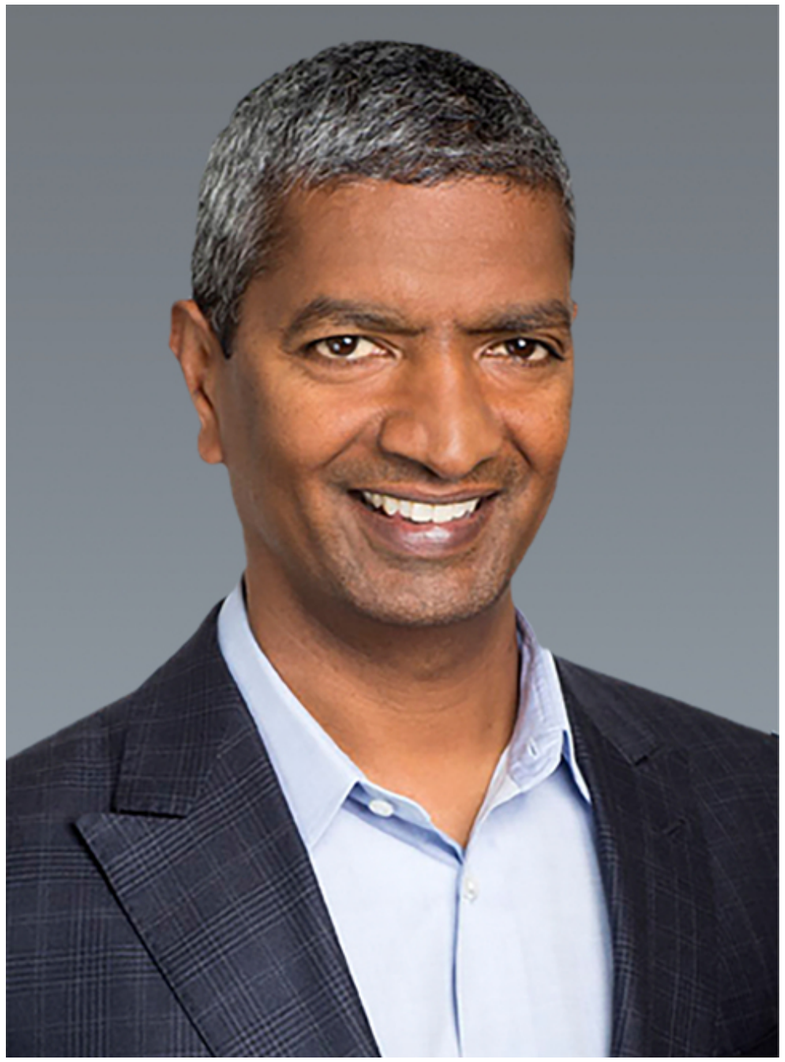
Bloom energy®

Energy for the Digital Revolution

2024 Impact Report

Message from Leadership



Dear Stakeholders,

For two decades we have built Bloom Energy with a deep conviction that reliable onsite power is essential to a digitizing world. Our perseverance, humility, continued innovation, and discipline have made us the obvious choice for the moment, one characterized by explosive energy demand associated with the electrification of everything.

As the artificial intelligence (AI) led digital revolution accelerates, we recognize the current energy infrastructure must undergo a paradigm shift to keep up. Never have we faced the challenge of building such a vast amount of energy infrastructure in such a short timeframe. This transformation is not just about meeting the energy demands of AI, it's about setting the stage for a more resilient and sustainable energy future with access, affordability, and abundance. Bloom was built for this moment, and we are leveraging our technology and ingenuity to meet the needs of our customers and a transforming energy system.

The AI Revolution

Data center electricity demand had already soared in recent years due to the increasing role technology plays in our everyday lives. Between 2017 and 2021, electricity used by the main providers of commercially available cloud computing and digital services more than doubled. Now, with AI workloads 10 times as intensive,[1] McKinsey estimates that demand for data center capacity could more than triple by 2030.[2]

There is consensus amongst business, policy, and technology leaders that the AI revolution will continue to gain speed and have a profound impact on humanity and the planet, as was the case with past industrial revolutions. The geopolitical impacts of such changes cannot be overstated. Nation states around the world are set to compete for AI dominance, with potentially profound consequences for societal value systems. So, the stakes are high and there is one certainty. To win the AI race, we need electricity - lots of electricity.

Ten years ago, a 30MW data center was considered large, Today, a 200MW facility is considered normal.[2] The extent of the data center growth that will ultimately be enabled will be a function of the industry's ability to gain access to the required power in a timely manner. And we know that grids around the world are stressed to the breaking point.

Bloom is Ready

The good news is that Bloom's distributed energy solutions are ready - it's the result of our work to commercialize a unique fuel cell technology and build the supply chain and operational capability to scale globally at the time we are needed most. And as we collaborate with utilities more directly, we see the potential for scalable and flexible deployments that support capacity needs worldwide.

[1] EPRI Powering Intelligence: Analyzing Artificial Intelligence and Data Center Energy Consumption
[2] https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/ai-power-expanding-data-center-capacity-to-meet-growing-demand

This past year we offered enhanced microgrids that are complete power solutions for customers without the need to connect to a utility grid. And we continue to advance carbon capture and hydrogen capability. This allows us to offer our customers multiple decarbonization pathways as their ecosystems shift over time.

The flexibility of Bloom's solid oxide platform was recognized as fit for purpose through an historic supply agreement last year with American Electric Power (AEP) for up to 1 gigawatt (GW) of Bloom Energy Server deployments, the largest commercial procurement of fuel cells in the world to date. This will help them meet the immediate power needs of AI data centers.

We will continue to evolve our commercial and technology offerings to ensure our capability to support growth of critical infrastructure, be it data centers or other commercial and industrial (C&I) customers. Our C&I market segments continue to strengthen, and in 2024 we secured orders from multiple industries, including telecom companies, retail, manufacturing, education, and healthcare.

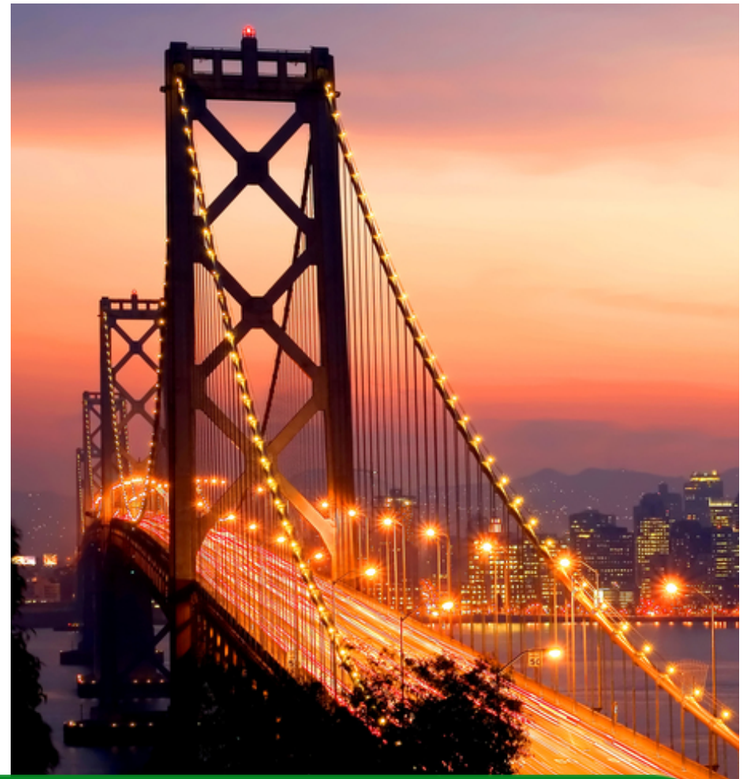
Our Evolution Continues

Bloom continued its strong environmental performance in 2024, driving increasingly significant carbon reductions, air quality improvement, and water reductions from our projects as our footprint expands. We've continued to evolve as an organization as well. This past year we increased the composition of our Board and added new leadership that will help us execute our strategy. We enhanced our manufacturing systems and advanced risk management and environmental programs designed to drive our competitiveness on a global scale. Additionally, we continued our direct engagement and support of the communities we serve.

Transforming the energy sector is no small task, but our team is up to the challenge. Behind every deal, every megawatt, and every breakthrough, we have a global team of innovators, problem solvers, builders, and doers. We will continue to BE Bold, BE Agile, and BE Inspired as we lead in the new energy revolution. That quest powers us at Bloom. What powers you? Ponder that question as we proudly present our 2024 Impact Report.

Sincerely,

KR Sridhar, Ph.D.
Founder, Chairman, and
Chief Executive Officer



We will continue to BE Bold, BE Agile, and BE Inspired as we lead in the new energy revolution.

About this Report

We are proud to present our annual Impact Report, which covers the progress we have made in advancing our environmental, social, and governance (ESG) initiatives during the 2024 calendar year. Where appropriate, we also provide updates on initiatives underway in 2025.

This report uses accepted frameworks and standards, including the alignment this year with the International Financial Reporting Standards (IFRS) S2 Climate-related disclosures in acknowledgement of the increasing use of these standards in global compliance programs. Additionally, this report is informed by certain Global Reporting Initiative (GRI) standards and aligns to the United Nations Sustainable Development Goals (UN SDGs).

Data provided in this report covers our owned and operated facilities, including our manufacturing facility established as part of a joint venture with SK ecoplant, as well as our globally deployed fleet of fuel cell and electrolyzer products. We have worked to ensure that the data presented throughout the report and in the appendices is as accurate as possible, and have noted any figures that have been externally verified.

For specific information about this report or our sustainability program overall, please contact us at sustainability@bloomenergy.com. All information included in this report is for the 12-month period ending December 31, 2024, unless otherwise stated.

Forward-looking Statements and Other Important Legal Information

This document and the materials or websites cross-referenced contain statements that are aspirational or reflective of our views about our future performance that constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are generally identified through the inclusion of words such as “aim,” “anticipate,” “aspire,” “believe,” “commit,” “endeavor,” “estimate,” “expect,” “goal,” “intend,” “may,” “plan,” “seek,” “strive,” “target,” “projection,” “will,” and “work,” or similar statements or variations of such terms and other similar expressions. The forward-looking statements in this document and the materials or websites cross-referenced concern the company’s goals, progress, or expectations with respect to corporate responsibility, sustainability, employees, environmental matters, policy, and business risks and opportunities.

Forward-looking statements inherently involve risks and uncertainties that could cause actual results to differ materially from those predicted in such statements. These statements are based on numerous assumptions that we believe are reasonable but are open to a wide range of uncertainties and business risks. In addition, these statements may be based on standards for measuring progress that are still developing, controls and processes that continue to evolve, and assumptions that are subject to change in the future. Consequently, actual results may vary materially from what is contained in a forward-looking statement. For a further description of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to our business in general, see our Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) on February 27, 2025, and our subsequent periodic reports filed with the SEC.

Forward-looking statements are aspirational and not guarantees or promises that goals or targets will be met. The company undertakes no obligation to update any forward-looking or other statements, whether as a result of new information, future events, or otherwise, and notwithstanding any historical practice of doing so. The company may determine to adjust any goals and targets or establish new ones to reflect changes in our business. The information included in, and any issues identified as material for purposes of, this document may not be considered material for SEC reporting purposes. In the context of this report, the term “material” is distinct from, and should not be confused with, such term as defined for SEC reporting purposes. Website references and hyperlinks throughout this document are provided for convenience only, and the content on the referenced third-party websites is not incorporated by reference into this report, nor does it constitute a part of this report. The company assumes no liability for the content contained on the referenced third-party references.

Table of Contents

2024 ESG Highlights

CLIMATE

1,199,739 tonnes

of avoided carbon emissions from our fuel cell projects

WASTE

3,795 tonnes

of material recycled through our repair and overhaul operations

99.5%

recycling or reuse of our product materials at end of life

EMPLOYEES

Safety Management System

introduced as a part of broadened Environmental Health & Safety program

GOVERNANCE

ISO 9001 Certification

achieved at Bloom's Delaware Manufacturing Center

PRODUCT

BeFlexible™

load following capability refined as part of the Solid Oxide Platform

1 Billion

real time data points reviewed by Bloom service teams now with the help of AI

100 MW

per acre footprint now achievable with vertically stacked fuel cell deployments

AIR QUALITY

$96 – $130 million

savings to local health-care systems throughout the U.S. by emissions avoided from our non-combustion technology

WATER

67%

reduction in water consumption from already low fleet-wide water use due to improved operating characteristics

COMMUNITY

$250,000

raised through expansion of our Bloom Energy Stars and Strides Community Run/Walk

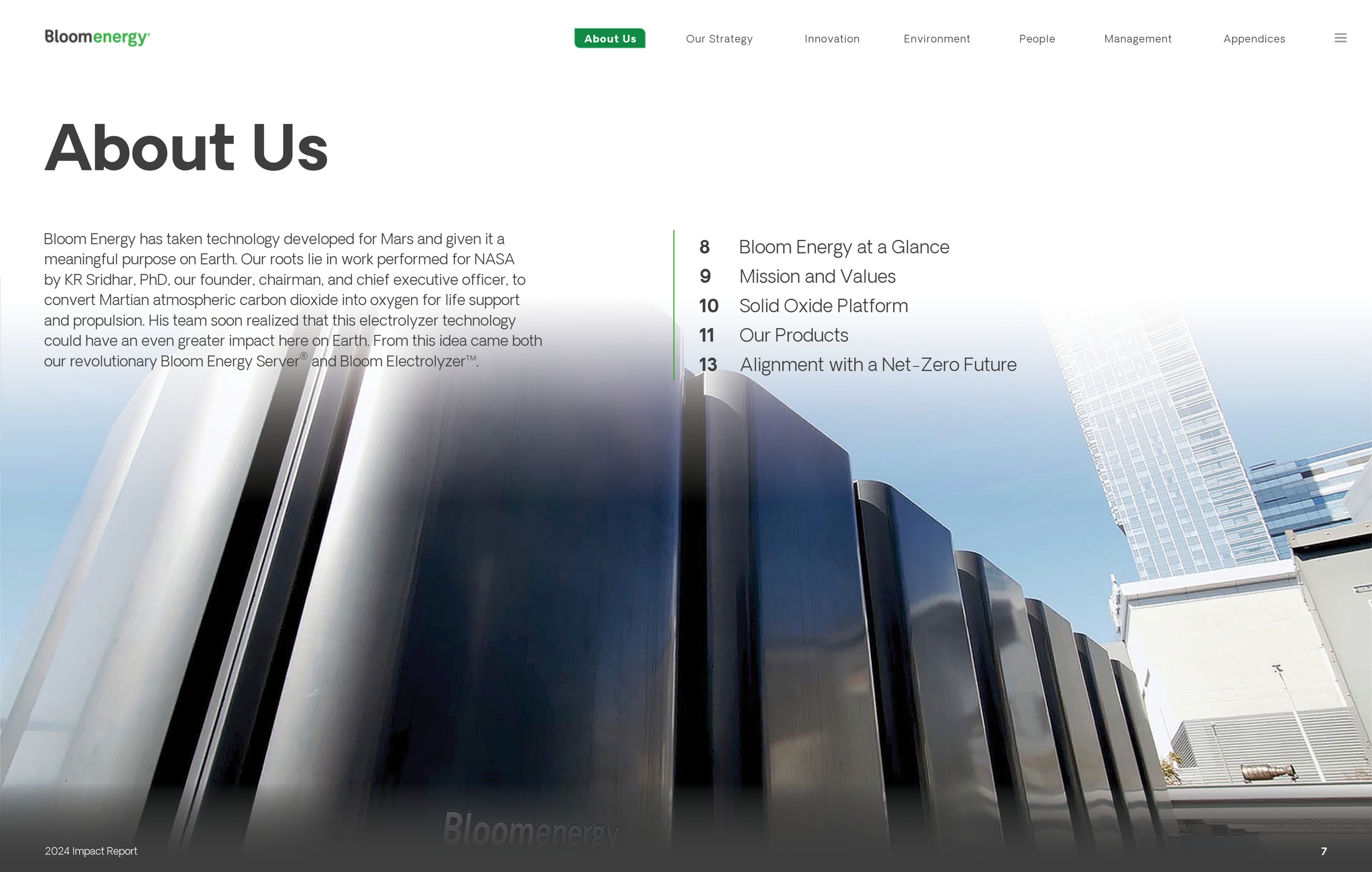
SUPPLY CHAIN

97%

of suppliers responded to our conflict minerals supplier survey, up from 96% in 2023

About Us

Bloom Energy has taken technology developed for Mars and given it a meaningful purpose on Earth. Our roots lie in work performed for NASA by KR Sridhar, PhD, our founder, chairman, and chief executive officer, to convert Martian atmospheric carbon dioxide into oxygen for life support and propulsion. His team soon realized that this electrolyzer technology could have an even greater impact here on Earth. From this idea came both our revolutionary Bloom Energy Server® and Bloom Electrolyzer™.



Bloom Energy at a Glance

$1.47B
2024 Revenue

7B
kWh Produced without Combustion

1.4+
GW of Products Deployed

209+
Customers

1,037+
Installations

198+
Microgrids

2,377
Employees

Mission and Values

Our Mission

To make clean, reliable energy affordable for everyone in the world.

Our Values

At Bloom Energy, our values define who we are and shape our corporate culture. Changing the future of energy is no small task, but our diverse group of thinkers, solvers, and dreamers are up to the challenge. Driven by a shared passion our employees design, produce, and distribute unique energy solutions that transform how we power our world.

