veterans and military personnel are critical to our mission of using science to help society and we’re gratified to have earned this designation. ”



Lou Von Thaar,  
Battelle President and CEO

## FAIRNESS AND RESPECT

Fair policies, practices, systems and structures enable us to better serve our communities. We are working to create a workplace in which all our employees are empowered to bring forward their thoughts and ideas. We strive to remove any barriers that limit access to opportunity.



## Employee engagement and retention

Engaged employees working to their fullest potential make it possible for us to solve what matters most to humanity through science and technology. When our people thrive, Battelle thrives — and the world becomes a better place.

At the beginning of our employees' careers at Battelle, we intentionally create a professional environment centered on integrity and respect. Our organization-wide values and practices are supported by programs and initiatives highlighted throughout this report and reinforced through policies including our Code of Conduct, ethics and compliance, anti-harassment, cybersecurity and more.

Our Mission First Behaviors in Action program offers curated sessions targeted to the needs of groups and teams within our organization and is grounded in the principles of unity, collaboration, belonging, respect, and accountability that form the foundation of Battelle's culture.

This program also includes modules designed to enhance employees' capability to address conflicts and resolve communication barriers productively and authentically.

To better understand how employees feel about working at Battelle, we track employee sentiment through an annual culture survey. We measure more than a dozen attributes including trust, flexibility, appreciation and teamwork. The results of this survey help the SLT determine areas to prioritize throughout the organization. We have built-in accountability mechanisms for these efforts through improvement goals that are tied to individual business leaders.

### VALOR

Valor engages military service professionals, veterans, family and friends. The group leads Battelle's efforts for Honor Flight, an annual program escorting and welcoming veterans to Washington, D.C., to visit the memorials and monuments dedicated to their service and sacrifice.

### AFRICAN AMERICAN & BLACK LEADERSHIP EXCELLENCE (AABLE)

AABLE is committed to making Battelle an employer of choice by supporting the engagement and professional development of talent. The group supports the internship program by connecting interns to mentors who help them navigate the shift from academic to professional environments.

### EMBRACE

Embrace celebrates the wide range of commonalities and differences across Battelle. It hosts many celebrations and learning sessions, including a Spanish language class developed and facilitated by the ERG's leadership team.

As mentioned in the [Performance management, learning and development](#) section, we have an Emerging Scientists and Engineers Council that connects emerging scientists and engineers to networking opportunities to learn about research and other work taking place across the organization. The council is a resource to help earlier career individuals discover new opportunities and ensure that Battelle is a place where one can grow their careers while discovering their passions.

We are proud to have a dedicated CEO's Council that offers insight and recommendations to our SLT on advancing strategies that promote employee engagement, develop supportive leaders and encourage a safe and welcoming workplace. The CEO's Council works closely with our employee resource groups (ERGs) to ensure alignment on the recruitment, engagement and retention of high-performing talent.

We offer a variety of executive-sponsored and employee-led ERGs to help connect employees with the resources they need to grow and thrive. Our ERGs provide opportunities for all employees to develop their leadership skills, build and find connections and receive meaningful organizational support. Our volunteer-led employee resource groups are open for all employees to join across the organization:

### WOMEN'S NETWORK

Women's Network supports professional development and mentorship. The group has partnered with the Association for Women in Science to ensure that all interested Solvers at Battelle have a membership for continued development and networking.

### NEXTGEN

NextGen engages early career professionals and those seeking networking opportunities. It encourages employees to get involved in the communities where they live and work. In 2024, NextGen raised more than \$58,000 to support causes that matter most to our employees.

### PRISM

Prism supports our LGBTQ+ employees, their families and allies. The Prism leadership team helps shape the employee experience at Battelle by partnering across the business to ensure that employees can bring their full, authentic selves to work.

# SOLVING SOCIETAL CHALLENGES

## Health

We work diligently to find solutions to some of the world's most pressing health challenges and provide insights for making informed program and policy decisions on a broad range of issues from health preparedness to infectious disease prevention. Battelle's team of health professionals work toward advancing science to protect against public health threats, support quality patient care, drive health equity and improve health outcomes. Our research has been the foundation for program development and public policy for organizations such as the Centers for Disease Control and Prevention, Centers for Medicare and Medicaid Services (CMS) and the EPA.

Our solutions include:

- **Therapeutics, prophylaxis and diagnostics** that help clients deliver lifesaving diagnostic and therapeutic solutions.
- **Epidemiology and surveillance** that brings predictive analytics for public health at the intersection of science, technology and policy.
- **Biosecurity and pandemic preparedness** to conduct secure, state-of-the-art research, development, testing and evaluation that is critical to national security, economic strength and the well-being of people.
- **Healthcare quality** to help improve the performance and promote patient equity of health systems, small and large.
- **Medical countermeasures** to provide high-quality life science research supporting FDA-regulated countermeasures in response to potential public health emergencies.
- **Artificial intelligence and machine learning** to drive breakthroughs and innovation in health and biomedical research.



### PARTNERSHIP FOR QUALITY MEASUREMENT

Battelle is a CMS-certified consensus-based entity. As a consensus-based entity (CBE), Battelle synthesizes evidence and convenes key stakeholders to make recommendations focused on improving performance within the healthcare system through clinical quality and cost/resource use measures. Maintaining these measures through transparent, periodic and consensus-based reviews is critical for ensuring healthcare quality performance can not only be measured but can also be improved upon. In 2023, the CMS awarded Battelle the National Consensus Development and Strategic Planning for Health Care Quality Measurement contract.

In the past two years, significant advancements have been made to increase transparency, accessibility and efficiency in all elements of the CBE work. To improve transparency and accessibility, the current CBE established a membership of health care experts called the Partnership for Quality Measurement (PQM). PQM membership is free to all individuals and organizations, and patient membership has increased, with patients now holding the largest number of seats on all PQM committees. Additionally, the CBE has taken steps to streamline the quality measure endorsement and maintenance process and improve pre-rulemaking stakeholder feedback. Administrative changes responsive to stakeholder feedback have allowed for increased public comments in the pre-rulemaking measure review, including a historically high number of public comments. Ensuring transparent, reliable and consensus-based processes for improving performance measurement that drives toward better-quality care for Americans is the foundation of the CBE program.

## NEUROTECH

“ Battelle is pioneering the use of artificial intelligence in medical device development, advancing healthcare and transforming patient care. NeuroLife demonstrates how AI can restore movement and hope for individuals with spinal cord injuries, and autonomous triage systems support first responders with critical tools. As AI evolves, our efforts remain centered on creating impactful and responsible solutions that bring meaningful change. ”



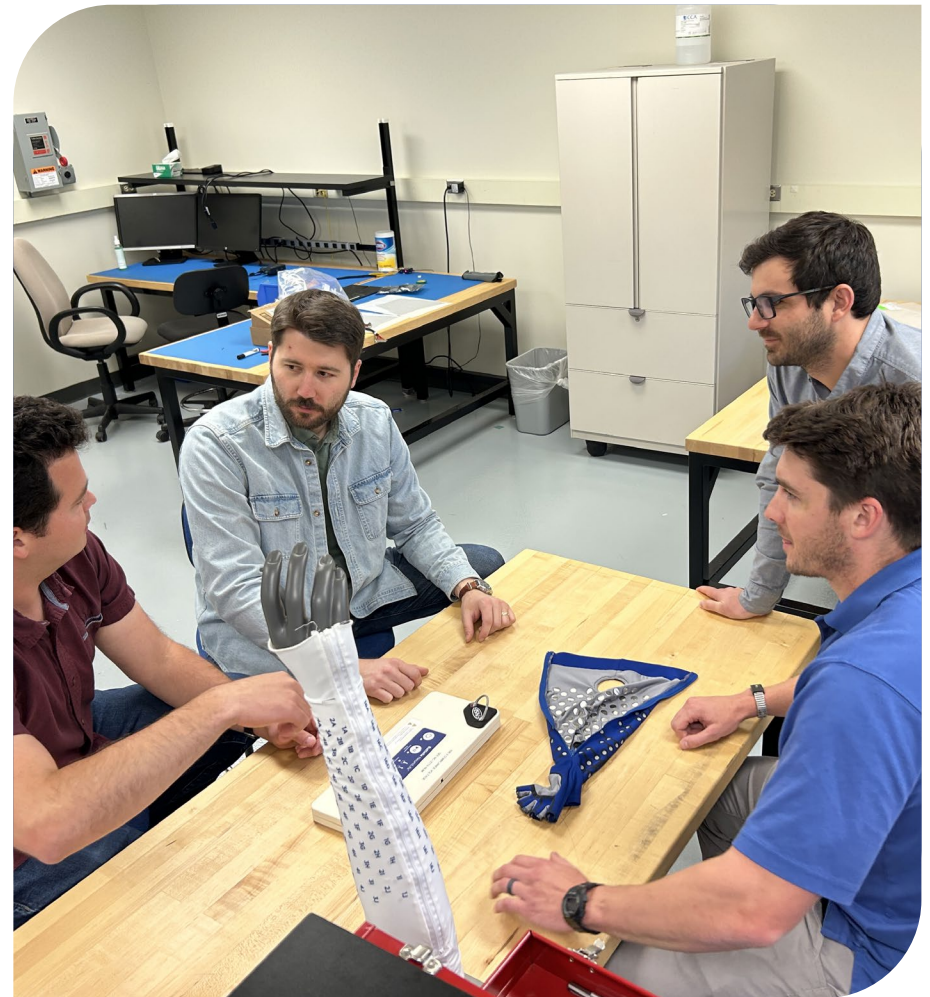
- Sam Colachis, Biomedical Engineer

Battelle has been at the forefront of integrating artificial intelligence (AI) into medical device development, enhancing patient care and advancing medical technology. Our journey reflects the broader evolution of AI, transitioning from human-in-the-loop systems to AI-assisted processes, and now towards autonomous AI solutions.

One of Battelle's notable projects is the NeuroLife initiative, which aims to restore movement in individuals with spinal cord injuries. By employing deep learning models, Battelle developed a neural bypass system that decodes neural activity and translates it into muscle movements, enabling patients to regain control of paralyzed limbs.

Additionally, Battelle has applied AI in developing autonomous sensor-based systems for mass casualty triage. These systems utilize machine learning models to assess physiological data, aiding first responders in identifying individuals requiring immediate medical attention.

Our integration of AI in medical device development not only enhances patient outcomes but also contributes to sustainability in healthcare. AI-driven devices can lead to more efficient diagnostics and treatments, reducing the need for resource-intensive procedures and minimizing environmental impact. As AI technology continues to evolve, Battelle aims to be committed to responsible innovation, ensuring that advancements in medical devices are both ethical and environmentally sustainable.



## STEM education and philanthropy

We invest in STEM education to advance future research and development and the talent needed for solving the problems of tomorrow. We also provide philanthropic support in our local communities to support other essential needs.



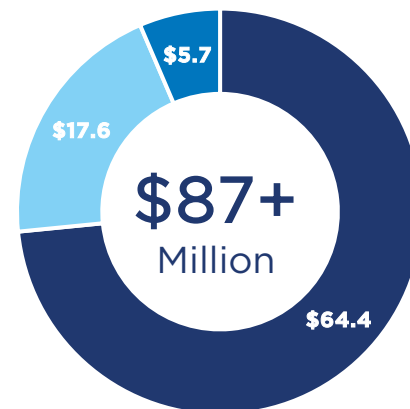
The vision of our founder, Gordon Battelle, calls on us to make charitable distributions that will do the greatest good for humanity. Battelle distributes at least 20% of its net income every year to qualified charitable causes, at least 62% of which is made in central Ohio for the benefit of Central Ohio. For the fourth year in a row, Battelle has funded new STEM education experiences through the Ohio STEM Learning Network STEM Classroom Grants. In Ohio specifically, we were able to support 197 schools in 144 public school districts across 67 counties. The funding covers 248 grants and will reach tens of thousands of students.

Since 2006, we have engaged in partnerships and launched networks to amplify effective educational practices and build a professional community for STEM educators across the nation.

Our philanthropic spend in 2024 totaled \$14 million. Overall, our STEM education and philanthropy efforts and outreach from Battelle-managed national laboratories reached 1.66 million students in fiscal year 2024. This is in line with our commitment to deliver quality STEM education experiences to 1 million students every year.

## MEASURING OUR COMMUNITY IMPACT

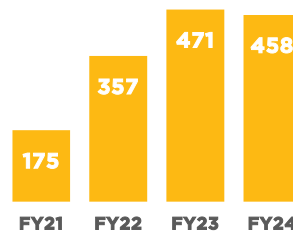
Total \$ Value Charitable Contributions (FY21 - FY24) in millions



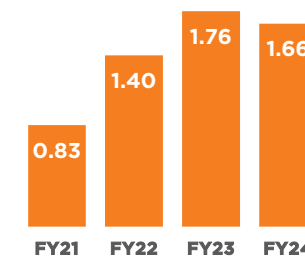
- Organization Charitable Contributions in Ohio
- Organization Charitable Contributions Nationwide (outside Ohio)
- Employee Charitable Contributions<sup>14</sup>

<sup>14</sup> We match employee gifts dollar for dollar, doubling the impact of our employee giving.

### GRANTS ISSUED



### STUDENTS IMPACTED (millions)<sup>15</sup>



<sup>15</sup> This data includes Battelle-managed national laboratories.

## STEM EDUCATION

We regularly review contracts for educational grants against our mission, business development strategy and for their potential impact in promoting STEM education. To nurture the next generation of STEM talent, we engage with a broad range of educational stakeholders in various ways.

- Battelle Education, our mission-oriented nonprofit organization, amplifies STEM education best practices across the U.S. through grant funding as well as public-private partnerships with educators such as the Ohio STEM Learning Network and Tennessee STEM Innovation Network. These networks are supported by state funding and work closely with their local state Departments of Education.
- STEMx™ network, managed by Battelle, is a national coalition of state STEM leaders that provides opportunities and solutions for addressing common obstacles confronted by STEM educators.



## BATTELLE DONATION FUNDS STEM EDUCATION FOR THE NEXT GENERATION WORKFORCE

Battelle granted \$3.2 million to support the Girl Scouts of Ohio's Heartland in establishing the AEP Foundation STEM Leadership Center and CK Construction Maker Space at the Battelle Science & Innovation Campus. This state-of-the-art facility will provide students with pathways to in-demand careers.

The center, which opened in October 2024, offers interactive labs and hands-on workshops, empowering students to explore STEM careers and develop critical skills for tomorrow's workforce. The initiative was piloted with significant community involvement, demonstrating a strong demand for such resources among educators and students.

Battelle's initial donation enabled the creation of this innovative space. The program is in its early stages but holds tremendous potential to inspire and equip the next generation of female leaders in STEM.

“ We are working to ensure every student has access to meaningful, hands-on STEM experiences that inspire them to explore, innovate and think critically about the world around them. ”



- Sarah Sparkman,  
STEM Project Manager

## PHILANTHROPY

“ Battelle’s fiscal year 2024 philanthropic giving improves the lives of those in the communities we serve. From matching employee donations to funding educational programs, we strive to create opportunity. Every day, we seek to carry forward the mission of Battelle and make a difference. ”



- Leslie Vesha, Manager of Philanthropy

Our long history of philanthropic giving includes funds for STEM education, essential social services and other programming to improve the communities where our employees live and work.

Our Philanthropy team regularly identifies and evaluates nonprofit partners who best align with our charitable giving strategy, advancing suggested recipients to Battelle’s Distribution Committee for approval. The Science & Technology and Community Benefit Committee of the Board of Directors approves proposals for any grants in excess of \$500,000 to a single recipient.

As part of our additional review process, we partner with the Columbus Foundation for due diligence of all grants made, and we provide additional reporting of all grants equal to or greater than \$25,000 to the Ohio Attorney General annually. We also support our employees through dollar-for-dollar matching of their charitable contributions to nonprofits, doubling the impact of their giving and through our Team Battelle program, which encourages employees to organize volunteer-driven programs and activities in their communities. We also work with our Pacific Northwest National Laboratory and Savannah River National Laboratory partners to fund grants within their local communities.



**BATTELLE**

# GOVERNANCE

We manage our operations with the highest degree of integrity. Our governance functions provide a consistent framework that holds us to the highest ethical standards and helps us manage enterprise risks.

Our governance functions ensure ethical interactions both among our employees, clients and communities. They also ensure that our corporate practices support our goals and commitments for ethical behavior.

Corporate governance and risk management

Business ethics and compliance

Data security and privacy

Procurement and supply chain practices



# CORPORATE GOVERNANCE AND RISK MANAGEMENT

Our board of directors bears the ultimate fiduciary responsibility for the oversight of management and operation of the organization. They bring experience from a wide range of sectors aligned with our mission and strategy and serve as a resource for the President and CEO and SLT.

The board has appointed three committees that meet quarterly with management:

- Human Resources, Compensation and Governance.
- Science & Technology and Community Benefit.
- Audit.

See the [governance framework](#) section to read more about the board's roles and responsibilities.

We follow practices and policies that are designed to provide strong governance oversight. Our board of directors is expected to comply with Battelle's Code of Conduct, including a Conflicts of Interest Policy in connection with the work they do for Battelle and must disclose affiliations that could pose a conflict.