To achieve our mission of energy abundance with, we strive to:

BE Bold
We challenge the status quo using a considered, data-driven approach to exceed our customers' needs and solve their most complex problems.

BE Inspired
Our passion for our planet pushes us to deliver world-leading energy solutions. Our compassion and desire to do the right thing establishes trust and delivers excellence across the products we build and the customers we serve.

BE Agile
We learn quickly and embrace entrepreneurship to adapt nascent ideas into best-in-class solutions that enable scalable, low-cost energy transformation.

These shared values are what power our team to create a more sustainable energy future.

Solid Oxide Platform

One Platform. Multiple Applications

Our modular and configurable solid oxide platform is capable of providing a variety of sustainable energy solutions: from zero-carbon electricity to clean hydrogen. We continue to evolve and expand our offerings as we pursue our mission to make clean, reliable energy affordable for everyone.

Core Attributes

Shared Solid Oxide Technology
Leveraging the same proprietary fuel cell printing, stack and column configurations that drive high efficiency energy production across products and applications.

Common Product Architecture
The same enclosures and skid mounted installations are common across products and the modular fault tolerant design enables resilient operation and service.

Shared Supply Chain and Manufacturing Process
Core technology components and supplier network are shared across products. The same manufacturing lines, personnel, and processes are leveraged at Bloom's Fremont, CA cell print factory and Delaware assembly facility. Repair and overhaul operations are also combined to support end-of-life recovery.

Be Flexible™ Platform Enhancements

Our customers have an urgency to procure energy, and our Energy Server solutions are increasingly being configured as microgrids operating independently of the grid. To meet this need, we have made changes to our column design and manufacturing process for all new products moving forward to better accommodate load following capability aligned with the needs of our microgrid customers as well as customers such as AI data centers and utilities with load variability requirements.

Our Products

Bloom Electrolyzer for Hydrogen Production

The Bloom Electrolyzer supplants the conventional way of making hydrogen. In place of a dirty process that creates carbon emissions, our electrolyzer efficiently uses electricity to split water into hydrogen and oxygen. It can be paired with zero-carbon power sources, such as that produced by solar and wind power, as well as with the steam generated by nuclear power operations.

Efficient
use of power lowers costs

Proven
with decades of experience

Bloom Energy Server for Power Generation

Our Energy Server is an advanced distributed energy generation device that creates cost-effective, clean, reliable, and resilient electricity from a variety of fuels, including natural gas, biogas, and hydrogen at high efficiency and without combustion. It delivers non-combustion energy solutions for businesses seeking reliability, predictable pricing, and highly efficient power for their operations. Bloom Energy Server systems typically result in reduced emissions and improved air quality and require minimal water usage.

Modular
fault tolerant designs

Resilient
solutions for energy independence

Reliable
generation for mission critical facilities

Flexible
deployment configurations

Future proof
for the energy transition

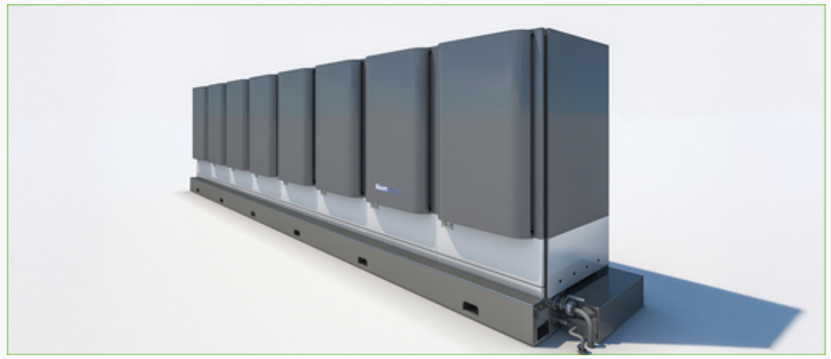
Bloom Energy Server Configurations and Applications

Configurations:

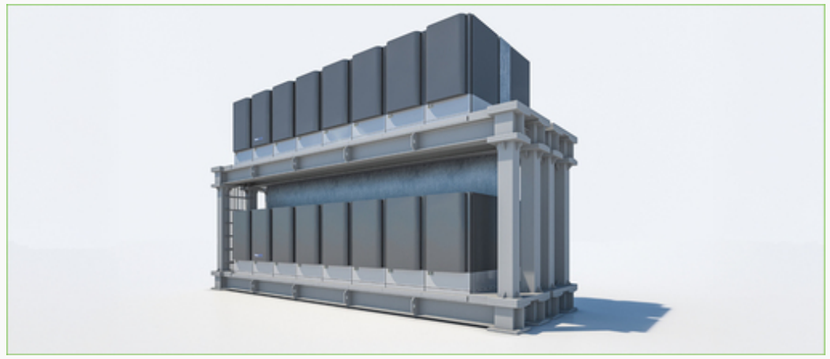
Primary Power
operating in parallel to the grid

Microgrids
capable of islanding from the grid

Deployments:

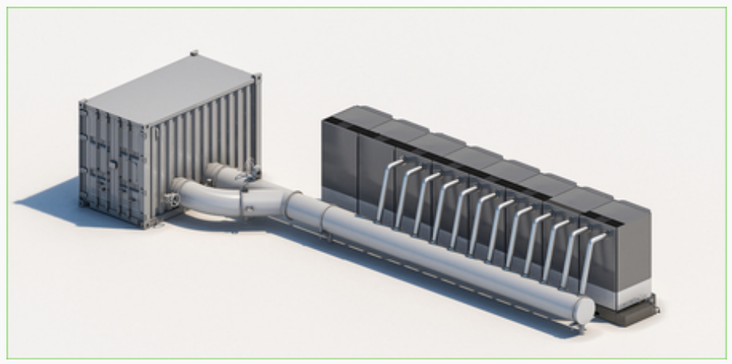


Skid Mounted for ease of installation and movement

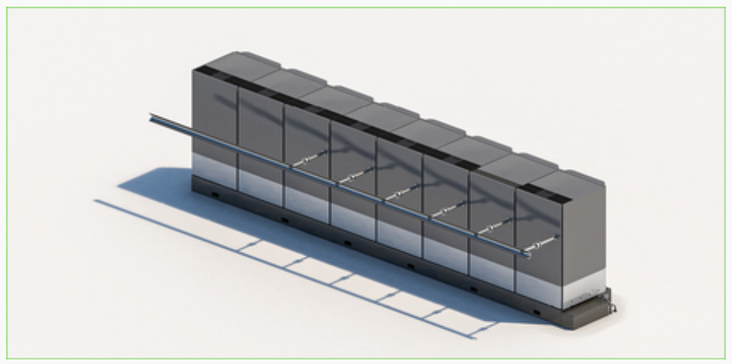


Stacked to provide additional power density

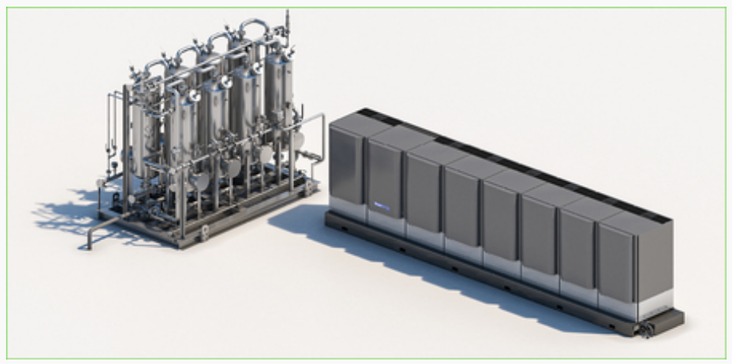
Applications:



Combined Heat & Power
High temperature exhaust stream for delivery to buildings through a heat exchanger for heating and cooling needs



Carbon Capture Utilization & Storage
High purity CO_2 exhaust captured for CO_2 utilization or sequestration



Waste to Energy
Onsite operation utilizing a diverse set of biogas feedstocks through an integrated biogas cleanup process.

Alignment with a Net-Zero Future

Our diverse solution set directly aligns with the innovation needed from the energy sector to align with a net-zero future. According to analysis by the International Energy Agency, deployment of seven key clean energy technologies will account for about three-quarters of CO_2 emission reductions from today through to 2050.[3]

Abatement Strategy: Wind/Solar PV

Bloom Solution: Bloom Electrolyzer

Bloom's electrolyzer produces green hydrogen from solar and wind and can utilize otherwise curtailed energy from renewable projects, helping increase the capacity factor and economic viability of renewable projects.

Abatement Strategy: Nuclear

Bloom Solution: Bloom Electrolyzer

Bloom's electrolyzer is a high-temperature application capable of utilizing both power and waste heat from nuclear facilities, increasing the economic viability of nuclear facilities facing potential retirement.

Abatement Strategy: Electric Vehicles / Heat Pumps

Bloom Solution: Bloom Energy Server

Our distributed fuel cells can be grid-connected, helping with resilience of electrified buildings, and our systems produce DC power natively, ideal for serving fast-charging EV systems serving vehicles and port infrastructure.

Abatement Strategy: Hydrogen

Bloom Solution: Bloom Electrolyzer

The Bloom Electrolyzer enables various types of hydrogen production, and our high efficiency solid-oxide fuel cells can utilize hydrogen as a fuel feedstock, enabling two pathways for Bloom to contribute to the growth of the hydrogen economy.

Abatement Strategy: CCUS

Bloom Solution: Bloom Energy Server

Our ability to efficiently separate relatively pure streams of CO_2 is rare in power generation. Our flexibility provides the potential for distributed carbon utilization as well as large-scale sequestration capability.

[3] https://www.iea.org/reports/world-energy-outlook-2024

Our Strategy

In 2024, we continued advancing our strategic agenda, deepening the company's focus on its material issues, developing our capacity internally, and advancing our commercial strategy in response to a rapidly evolving set of energy sector considerations.

Our business and sustainability strategies are inextricably linked. As an energy company that is a key partner to customers who are working towards their own net-zero and decarbonization journeys, it is essential that our products, employees, and supply chain partners continuously work to reduce negative impacts and improve outcomes for the customers and communities we touch.

We continuously evolve our ESG strategy by identifying key trends in the energy industry, understanding internal and external risks across the spectrum of our activities, and advancing the programs and policies best suited to manage those risks. We monitor new developments across the voluntary and regulatory landscape to ensure that our company is responsive to existing and emerging requirements, policy development, disclosures, and programmatic action.

Materiality

In 2022, we conducted a revision of our materiality analysis in acknowledgment of the fact that the energy sector is rapidly evolving. We identified stakeholder groups that were most impactful to our business and strategy—Bloom leadership, customers, investors, policymakers, employees, and suppliers—and engaged internal representatives who could best represent the views of those stakeholders. This engagement occurred through interviews and survey-based questionnaires and aimed to help us understand the specific ESG topics that were most impactful and relevant to these audiences.

The newly added topics that ranked the highest included climate risk and resilience, technology and innovation, government relations and public policy, employee well-being, and human capital management.

Environmental Topics

Social Topics

Governance Topics

PRIORITY	TOPIC	CATEGORY
HIGHER	Climate Action and Decarbonization (pages 32-33)	
	Emissions and Air Quality (page 35)	
	Technology and Innovation (pages 25-26)	
	Inclusion and Equity (page 41)	
	Climate Risk and Resilience (pages 19-21)	
	Government Relations and Public Policy (page 23)	
MEDIUM	Energy Management (page 34)	
	Privacy and Data Security (page 49)	
	Effective Corporate Governance (page 49)	
	Employee Well-Being (pages 40-43)	
	Human Capital Management (pages 39-43)	
	Product Circularity and Waste Management (page 37-38)	
LOWER	Responsible Supply Chain (pages 48)	
	Community Impact (page 44)	
	Sustainable Finance (page 33)	
	Enterprise Risk Management (page 22)	
	Environment Management System (page 47)	
	Water Stewardship (page 36)	
	Labor Relations (page 40-43)	

Materiality Methodology

Materiality Matrix Development Process

1

ESG Topics

2020 Results & Peer Research Update Topics

2

Stakeholder Identification

Stakeholder Groups & Internal Representatives

3

Stakeholder Engagement

Stakeholder Survey & Leadership Survey

Climate-Related Risks and Opportunities

We take climate change risk seriously. While our products and technologies can help customers respond to current climate risks and mitigate future effects by reducing greenhouse gas ("GHG") emissions, we understand that our business is subject to those same risks. We expect climate considerations to drive fundamental shifts in the energy industry for years to come. In response to recommendations from the Task Force on Climate-related Financial Disclosure (TCFD) now part of the IFRS framework, we identify climate-related risks, opportunities, and management responses across four dimensions: market and technology shifts, reputation, policy and legal, and physical risks. We will continue to evaluate and formalize responses to risks as they arise through our evolving Enterprise Risk Management program.

0-3 years Near-term | **3-10 years** Medium-term | **10-30 years** Long-term

MARKET & TECHNOLOGY SHIFTS

RISKS

Time Horizon	Description
Near-term Medium-term	Acceleration of renewable or carbon-free energy procurement goals may adversely impact customer demand for natural gas-based systems.

IMPACT ON BUSINESS STRATEGY & FINANCIAL PLANNING

Customer interest in renewable or carbon-free energy solutions may require us to offer a broader range of market-based or on-site fuel solutions and/or shorter deal terms.

Alternatively, we may need to advance commercial offers to accommodate blends of renewable fuel, which will require additional R&D investment and the development of formalized contractual and commercial commitments.

2024 MANAGEMENT ACTIONS IN RESPONSE

We continued to enhance our CHP offerings which channel high-temperature cathode exhaust from the Energy Server to one or more heat recovery devices, such as a water heater or an absorption chiller to support air conditioning, refrigeration, and/or process fluid cooling for use in commercial buildings or other industrial plants.

OPPORTUNITIES

Time Horizon	Description
Near-term Medium-term	Increased customer interest in delivery of reliable, resilient, renewable, and/or zero-carbon baseload power creates opportunities for our innovative product offerings and expands market opportunities to new utility scale applications. The focus on rapid decarbonization in the transportation sector expands market opportunities into transportation fuel, including electricity and hydrogen.

IMPACT ON BUSINESS STRATEGY & FINANCIAL PLANNING

We will need to develop in-house product development, engineering, and commercial expertise across a range of new applications. We will also need to develop new partnerships, including new utility partnerships, to help position and test new technology and business models.

2024 MANAGEMENT ACTIONS IN RESPONSE

Bloom signed a supply agreement with American Electric Power (AEP) for up to 1 gigawatt (GW) of our products. As part of this agreement, AEP has placed an order for 100 megawatts (MW) of fuel cells with further expansion orders expected in 2025. The agreement expands Bloom's previous work with AEP to deploy Energy Server systems in commercial and industrial settings and gives the utility additional ability to serve commercial and industrial customers with flexible capacity as the regional electric grid supply challenges.

REPUTATION

RISKS

Time Horizon	Description
Near-term Medium-term	As the energy transition intensifies, public discourse surrounding energy topics may become politically charged. Our unique deployment characteristics and value proposition may require us to engage across stakeholder groups in a nuanced and data-driven manner to avoid reputational damage.

OPPORTUNITIES

Time Horizon	Description
Near-term Medium-term	Bloom is positioned as a thought leader on both critical energy resilience and carbon mitigation efforts. Continued delivery of projects offering community impact and disaster response can provide a platform for stakeholder engagement with the potential for reputational enhancement. Bloom's position as a domestic clean energy manufacturing job creator also offers potential to differentiate the company.

IMPACT ON BUSINESS STRATEGY & FINANCIAL PLANNING

Anti-natural-gas sentiment or misalignment with renewable and low carbon procurement goals may adversely impact public policy and customer demand for our products. Engagement with a diverse set of stakeholders requires investments in communications, marketing, policy, and sustainability teams.

The company will need to continue to devote resources to market development outside of traditional corporate commercial and industrial clients and deepen investments in teams focused on community engagement.

2024 MANAGEMENT ACTIONS IN RESPONSE

The company added two new Board members in 2024, Barbara Burger, a former Chevron executive with extensive experience in the energy sector, brings her expertise in innovation and sustainable energy solutions to the company. Additionally, Gary Pinkus was added. He has spent nearly 40 years of his career at McKinsey & Company, the global management consulting firm working with a variety of energy leaders on their net-zero journeys.

The company continued to improve its domestic manufacturing operation while enhancing global competitiveness through ISO 9001 certification of our Delaware Manufacturing facility. The internationally recognized ISO 9001 standard demonstrates a company's commitment to quality management, building trust with potential international clients and boosting credibility in the global market.

Additionally, we were awarded a Qualifying Advanced Energy Project Credit of up to $75.3 million by the Department of Energy to support our domestic manufacturing operations.

POLICY & LEGAL

RISKS

Time Horizon	Description
Near-term	In some jurisdictions, we may be denied requests for utility service connection or may be subject to additional operating conditions. This includes restrictions to natural gas system interconnection.
Medium-term	We may be subject to a heightened risk of regulation and a potential loss of certain enabling incentives.
Long-term	Our projects may also become subject to carbon pricing.