Directors serve one-year terms and are generally elected every November. Directors must retire by the end of the year they reach age 72. Our board regularly assesses its performance as a board and as individual directors.

Our board oversees Battelle's strategy and delegates the execution of strategy to the SLT. The SLT presides over a policy and procedure infrastructure that enable Battelle's strategy and operations, including Battelle's authorities to operate that define management's decision-making authorities throughout the organization.



## Enterprise risk management

Battelle recognizes the importance of ensuring the continuity of our business by identifying and addressing the risks most relevant to our organization.

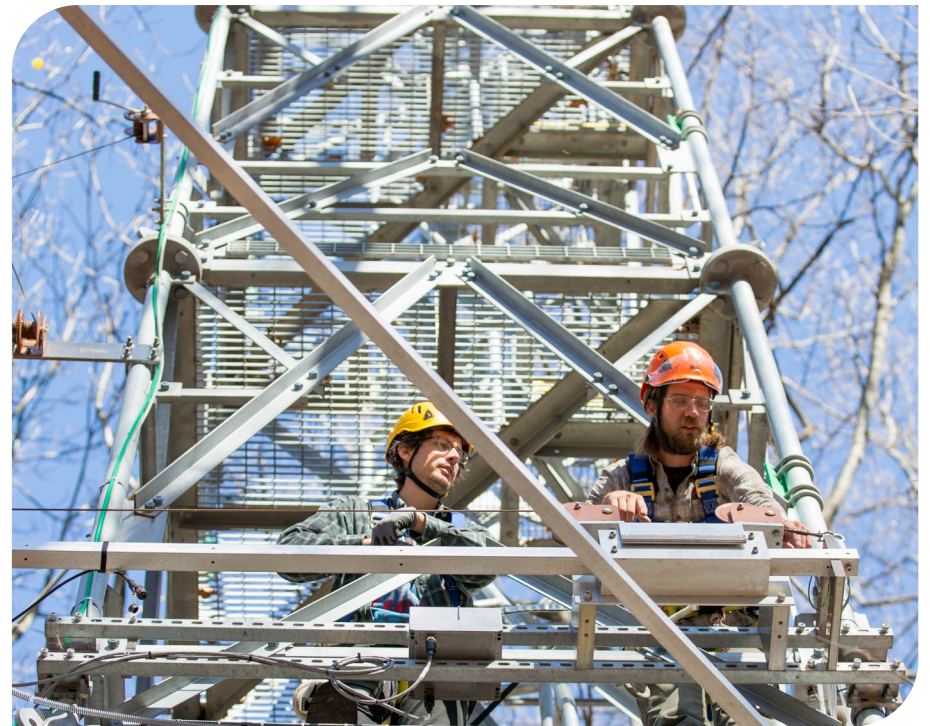
We manage risk on an enterprise and project level, and every project involving a government customer has a risk management process tailored to its needs.

Our overall approach to risk management is robust, and we are focused on resiliency so that we are as prepared as possible for risks should they arise. We have the following institutionalized risk management structures in place including:

- Our **chief risk officer** who is responsible for identifying key enterprise risks, works with the SLT to mitigate potential threats and reports to the board of directors' Audit Committee on a quarterly basis.
- Our **chief audit executive** (CAE) is responsible for the internal audit function at Battelle, which conducted a combined total of 15 audits, consulting engagements, and self-assessments in fiscal year 2024 spanning across risks that are most relevant to our organization. The CAE is also responsible for Battelle's ethics reporting process and investigations. The CAE works closely with Battelle's Audit Committee Chair to provide transparency into the effectiveness of Battelle's internal controls systems.
- Our **chief financial officer** (CFO) who works closely with the risk and audit functions to ensure alignment across the accounting and financial reporting processes.
- Our **board of directors** with an **Audit Committee** that is responsible for oversight of our organization's enterprise risk management process. The committee receives updates on the top 10 enterprise risks at each Audit Committee meeting and performs a thorough review of key risks at every meeting.

- Our **Enterprise Risk Management Working Group** reviews risk priorities quarterly and reprioritizes top risks as needed. Every identified risk is assigned to one or more SLT members for the development of risk management action plans. These plans are reviewed with the Audit Committee quarterly.

See our [governance framework](#) section for additional information.



# BUSINESS ETHICS AND COMPLIANCE

Our actions conform with the highest ethical standards and follow all domestic and foreign legal requirements.

Our ethics hotline and website allow individuals to report concerns through a third party and anonymously if desired, so the concern can be thoroughly investigated by our Investigation Oversight Committee (IOC). The IOC, a partnership between our Legal, Human Resource and Internal Audit teams, shares quarterly updates with the number of and nature of employee-initiated complaints, including those made through the ethics hotline with the SLT and Audit Committee while maintaining the anonymity of individuals. In addition, we have a protocol in place where the chief audit executive has a direct line of communication with the Audit Committee chair when a concern with immediate notification is required.

We maintain a formal Code of Conduct, which is shared with all employees and describes the standards of behavior we expect from employees. Other documented policies include:

- A no-retaliation policy that ensures individuals may raise good-faith concerns without fear of retribution.
- Scientific integrity through anti-plagiarism tools and a zero-tolerance policy for scientific misconduct.
- Safeguards that protect the rights, welfare, health, safety and privacy of persons who volunteer to serve as human subjects in research.
- Protections against conflicts of interest, including clear rules regarding gifts and gratuities.
- A research and scientific activities policy that requires all scientific activities undertaken are consistent with Battelle's mission, comply with all legal requirements of such activities and are completed in accordance with ethical standards.<sup>16</sup>

<sup>16</sup>Battelle is prohibited by law from undertaking certain activities, including the practice of medicine, offering legal advice or providing certain engineering services. Employees engaged in research and scientific activities must undertake those activities consistent with Battelle policies and procedures. Specified research and scientific activities must be reviewed and approved by a cognizant oversight board prior to the onset of the activities.

## Anti-corruption and bribery

Battelle maintains strong policies and procedures that prohibit the giving, receiving or soliciting of bribes, kickbacks or other compensation in relation to employment. We also have enacted robust protections against conflicts of interest, including clear rules regarding gifts and gratuities. Employees participate in mandatory annual training related to ethics, conflicts of interest and compliance to reinforce our expectations.

## Political contributions

As a 501(c)(3), Battelle does not participate in political activities and does not engage in corporate political contributions or in lobbying efforts related to ballot issues. We have no direct engagement in political lobbying efforts; however, we do engage in lobbying and education efforts if they are related to important areas of the business, and we disclose those details in our Form 990.

## Human rights

We maintain policies that help protect human rights throughout the organization including through our suppliers. Discrimination, forced labor, slavery, human trafficking and other human rights violations are prohibited. Employees participate in mandatory annual training on our Code of Conduct, which clearly details our position as well as our expectations within our own operations and our supply chain. We ensure the ethical behavior of our supply chain through the terms and conditions that are standard in our Purchase Orders (POs) and Subcontracts. These terms and conditions include provisions that address various aspects of ethical conduct, compliance with applicable laws, and adherence to our company's standards. By incorporating these requirements into our contractual agreements, we maintain a high level of integrity and responsibility throughout our supply chain. See the [Business ethics and compliance](#) section for more information on relevant policies.

## Use of human subjects in research

We are committed to safeguarding the rights, welfare, health, safety and privacy of people who volunteer to serve as human subjects in research.

Battelle maintains a human subjects research policy, and all volunteers must provide their informed consent to take part in our research. We demonstrate our ethical commitment to protect human subjects through a Federal-wide Assurance (FWA) issued by the Department of Health and Human Services (HHS). Our Battelle Institutional Review Board (IRB), a committee tasked to protect human subjects in research, must review, approve and oversee the conduct of all research protocols that solicit the participation of human subjects.

Battelle researchers are committed to managing human subjects research in accordance with established ethical standards, federal and other regulatory requirements and institutional procedures. All Battelle staff members engaged in human subjects research complete initial and refresher training courses. Research data or specimens that could be associated with a human subject's identity is secured so that it may be accessed only by those with the proper permissions.

## Ethical use of animal models

We take the welfare and the ethical use of animal models in our work seriously, and we maintain an animal welfare policy that governs required and regulated research conduct. Our primary use of animal models is to gain insights into aspects of human diseases and to evaluate new treatments that can have a positive impact on human health, and often animal health. Animal models also help us understand exposure to chemical and environmental hazards.

We adhere to the Animal Rule, a regulatory pathway used to support approval of drugs and licensure of biological products when human efficacy studies are not ethical and field trials to study the effectiveness of drugs or biological products are not feasible. In addition, we are committed to:

- Using the smallest number of animals necessary to generate scientifically valid results.
- Employing procedures and techniques that assure animals the most comfort and cause the least amount of pain and distress possible.
- Avoiding use of animals if there are other nonanimal models that will yield comparable results.
- Ensuring that veterinary care is continually available.
- Training all employees involved with animals about humane treatment and the ethical issues involved in using animals for research.
- Providing staff with multiple methods for anonymously reporting any concerns around the treatment of animals.

### ANIMAL WELFARE OVERSIGHT

Our care for animals used in scientific research is overseen by several governmental and regulatory bodies, including a dedicated Battelle committee:

- U.S. Department of Agriculture (USDA)-registered research facility since 1967.
- Public Health Service (PHS) Office of Laboratory Animal Welfare (OLAW)-assured institution.
- American Association for Accreditation of Laboratory Animal Care (AAALAC) international accreditation since 1978.
- Battelle's Institutional Animal Care and Use Committee (IACUC).

# DATA SECURITY AND PRIVACY

## Data security

Protecting the data entrusted to us is crucial for the health of our organization, the welfare of our partners and clients, and, in some cases, the security of our nation. We continuously and proactively assess the potential vulnerabilities of our records and IT systems so that any potential threats can be identified and addressed.

Battelle developed a cybersecurity framework derived from the NIST Cybersecurity Framework (CSF) and industry best practice to address data security risks to manage data security and associated risks through a measured, process-driven approach. The framework is organized into five components: identify, protect, detect, respond and recover. We also maintain a robust set of data security policies formalizing the organizational approach to data security, which include:

- Corporate information security policy.
- Incident response policy.
- Privacy policy.
- Acceptable use policy.

Battelle also conducts continuous security assessments and monitoring within the corporate environment and in partnership with third parties. These are inclusive of but not limited to threat hunting and vulnerability scanning.

Employees receive annual cybersecurity training and education on how they can help safeguard our systems and keep unapproved parties from accessing data. System users, including contractors and visitors, are required to follow the security measures we have put in place to keep data secure. Any known or suspected security breach must be reported immediately and, in the case of classified information, to the appropriate U.S. government entity so that we can respond promptly to the potential compromise.

In fiscal year 2024, Battelle validated its approach to secure software supply chain security by formally attesting to the Secure Software Development Framework (SSDF). The SSDF is a core set of high-level secure software development practices integrating security into the software development process. Software supply chain security and the SSDF are codified in Executive Order 14028 "Improving the Nations' Cybersecurity" and NIST SP 800-218A (Secure Software Development Framework (SSDF)).

### BATTELLE AWARDED CYBERSECURITY MATURITY MODEL CERTIFICATION VERSION 2.0

We completed the Cybersecurity and Infrastructure Security Agency's 2.0 program requirements for the Cybersecurity Maturity Model Certification aligned with the NIST cybersecurity standards. We also received a perfect score on the Defense Industrial Base Cybersecurity Assessment Center's Joint Surveillance Voluntary Assessment Program demonstrating cybersecurity maturity as a trusted contractor for the DOD.

## Data privacy

The protection of internal, restricted and controlled information is crucial to ensuring that data remains only with those who should have access. We have established a data classification system and guidelines that govern the use of the organization and third-party data in our possession.

Employees participate in mandatory annual data privacy training and education to learn how different kinds of information should be handled so that it is not improperly disseminated or misused. Any access to data by unauthorized parties must be reported immediately for investigation and prompt response.

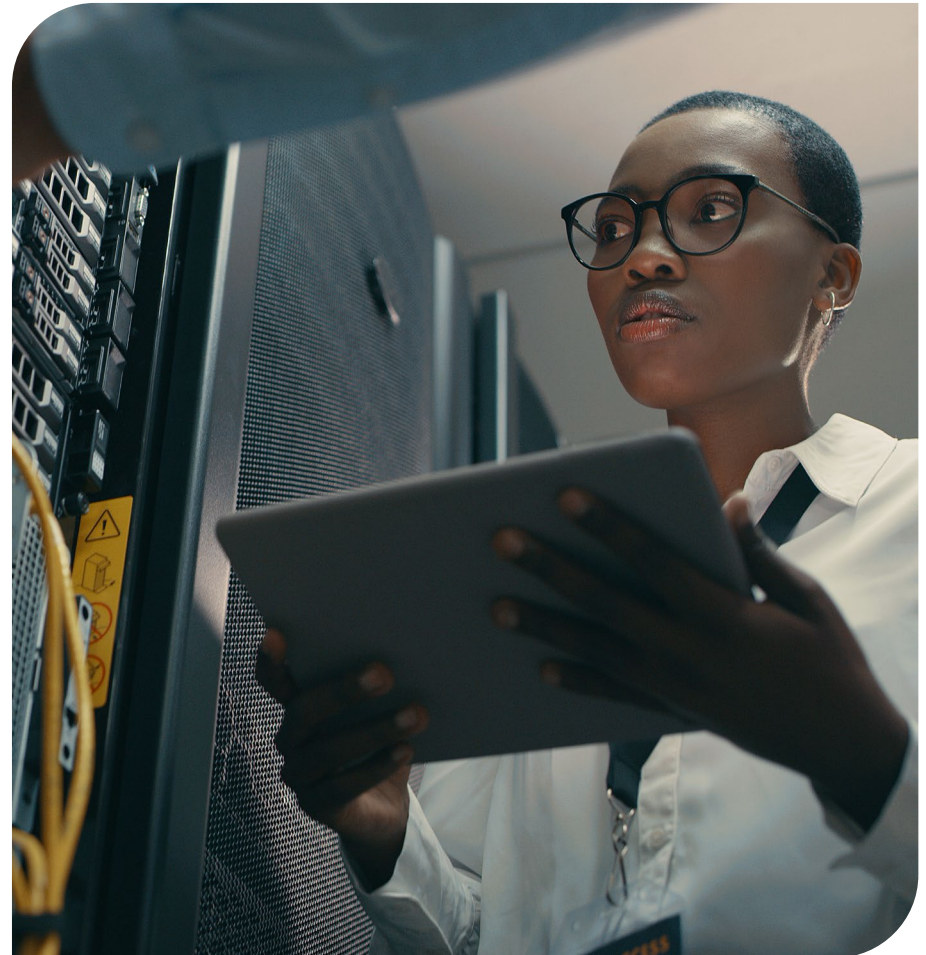
### RESPONSIBLE USE OF AI

We released a policy on the responsible use of artificial intelligence (AI) to create guidelines and standard use cases for teams and functions throughout the organization. Over the past year, we've bolstered those policies with extensive training on our tools and services to ensure our user base is cognizant of our policies with respect to responsible use.

“By embracing innovation and responsible AI, we give teams the freedom to explore new ideas while staying grounded in best practices that drive real impact across the organization.”



- Rob Ravenscroft, Senior IT Enterprise Architect



# PROCUREMENT AND SUPPLY CHAIN PRACTICES

## Procurement and small business programs

Suppliers provide us with the materials and services we need to pursue our work, and a resilient supply chain is crucial to our work — creating innovations that improve the world.

Our Small Business Program Office is committed to partnering with small businesses with the expertise to help us develop breakthrough solutions, including:

- **Small Business** – A business that meets the SBA's size standards based on industry classification.
- **Small Disadvantaged Business** – A small business at least 51% owned and controlled by socially and economically disadvantaged individuals.
- **Women-Owned Small Business** – A small business at least 51% owned and controlled by one or more women.
- **Veteran-Owned Small Business** – A small business at least 51% owned and controlled by one or more veterans.
- **Service-Disabled Veteran-Owned Small Business** – A VOSB where the veteran owner(s) have a service-connected disability.
- **HUBZone Small Business** – A business located in a Historically Underutilized Business Zone (HUBZone), at least 51% owned by U.S. citizens, and with at least 35% of employees residing in a HUBZone.

Our dedication to small businesses is unwavering. Throughout 2024, we have allocated approximately 63.5% of our spend to small businesses across various socio-economic categories as defined by the Small Business Administration. In addition, we have a dedicated department within our procurement team that supports small business outreach to ensure we continue to leverage and support the small business community.

### BATTELLE HONORS AMERICAN POWER SYSTEMS AS ITS SMALL BUSINESS SUPPLIER OF THE YEAR

Supply chain issues are well-known and have affected the American manufacturing sector. But when Battelle's Armored Commercial Vehicles line needs specialty parts, American Power Systems (APS) comes through. Based on consistent delivery when faced with anything from innovative supply chain management to emergency timelines and critical procurement challenges, APS has been a trusted partner and is Battelle's Small Business Supplier of the Year. The response time and quality of products have been essential. Their power management systems help us bring our service members home safe.



## Supplier onboarding and continuous monitoring

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As part of Battelle's supplier onboarding process, all suppliers undergo validation to ensure they are in good standing with the Office of Foreign Assets Control (OFAC) and the Excluded Parties List (EPL). Once a supplier is added to Battelle's system, they are enrolled in continuous monitoring against both OFAC and EPL.