OPPORTUNITIES

Time Horizon	Description
Near-term	New incentives for microgrids, biogas, hydrogen, and carbon capture utilization and storage (CCUS) projects, with enhancements for domestic manufacturers, have emerged at the federal and state level, including through the Infrastructure Investment and Jobs Act as well as the Inflation Reduction Act.
Medium-term	
Long-term	

IMPACT ON BUSINESS STRATEGY & FINANCIAL PLANNING

Loss of gas access or enabling incentives may limit our ability to offer services to certain customer segments in certain regions. The introduction of meaningful carbon pricing may erode savings that drive customer value from our natural gas-fueled energy servers.

These opportunities drive material incentive dollars applicable to Bloom projects with direct benefit to corporate financial performance.

2024 MANAGEMENT ACTIONS IN RESPONSE

We bolstered our islanded microgrid solutions which allows data center and other customers the ability to skip the interconnection queue and start construction by adding our Be Flexible™ load following capability. This allows us to serve customers without the need to export excess power to the grid. We believe avoiding these lengthy interconnection queues is key to unlocking time to power for our customers.

Our policy, legal, and regulatory teams and consultants engaged directly with state and federal policymakers, including with respect to IRA implementation, culminating in the issuance of guidance and updated life-cycle analysis tools for Section 45V, as well as additional guidance for Sections 45Z and 48E sections of the tax code. These pieces of guidance help provide clarity for our project development partners surrounding tax incentive treatment of Bloom projects.

PHYSICAL RISKS

RISKS

Time Horizon	Description
Medium-term	We rely on a limited number of third-party suppliers for some of the raw materials and components for our products. Therefore, our supply chain could be disrupted by severe weather events. Our offices and manufacturing facilities could also be impacted by climate-driven severe weather. Similarly, Bloom equipment in operation could be impacted by physical climate risks.
Long-term	

OPPORTUNITIES

Time Horizon	Description
Near-term	If climate-driven severe weather continues to intensify, it will strain grid operations and incentivize resilient and distributed power solutions like our microgrids.
Medium-term	
Long-term	

IMPACT ON BUSINESS STRATEGY & FINANCIAL PLANNING

If our operations, supply chain, or equipment in operation is disrupted by climate-driven severe weather, we may face material financial impacts.

We will need to continue to invest in our microgrid offerings and increase the variety of resiliency options made available to customers.

2024 MANAGEMENT ACTIONS IN RESPONSE

In response to evolving risks, we have taken proactive steps to diversify our supplier base, enhance supplier engagement, and strengthen our risk management capabilities. These steps include expanded sourcing strategies to reduce dependency on single suppliers and high-risk regions, strengthened supplier assessments, and enhanced collaboration with key suppliers.

Our BeFlexible™ load following capability paired with our pre-existing islanded microgrid capability not only serves as insulation against transition risks governing grid connection, but also enables our customers, particularly large data center customers, with the ability to choose Bloom's grid-independent solutions that avoid the need for inefficient and dirty back-up diesel generation.

Scenario Planning

Last reporting cycle we conducted our first forward scenario analysis focused on quantifying inherent physical climate risks and our exposure to carbon pricing risk across a sample of our facilities, projects, and supply chain. We understand that climate-related risks and opportunities impact our commercial strategy and financial planning and endeavor to enhance our understanding of those risks in line with TCFD recommendations. We used the Shared Socioeconomic Pathways (SSP) scenarios released along with the Intergovernmental Panel on Climate Change's (IPCC) sixth assessment report published in 2021 to inform the analysis. The scenarios were developed to consider how factors such as population, economic growth, education, urbanization, and technology development may change over time. Our results demonstrate the magnitude of potential impact across each scenario and time horizon, providing insight into the extent of risks posed at the different locations as well as the change from historic data.

Methodology

Four physical climate hazards were assessed:

HAZARD	INDICATOR:
EXTREME WEATHER EVENTS	Extreme rainfall and riverine flooding
WILDFIRE	Fire weather index score
HURRICANE	Historic maximum wind speed
SEA LEVEL RISE	Inundation depth from coastal flooding with storm surge

13
Bloom locations included covering Bloom manufacturing facilities, project sites, and supply chain partners

Bloom Energy Climate Risk Exposure

TIME HORIZONS 2005 | 2030 | 2050

Climate scenarios

SSP1

Taking the Green Road (low challenges to mitigation and adaptation): Aligned with the Representative Concentration Pathways (RCP) 2.6 scenario, which predicts a 1.5 degree Celsius increase in average temperature by 2100

SSP2

Middle of the Road (medium challenges to mitigation and adaptation): Aligned with the RCP 4.5 scenario, which predicts a 2–3 degree Celsius increase in average temperature by 2100

SSP5

Taking the Long Road (high challenges to mitigation and low challenges to adaptation): Aligned with the RCP 8.5 scenario, which predicts a more than 4 degree Celsius increase in average temperature by 2100

In looking at the results of this physical risk scenario analysis, we focus on the SSP5 scenario, which indicates a 'worst case' scenario for physical climate impacts to help inform planning and resilience. To assess the level of risk exposure, we established five categories based on the magnitude of potential impact from each hazard: Very Low, Low, Moderate, High, and Very High.

Inherent Physical Risk Exposure

EXTREME WEATHER	
Medium term (2030)	**MODERATE**
Long term (2050)	**VERY HIGH**
Assessment	

For extreme weather events, the majority of sites experience High to Very High exposure to extreme precipitation in 2030 and 2050. The suppliers located in Thailand, India, China, and South Korea that were included in this analysis face the highest risk exposure along with a Bloom office and warehouse location in India. Riverine flooding exposure is Very Low or Low across the sites analyzed with the exception of Bloom's India site and a data center location in New Jersey. Riverine flood exposure is relatively unchanged from 2030–2050.

WILDFIRE	
Medium term (2030)	**LOW**
Long term (2050)	**LOW – MODERATE**
Assessment	

Across the portfolio of sites evaluated, the majority have Very Low or Low wildfire risk exposure with the exception of locations in Northern California and India. For these locations, there is a notable increase in risk exposure in 2030 from baseline conditions from Low or Moderate risk exposure to Very High. In 2050, we see an increase from Low risk exposure to Moderate risk exposure in Bangalore, India, and Central California.

HURRICANE
Assessment

Hurricane and cyclone risk exposure is based on historic maximum wind speeds at each location. Forward-looking data for hurricane exposure was not evaluated in this analysis. Based on historic exposure, most sites have Very Low to Moderate risk exposure. Sites in Mumbai, India, and China have Very High historic maximum wind speed, which may indicate higher exposure to cyclones in the future.

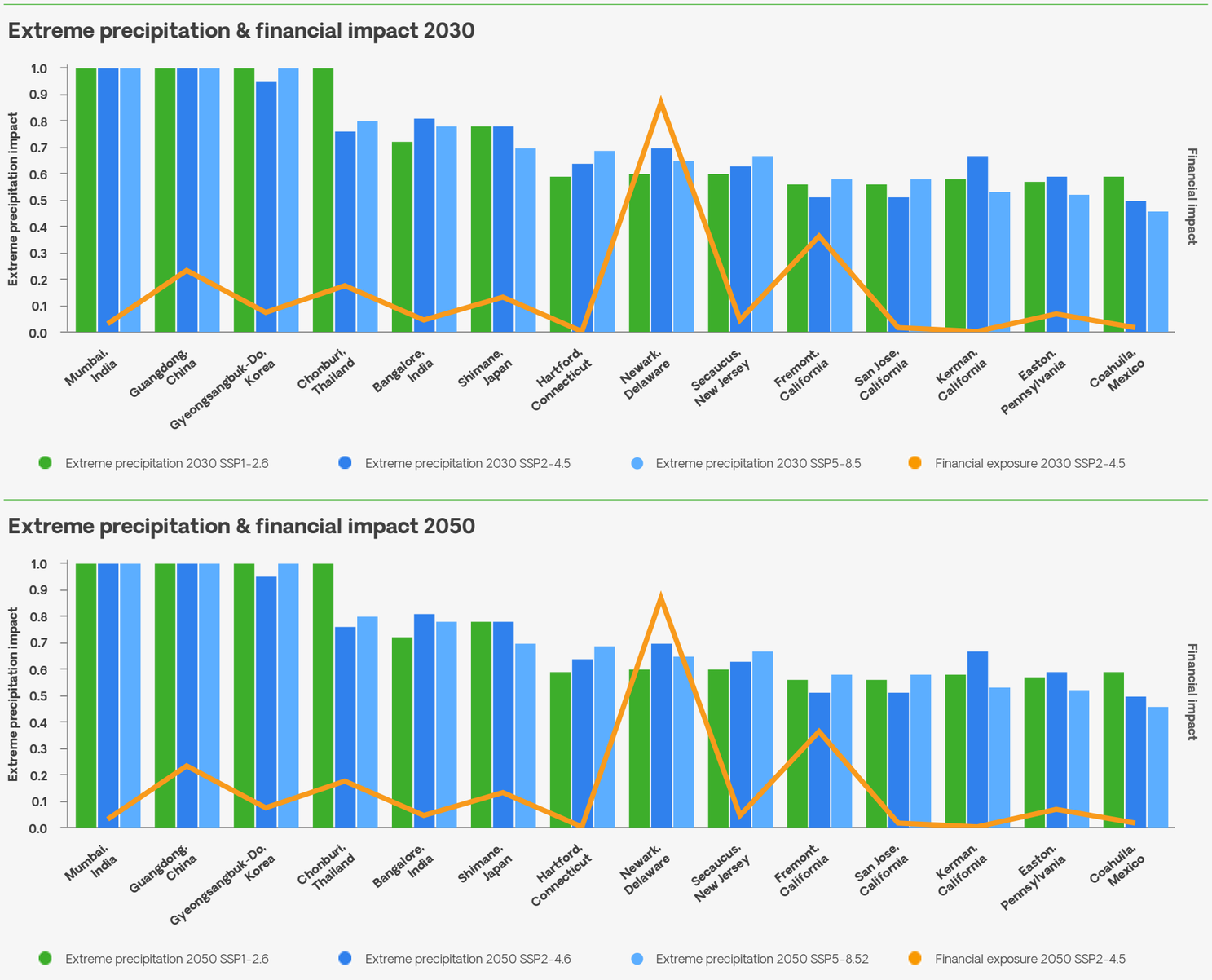
SEA LEVEL RISE	
Medium term (2030)	**LOW**
Long term (2050)	**LOW**
Assessment	

Overall exposure to sea level rise across the portfolio evaluated is Low as most locations are not coastal. Two sites in Northern California may experience increasing risk exposure with one location increasing from Low risk exposure to Moderate risk from 2030 to 2050 and the second location increasing from High risk exposure to Very High risk exposure from baseline to 2030 and remaining Very High up to 2050.

Commercial Impact of Extreme Weather

In order to understand which of our sites might require the most attention from a mitigation standpoint, we ran a financial impact assessment on extreme weather events, which was found to be the most relevant of potential climate risks in our sample. This assessment evaluated the potential financial impact on asset value associated with unmitigated extreme weather events at any of our sample locations. The facility with the highest asset value at risk and greatest chance of climate driven extreme weather over time is our Delaware manufacturing facility.

ASSET VALUE X MAXIMUM DAMAGE X RAINFALL EVENT INTENSITY = FINANCIAL IMPACT



Enterprise Risk Management

Bloom has an Enterprise Risk Management (ERM) program that encourages effective risk management practices within the organization. To achieve any goal, objective, or outcome, including environmental and social initiatives, as well as compliance with ESG reporting standards, we face various risks. To address these challenges, Bloom has incorporated climate-related risks and opportunities into the ERM program, as this integration is vital to our business strategy.

We believe that climate risks drive various existing risk categories and types. Through a risk lens, we periodically conduct a review of climate-related risks relevant to our industry and geographical locations. This review includes both physical risks, such as extreme weather events, and transitional risks, such as policy or market shifts. We take these reviews into account and maintain a climate component in relevant risk descriptions in our risk register. We are committed to continuous improvement and will regularly review and update our climate-related risk management strategies based on new data, scientific findings, and changes in regulations.

At Bloom, maintaining business continuity and disaster recovery is of utmost importance. Our offices, manufacturing facilities, suppliers, and equipment may be vulnerable to climate-driven severe weather events. Any significant disruption to our operations could adversely affect the production of our products, potentially harming our business and operations.

We have a team focused on reducing potential risks to business continuity and disaster recovery. This cross-functional team is responsible for reviewing, assessing, and managing these risks. Our mitigation plan includes conducting business impact analyses, comprehensive planning, and thorough evaluations of our strategies. To ensure support across the organization, we established business continuity coordinators in various departments. Additionally, we have partnered with a third-party vendor to provide risk monitoring and emergency notification services. The risk monitoring component is essential for giving us real-time information about extreme weather events that may impact our employees, facilities, and operations. Ultimately, this information is key to protecting our organization and employees from potential threats,

Bloom aims to continually enhance our program and processes to identify, assess, and respond to risks and opportunities throughout the organization, including those related to ESG.

Elements of Our ERM Program

Board Oversight

Bloom's Board of Directors has primary responsibility for risk management, with the Audit Committee having responsibility for the ERM framework and risk assessment process. The Audit Committee oversees the policies and processes established by the ERM Committee to assess, monitor, manage, and control the company's material financial and other risk exposures, including operational, climate, and strategic risks. The Audit Committee reviews the company's key risks and receives updates on specific risk topics throughout the year.

Enterprise Risk Management Committee

The ERM Committee has been established by the Audit Committee of the Board of Directors to assist in overseeing the company's ERM program. The ERM Committee is comprised of members of Bloom's executive management and senior leadership team. The ERM Committee plays a crucial role in setting the tone and developing a culture of risk management, promoting open discussions regarding risk, and integrating risk management into the company's goals and compensation structure.

Ongoing Assessment of Risk

Bloom regularly reviews and assesses risks to ensure the company is prepared for any potential impact. This involves identifying any new or emerging risks, analyzing their potential impact, and evaluating the best course of action. Both internal and external factors are considered, including industry trends and changes in the business environment. By continuously monitoring and periodically reassessing, Bloom remains proactive in adapting to evolving risks and maintaining effective risk management practices.

Targets

The company understands that sustainability targets are critical to guiding the business away from potential risks and toward opportunities. We continue to consider target-setting frameworks in line with SEC rules, now stayed pending litigation, and California climate disclosure requirements still to be promulgated. We intend to align any forthcoming ESG program goals with prevailing guidance. Until such time as we may announce targets, we present impact projections in the interest of transparency, and they should not be construed as representing company targets or goals.

Policy Support for the Energy Transition

The Infrastructure Investment & Jobs Act (IIJA), and the Inflation Reduction Act (IRA) passed during the Biden administration contain significant policy and economic support for clean energy projects and map directly to the transformation needs of the energy sector and Bloom's commercial strategy.

Under a new administration, we expect changes to both programs including grant programs, implementation guidance from U.S. Treasury and potentially the underlying statutes. While the extent of any resulting changes to the framework are not clear, we believe that there will be a continued focus on domestic energy security, resilient supply chains, and growing the domestic manufacturing base - which all align with Bloom's commercial strategy.

Additionally, the incoming administration has signaled support for additional power generation capacity generation through the Declaring a National Emergency executive action which prioritizes access to critical materials and calls for expedited delivery of energy infrastructure.

Innovation

Bloom Energy has been at the forefront of energy innovation for more than two decades, providing alternatives to centralized energy. We developed the first large-scale, commercially viable solid oxide-based power generation platform that allows organizations, essential services, critical infrastructure, and communities to responsibly take charge of their energy future. In addition, the same solid oxide platform can be harnessed to produce and utilize hydrogen, recognized as the renewable fuel of the future. Our teams are hard at work advancing our technology, as well as our operating and commercial models.

Driving Innovation at Bloom

As we work towards diversified solutions that address the needs of multiple industries, we are also working to spur further innovation that improves product efficiencies, reduces costs, and identifies new opportunities across the business. We recognize that good ideas can come from anywhere, and we aim to foster an environment where our employees feel comfortable championing those ideas.

Technological Innovation

Since its founding 20-plus years ago, Bloom Energy has been on the forefront of technological innovation in the fuel cell industry. Our world-class teams work to constantly evolve our technology and manufacturing processes as evidenced by our expanding patent library. Through December 2024, Bloom had 358 issued and active United States Patents and 177 patents internationally, demonstrating the commitment we have to lowering costs and improving the output, efficiency, reliability, and sustainability of our products.

Manufacturing Innovation

In 2023, we scaled up production at our multi-gigawatt factory in Fremont, CA, while streamlining and consolidating operations from our Sunnyvale, CA, facility to our Fremont facility. The shift embraced the introduction of additional automation which continued in 2024. Additionally, our Delaware manufacturing facility achieved ISO 9001 Certification covering the manufacture of Bloom Energy Server systems and Electrolyzers. The certification, also planned for other facilities moving forward helps demonstrate our commitment to quality management and signals to our stakeholders that we have embraced a culture of continuous improvement.

Additionally, Bloom was awarded up to $75M in tax credits from the Departments of Energy and Treasury in recognition of our commitment to expand domestic clean energy manufacturing.

Commercial Innovation

Our utility customers are recognizing the challenge of keeping pace with the growing demand for power. Aging infrastructure, coupled with transmission and distribution bottlenecks, are making it more difficult for utilities to integrate additional sources of energy to enhance capacity. Building new transmission and distribution infrastructure is expensive, takes many years, and would likely cause utility rates to increase. As demand for power continues to grow, and time to power becomes increasingly important, utilities are exploring alternative means of producing and supplying energy to their end customers, including our Energy Server systems. We entered into multiple agreements with utilities in 2024, including a landmark 1GW supply agreement with American Electric Power (AEP) that included a 100 MW order in 2024. We expect more utility customers in the future to supplement their power generation with the Bloom Energy Server system.