Additionally, Battelle's procurement function obtains Dun & Bradstreet reports to assess financial risks before issuing any work to the supplier. This process ensures that Battelle collaborates with reputable suppliers and is aware of any potential risks before engagement.

## Battelle supplier compliance management

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All Battelle supplier agreements include standard terms requiring supplier compliance with applicable laws, regulations and ethical standards, particularly those related to government contracts, anti-fraud measures and scientific integrity. Further, suppliers must obtain necessary licenses and permits, adhere to local, state, and federal directives and take full responsibility for any legal or financial consequences of non-compliance. Additionally, they must uphold strict environmental, safety and health (ESH) standards to ensure work is conducted safely and responsibly. Battelle holds suppliers accountable for both their own compliance and that of their subcontractors, integrating ESH management into all aspects of work planning and execution.

**BATTELLE**

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# FORWARD- LOOKING STATEMENT

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We view our impact strategy as a long-term priority and are committed to building an ongoing management strategy that aligns with current and future stakeholder expectations and business imperatives. This work includes identifying and prioritizing the relevant sustainability-related issues with the greatest impact on our business, formalizing internal committees and working groups, and implementing organization wide goals intended to measure targets and improve our performance.

We welcome feedback on our efforts to date. Please contact us at [solutions@battelle.org](mailto:solutions@battelle.org) with any questions.

**BATTELLE**

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# APPENDIX

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Appendix: Performance data

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Appendix: Disclosure indexes

# ENVIRONMENT

GHG emissions	FY22	FY23	FY24
<b>Scope 1 &amp; Scope 2 GHG emissions, total (MT CO<sub>2</sub>e)</b>	<b>41,404</b>	<b>42,712</b>	<b>40,605</b>

Scope 1 GHG emissions by source (MT CO <sub>2</sub> e)	FY22	FY23	FY24	Scope 2 GHG emissions, total (MT CO <sub>2</sub> e)	FY22	FY23	FY24
Facilities (utility bills)	14,351	14,020	14,272	Location based, owned facilities <sup>18</sup>	21,674	22,965	21,934
Refrigerants	1,343	581	296	Location based, leased facilities (estimated) <sup>19</sup>	2,412	2,238	2,229
Fuel oil	0	462	173				
Aviation fuel	1,537	2,360	1,614				
Gasoline (estimated)	87	87	87				
<b>Scope 1 GHG emissions, total (MT CO<sub>2</sub>e)<sup>17</sup></b>	<b>17,318</b>	<b>17,509</b>	<b>16,442</b>				

<sup>17</sup> Scope 1 emissions are calculated using emission factors from version 4.1 of the GHG Protocol tool for stationary combustion. The gases included in the calculation are CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O. Reported data covers our Columbus, Ohio, headquarters; West Jefferson, Ohio, research facility; and the Battelle Eastern Science and Technology (BEST) Center.

<sup>18</sup> Scope 2 emissions for owned facilities are calculated using EPA eGRID output emission rates. The gases included in the calculation are CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O. Reported data covers our Columbus, Ohio, headquarters; West Jefferson, Ohio, research facility; and the Battelle Eastern Science and Technology (BEST) Center.

<sup>19</sup> Battelle has estimated electricity and natural gas consumption using published values for average energy consumption per square foot of floor area provided by the U.S. Energy Information Administration's [Commercial Building Energy Consumption Survey \(CBECS\)](#). Scope 2 emissions are calculated using EPA output emissions factors by activity type. The gases included in the calculation are CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O.

# ENVIRONMENT

Energy use	FY22	FY23	FY24
Total purchased energy consumption inside the organization (kBtu) <sup>20</sup>	459,042,228	470,501,404	460,018,233
Total energy consumed by buildings (kBtu) <sup>21</sup>	435,791,908	429,234,333	433,327,045
Total owned facility area (ft <sup>2</sup> )	1,888,282	1,888,282	1,888,282
<b>Energy intensity ratio (kbtu/sq. ft.)<sup>22</sup></b>	<b>231</b>	<b>227</b>	<b>229</b>

% of energy from renewable vs. nonrenewable energy sources	FY22	FY23	FY24
% renewable	2.4	2.5	2.8
% nonrenewable	97.6	97.5	97.2

<sup>20</sup>Reported data covers all energy sources including electricity, natural gas, gasoline, fuel oil, and aviation fuel for our Columbus, Ohio, headquarters; West Jefferson, Ohio, research facility; and the Battelle Eastern Science and Technology (BEST) Center

<sup>21</sup>Reported data covers the electricity and natural gas energy consumed by our owned buildings to operate the facilities.

<sup>22</sup>Energy intensity is reported in kBtu per area of owned facility. The energy included in the ratio is from electricity and natural gas, the energy sources used on site to operate the facilities. Fuel oil is also used occasionally to operate the facilities; however, Battelle does not currently have a means of tracking when fuel oil is consumed. Current fuel oil consumption is based on when fuel oil is purchased. The fuel oil purchased in fiscal year 2023 is only 1.4% of the total site energy consumption and would have a negligible impact on the energy intensity ratio.

Purchased energy use by type (kBtu)	FY22	FY23	FY24
Electricity	167,190,665	166,844,218	166,209,612
Natural gas	268,601,243	262,390,114	267,117,433
Fuel oil	0	6,249,551	2,346,828
Jet fuel	22,000,320	33,767,520	23,094,360
Gasoline (estimated)	1,250,000	1,250,000	1,250,000
<b>Total purchased energy<sup>20</sup></b>	<b>459,042,228</b>	<b>470,501,404</b>	<b>460,018,233</b>

Water consumption	FY22	FY23	FY24
Total water consumption from all areas in megaliters <sup>23</sup>	224.6	206.5	202.7

<sup>23</sup>Reported data covers our Columbus, Ohio, headquarters; West Jefferson, Ohio, research facility; and the Battelle Eastern Science and Technology (BEST) Center

# ENVIRONMENT

General solid waste by treatment	FY22	FY23	FY24
Recycled	264.5 tons	255.0 tons	359.5 tons
Composted (estimated)	Not available	1.6 tons	5.2 tons
Landfill	271.5 tons	300.9 tons	336.4 tons
Construction projects recycling <sup>24</sup>	1,143.3 tons	891.2 tons	91.3 tons
Construction projects landfill <sup>24</sup>	NR	NR	53.9 tons
<b>Total<sup>25</sup></b>	<b>1,679.3 tons</b>	<b>1,448.7 tons</b>	<b>846.3 tons</b>

<sup>24</sup> Based on available data from contractor construction waste records. Construction waste is not tracked on all projects.

<sup>25</sup> Reported data covers our Columbus, Ohio, headquarters; West Jefferson, Ohio, research facility; and the Battelle Eastern Science and Technology (BEST) Center.

Regulated waste by treatment	FY22	FY23	FY24
Landfill — nonhazardous regulated waste	Not available	26.9 tons <sup>27</sup>	77.8 tons
Landfill — hazardous waste	Not available	0.1 tons	0.05 tons
Stabilization/landfill — radioactive waste	Not available	1.4 tons	1.9 tons
Stabilization/landfill — remediation waste	Not available	1,535.0 tons <sup>28</sup>	0.0 tons
Incineration — nonhazardous regulated waste	Not available	68.5 tons	60.9 tons
Incineration — hazardous waste (without energy recovery)	Not available	38.0 tons	35.3 tons
Reused/reclaimed — hazardous waste	Not available	10.6 tons	6.0 tons
Reused/reclaimed — nonhazardous regulated waste	Not available	10.4 tons	17.5 tons
Thermal inactivation — infectious waste (without energy recovery)	Not available	53.0 tons	63.8 tons
Other — hazardous waste	Not available	2.0 tons <sup>29</sup>	0.0 tons
<b>Total<sup>26</sup></b>	<b>Not available</b>	<b>1,745.9 tons</b>	<b>263.25 tons</b>

<sup>26</sup> Reported data covers our corporate headquarters in Columbus, Ohio; A research facility in West Jefferson, Ohio; the Battelle Eastern Science and Technology (BEST) Center in Aberdeen, Maryland; and our analytical lab in Norwell, Massachusetts.

<sup>27</sup> FY23 Landfill - nonhazardous waste disposal volume revised to account for latest waste figures.

<sup>28</sup> Includes 1,317 tons of nonhazardous, lead-impacted soil related to Big Darby Shooting Range remediation project and 218 tons of PCB- and asbestos-contaminated concrete from JS-7 energetics containment demolition.

<sup>29</sup> Waste manifest did not specify disposal method.