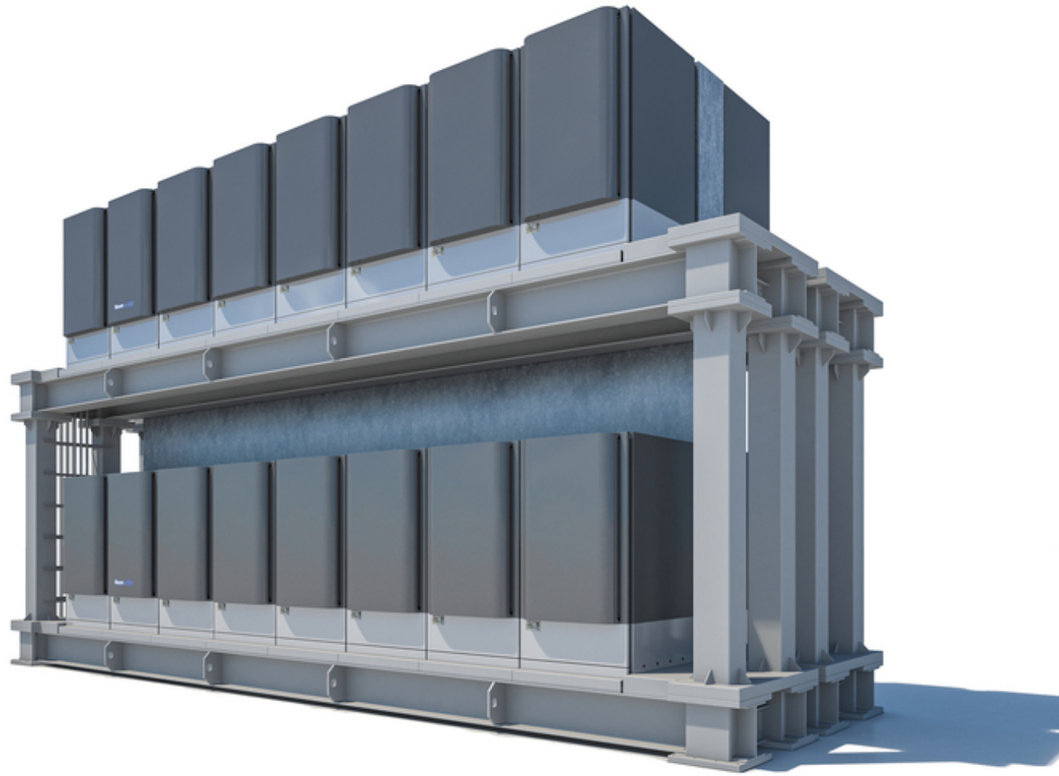
Deployment Innovation

As we see increased demands from large power users like data centers and utilities, Bloom has been rethinking the way we deploy our Energy Server systems. Customers with large power demand looking to maximize the use of space on their site need an energy-dense solution that can be installed quickly. To meet this need, Bloom has innovated its packaging solution and now ships the fuel cell units from factory pre-mounted on a skid. This reduces installation time and onsite labor required, enabling us to match our customers' sense of urgency. Additionally, we have designed these skids to be easily stacked vertically. This is a significant reduction in our required footprint, increasing our energy density to in excess of 100 MW/acre.

Service Innovation

C3.ai, the Enterprise AI application software company, and Bloom Energy began working together in 2024 to implement innovative AI-based solutions to broaden the scope and precision of Bloom's product monitoring technology.

Bloom receives and monitors billions of real-time performance data points daily from its energy systems and has advanced the use of data analytics in the energy sector to both monitor and refine fuel cell performance and support new science, research, and technology innovation. Now, Bloom's remote engineering teams use AI recommendations, alerts, and workflows within the C3 AI Reliability Suite to adjust fuel cell operating parameters that impact cell performance and lifetime, further refining Bloom's operational excellence.



Advancing Our Technology

Load Following

Our customers have an urgency to procure energy, Our Energy Server solutions can be configured as "islanded" microgrids where they operate independently of the grid. We are seeing this interest in particular in the data center segment. Additionally, that same capability can be leveraged by utilities that need dispatchable resources. To meet this need, the Bloom Energy Server has to modulate its output to match the instantaneous demand of the customer, requiring us to "load follow". Furthermore, as our data center customers shift to running AI workloads, the rate of change of the load and frequency of these changes are increasing.

Driven by these market needs, load following has been a major technical focus for the organization in 2024. We have made changes to our column design and manufacturing process to allow for this. On a system level, we have done significant testing and development work on integration with energy storage assets such as ultra capacitors and batteries.

Based on this work, Bloom introduced our BeFlexible™ load following capability and deployed a full islanded microgrid solution at Quanta Computer Inc., a Taiwanese electronics manufacturer.

Combined Heat and Power

The Bloom Energy Server is configurable as a Combined Heat and Power (CHP) system, increasing total system efficiency and improving customer economics. With a platform based on solid oxide technology, operating at temperatures above 800° C, the Bloom Energy Server can produce clean energy at one of the highest efficiencies in the market today. The high temperature cathode exhaust from the Energy Server can be channeled, allowing the resulting exhaust heat to be available for further use. Once captured, this high temperature heat can be utilized in various applications and to further increase the overall efficiency of the system. By adding heat capture, the total system efficiency can reach a lifetime average efficiency of ~90%.

2024 saw significant advancements in Bloom's heat capture technology. Bloom launched its advanced CHP design that allows higher temperature heat (350° C) to be captured, expanding the applications we can address to include hot water for district heating, and steam for industrial and liquid cooling applications for data centers.

THE BLOOM ENERGY SERVER WITH HEAT CAPTURE TECHNOLOGY REACHES A LIFETIME AVERAGE EFFICIENCY OF:

>90%

Carbon Capture Utilization & Storage

Efficient carbon capture depends on the purity of CO_2 in the exhaust stream, which varies widely across power generation technologies. Conventional technologies that generate electricity from natural gas combustion produce exhaust streams with approximately 5% CO_2. Capturing such low-concentration emissions remains technically complex and costly. In contrast, Bloom's proprietary high-temperature fuel cell technology converts natural gas without combustion, yielding a CO_2 -rich stream that has 15 times lower mass flow and ten times the CO_2 concentration after water removal, making the process more efficient and less costly. Due to the lack of combustion, Bloom's system also avoids the generation of harmful criteria pollutants that avoid additional complexity. As more countries and organizations set ambitious net-zero goals, carbon capture is poised to play a significant role in the energy transition.

In 2024, Bloom advanced our CCUS solution by working to optimize our Energy Server for seamless integration with CCUS ecosystems. We developed more defined product architecture for the configuration of our solution and invested in the development of strategic partnerships with multiple leaders in carbon capture technology - culminating in early 2025 in an announcement that Bloom and Chart Industries would partner to process CO_2 from Bloom's fuel cell projects and make it available to carbon utilization partners.

Hydrogen

Through 2024 we continued to innovate on the Bloom Electrolyzer. Our marquee installation at Moffet Field continued to operate giving us valuable data around system performance and reliability. Our system-level energy consumption of 37.5 kWh per kg of hydrogen remains one of the highest in the industry. We also were able to launch our next generation product, sized at a 2.4 MW building block, allowing for a reduction in footprint. This substantially improved our installation costs and ease of deployment.

Bloom also further innovated on the Hydrogen fuel cell system. In a test in our laboratory in Fremont, California we demonstrated a start of life efficiency of 60%.

Data Centers and the Energy Transition

The Case for Bloom Energy's Distributed Fuel Cell Solutions for Data Centers in the PJM Interconnection

Over the past few years it has become apparent that the three core elements of the energy system are all trending in the wrong direction. Reliability is down, costs are up, and emission reductions are lagging behind expectations. In both the U.S. and globally, policy mechanisms supporting electric vehicles, building electrification, and hydrogen development have been implemented, while at the same time the power demand from digital infrastructure driven by the generative AI revolution has exploded. The result is a level of anticipated growth in the demand for electricity that has not been seen for decades.

Perhaps nowhere is the strain on the electric system more acute than in the PJM Interconnection, the Regional Transmission Organization (RTO) managing the grid across 13 states along the Mid-Atlantic of the U.S. and home to "Data Center Alley" in Loudoun County Virginia, the largest concentration of data centers in the world. In PJM, capacity constraints, transmission challenges, interconnection delays, and explosive growth in data center energy demand have combined to challenge grid operators, policymakers, local communities, and data center operators. Bloom Energy's distributed fuel cell solutions can provide critical relief for the near-term challenges and provide unparalleled longer-term decarbonization options – all while avoiding stranded assets or significant ratepayer costs.

Data Center Background

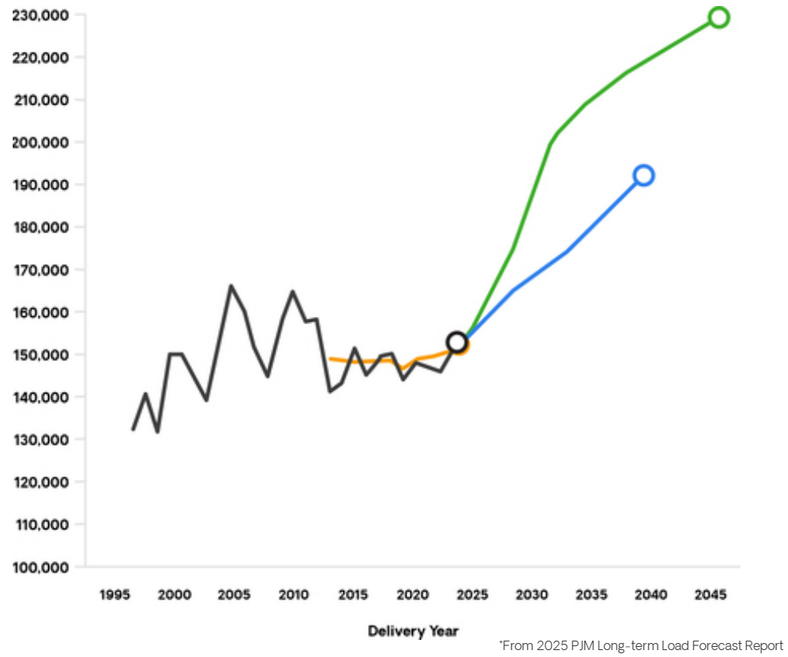
Data center driven electricity demand has already soared in recent years due to the increasing role data access plays in our everyday lives. Between 2017 and 2021, electricity used by Meta, Amazon, Microsoft, and Google, the main providers of commercially available cloud computing and digital services, more than doubled. Today, AI models are typically much more energy-intensive than the data retrieval, streaming, and communications applications that have historically driven data center growth. In fact, AI queries are estimated to require 10x more electricity.[4] McKinsey estimates that demand for data center capacity could more than triple by 2030.[5]

An important driver of the anticipated growth is the increased size of data centers to accommodate AI workloads. Ten years ago, a 30-megawatt (MW) center was considered large. Today, a 200-MW facility is considered normal.[5] The extent of data center growth that will ultimately be realized will be a function of the industry's ability to gain access to the required power. This is a fundamental shift for both the data center industry and utilities, where historically data centers could expect to connect to the local utility as needed. Now, growing grid constraints and projected capacity shortfalls are forcing both utilities and data center developers to explore new solutions in order to ensure sufficient power is provided when and where it is needed.

The Situation in PJM

While the growth estimates for data centers are significant on a national level, it is even more striking to consider the geographic concentration of the industry and the local challenges this growth can create. Today, 15 states account for 80% of the national data center load, with data centers estimated to comprise a quarter of Virginia's electric load in 2023.[4] In 2022, PJM began a review of data center load growth and identified growth rates over 300% in some instances. The 2023 PJM Load Forecast Report incorporates adjustments to previously modeled load growth to reflect the explosive expansion of data center energy demand.[6] The challenges are exacerbated by planned retirements of large generators and a long and growing interconnection queue for new generation. And because the vast majority of planned new generation assets in PJM are intermittent renewables or other limited-duration resources, disconnect between capacity and demand will continue to increase.[7] In 2024, PJM updated these figures to include data center demand, which now drives the summer peak to 170GW and increases the 2022 to 2024 growth estimate to 375%.[8] The 2025 forecast now continues to show explosive demand growth as shown in the graphic.

Impacts of Electrification and Data Center Load on Forecasts



*From 2025 PJM Long-term Load Forecast Report

4 EPRI Powering Intelligence: Analyzing Artificial Intelligence and Data Center Energy Consumption
5 https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/ai-power-expanding-data-center-capacity-to-meet-growing-demand
6 https://services.pjm.com/annualreport2023/energy-transition
7 https://www.pjm.com/-/media/library/reports-notices/special-reports/2023/energy-transition-in-pjm-resource-retirements-replacements-and-risks.ashx
8 https://www.pjm.com/-/media/DotCom/library/reports-notices/special-reports/2024/20240624-energy-transition-in-pjm-flexibility-for-the-future.pdf

Impact on the Energy Transition

The result on the ground is the likely delay of fossil retirements and the ongoing use of natural gas solutions to serve demand, control costs and balance the system. This tracks with national dynamics, with Goldman Sachs anticipating that gas resources will provide ~60% of the total data center power demand expected through the rest of the decade. This implies a roughly 10% increase in the amount of gas consumed in the power market vs. today and more importantly represents a 50% increase vs. prior growth expectations for power demand for gas.[9]

In January 2023, the Virginia Department of Environmental Quality (DEQ) issued a proposed order that would allow the data center industry to run backup diesel generators for longer and more frequent periods of time – allowing the industry to circumvent Virginia's air pollution control laws that limit dangerous pollutants and emissions. The proposed order would apply to 101 data center air pollution permit holders in Northern Virginia, covering 4,632 commercial diesel generators with a total rated capacity of over 11 GWs of power.

The combination of ongoing conventional combustion natural gas generation and expanded use of diesel generation to alleviate the near-term capacity issues has important negative consequences on both the climate and local communities. We can expect marginal emission rates, set by the resources bidding the highest marginal cost of power production into the market to hold over time or increase based on the system's well documented capacity constraints.[10] This comes at a time when our current global carbon budget for a 50% chance at a 1.5 degree warming trajectory is only 200 gigatonnes of CO_2e, which we exhaust globally at a rate of 40 GT a year.[11] This gives the world until 2029 to stay on track. Critically, because of the time value of carbon, every tonne avoided now is more important than a tonne avoided later due to the unknowns around tipping points in the global climate and the pace and extent of climate change generally.

Other Considerations for Communities

Beyond the critical global climate issues, communities near large data centers are often subjected to significant noise, air quality, water and land-use impacts, primarily due to the use of backup diesel generators and the need for large amounts of water used for cooling. Thermoelectric power generation is the most water-intensive sector of the economy, accounting for the greatest of all domestic water use across all sectors – even exceeding water use for irrigation.[12] Collectively, data centers are among the top ten water consuming industrial or commercial industries in the U.S., and consumption will grow dramatically as the data center explosion continues. Large amounts of water are required to operate data centers, both directly for liquid cooling and indirectly to produce electricity. As much as one-fifth of data center servers direct water footprint comes from moderately to highly water stressed watersheds, while nearly half of servers are fully or partially powered by power plants located within water stressed regions.[13]

Loudoun County has approximately 200 data centers that used 3.4 GW of power in 2023. Some would argue that new data center energy demand should be met by the additional build-out of new renewable installations, but current consumption would require 34,000 acres of solar panels. If power demand in Loudoun County for the next five years grows at the same rate as the previous five years, the county will be using 11.56 GW of power in 2028. That would require 115,600 acres of solar panels, roughly one third of the land in the county.[14]

The Bloom Energy Server as Near-term Solution

As Loudoun County Supervisor Mike Turner has assessed, *the 135-yr. old paradigm of power generated by large, remote power plants and transmitted across hundreds of miles of transmission lines will no longer work for Loudoun County's globally unique needs.*[14]

The good news is that there is a proven, resilient, and sustainable solution that is deployable today, flexible enough to allow for deep decarbonization tomorrow that solves the data center driven challenges identified by stakeholders across PJM. The Bloom Energy Server is based on an advanced distributed energy generation platform that creates electricity from a variety of fuels, including natural gas, biogas, and hydrogen at high efficiency and without combustion. Bloom Energy Servers deliver energy solutions for businesses seeking reliability, predictable pricing, and highly efficient power for their operations. Along with biotech research centers, hospitals, precision manufacturers and other critical infrastructure, data center operators have long been a core customer segment.

[9] Goldman Equity Research AI, Data Centers and the coming US power demand surg
[10] https://learn.pjm.com/electricity-basics/market-for-electricity.aspx
[11] https://climatechangetracker.org/igcc/current-remaining-carbon-budget-and-trajectory-till-exhaustion
[12] https://www.usgs.gov/mission-areas/water-resources/science/total-water-use#overview
[13] https://iopscience.iop.org/article/10.1088/1748-9326/abfba1
[14] https://www.loudoun.gov/ArchiveCenter/ViewFile/Item/13979

Flexibility of Distributed Resources

Bloom's Energy Server systems can be installed in a variety of locations including behind the meter at data center sites or front of the meter in partnership with local utilities utilizing an innovative power procurement model, In either scenario, Bloom projects help grid operators and network planners avoid the build out of centralized generation and transmission infrastructure. Indeed, the benefits of distributed energy resources can largely be achieved without ratepayer-funded system upgrades.

Transmission for large users such as data centers have staggering costs that are often socialized among all ratepayers – the magnitude of this impact would amount to a massive subsidy and therefore is of growing concern.[15] In contrast, the cost of on-site generation is borne by the customer whose load is being served. This provides all the benefits of emissions-reducing power generation without the ratepayer costs or electric grid strain caused by large scale interconnections for new loads requesting grid power.

The world class efficiencies of Bloom's Energy Servers result in emissions rates of 679-833 lbs./MWh which are lower than legacy combustion generators, including marginal generators across PJM, resulting in demonstrable and meaningful near-term GHG emission reductions for nearly all of our projects.[16,17] PJM tracks and publishes marginal emissions data and the most recent reporting suggests average marginal emissions since 2018 have declined slightly but marginal emission rates still reflect the fact that natural gas generators are the dominant marginal unit on the system.

Production cost modeling focused on future grid dynamics through 2040 suggests that operating marginal rates are expected to continue to reflect legacy natural gas combustion generation as the ongoing marginal unit.

YEAR	PJM 2022 REPORTED EMISSIONS RATES (LBS./MWH)[18]
2018	1375
2019	1310
2020	1236
2021	1136
2022	1020
2023	1240
2024	1107

*PJM Marginal Emissions API

[15] The Washington Post. November 1, 2024. "As data centers for AI strain the power grid, bills rise for everyday customers." https://www.washingtonpost.com/business/2024/11/01/ai-data-centers-electricity-bills-google-amazon/
[16] https://www.bloomenergy.com/wp-content/uploads/bloom-energy-server-datasheet-2024.pdf
[17] https://www.bloomenergy.com/resource/how-bloom-reduces-emissions-technical-note/
[18] PJM Marginal Emissions API

Near-term Importance of CCUS

Permitting reform necessary to relieve electric transmission constraints is also likely to have a positive impact on the ability to advance CO_2 pipeline infrastructure. DOE's most recent estimates suggest that between 30,000 and 96,000 miles of CO_2 pipelines will be necessary to reach the United States' 2050 net-zero emissions goal.[19] Class VI well applications in West Virginia are active with the EPA. Building CO_2 pipeline infrastructure to connect projects to regional sequestration capacity is reasonable given the interstate transmission challenges plaguing the system in PJM and the permitting reform effort underway in Congress focused on clarifying regulatory jurisdiction, land rights, environmental permitting, and safety considerations.

Whether CO_2 is made available for novel utilization cases or sequestered underground, the Bloom carbon capture solution is well suited to support CCUS ecosystems. The SOFC platform's non-combustion process results in a relatively pure stream of CO_2 in the exhaust. In fact there is a 10X higher concentration of CO_2 and 15X lower mass flow after water removal than a traditional combustion turbine.

This means that Bloom paired with carbon capture capability is a cost-effective and reliable solution for 24/7 low carbon energy generation. CCUS ecosystems will emerge across PJM in support of data center projects in the years ahead and can support viable decarbonized distributed baseload energy projects serving data centers.

Take-away

We are in an unprecedented time in the energy transition. Corporates, regulators, policymakers, industry and market observers are all struggling with the combination of forces that have come together to place historic strain on the electric system. Strategic national security implications necessitate we proceed with data center build out at the heart of the strain, which means we must align around the most responsible energy solutions with the most flexibility to avoid technology lock-in that might threaten our climate goals.

All indications are that new natural gas projects will proceed, and Bloom's highly efficient non-combustion platform offers a responsible near-term technology choice with a realistic decarbonization pathway, and provides more rapid deployment and lower emissions than conventional combustion alternatives. Bloom is at the forefront of RNG, CCUS and hydrogen ecosystems working every day to enhance our near-term execution and long-term decarbonization potential so we might serve as a cornerstone of the energy transition in PJM and beyond.

[19] https://blogs.law.columbia.edu/climatechange/2023/10/18/permitting-co2-pipelines-overcoming-state-and-federal-barriers-to-co2-pipeline-networks/

Environment

Bloom Energy offers solutions that significantly lower local criteria pollutants and reduce global greenhouse gas emissions. Our products displace less efficient energy forms, including combustion-based power producers and on-site stationary internal combustion engines. We design our products to consume minimal water and operate at a high-power density, which optimizes land use.

GHG Emissions

In 2024, Bloom performed and verified our GHG inventory across Scopes 1 and 2. Bloom uses the operational control approach to set our organizational boundary for inventory reporting. Our GHG inventory calculation approach is based on national and international standards from the GHG Protocol Corporate Standard, GHG Protocol Scope 2 Guidance, and the EPA Center for Corporate Climate Leadership Greenhouse Gas Inventory Guidance. All of our product emissions fall into the Scope 1 category due to the fact that we maintain exclusive operational control of all our fuel cell installations in operation. The remainder of our Scope 1 emissions are from our manufacturing operations, service fleet, and other miscellaneous activity.

Our GHG inventory went through a verification process in which our emissions accounting was formally verified by the consulting firm Ramboll. The verification statement can be found in the appendix. Our total GHG emissions are disclosed in carbon dioxide equivalents (CO_2e).

2024 GLOBAL SCOPE 1 EMISSIONS:

2,678,927

Metric Tonnes CO_2e

Includes emissions from all Bloom Energy Servers in operation globally 99+% and from the company's vehicles, facility operations, and test equipment <1%

2024 GLOBAL SCOPE 2 EMISSIONS:

7,613

Metric Tonnes CO_2e

Market-Based Indirect Emissions from Purchased Energy

12,724

Metric Tonnes CO_2e

Location-Based Indirect Emissions from Purchased Energy

Includes Scope 2 energy consumption from Bloom facilities in California, Delaware, South Korea, and India.

Avoided Emissions

Each Energy Server deployment displaces power supplied to our customers from an alternative source, typically centralized power grids. As a result, establishing the full climate impact of our operations requires comparing our emissions to the emissions from displaced grid alternatives. Since Bloom Energy Servers are an efficient distributed energy resource, when a new Bloom Energy Server is brought online, it reduces the amount of power required from energy sources that generate "on the margin," meaning those units that are operating to meet the last unit of energy demand. Since our Energy Servers' carbon intensity is typically lower than the displaced (generally fossil-powered) alternatives, the net impact is measurable emissions reductions.

Ramboll also conducted a review of Bloom's marginal emissions displacement methodology and confirmed that Bloom's approach was developed in accordance with WRI's Guidelines for Quantifying GHG Reductions from Grid Connected Electricity Projects.

2024 NET EMISSIONS FROM BLOOM PROJECTS:

-1,199,739

Metric Tonnes CO_2e

REGION	PERCENTAGE REDUCTION VS. GRID
USA	17%
Korea	45%
India	55%
Japan	35%
Taiwan	15%
Italy	6%
Global Weighted Average	**27%**

Green Notes 2024 Progress Report

In September 2020, we issued our first Green Convertible Senior Notes (the "Green Notes") with an initial $230 million issuance due in 2025. We have followed that up with another issuance of $632.5 million in May of 2023 due in 2028 and $402.5 million in May 2024 due in 2029. We finalized allocating 100% of the initial $230 million issuance in 2023. The updated investment framework, which can be found on our website, reinforces our commitment to decarbonization and energy sector transformation by directing proceeds toward renewable energy projects and microgrid componentry, along with research and development associated with our decarbonized product portfolio. All three Green Notes are aligned with the International Capital Market Association's Green Bond Principles (GBP), and a positive second party opinion was provided by Sustainalytics. We have an annual obligation to report on use of proceeds and enabled impact across the investment framework, and we are pleased to provide our progress report below, also reviewed by Sustainalytics.

TOTAL ALLOCATED PER REPORTING PERIOD

100%
The 2020 issuance is 100% allocated

15%
The 2023 issuance is 15% allocated

0%
The 2024 issuance is 0% allocated

NOTE DETAILS

Issuer	Bloom Energy Corp.	Bloom Energy Corp.	Bloom Energy Corp.
Issue Date	8/11/2020	5/16/2023	5/24/2024
Currency	USD	USD	USD
Tenor	5 year	5 year	5 year
Issued Amount	$230 million	$632.5 million	$402.5 million
CUSIP	093712107	093712 AJ6	093712AL17

USE OF PROCEEDS

Amount Distributed to Eligible Projects in Reporting Year (million USD)	$0.0	$68.1	$0.0
Percentage of Notes Allocated to Date	100%	15%	0%

USE OF PROCEEDS CATEGORY	PROJECTS FINANCED	CONSOLIDATED ENVIRONMENTAL IMPACTS REPORTED
RENEWABLE ENERGY	Biogas Applications Hydrogen Energy Servers Electrolyzers CHP Applications Carbon Capture Applications Marine Applications Fuel Blending Projects	In 2024, Bloom's waste-to-energy fuel cell installations reduced a total of 27 tonnes of CO_2e. For several of these categories we are still in the R&D phase, and there are no operations in the field. Environmental impacts from operations will be quantified as projects come online.
CLIMATE CHANGE ADAPTATION	Microgrid Componentry Microgrid R&D	Bloom's microgrid systems facilitate customers' energy needs during grid outages. Events where a Bloom microgrid supplies power to a customer during a grid outage is called a "ride-through" event. In calendar year 2024, Bloom's microgrids have facilitated 452 ride-through events for customers, carrying a total of 34,483 MWh of energy demand over 505 hours of grid outages. From August 11, 2018, (Bloom's lookback date for the original issuance) to December 31, 2024, Bloom's microgrids facilitated 3,592 ride-through events for customers, carrying a total of 2,830,032 MWh of energy demand over 5,452 hours of grid outages.
POLLUTION PREVENTION AND CONTROL	End-of-Life Recycling Activity	Over 99.50% of products by weight that are sold are either recyclable or reusable. **Weight of end-of-life material recovered and avoided landfill by year:** • 1,420 tonnes in 2020 • 1,738 tonnes in 2021 • 3,028 tonnes in 2022 • 3,559 tonnes in 2023 • 3,795 tonnes in 2024
GREEN BUILDINGS	Headquarters Build-out	Bloom's headquarters are a LEED Gold certified building. In 2024, Bloom did not use proceeds from the Green Notes to fund any additional expansion of our headquarters building. By occupying a LEED certified building, the following measurable environmental effects have resulted: **Water:** • The building is reducing its indoor potable water use by at least 40% compared to a baseline building. • Irrigation and outdoor water uses are reducing potable water use by at least 50% compared to similar landscaped areas. **Energy:** • Core and Shell building is reducing its energy consumption by 28% compared to a similar baseline building. **Materials:** • The project was able to divert at least 75% of its construction and demolition waste from the landfill during the construction phase. • At least 20% of the building's material (by cost) was sourced from recycled content. • At least 20% of the building materials (by cost) was harvested and manufactured within 500 miles of the project site. **Indoor Environmental Quality:** • 90% or more of the floor areas have direct line of sight to the outdoors. • 75% or more of the floor plan has at least 25-foot candles of daylight during typical occupancy hours.

Energy Management

We are focused on energy efficiency in our production and administrative processes, and as we expand our facility footprint, we have designed Bloom equipment into our operations. Where supplementary power is needed, we endeavor to opt in to community choice aggregation programs. Our headquarters building uses Green Start power provided by Silicon Valley Community Energy, and our new Fremont Manufacturing Center has its power delivered through Ava Community Energy's Bright Choice offering.

2024 TOTAL ENERGY CONSUMED (GJ)

142,358 GJ

Includes Scope 2 energy consumption from Bloom facilities in California, Delaware, South Korea, and India.

Product Efficiency

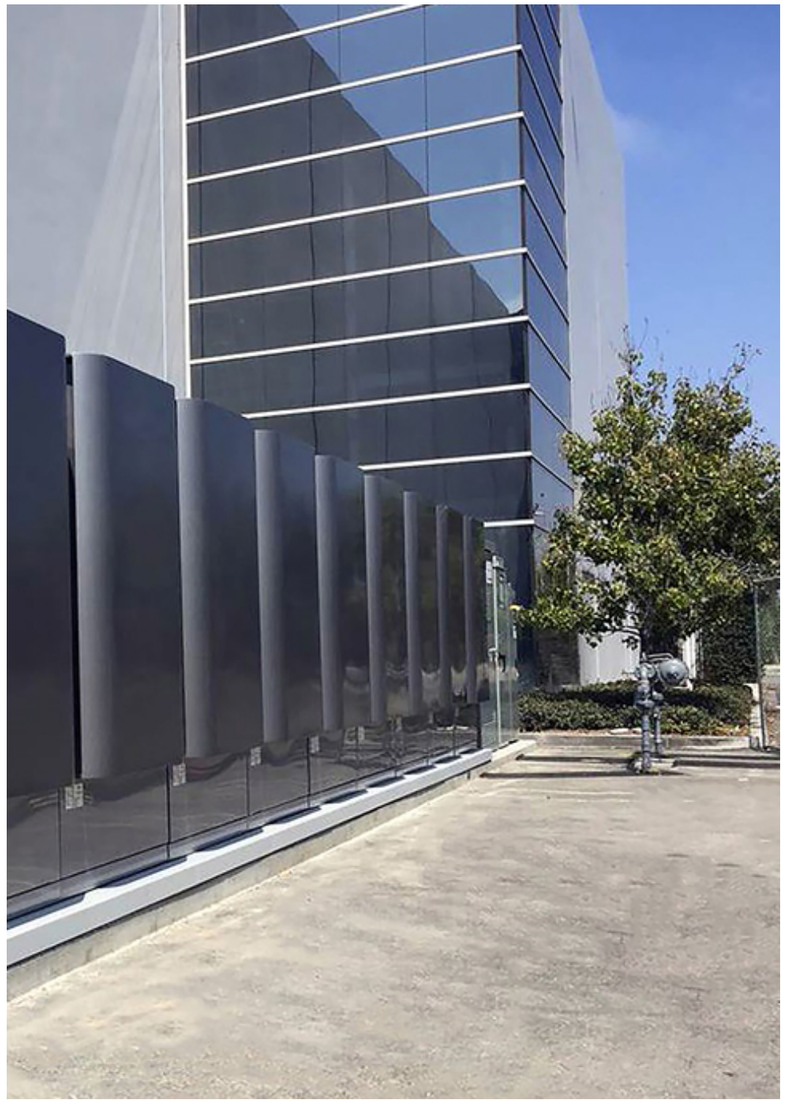
Our product efficiency is tracked closely through our Remote Monitoring and Control Centers (RMCC) in San Jose, California, and Mumbai, India. The RMCC tracks and monitors various operating parameters down to the individual fuel cell stack level. Based on data provided by the RMCC, we repair Energy Server systems not performing in accordance with customer warranties and standards.

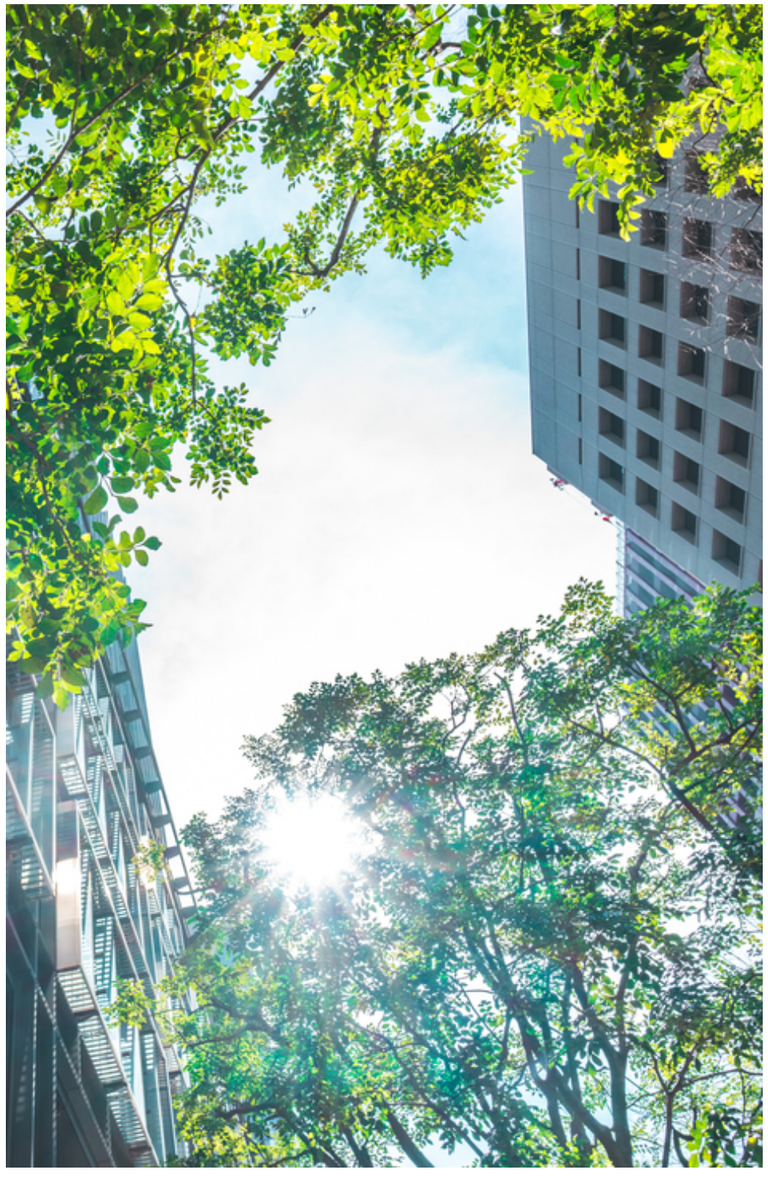
As our fuel cells age, efficiency decreases, and replacements are made to keep the Energy Server operating appropriately. We understand that product efficiency directly affects GHG emissions. Therefore, we report on average efficiency and stack life of our installed base to highlight our focus on the issue.