# ENVIRONMENT

Work-related ill health	FY22	FY23	FY24
Number of fatalities as a result of work-related ill health	0; 0.00	0; 0.00	0; 0.00

Workforce health and safety <sup>30</sup>	FY22	FY23	FY24
Number and rate of fatalities as a result of work-related injury	0; 0.00	0; 0.00	0; 0.00
Number and rate of high-consequence work-related injuries (excluding fatalities) — defined as Days Away, Restricted and Transferred (DART) cases	11; 0.29	15; 0.40	17; 0.45
Number and rate of recordable work-related injuries — defined as total recordable incident rate (TRIR)	29; 0.77	39; 1.04 <sup>31</sup>	53; 1.42
Main types of work-related injury	Injury by animal	Contact with object	Contact with object; body reaction and exertion; Injury by animal
Number of hours worked	7,487,000	7,472,500	7,481,333

Annual spill data <sup>32</sup>	FY22	FY23	FY24
Nonreportable spills	7	8	14
Reportable spills	0	0	1

<sup>32</sup> Our nonreportable spills consisted of small volumes (< 5 gallons) of hydraulic oil, diesel fuel, gasoline, ethylene glycol and other common materials that were captured and contained. Reportable spills are defined as environmental releases subject to federal, state or local regulatory reporting requirements.

<sup>30</sup> All rates inclusive of contractors working under direct Battelle supervision. TRIR calculated by the number of OSHA recordable incidents x 200,000 / total number of hours worked

<sup>31</sup> An OSHA Recordable incident that occurred in FY23 at an off-site location was added after FY23 closed.

# SOCIAL

## ANNUAL CULTURE SURVEY: ESSENTIAL DIMENSIONS OF A HEALTHY CULTURE

	FY22	FY23	FY24
Customer and quality focus	80	85	85
Agility / innovation / growth	70	77	78
Performance orientation	77	81	82
Collaboration and trust	67	74	75

## ANNUAL CULTURE SURVEY: RESPECT AND BELONGING

	FY22	FY23	FY24
Our senior leaders role-model belonging behavior	75	79	79
Our culture empowers us to create better solutions for our business	74	77	78
People are valued for their unique contributions	73	77	78

## WORKFORCE

	FY22			FY23			FY24		
	Full time	Part time	Temporary/ contingent	Full time	Part time	Temporary/ contingent	Full time	Part time	Temporary/ contingent
Total headcount	3,389	57	258	3,456	67	267	3,344	67	265

# SOCIAL

## PARTICIPATION IN RETIREMENT PLANS (%)

	FY22	FY23	FY24
Average employee deferrals <sup>33</sup>			
• Percentage of salary contributed by employee or employer	10.7%	10.7%	10.7%
Level of participation in retirement plans <sup>33</sup>			
• such as participation in mandatory or voluntary schemes	80%	81%	80%

<sup>33</sup> Based on employee contributions and deferral alone.

## PARENTAL LEAVE

	FY22	FY23	FY24
Number of employees entitled to parental leave	All employees are eligible for parental leave. Temporary employees and Fringe B employees are not eligible. This is offered to both birth and non-birth parents; adoption and birth are supported. 4 weeks paid at 100%.		
Total number of employees that took parental leave	92	106	120

## COMMUNITY IMPACT

	FY22	FY23	FY24
Total \$ in organization charitable contributions nationwide	\$27.5M	\$22.3M	\$14M
Total \$ in organization charitable contributions, Ohio	\$22.7M	\$16.9M	\$9.96M
Total \$ in employee charitable contributions <sup>34</sup>	\$1.5M	\$1.5M	\$1.7M
Impact metrics (grants)	357	471	458
Students impacted <sup>35</sup>	1.4M students	1.76M students	1.66M students

<sup>34</sup> We match employee gifts dollar for dollar, doubling the impact of our employee giving.

<sup>35</sup> This data includes Battelle-managed national laboratories.

# GOVERNANCE

## DATA SECURITY AND PRIVACY

	FY22	FY23	FY24
Number of data breaches	0	0	0
Percentage involving customers' confidential business information (CBI) or personally identifiable information (PII)	-	-	-
Number of customers affected by data breaches	0	0	0
Total number of substantiated complaints received concerning breaches of customer privacy, categorized by:			
• Complaints received from outside parties and substantiated by the organization	0	0	0
• Complaints from regulatory bodies			
Total number of identified leaks, thefts or losses of customer data	0	0	0

## ENTERPRISE RISK MANAGEMENT : INTERNAL AUDIT

	FY22	FY23	FY24
Number of audits, consulting engagements, and self-assessments	11	15	15

# APPENDIX: DISCLOSURE INDEXES

## SASB INDEX

### INDUSTRY: PROFESSIONAL AND COMMERCIAL SERVICES

Sustainability Accounting Standards Board (SASB) is an independent standards-setting organization dedicated to improving the effectiveness and comparability of corporate disclosure on sustainability factors. The tables below summarize how our existing reporting aligns with the recommended metrics for the Professional and Commercial Services Standard, and where this information can be found in this report.

**TABLE 1. SUSTAINABILITY DISCLOSURE TOPICS AND METRICS**

SASB Code	Metric	Impact report section(s)/disclosure	Additional references
<b>DATA SECURITY</b>			
SV-PS-230a.1	Description of approach to identifying and addressing data security risks	See Data Security and Privacy, pp. <a href="#">40</a>	
SV-PS-230a.2	Description of policies and practices relating to collection, usage and retention of customer information	See Data Security and Privacy, pp. <a href="#">40</a>	
SV-PS-230a.3	1) Number of data breaches, 2) percentage involving customers' confidential business information (CBI) or personally identifiable information (PII), 3) number of customers affected	See Performance data tables, pp. <a href="#">59</a>	

# APPENDIX: DISCLOSURE INDEXES

## SASB INDEX

TABLE 1. SUSTAINABILITY DISCLOSURE TOPICS AND METRICS (CONTINUED)

SASB Code	Metric	Impact report section(s)/disclosure	Additional references
<b>PROFESSIONAL INTEGRITY</b>			
SV-PS-510a.1	Description of approach to ensuring professional integrity	See Business ethics and compliance, pp. <a href="#">37-39</a>	
SV-PS-510a.2	Total amount of monetary losses as a result of legal proceedings associated with professional integrity	Not discussed	

TABLE 2. ACTIVITY METRICS

SASB Code	Metric	Impact report section(s)/disclosure	Additional references
SV-PS-000.A	Number of employees by 1) full time and part time, 2) temporary and 3) contract	See Performance data tables, pp. <a href="#">50</a>	
SV-PS-000.B	Employee hours worked; percentage billable	Not discussed	

# APPENDIX: DISCLOSURE INDEXES

## GLOBAL REPORTING INITIATIVE (GRI) INDEX

The GRI Standards represent global best practices for reporting publicly on a range of economic, environmental and social impacts. The tables on the next pages summarize where responses to the GRI disclosures can be found throughout this report.

<b>Statement of use</b>	Battelle Memorial Institute has reported the information cited in this GRI content index for the period 10/1/2023 to 09/30/2024 with reference to the GRI Standards.
<b>GRI 1 used</b>	GRI 1: Foundation 2021
<b>Applicable GRI Sector Standard(s)</b>	N/A

# APPENDIX: DISCLOSURE INDEXES

## GENERAL DISCLOSURES

Disclosure	Disclosure title	Impact report section(s)/disclosure	Additional references
<b>GRI 2.1: THE ORGANIZATION AND ITS REPORTING PRACTICES</b>			
2-1	Organizational details	See About Battelle, pp. <a href="#">3-5</a>	<a href="#">See 2022 Form 990.</a>
2-2	Entities included in the organization's sustainability reporting	See About Battelle, pp. <a href="#">3</a>	
2-3	Reporting period, frequency and contact point	See About this report, pp. <a href="#">3</a> Please contact us at <a href="mailto:solutions@battelle.org">solutions@battelle.org</a> with any questions.	
2-4	Restatements of information	Data presented represents information available as of September 30, 2024, including certain estimates and assumptions. Historical estimates may periodically be subject to revision due to data source restatements and updates to methodology.	
2-5	External assurance	This report is not externally assured. We are considering external assurance for certain data in future reports.	
<b>GRI 2.2: ACTIVITIES AND WORKERS</b>			
2-6	Activities, value chain and other business relationships	See About Battelle, pp. <a href="#">3-5</a>	
2-7	Employees	See Performance data tables, pp. <a href="#">50</a>	
2-8	Workers who are not employees	See Performance data tables, pp. <a href="#">50</a>	