Initial lifetime statistics are subject to minor variations as we gather additional data from fuel cells still operating until the entire product vintage is operated beyond the median life. We continuously monitor the performance and health of our fleet. We have ongoing continuous reliability improvement projects in place that implement countermeasures to improve reliability and the life of our fleet. Based on the current performance trajectory, we predict 2024 fleet medium time to refurbishment as 5 years.

WEIGHTED AVERAGE SYSTEM LIFETIME EFFICIENCY AS OF EOY 2024

55.42%





Air Quality

Our fuel cells convert fuel into electricity without combustion. When a fuel cell is used for power, it typically displaces a less efficient power source (generally a combustion generator). When compared to these marginal sources, our fuel cells reduce nitrogen and sulfur dioxide by over 99% and other criteria pollutants (volatile organic compounds, carbon monoxide, and particulate matter) significantly.

Avoided Air Pollution Impact

The emission reductions that occurred in the United States in 2024 from the operation of our fuel cells amount to a decrease in approximately 249 days of work lost due to illness, 4,895 cases of asthma symptoms, as well as $96M–$130M in decreased healthcare costs. The health and environmental impacts of combustion-related pollutants are a major focus of the Environmental Protection Agency (EPA) and air quality districts nationwide. Combustion-related emissions tend to disproportionately impact disadvantaged communities due to the increased likelihood of proximity to industrial facilities, including power plants or businesses utilizing large diesel backup systems. Our solution, which can provide up to a 99% reduction of these harmful air pollutants, continues to improve the air quality in these communities. It also provides a model for near-zero criteria pollutant energy generation for policymakers, regulators, and the environmental justice community, which can translate to emission reductions and health benefits today.

Bloom's Energy Servers utilizing natural gas were first certified as meeting stringent California Air Resources Board (CARB) Distributed Generation (DG) standards in 2016. The DG certification program establishes the emission standards that electrical generation technologies must meet to be exempted from local air district permitting requirements. CARB must re-certify the technology covered by the program, including our Energy Servers, every five years. Since our initial certification, Bloom has consistently improved our technology. During the most recent recertification process in 2021, our Energy Servers were certified based on data demonstrating our lowest criteria pollutant emission rates ever. In addition, in 2022 we received DG Certification for our product using digester and landfill gas.

NO_x:

19,945

2024 Emissions of NOx from Products (lbs)

2,385,488

2024 Domestic NO_x Reductions vs. Grid Alternatives (lbs)

99.8%

% Reduction vs. Grid

SO_2:

40

2024 Emissions of SO_2 from Products (lbs)

553,274

2024 SO_2 Reductions vs. Grid Alternatives (lbs)

99.9+%

% Reduction vs. Grid

Based on comparison to 2023 EPA eGRID non-baseload emissions rates inclusive of line losses as a proxy for marginal emissions

Water Management

Bloom's 2024 Water Savings:

	BLOOM (GAL/MWH)	UNITED STATES AVERAGE RATES[1] (GAL/MWH)	2024 FLEETWIDE WATER REDUCTIONS (MGAL)[1,2]
Water Consumption	0.32	830	5,702
Water Withdrawal	0	102,000	851,676

BLOOM REDUCES WATER USE BY

99+%

[1] Using regional factors from WRI Guidance for Calculating Water Use Embedded in Purchased Electricity for United States average water consumption and withdrawal (https://www.wri.org/research/guidance-calculating-water-use-embedded-purchased-electricity)

[2] Bloom's water reductions were calculated using actual fleetwide energy production in 2024

Water Impacts of Our Energy Server Fleet

Our Energy Servers consume minimal amounts of water when compared to other centralized power generation sources, and only consume water during start-up and/or if a restart is required. In 2024 Bloom introduced new water management operating procedures across its fleet of Energy Server systems which improved electricity output and reduced the amount of water needed to maintain the same levels of power and efficiency. The result was a 69% reduction in average water consumption year over year. Last year alone, our fuel cells avoided more than 5.7 billion gallons of water consumption and over 852 billion gallons of water withdrawal by grid electricity sources. Based on data from the Energy Information Administration (EIA), total water withdrawal by U.S. thermoelectric power plants is almost 47.7 trillion gallons annually. The water intensity of U.S. thermoelectric power plants is approximately 11,595 gallons/MWh. This results in approximately 146 Olympic-sized swimming pools of water saved annually for a 1 MW Bloom fuel cell in the United States.

Water Impacts in Our Operations

While the water use at our facilities is minimal (primarily for sanitation and hygiene purposes), we do use a small amount of water as part of our energy server production process. We engage with local regulatory bodies to ensure compliance with all relevant standards governing any necessary effluent discharge.. This effluent is monitored and tested prior to release. Additionally, we train our employees to follow the Injury and Incident Reporting Protocol, a part of our Injury and Illness Prevention Program, to ensure that strict root cause analysis, remediation, and coordination with local authorities is conducted for any issues that might arise.

Hazardous Materials and Waste Management Program

Waste Management Program

Bloom Energy endeavors to reduce waste and introduce efficiency wherever possible throughout our operations and in our facilities. Efforts to manage pallets, cardboard, and foam at our Delaware manufacturing facility continue and we are focused on reducing waste and introducing circularity through our product design and sourcing efforts.

Bloom's Waste Management Program is also designed to avoid the generation and disposal of hazardous waste to the extent feasible. This is primarily achieved through management of our desulfurization material and canisters, our largest potential waste stream. This program includes a Hazardous Materials Business Plan (HMBP) document for customers that explains the desulfurization canister removal and material recycling process. EH&S trains Field Service personnel annually on the HMBP document and its contents.

Hazardous Materials Management Program

Bloom Energy's manufacturing facilities contain a variety of chemicals utilized during the fuel cell manufacturing process. Chemical Safety Data Sheets (SDS's) are stored in Bloom's online chemical inventory, which is accessible to all employees. The New Chemical Review process is utilized to ensure our Environmental, Health, and Safety (EH&S) group reviews all new chemicals before they come into a manufacturing facility. Through Environmental Management System (EMS) Compliance Evaluations, Bloom also identified several opportunities for enhancement where chemical management is concerned. In response, the EMS Implementation Team developed guidance documents intended to enhance communication and staff awareness.

Desulfurization Recycling Process

Bloom continues to manage our spent desulfurization material as Excluded Recyclable Material. Bloom ensures that our company's desulfurization material generated in the United States is recycled and not transported or disposed of as hazardous waste. It is shipped to our recycling partner, ShoreMet, in Indiana. ShoreMet chemically dissolves the copper metal within that material, which then can be used to manufacture copper compounds, including copper amine carbonate, copper oxide, basics copper carbonate, and copper chloride dehydrate. The recycle and reuse process further promotes end-of-life circularity and ensures that desulfurization material does not become hazardous waste as per the Resource Conservation and Recovery Act.

Bloom avoids hazardous waste generation through its novel relationship with an end-of-life recycling partner leveraging the circular economy.

Product End-of-Life Management & Circularity

Bloom Energy Servers contain an impressive 99.5% of materials by weight that are recyclable or reusable. The total metric tonnes of end-of-life material increased from 3,559 to 3,795 metric tonnes from 2023 to 2024 due to increased volumes of fuel cell upgrades. After new units generate power for a period, and our Remote Monitoring and Control Center determines there is a need for repair or overhaul, the units return to our manufacturing facility. Our Repair and Overhaul Operations team, located in Delaware, performs the tasks required to deconstruct the units and rebuild them for redeployment into service. The materials that cannot be reused are sent to recycle streams, where they are repurposed in other industries. As a result, out of an approximately 25,000-pound Bloom Energy Server, the weight of components that go to the landfill without a recycling or refurbishment stream comprises approximately 250 pounds, or less than approximately 1% of the total server weight. Typical components that go directly to landfill without refurbishment or recycling are sealants, adhesives, gaskets, filters, tape, and non-recyclable plastics.

2024 PERCENTAGE BY WEIGHT OF PRODUCTS SOLD THAT ARE RECYCLABLE OR REUSABLE

99.5%

ESTIMATED TOTAL WEIGHT OF END-OF-LIFE MATERIAL RECOVERED IN 2024

3,795
metric tonnes

Product Safety

Bloom Energy aspires to the highest and strictest standards of product safety. These standards cover user, operator, and product safety across the design, manufacturing, installation, and operations of our fuel cells and electrolyzers.

As we grow our sales internationally, we work to gain safety certifications across the various countries of operation. Where relevant, we also certify to relevant building and electrical codes to ensure the safety of our equipment in relation to the properties surrounding the installation.

This allows us to continuously improve on our high standards for safety and ensures that each new evolution of our product is built and sourced with these specifications in mind. In the United States, we work with UL to inspect and certify our product and manufacturing sites quarterly. In Europe, we ensure that our fuel cell products and installation processes meet the required standards for Registration, Evaluation and Authorization of Chemicals (REACH) compliance, the Electromagnetic Compatibility (EMC) Directives, and the Pressure Directive (PED) and can be imported with the CE mark. Similarly, for Korea, we ensure that we follow compliance requirements as outlined by the Korean Occupational Safety and Health Agency (KOSHA) and Korea Electrical Safety Corporation (KESCO).

HIGHLIGHT

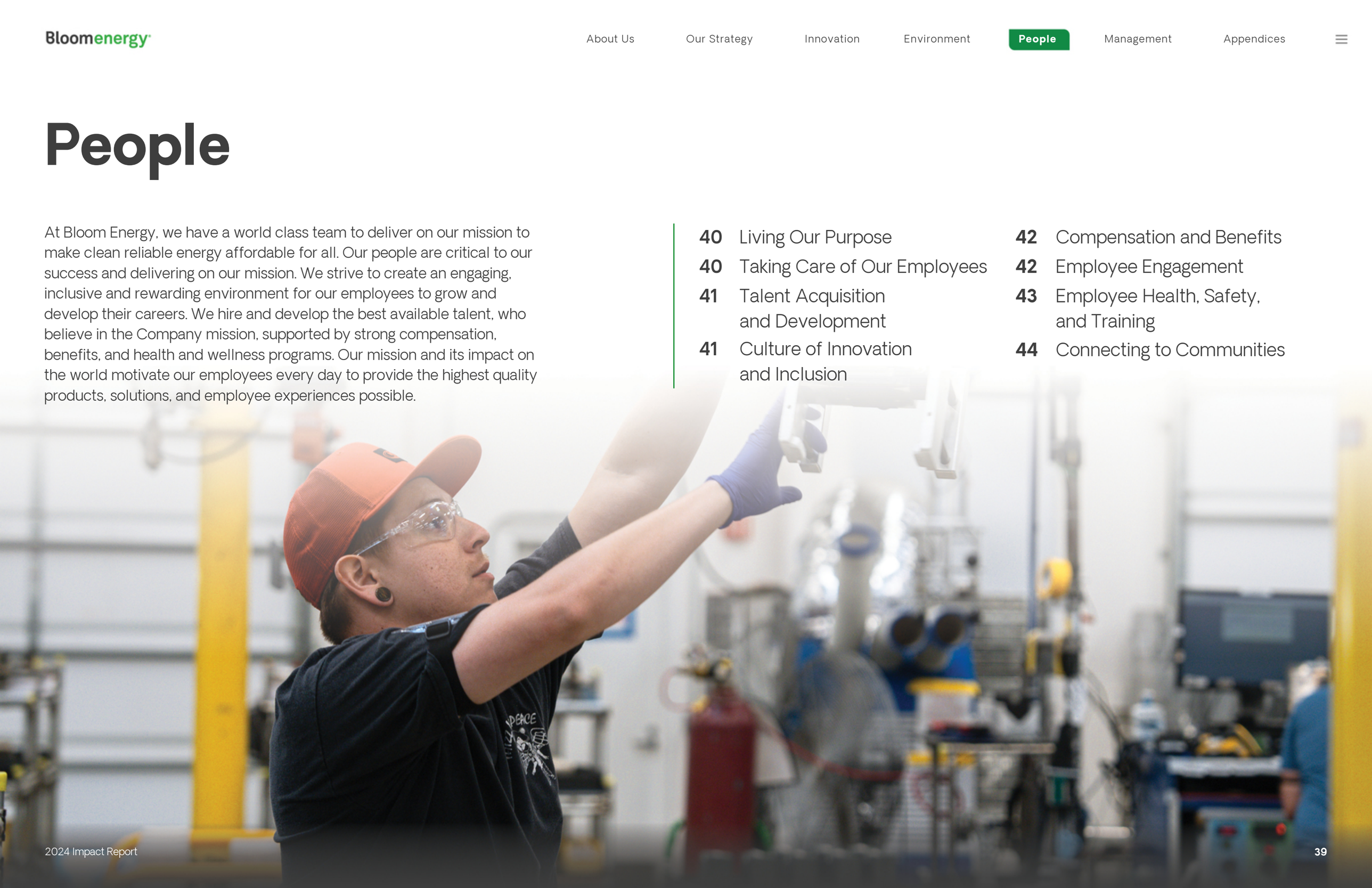
Interconnects

The aggressive pursuit of cost-down and profitability drives the goal that all components are re-used before they are recycled. Not only does this bring down costs, it is preferred over recycling as there are energy and transportation involved in recycling metals. Of the many components the team has developed re-use procedures for, the interconnect plays the most pivotal role in driving cost savings. The interconnect is a metal plate upon which the fuel cell sits, with the function to ensure fuel (anode) and air (cathode) flow across the fuel cell on opposite sides. These layers are stacked within our fuel cell units and are the highest quantity of any part within our system.

At end-of-life, these parts are separated, cleaned, inspected, and then re-used into our Repair & Overhaul units. Bloom has driven the re-use of these plates from zero percent to now over 75% in less than two years, offering a significant cost reduction without sacrificing life or electricity output. The efforts of the team on this project have improved the economics of the Service business, while saving energy and emissions that are part of any metals recycling stream. This combination delivers value to both our stakeholders and our environment.

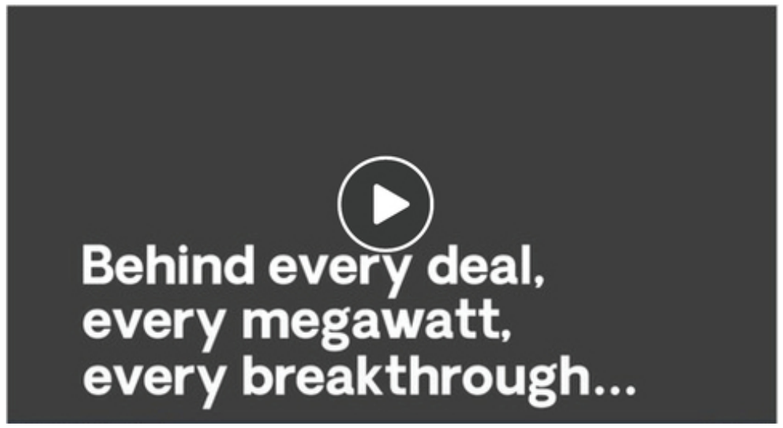
People

At Bloom Energy, we have a world class team to deliver on our mission to make clean reliable energy affordable for all. Our people are critical to our success and delivering on our mission. We strive to create an engaging, inclusive and rewarding environment for our employees to grow and develop their careers. We hire and develop the best available talent, who believe in the Company mission, supported by strong compensation, benefits, and health and wellness programs. Our mission and its impact on the world motivate our employees every day to provide the highest quality products, solutions, and employee experiences possible.



Living Our Purpose

At Bloom, we recognize the importance of communicating our mission, living our core values, and connecting our employees to our mission. Transforming the future of energy is no small task, but our team is up to the challenge. Behind every deal, every megawatt and every breakthrough, we have a global team of builders, innovators, problem solvers, and doers.



Click here to watch the video.

Taking Care of Our Employees

Our achievements are possible thanks to our global workforce of innovators and problem solvers. We are dedicated to creating a workplace where our employees feel valued and engaged in meaningful work. Just as our people support and advance our mission, we aim to foster a culture of innovation, respect, collaboration, and transparency that enables our employees to thrive and grow their connection to Bloom's purpose.

To attract the best and the brightest talent to work at Bloom, we partner with local communities, universities, and industry groups. We strive to maintain a safe, inclusive, and engaging workplace, with opportunities for our employees to grow in their careers, supported by strong compensation, benefits, and health and wellness programs.

At Bloom, it is of utmost importance that we communicate our mission clearly, living our core values, and connecting our employees to our purpose: to make clean, reliable energy affordable for everyone in the world. Building solutions to address decarbonization and energy security requires us to have an employee base that is committed to working in an innovative and collaborative manner and requires management to create a safe, welcoming environment with clear communication of priorities and company direction.

Talent Acquisition and Development

To attract, retain, and diversify our exceptionally talented workforce, we continue to evolve our hiring strategies, track our progress, and hold ourselves accountable to hiring the best. These efforts are led by our Human Resources department and overseen by the Board of Directors. Our goal is to attract and retain the most qualified talent based on Bloom's technology, a strong employer brand in the energy industry while providing competitive compensation and benefits. We actively source candidates from various networks globally through job postings, networking, employee referrals and job fairs.

We have a comprehensive Talent Management System designed to link performance and contribution to business results, enabling each employee to make a direct connection between their contributions and the success of Bloom. This comprehensive program includes goal setting, monthly check-ins, feedback solicitation, self-assessments, and annual contribution assessment conversations. Our Talent Management System provides employees with the resources required to achieve their goals and engage in meaningful feedback discussions with their managers, leading to development, exposure to new experiences, and real-time learnings.

We have invested in developing our next generation of leaders and people management capabilities. We have sent senior leaders to the Performance Acceleration Journey Executive Leadership program, designed by Board member Jeff Immelt and executive coach Kimberly Kleiman-Lee for high potential business leaders. We continued to strengthen the Bloom Energy Women Leaders (BEWL), an employee group aiming to create and encourage a Bloom culture where women leaders thrive.

In addition, we have invested in a leading online development platform, for the continuous development of our employees across all levels. In 2024, 378 employees were enrolled in at least one program on the platform. We held regular Be Inspired sessions to help with business literacy and technology learnings.

Culture of Innovation and Inclusion

Our cultural foundation is that of innovation, results, respect, and desire to do the right thing. One of our greatest strengths is a talented and diverse employee population. We believe this leads to better decision making and best positions us to meet the needs of our customers, stakeholders, and the communities in which we live and work. Our continued engagement with organizations that partner with diverse communities has been essential to our efforts to build a world-class company.

Compensation and Benefits

Our talent strategy is integral to our business success, and we design competitive and innovative compensation and benefits programs to help meet the needs of our employees. In addition to salaries, these programs (which vary by country/region) include annual bonuses, stock awards, an employee stock purchase plan, a 401(k) plan, healthcare and insurance benefits, health savings and flexible spending accounts, paid time off, parental leave, flexible work schedules, an extensive mental health program, and a fitness center. Our supplemental U.S. benefits programs are designed to support as many employees as possible at all levels of the organization. Our financial wellness program has a focus on our manufacturing employees, and our mental health support program is eligible to all employees, whether enrolled in our medical plans or not. One hundred percent of our employees (men and women) are eligible for parental leave. In addition to our broad-based equity award programs, we have used targeted equity grants to facilitate retention of critical talent with specialized skills and experience.

Employee Engagement

We are committed to continuously checking in with our employees through surveys and events to encourage open dialogue, understand employee concerns, and ensure that we maintain a positive and supportive environment for all who work at Bloom. We are also dedicated to developing and fostering an inclusive community at our workplaces. Sites across the world have a cadence of company or employee sponsored events to celebrate cultural milestones.

The BE Green Team is a voluntary internal group of Bloom employees across departments and office locations. Its mission is to engage Bloom Energy employees in sustainability-driven and community-oriented initiatives as well as to further promote operations and business practices grounded in sustainable principles. Our Green Team chapters conducted multiple events in 2024, including another clean-up of the Don Edwards San Francisco Bay National Wildlife refuge next to our Fremont manufacturing facility, an Earth Day event at our BE India offices that included eliminating single-use papers and plastics for a day, and guest speakers for Earth Day and World Environment Day for our India employees. To mark the World Environment Day, seed balls of native trees were distributed to support the theme of “Land Restoration, Desertification, and Drought Resilience” by empowering employees to actively contribute to local reforestation efforts.

Bloom is committed to continuously checking in with our employees through surveys and events to encourage open dialogue, understand employee concerns, and ensure that we maintain a positive and supportive environment.

Employee Health, Safety, and Training

In 2024, Bloom continued to see improvement in safety culture through programs like the Safety Observation Program. This is a program designed for employees to take accountability for safety by identifying concerns, implementing corrective action, and reporting the issue in Bloom's EHS portal. This allows the EHS team to track and report metrics that are leading indicators. Ultimately, safety issues identified early translate to a prevented incident. In addition, in 2024, we rolled out a formal process for incident investigations. This process is triggered when an OSHA recordable incident occurs. It is also implemented for other minor incidents that require further investigation or potentially may require a new engineering control design.

Robust effort and action translated to a significant improvement in Bloom's safety performance in 2024.

Year-Over-Year, Bloom saw a significant TRIR improvement, and we recorded our best safety performance since 2020 despite considerable growth.

THE BLOOM SAFETY FRAMEWORK

Safety Observation Program	While the Safety Observation Program rolled out in 2023, the full effect of its benefit was realized in 2024. The program saw huge success, particularly at our Delaware manufacturing facility. There were over 1,200 Safety Observations submitted by Delaware staff in 2024. Most of those were submitted by staff working in our highest risk areas. In those high-risk areas, the number of OSHA recordable incidents decreased by 80% from the beginning of the year to the end. This caused the TRIR, specific to that area to decrease by 53% YOY at the end of 2024. Staff was able to make this happen by embracing a safety culture and identifying issues before they became incidents.
Incident Investigations	A formal procedure was developed for implementing Incident Investigations. The procedure requires a cross-functional team to perform a deep-dive investigation on the incident. The process includes the following: a description of the incident, a Risk Assessment review (i.e., standard operating procedure and Job Safety Analysis review), then root cause determination through the 5-Why's process, and finally, requires participants to discuss both short and long-term corrective action. Often, the best corrective action includes perspectives from various groups; whether it be Operations, Engineering, or EHS, all points of view are valuable to the process.
Safety Management System	A major milestone for Bloom in 2024, was the development of the Safety Management System (SMS). The ISO-informed SMS, similar to Bloom's EMS, is based on the ISO-45001 international standard. A full review of heath and safety compliance obligations were evaluated based on Bloom's aspects (activities, services, and products). In addition, a gap assessment was completed to determine the tasks that were necessary for Bloom's existing Safety Programs to meet the standards outlined in ISO-45001. An implementation plan to address these gaps and implement the system was then developed. Development of an integrated EMS and SMS manual was ongoing throughout much of the second half of the year. This manual was finalized at the end of 2024 and effectively became the EHSMS Management System Manual. In addition to integrating the manual, another achievement was the Hazard Identification (ID) and Risk Assessment process. Completion of the Hazard ID and Risk Assessment sets the Implementation Team up to set 2025 Objectives and Targets based on the highest risks identified, gaps identified through the gap assessment, or company priority. Part of the SMS development process was the signing and publishing of a company Safety Policy. The Safety Policy was signed by Bloom's CEO and states the importance of safety at Bloom. The Safety Policy identifies how we will operate consistent with Bloom's mission and strive for continuous improvement in Safety performance. Finally, 2024 ended with completion of the Safety Audit Checklist, which will be implemented in 2025. This is a robust safety checklist that aims to identify any potential safety-related issue that could arise within the manufacturing or customer installation setting. In addition, a Safety Training Matrix was finalized to ensure all compliance programs and relevant job-specific trainings are completed.

Connecting to Communities

Resilient Together

As we reflect on the past year, we are proud to celebrate the strength and resilience of our community partnerships. At Bloom Energy we believe that true progress is achieved through collaboration and mutual support. Our theme for 2024, Resilient Together: Celebrating Community Partnerships and Collaborative Success embodies our commitment to fostering enduring relationships that empower communities to thrive, even in the face of challenges.

Over the past decade, we have witnessed the transformative power of working together. From advancing sustainable energy solutions to enhancing STEM education and workforce development, our collaborative efforts have made significant impact. As we look to the future, we remain dedicated to building resilient partnerships that drive innovation and help create opportunities for all.

Together we will continue to grow, adapt, and succeed, ensuring a brighter and more sustainable future for the communities we serve.

Stars and Strides

Our founding support for the 2024 Stars and Strides community events in Delaware and California achieved significant new milestones. In San Jose, the event raised $250,000 for the Valley Medical Foundation, supporting health initiatives in Santa Clara County. Bloom and its CEO KR Sridhar were honored for their leadership and contribution to community resilience. Now in its fourth year, the event has raised a total of $1,200,000.

In Delaware, Bloom honors veterans and military families through Stars and Strides Delaware - with a focus on uniting a diverse coalition of businesses and organizations. The event raises awareness and meets the needs of veterans, demonstrating our gratitude and support. Since its inception in 2022, Stars and Strides Delaware has raised over $80,000. The 2024 event included more than 400 participants and raised $45,000 benefiting organizations like the Delaware National Guard Youth Foundation, Stop Soldier Suicide, Food Bank of Delaware, Aetna Hose, Hook and Ladder Volunteer Fire and Company—charities devoted to military and veterans' issues in Delaware.

Partnerships in Delaware

Since 2020, Bloom has been deeply involved with The Newark Partnership (TNP), demonstrating our commitment to the community through investment and leadership. Our sponsorship prioritizes workforce development and sustainable community initiatives. In 2024, Bloom helped raise over $153,000 to sustain community development improving Newark's culture, economy, and environment. TNP has used Bloom's sponsorship to support multiple veteran banner projects.

In 2024, Bloom's continued investment in the Delaware Foundation for Science and Math Education (DFSME) helped enhance its ability to serve educators and foster business collaboration with respect to science, technology, engineering, and math (STEM) education. The STEM in Action Day, held at the Delaware Manufacturing Center, provided an opportunity for employees to showcase our history, technology, and career opportunities to regional educators.

These partnerships help to illustrate our commitment to fostering resilient and collaborative community relationships.

Management

We continue the evolution of our Board oversight and management processes to more fully and formally incorporate ESG data and analysis into our strategy development, risk management, and operations. Our sustainability governance structure involves numerous participants engaging in information sharing and ESG decision-making, capitalizing on the depth and breadth of expertise throughout the company.

ESG Management and Oversight

Board of Directors

- Approves company strategy, including ESG components
- Provides strategic guidance on ESG matters relevant to the company's business

Nominating, Governance, and Public Policy Committee

- Oversees and makes recommendations to the Board on governance and sustainability matters
- Oversees all ESG matters
- Provides guidance on significant social and political trends, legislative proposals and regulatory developments, and energy and environmental policy

Audit Committee

- Oversees the policies and processes established by management to assess, monitor, manage, and control the company's material risks

Compensation and Organizational Development Committee

- Oversees all issues pertaining to human capital management, organizational development goals, and programs including leadership development, talent assessments, and diversity and inclusion initiatives and objectives
- Responsible for executive compensation and any pay metrics tied to ESG performance

CEO

- Information on ESG programs, goals, and metrics, and the identification, assessment, monitoring, and management of ESG risks
- Information on processes for ESG risk identification, assessment, monitoring, and management
- Approves ESG goals and positioning
- Pushes mandates internally
- Information on status of compliance programs
- Reporting on culture, working environment, talent composition, social, or other issues impacting the workforce

ESG Committee

- Chief Financial Officer
- Chief Commercial Officer
- Chief Technology Officer
- Chief People Officer
- Chief Legal Officer
- Chief Operating Officer
- Head of Government Affairs and Policy
- Head of Development Engineering
- Head of Service and Systems Operations
- Head of Quality and Reliability

Responsible for setting ESG priorities and objectives

Senior Director, Sustainability

- Owns voluntary execution
- Leads public disclosure activities

Vice President, Risk, Compliance, and Ethics

- Owns enterprise risk management
- Leads development of our Enterprise Risk Management System

Vice President, Environment and Regulatory Law

- Owns compliance execution
- Leads development and implementation of internal management systems

Cross-Functional ESG Working Group

- Department leaders deputized by ESG Committee to execute programs
- Responsible to inform and produce relevant positioning, programs, policies, procedures, goals, or reporting as directed

Board Oversight of ESG

The Board, both as a whole and through its committees, oversees our strategy, ESG efforts, and risk management processes. All Board committees have active oversight of one or more key ESG components.

The Nominating, Governance & Public Policy Committee (the "Nominating Committee") has oversight of ESG matters in general in recognition of their relevance to our business. The Audit Committee, with its oversight of risk management processes and financial matters, and the Compensation and Organizational Development Committee (the "Compensation Committee"), which oversees human capital matters, and shares relevant information and analysis with the Nominating Committee. The full Board takes the work of these committees into account in considering and providing guidance on our strategy and objectives for the short, medium, and long-term, including on climate and other sustainability-related strategy and objectives. Management regularly provides the Nominating Committee with background on emerging trends, evolving external reporting frameworks, and the importance of ESG to the business.

The ESG Committee, which consists of cross-functional leaders from across the company, is responsible for setting ESG priorities and objectives, approving strategic initiatives, and assigning responsibility for the management of emerging issues to leaders across the organization. The Committee meets regularly and is responsible for sharing updates with the CEO and the Board.

Environmental Management System

Bloom Energy continued to implement its ISO-informed Environmental Management System (EMS) in 2024. We developed new Objectives and Action Plans, and completed EMS audits and compliance evaluations at our manufacturing location in Delaware and at two large customer installations.

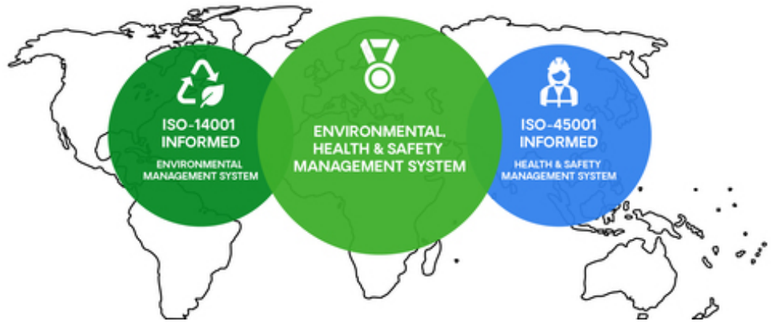
One Objective focused on developing a process for international environmental regulatory review and subject matter expertise in key locations abroad. This process engaged vendors and consultants in locations where new installations were being constructed or going to be constructed. Regional and local environmental regulations specific to waste disposal were reviewed. The process put our Services team in a position of being proactive rather than reactive when it comes to waste management.

The second Objective focused on waste reduction in manufacturing. A cross-functional team, lead by EHS was able to perform a deep dive investigation on waste generated at Bloom's Fremont, CA, Manufacturing facility. The team specifically reviewed waste classified as hazardous. In 2025, the project will continue by identifying specific source reduction opportunities. With some creative thinking, we believe source and cost reduction are possible.

In addition to the work on the EMS, the Implementation team also started developing an ISO-informed Safety Management System (SMS) in 2024. Based on the ISO-45001 standard, the SMS and EMS are now integrated. As part of this 2024 effort, Bloom adopted a formal Safety Policy and finalized a combined EHSMS Manual covering all ISO-14001 and ISO-45001 requirements.

Awareness training was provided to all new hires and to further awareness levels for employees, key members of the Implementation Team presented EMS/SMS information and other EHS related topics at a BE Inspired event broadcast across the company in August. We believe ongoing communication helps to drive a culture of Environmental, Health & Safety compliance and continuous improvement. 51 new hires and other employees took EMS Awareness training in 2024, not including the large number of manufacturing staff who also reviewed the ToolBox Talk EMS Program and Environmental Policy overview.

Environmental Management System Process



Responsible Sourcing and Supply Chain Management

Our supply chain is structured so that we work with high-quality suppliers that support various industries, including automotive, semiconductor, and other traditional manufacturing organizations. Manufacturing a fuel cell system requires varied supplier relationships to source rare earth elements, precious metals, scarce alloys, and industrial commodities. In addition, we have a supplier diversification strategy that supports business continuity and are working to optimize logistics routes between sourcing partners and manufacturing locations.

We have also established an internal cross-functional Sourcing Council dedicated to developing supplier responsibility standards and institutionalizing supplier screening. In order to manage risks inherent in a global supply chain practice, we require suppliers to adhere to the standards set out in our Global Business Partner Standards Policy, which includes specific guidance on supplier-related anti-corruption practices, human rights, labor laws, environmental measures, and more.

Business partners are required to comply with the Global Business Partner Standards and all applicable laws in the countries in which they operate. In addition, we perform risk-based due diligence on new business partners and ongoing monitoring of a subset of existing business partners.

In addition, Bloom Energy:

- Regularly screens all business partners against the Office of Foreign Assets Control (OFAC) watch lists and;
- Requires certain business partners to provide information annually in conjunction with our conflict minerals and human rights compliance programs

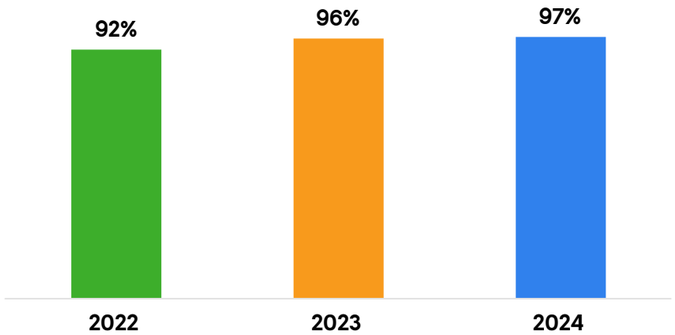
Bloom Energy reviews the results of screening and responses provided by business partners and takes corrective action when necessary. Corrective action may include additional monitoring, training, or termination of the relationship.