# APPENDIX: DISCLOSURE INDEXES

## GENERAL DISCLOSURES

Disclosure	Disclosure title	Impact report section(s)/disclosure	Additional references
<b>GRI 2.3: CORPORATE GOVERNANCE</b>			
2-9	Governance structure and composition	See Corporate governance and risk management, pp. <a href="#">35</a>	<a href="#">See Board of directors.</a>
2-10	Nomination and selection of the highest governance body	See Corporate governance and risk management, pp. <a href="#">35</a>	
2-11	Chair of the highest governance body	See Corporate governance and risk management, pp. <a href="#">35</a> Battelle's board chair is an independent director and is not a senior executive in the organization.	<a href="#">See Board of directors.</a>
2-12	Role of the highest governance body in overseeing the management of impacts	See Corporate governance and risk management, pp. <a href="#">35</a> , <a href="#">36</a>	
2-13	Delegation of responsibility for managing impacts	See Corporate governance and risk management, pp. <a href="#">35</a> , <a href="#">36</a>	
2-14	Role of the highest governance body in sustainability reporting	See Our approach to impact, pp. <a href="#">5</a>	
2-15	Conflicts of interest	See Corporate governance and risk management, pp. <a href="#">35</a>	
2-16	Communication of critical concerns	See Business ethics and compliance, pp. <a href="#">37-39</a>	
2-17	Collective knowledge of the highest governance body	See Corporate governance and risk management, pp. <a href="#">35</a>	<a href="#">See Board of directors.</a>
2-18	Evaluation of the performance of the highest governance body	See Corporate governance and risk management, pp. <a href="#">35</a>	
2-19	Remuneration policies		<a href="#">See 2022 Form 990.</a>
2-20	Process to determine remuneration		<a href="#">See 2022 Form 990.</a>
2-21	Annual total compensation ratio		<a href="#">See 2022 Form 990.</a>

# APPENDIX: DISCLOSURE INDEXES

## GENERAL DISCLOSURES

Disclosure	Disclosure title	Impact report section(s)/disclosure	Additional references
<b>GRI 2.4: STRATEGIES, POLICIES AND PRACTICES</b>			
2-22	Statement on sustainable development strategy	See Our approach to impact, pp. <a href="#">5</a>	
2-23	Policy commitments	See Business ethics and compliance, pp. <a href="#">37-39</a>	
2-24	Embedding policy commitments	See Business ethics and compliance, pp. <a href="#">37-39</a>	
2-25	Processes to remediate negative impacts	See Business ethics and compliance, pp. <a href="#">37-39</a>	
2-26	Mechanisms for seeking advice and raising concerns	See Business ethics and compliance, pp. <a href="#">37-39</a>	
2-27	Compliance with laws and regulations	See Business ethics and compliance, pp. <a href="#">37-39</a>	
2-28	Membership associations	Not discussed	
<b>GRI 2.5 STAKEHOLDER ENGAGEMENT</b>			
2-29	Approach to stakeholder engagement	See Our approach to Impact, pp. <a href="#">5</a>	
2-30	Collective bargaining agreements	Not discussed	

# APPENDIX: DISCLOSURE INDEXES

## MATERIAL TOPIC SPECIFIC DISCLOSURES

Disclosure	Disclosure title	Impact report section(s)/disclosure	Additional references
<b>GRI 3: MATERIAL TOPICS</b>			
3-1	Process to determine material topics	See Our approach to impact, pp. <a href="#">5</a>	
3-2	List of material topics	See Our approach to impact, pp. <a href="#">5</a>	
<b>GRI 301: MATERIALS</b>			
3-3	Management of material topics	See About Battelle, pp. <a href="#">3</a>	
201-1	Direct economic value generated and distributed	See About Battelle, pp. <a href="#">3</a>	<a href="#">See 2022 Form 990.</a>
201-2	Financial implications and other risks and opportunities due to climate change	See Environmental risk management, pp. <a href="#">19</a>	
201-3	Defined benefit plan obligations and other retirement plans	See Compensation and benefits, pp. <a href="#">26</a> See Performance data tables, pp. <a href="#">58</a>	
<b>GRI 202: MARKET PRESENCE</b>			
3-3	Management of material topics	See About Battelle, pp. <a href="#">3</a>	
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	Not discussed	
202-2	Proportion of senior management hired from the local community	Battelle has a legal requirement to have the CEO and a few key members of the senior management team to be in Central Ohio. Annually, the HR and legal team ensure compliance with this legal requirement and attest compliance with them to the state AG.	

# APPENDIX: DISCLOSURE INDEXES

## MATERIAL TOPIC SPECIFIC DISCLOSURES

Disclosure	Disclosure title	Impact report section(s)/disclosure	Additional references
<b>GRI 203: INDIRECT ECONOMIC IMPACT 2016</b>			
3-3	Management of material topics	See Solving societal challenges, pp. <a href="#">29</a>	
203-1	Infrastructure investments and services supported	Not applicable	
203-2	Significant indirect economic impacts	See STEM education and philanthropy, pp. <a href="#">31-33</a>	
<b>GRI 204: PROCUREMENT PRACTICES</b>			
3-3	Management of material topics	See Procurement and supply chain practices, pp. <a href="#">42-43</a>	
204-1	Proportion of spending on local suppliers	Not discussed	
<b>GRI 202: MARKET PRESENCE</b>			
3-3	Management of material topics	See Anti-corruption and bribery, pp. <a href="#">37</a>	
205-1	Operations assessed for risks related to corruption	Not discussed	
205-2	Communication and training about anti-corruption policies and procedures	See Anti-corruption and bribery, pp. <a href="#">37</a>	
205-3	Confirmed incidents of corruption and actions taken	Not discussed	
<b>GRI 206: ANTI-COMPETITIVE BEHAVIOR</b>			
3-3	Management of material topics	See Business ethics and compliance, pp. <a href="#">37</a>	
206-1	Legal actions for anti-competitive behavior, anti-trust and monopoly practices	Not discussed	

# APPENDIX: DISCLOSURE INDEXES

## MATERIAL TOPIC SPECIFIC DISCLOSURES

Disclosure	Disclosure title	Impact report section(s)/disclosure	Additional references
<b>GRI 207: TAX</b>			
3-3	Management of material topics	See Transparency, pp. 3	
207-1	Approach to tax	Battelle is a registered 501(c)(3) nonprofit organization.	<a href="#">See 2022 Form 990.</a>
207-2	Tax governance, control and risk management	Not applicable	
207-3	Stakeholder engagement and management of concerns related to tax	Not applicable	
207-4	Country-by-country reporting		<a href="#">See 2022 Form 990.</a>
<b>GRI 301: MATERIALS</b>			
3-3	Management of material topics	Not applicable	
301-1	Materials used by weight or volume	Not applicable	
301-2	Recycled input materials used	Not applicable	
301-3	Reclaimed products and their packaging materials	Not applicable	

# APPENDIX: DISCLOSURE INDEXES

## MATERIAL TOPIC SPECIFIC DISCLOSURES

Disclosure	Disclosure title	Impact report section(s)/disclosure	Additional references
<b>GRI 302: ENERGY</b>			
3-3	Management of material topics	See Energy management, pp. <a href="#">16</a>	
302-1	Energy consumption within the organization	See Energy management, pp. <a href="#">16</a> See Performance data tables, pp. <a href="#">47</a>	
302-2	Energy consumption outside of the organization	Not discussed	
302-3	Energy intensity	See Energy management, pp. <a href="#">16</a> See Performance data tables, pp. <a href="#">47</a>	
302-4	Reduction of energy consumption	See Energy management, pp. <a href="#">16</a> See Performance data tables, pp. <a href="#">47</a>	
302-5	Reductions in energy requirements of products and services	Not discussed	
<b>GRI 303: WATER AND EFFLUENTS</b>			
3-3	Management of material topics	See Water management, pp. <a href="#">19</a>	
303-1	Interactions with water as a shared resource	See Water management, pp. <a href="#">19</a>	
303-2	Management of water discharge-related impacts	Not discussed	
303-3	Water withdrawal	See Water management, pp. <a href="#">19</a>	
303-4	Water discharge	Not discussed	
303-5	Water consumption	See Water management, pp. <a href="#">19</a> See Performance data tables, pp. <a href="#">47</a>	

# APPENDIX: DISCLOSURE INDEXES

## MATERIAL TOPIC SPECIFIC DISCLOSURES

Disclosure	Disclosure title	Impact report section(s)/disclosure	Additional references
<b>GRI 304: BIODIVERSITY</b>			
3-3	Management of material topics	Not applicable	
304-1	Operational sites owned, leased, managed in or adjacent to protected areas and areas of high biodiversity value outside protected areas	Not applicable	
304-2	Significant impacts of activities, products and services on biodiversity	Not applicable	
304-3	Habitats protected or restored	Not applicable	
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	Not applicable	
<b>GRI 305: EMISSIONS</b>			
3-3	Management of material topics	See Greenhouse gas emissions, pp. <a href="#">15</a>	
305-1	Direct (Scope 1) GHG emissions	See Greenhouse gas emissions, pp. <a href="#">15</a> See Performance data tables, pp. <a href="#">46</a>	
305-2	Energy indirect (Scope 2) GHG emissions	See Greenhouse gas emissions, pp. <a href="#">15</a> See Performance data tables, pp. <a href="#">46</a>	
305-3	Other indirect (Scope 3) GHG emissions	Not discussed	
305-4	GHG emissions intensity	Not discussed	
305-5	Reduction of GHG emissions	See Greenhouse gas emissions, pp. <a href="#">15</a> See Performance data tables, pp. <a href="#">46</a>	
305-6	Emissions of ozone-depleting substances (ODS)	Not discussed	
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx) and other significant air emissions	Not discussed	

# APPENDIX: DISCLOSURE INDEXES

## MATERIAL TOPIC SPECIFIC DISCLOSURES

Disclosure	Disclosure title	Impact report section(s)/disclosure	Additional references
<b>GRI 306: WASTE</b>			
3-3	Management of material topics	See Waste and materials management, pp. <a href="#">17-19</a>	
306-1	Waste generation and significant waste-related impacts	See Waste and materials management, pp. <a href="#">17-19</a> See Performance data tables, pp. <a href="#">48</a>	
306-2	Management of significant waste-related impacts	See Waste and materials management, pp. <a href="#">17-19</a> See Performance data tables, pp. <a href="#">48</a>	
306-3	Waste generated	See Waste and materials management, pp. <a href="#">17-19</a> See Performance data tables, pp. <a href="#">48</a>	
306-4	Waste diverted from disposal	See Waste and materials management, pp. <a href="#">17-19</a> See Performance data tables, pp. <a href="#">48</a>	
306-5	Waste directed to disposal	See Waste and materials management, pp. <a href="#">17-19</a> See Performance data tables, pp. <a href="#">48</a>	
<b>GRI 308: SUPPLIER ENVIRONMENTAL ASSESSMENT</b>			
3-3	Management of material topics	See Procurement and supply chain practices, pp. <a href="#">42-43</a>	
308-1	New suppliers that were screened using environmental criteria	See Supplier onboarding and continuous monitoring, pp. <a href="#">43</a>	
308-2	Negative environmental impacts in the supply chain and actions taken	Not discussed	

# APPENDIX: DISCLOSURE INDEXES

## MATERIAL TOPIC SPECIFIC DISCLOSURES

Disclosure	Disclosure title	Impact report section(s)/disclosure	Additional references
<b>GRI 401: EMPLOYMENT</b>			
3-3	Management of material topics	See Our People, pp. <a href="#">23-26</a>	
401-1	New employee hires and employee turnover	See Hiring and employee attraction, pp. <a href="#">25</a>	
401-2	Benefits for full –time employees	See Compensation and benefits, pp. <a href="#">26</a>	
401-3	Parental leave	See Compensation and benefits, pp. <a href="#">26</a> See Performance data tables, pp. <a href="#">58</a>	
<b>GRI 402: LABOR, MANAGEMENT RELATIONS</b>			
3-3	Management of material topics	Not discussed	
402-1	Notice periods for operational changes	Not discussed	
<b>GRI 403: OCCUPATIONAL HEALTH AND SAFETY</b>			
3-3	Management of material topics	See Employee health and safety, pp. <a href="#">20-21</a>	
403-1	Occupational health and safety management system	See Employee health and safety, pp. <a href="#">20-21</a>	
403-2	Hazard identification, risk assessment and incident investigation	See Employee health and safety, pp. <a href="#">20-21</a>	
403-3	Occupational health services	See Employee health and safety, pp. <a href="#">20-21</a>	
403-4	Worker participation, consultation and communication on occupational health and safety	See Employee health and safety, pp. <a href="#">20-21</a>	
403-5	Worker training on occupational health and safety	See Employee health and safety, pp. <a href="#">20-21</a>	
403-6	Promotion of worker health	See Employee health and safety, pp. <a href="#">20-21</a>	

# APPENDIX: DISCLOSURE INDEXES

## MATERIAL TOPIC SPECIFIC DISCLOSURES

Disclosure	Disclosure title	Impact report section(s)/disclosure	Additional references
<b>GRI 403: OCCUPATIONAL HEALTH AND SAFETY</b>			
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	See Employee health and safety, pp. <a href="#">20-21</a>	
403-8	Workers covered by an occupational health and safety management system	See Employee health and safety, pp. <a href="#">20-21</a>	
403-8	Work-related injuries	See Employee health and safety, pp. <a href="#">20-21</a> See Performance data tables, pp. <a href="#">49</a>	
403-10	Work-related ill health	See Employee health and safety, pp. <a href="#">20-21</a> See Performance data tables, pp. <a href="#">49</a>	
<b>GRI 404: TRAINING AND EDUCATION</b>			
3-3	Management of material topics	See Performance management, learning and development, pp. <a href="#">24</a>	
404-1	Average hours of training per year per employee	Not discussed	
402-2	Programs for upgrading employee skills and transition assistance programs	See Performance management, learning and development, pp. <a href="#">24</a>	
404-3	Percentage of employees receiving regular performance and career development reviews	See Performance management, learning and development, pp. <a href="#">24</a>	

# APPENDIX: DISCLOSURE INDEXES

## MATERIAL TOPIC SPECIFIC DISCLOSURES

Disclosure	Disclosure title	Impact report section(s)/disclosure	Additional references
<b>GRI 406: NONDISCRIMINATION</b>			
3-3	Management of material topics	See Business ethics compliance, pp. <a href="#">37-39</a>	
406-1	Incidents of discrimination and corrective actions taken	Not discussed	
<b>GRI 408: CHILD LABOR</b>			
3-3	Management of material topics	See Human rights, pp. <a href="#">38</a>	
418-1	Operations and suppliers at significant risk for incidents of child labor	Not applicable	
<b>GRI 409: FORCED OR COMPULSORY LABOR</b>			
3-3	Management of material topics	See Human rights, pp. <a href="#">38</a>	
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Not applicable	
<b>GRI 410: SECURITY PRACTICES</b>			
3-3	Management of material topics	Not applicable	
416-1	Security personnel trained in human rights policies or procedures	Not applicable	
<b>GRI 411: RIGHTS OF INDIGENOUS PEOPLE</b>			
3-3	Management of material topics	See Human rights, pp. <a href="#">38</a>	
411-1	Incidents of violations involving rights of Indigenous peoples	Not applicable	

# APPENDIX: DISCLOSURE INDEXES

## MATERIAL TOPIC SPECIFIC DISCLOSURES

Disclosure	Disclosure title	Impact report section(s)/disclosure	Additional references
<b>GRI 413: LOCAL COMMUNITIES</b>			
3-3	Management of material topics	See STEM education and philanthropy, pp. <a href="#">31-33</a>	
417-1	Operations with local community engagement, impact assessments and development programs	See STEM education and philanthropy, pp. <a href="#">31-33</a>	
417-2	Operations with significant actual and potential negative impacts on local communities	Not discussed	
<b>GRI 414: SUPPLIER SOCIAL ASSESSMENT</b>			
3-3	Management of material topics	See Procurement and supply chain practices, pp. <a href="#">42-43</a>	
418-1	New suppliers that were screened using social criteria	See Supplier onboarding and continuous monitoring, pp. <a href="#">43</a>	
414-2	Negative social impacts in the supply chain and actions taken	Not discussed	
<b>GRI 415: PUBLIC POLICY</b>			
3-3	Management of material topics	See Political contributions, pp. <a href="#">37</a>	
415-1	Political Contributions		<a href="#">See 2022 Form 990</a>
<b>GRI 416: CUSTOMER HEALTH AND SAFETY</b>			
3-3	Management of material topics	Not applicable	
416-1	Assessment of the health and safety impacts of product and service categories	Not applicable	
416-2	Incidents of noncompliance concerning the health and safety impacts of products and services	Not applicable	

# APPENDIX: DISCLOSURE INDEXES

## MATERIAL AND LABELING

Disclosure	Disclosure title	Impact report section(s)/disclosure	Additional references
<b>GRI 417: MARKETING AND LABELING</b>			
3-3	Management of material topics	Not applicable	
417-1	Requirements for products and service information and labeling	Not applicable	
417-2	Incidents of noncompliance concerning product and service information and labeling	Not applicable	
417-3	Incidents of noncompliance concerning marketing communications	Not applicable	
<b>GRI 418: CUSTOMER PRIVACY</b>			
3-3	Management of material topics	See Data security and privacy, pp. <a href="#">40-41</a>	
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	See Data security and privacy, pp. <a href="#">40-41</a> See Performance data tables, pp. <a href="#">59</a>	