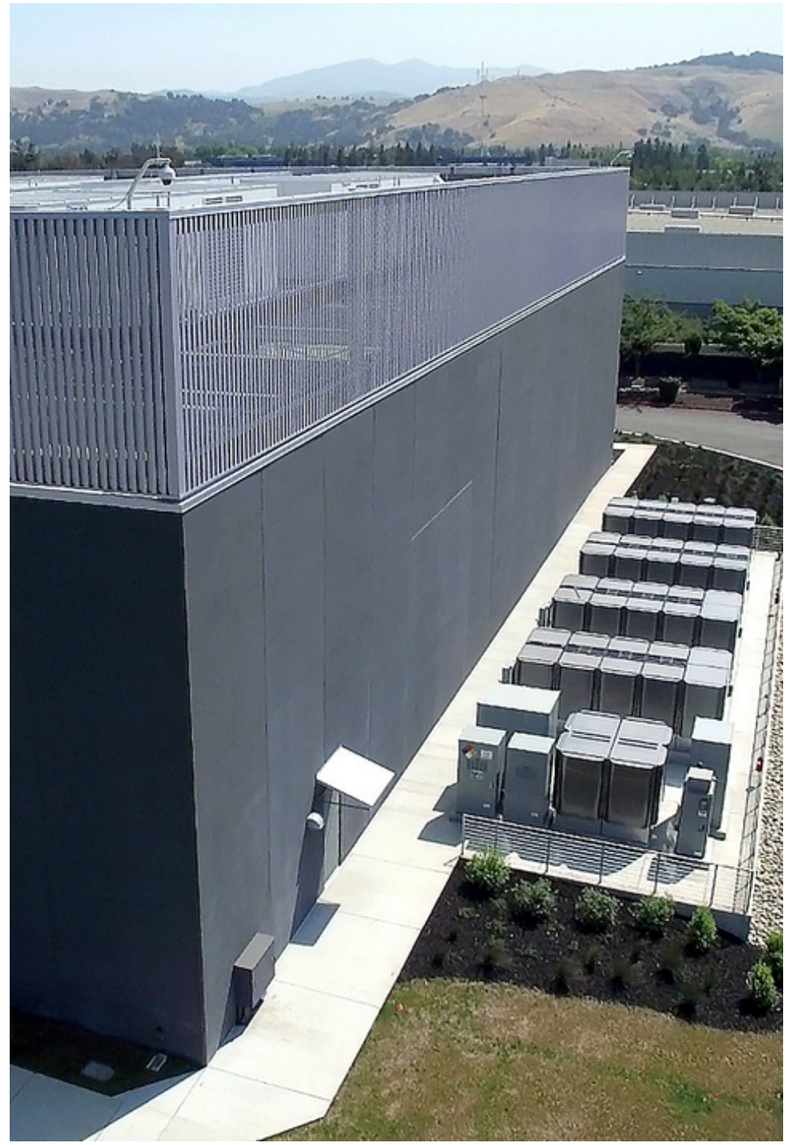
Conflict Minerals Monitoring

Due to the nature of the raw materials we use in production, we are particularly focused on preventing irresponsible smelting or refining activity of 3TG materials (tantalum, tin, tungsten, and gold) in our supply chain.

In 2024, we filed our fifth conflict minerals supplier report (Form SD) with the SEC covering reporting in the year 2023. The conflict mineral supplier response survey rate was 97%. We evaluate our suppliers' responses and escalate action with respect to any suppliers found with high risks.

Conflict Mineral Supplier Response Survey Rate





Business Ethics and Compliance

At Bloom Energy, we aim to foster a culture of ethical decision-making. Acting ethically helps us build loyalty, trust, and respect with our employees, business partners, customers, and the communities we serve. Each country where we operate has its own laws, regulations, and customs, and we are committed to complying with the law in every location where we live and work.

Global Code of Business Conduct and Ethics

The Code of Conduct applies to the company, its subsidiaries, employees, corporate officers, directors, and contractors working with the company. The Code of Conduct is available in four languages and addresses a range of ethics and compliance issues Bloom encounters globally. It summarizes key compliance policies and helps put Bloom's ethical principles into practice. The Audit Committee, on behalf of the board, oversees adherence to the Code of Conduct. This includes evaluating actual and potential conflicts of interest, ensuring compliance with anti-bribery and corruption requirements and best practices, reviewing and approving related party transactions, and establishing procedures for handling complaints regarding accounting or auditing matters.

Leadership

Leaders at Bloom Energy have important responsibilities. Their daily actions play a crucial role in promoting an ethical culture where employees adhere to the principles set forth in our Code of Conduct. They must consistently communicate the significance of ethical business practices, foster an open-door environment that encourages honest communication, and promptly report any concerns brought to them by their team members.

Whistleblower Protection

We offer an external channel for employees, contractors, and business partners to ask questions and report concerns or potential violations of the law, our Code of Conduct, or our policies. Our Ethics Helpline, which is operated by an independent third party, allows reporters to remain anonymous where permitted by local law. We have continued our "Speak Up" campaign to raise awareness amongst employees and encourage reporting. We have a strict policy against retaliation towards anyone who, in good faith, discloses any actual or suspected violations of the law, our Code of Conduct or policies, or participates in an investigation. The Audit Committee receives a regular report from executive management summarizing the number and types of issues submitted to us through our Ethics Helpline and management's responses.

Employee Training

We are committed to properly educating our employees on ethical matters. Training may take the form of computer-based or live training, policy acknowledgement or certification, and email communications.

Together, our Human Resources, Information Security, and Compliance and Ethics teams work to provide our employees with appropriate training on compliance-related issues upon hire and periodically thereafter. All new employees are required to complete training on our Code of Conduct, information security, and workplace harassment within their first 30 days. Non-manufacturing employees are also required to complete training on insider trading, anti-corruption, conflicts of interest, accurate books and records, and security awareness within their first 60 days of hire.

In 2024, our employees completed annual information security training and refresher training on our Code of Conduct, which focused on reporting and retaliation, confidentiality, conflicts of interest, gifts and entertainment, and workplace violence. The training also included a certification. Our non-manufacturing employees also participated in anti-bribery and corruption training.

Regulatory Compliance

We are committed to adhering to our Code of Conduct and complying with all applicable laws in the areas where we operate. We compete based on the quality of our products and have a strict policy against all forms of bribery and corruption, whether in government or commercial contexts.

Business Partners

We select business partners who align with our mission and intend to collaborate only with those who agree that our mutual success is grounded in ethical and lawful actions. Following the law is not enough. Our business partners are asked to adhere to our Global Business Partner Standards, which include:

- Conducting business with high ethical standards;
- Complying with applicable law;
- Supporting the human rights of workers and treating employees with dignity;
- Maintaining safe and healthy working conditions for workers; and
- Reducing the environmental impact of business and incorporating sustainable practices into operations.

We continue to assess and improve our compliance and ethics program.

Compliance Governance

The Audit Committee, supported by the Chief Legal Officer and Corporate Secretary, oversees our global ethics and compliance program.

Internal Audit

Internal Audit develops an annual audit plan, which focuses on the strategic, operations, compliance, and financial risks of the organization. The audit plan is approved by the Audit Committee. We perform internal audit reviews on a risk basis to review compliance with business and regulatory requirements, such as Sarbanes-Oxley. The results of each audit are reported to senior management and the Audit Committee.

Resources and Policy Library

Environment

- Environmental Policy
- Environmental Management System Manual
- Green Bond Framework
- Hazardous Materials Communication Program
- Hazardous Materials Business Plan (HMBP) for customer installations

Social

- California Supply Chain Disclosure Statement
- Conflict Minerals Report
- Responsible Sourcing Policy
- Social Compliance Program
- Safety Policy

Governance

- Audit Committee Charter
- Compensation and Organizational Development Committee Charter
- Corporate Governance Guidelines
- Global Code of Business Conduct and Ethics
- Global Business Partner Standards
- Nominating, Governance and Public Policy Charter

Appendices

Green Notes Management Framework

	GBP ELIGIBLE PROJECT CATEGORY	ELIGIBILITY CRITERIA AND EXAMPLE PROJECTS	ENVIRONMENTAL BENEFIT	SDG ALIGNMENT
Use of Proceeds **EXCLUDED FROM PROCEEDS** **Natural Gas** Specifically excluded from the Use of Proceeds are research and development (R&D), manufacturing, and fuel cell stack replacement activities related to Energy Servers operating entirely on natural gas, to the extent not otherwise provided for across the framework and CCUS projects that utilize captured CO_2 for enhanced oil recovery.	**RENEWABLE ENERGY**	Expenditures related to the manufacturing, construction, development, acquisition, maintenance, and operation of Bloom's renewable and low/zero-carbon projects including biogas, hydrogen, carbon capture utilization and storage (CCUS), marine and combined heat and power applications.	Energy Servers running on renewable biogas or hydrogen emit no greenhouse gases with continued air quality, water, resilience, and land use benefits. CCUS an BECCS projects may be carbon neutral or even negative with biogas feedstock. Marine and CHP projects provide important industrial decarbonization even running on conventional fuel. Electrolyzing hydrogen from water using excess renewable generation creates a valuable form of renewable energy storage, which further enables wind and solar capacity and integration. Green hydrogen can also be used as renewable fuel in transport applications, displacing fossil alternatives, and can help reduce emissions in other hard-to-decarbonize sectors like buildings.	
	ENERGY EFFICIENCY	Expenditures related to energy efficiency projects based on our best effort to ensure at least a 30% efficiency improvement, including expenditures related to the replacement of fuel cell stacks for Energy Servers running on biogas, hydrogen or blends of conventional fuel and those transitioning into full hydrogen compatibility.	Stack replacement improves efficiency for existing customers as fuel cells degrade over time, and lets them upgrade to full hydrogen compatibility.	
	CLIMATE CHANGE ADAPTATION	Expenditures related to manufacturing, construction, research, development, maintenance, and operation of microgrid specific componentry.	Enables energy independence for critical community and business infrastructure threatened by climate-related grid instability. Bloom microgrids can also replace diesel backup generation, reducing GHG and air pollution.	
	SUSTAINABLE WATER AND WASTEWATER MANAGEMENT	Expenditures related to water efficiency projects and wastewater management including efficiency in water management of electrolyzer and fuel cell systems.	Bloom's electrolyzer technology enables efficient water use during the process of electrolysis.	
	POLLUTION PREVENTION AND CONTROL	Expenditures related to reduction of air emissions, greenhouse gas control, soil remediation, waste prevention reduction, and recycling, and energy/emission-efficient waste to energy projects such as product end-of-life recycling.	Enables reuse and recycling of 99% of Energy Server components.	
	GREEN BUILDINGS	Expenditures related to new construction, upgrades, and buildout of properties that have received or are expected to receive LEED Gold or Platinum, BREEAM Excellent or above and Energy Star certifications with ratings of 85 or above.	Rereduces impact from corporate building and manufacturing footprint.	
	CLEAN AND MASS TRANSPORTATION	Expenditures related to electric vehicle (EV) or hydrogen charging infrastructure, including the manufacture and development of Energy Servers with EV charging capability and EV charging componentry.	Energy Servers natively produce DC power and can be configured to serve as resilient and low-carbon charging infrastructure for fleets and vehicles. Electrolyzers can generate renewable hydrogen fuel for use in zero-carbon land, ship, and air-based transportation applications.	
Evaluation	We have multiple budgeting and project evaluation processes established which we have extended to support our green notes approval process. We have a capital review committee that reviews large expenditures as well as quarterly, annual, and multi-year budgeting cycles that serve as an approval platform for access to proceeds generated by our Green Notes. Final approval will be made jointly by our Treasurer and our Chief Financial Officer.			
Fund Tracking	We have established an internal tracking system to monitor and account for the proceeds. Pending allocation of an amount equal to the net proceeds to eligible projects, proceeds will be invested in cash, cash equivalents, or liquid securities in accordance with our investment policy. As proceeds are allocated to the Green Notes, the amount of proceeds invested in cash or liquid securities will be reduced accordingly. In the case of divestment or if a project no longer meets the eligibility criteria, the funds will be reallocated to other eligible projects. Payment of principal and interest will be made from our general account and not be linked to the performance of the eligible projects.			
Reporting	Annually, until all the proceeds have been allocated, we will publish a Green Notes Report within this Sustainability Report that will include (i) the amount of net proceeds allocated to each Eligible Project Category, (ii) expected impact metrics that may include carbon dioxide equivalent (CO_2e) emissions avoided, criteria pollutant emissions avoided, and water savings, where feasible, (iii) a selection of brief project descriptions, and (iv) the outstanding amount of net proceeds yet to be allocated to projects at the end of the reporting period.			

Green Bond Annual Review

SUSTAINALYTICS

Bloom Energy Corporation

Type of Engagement: Annual Review
Date: 13 March 2025
Engagement Team:
Anjansingh Bist, anjansingh.bist@morningstar.com
Kajal Chaubey, kajal.chaubey@morningstar.com

Introduction

The Bloom Energy Corporation ("Bloom Energy") issued two green notes – the 2020 Green Notes and the 2023 Green Notes between August 2020 and June 2023 (collectively, the "Green Notes")[1] and raised USD 862.5 million to finance or refinance projects expected to reduce the carbon footprint of Bloom Energy's operations and contribute in its transition to a low carbon economy. In February 2025, Bloom Energy engaged Sustainalytics to review the projects financed with proceeds from the Green Notes (the "Nominated Expenditures") and provide an assessment as to whether they meet the use of proceeds criteria and whether Bloom Energy complied with the reporting commitments in the Bloom Energy Green Financing Framework (the "Framework").[2] Sustainalytics provided a Second-Party Opinion on the 2023 Framework in June 2023.[3] This is Sustainalytics' fifth annual review for the 2020 Green Notes, following previous reviews in March 2021,[4] March 2022,[5] February 2023,[6] and March 2024,[7] and the second annual review for the 2023 Green Notes of allocation and reporting issued under the Framework.

Evaluation Criteria

Sustainalytics evaluated the Nominated Expenditures and Bloom Energy's reporting based on whether they:

1. Meet the use of proceeds and eligibility criteria defined in the Framework; and
2. Reported on at least one key performance indicator (KPI) for each use of proceeds category defined in the Framework.

[1] Bloom Energy issued two green notes, raising USD 230 million in August 2020 with a maturity period of five years and USD 632.5 million in June 2023 with a maturity period of five years.
[2] Bloom Energy, "Green Financing Framework", (2023), at: https://www.bloomenergy.com/wp-content/uploads/Green_Financing_Framework.pdf
[3] Sustainalytics, "Second-Party Opinion, Bloom Energy Green Financing Framework", (2023), at: https://mstar-sustops-cdn-mainewebsite-s3.s3.amazonaws.com/docs/default-source/spos/bloom-energy-green-financing-framework-second-party-opinion-2023.pdf?sfvrsn=54921810_1
[4] Sustainalytics, "Annual Review", (2021), at: https://www.bloomenergy.com/wp-content/uploads/2020-bloom-energy-sustainability-report.pdf
[5] Sustainalytics, "Annual Review", (2022), at: https://www.bloomenergy.com/wp-content/uploads/2021-bloom-energy-sustainability-report.pdf
[6] Sustainalytics, "Annual Review", (2023), at: https://www.bloomenergy.com/wp-content/uploads/2022-bloom-energy-sustainability-report.pdf
[7] Sustainalytics, "Annual Review", (2024), at: https://www.bloomenergy.com/wp-content/uploads/2023-bloom-energy-sustainability-report.pdf

Table 1: Use of Proceeds Categories, Eligibility Criteria and Associated KPIs in the 2023 Framework

Use of Proceeds Category	Eligibility Criteria
Renewable Energy	Expenditures related to the manufacturing, construction, development, acquisition, maintenance and operation of renewable energy including: Research and development for biogas, hydrogen, and bioenergy to carbon capture ("BECCS") applications: • Manufacturing and operation of biogas cleanup technology • Manufacturing and operation of electrolyzers • Manufacturing and operation of BECCS applications[8] • Manufacturing and operation of Energy Servers intended to be run with on-site or directed biogas[9], or hydrogen[10], or blends of renewable and conventional fuel[11] • Hydrogen project development[5] • Biogas project development from qualifying waste sources[4] Expenditures related to the manufacturing, construction, development, acquisition, maintenance, and operation of low and zero carbon energy including: • Research and development for carbon capture, utilization and storage ("CCUS"), marine, and natural gas-based combined heat and power applications • Manufacturing and operation of Energy Servers and associated equipment intended to support (CCUS) projects • Manufacturing and operation of Energy Servers for use in a marine environment • Manufacturing and operation of Energy Servers with natural gas based combined heat and power capability
Energy Efficiency	• Expenditures related to energy-efficiency projects based on our best efforts to ensure at least 30% of energy efficiency improvement, including equipment, systems, and operational improvements and maintenance, with projects to potentially include the fuel cell stack replacement programme for Energy Servers running on biogas[4] or hydrogen[5] and those transitioning into full hydrogen compatibility
Climate Change Adaptation	• Expenditures related to manufacturing, construction, research, development, maintenance and operation of microgrid-specific componentry
Sustainable Water and Wastewater Management	• Expenditures related to water efficiency projects and wastewater management, including efficiency in water management of our electrolyzer and Energy Server systems.
Pollution Prevention and Control	• Expenditures related to reduction of air emissions, greenhouse gas control, soil remediation, waste prevention, waste reduction, and waste recycling and energy, or in emission-efficient waste to energy, such as product end-of-life recycling activity
Green Buildings	• Expenditures related to new construction, upgrades and build out of properties that have received or are expected to receive certified: – LEED: Gold or Platinum – BREEAM: Excellent or Above

[8] Commercial scale BECCS projects shall have: i) <100g CO_2e/kWh of emissions; ii) waste or bioenergy feedstock certified by a third party; and iii) permanent carbon storage.
[9] Manufacturing and operation of Energy Servers to be run with directed biogas: i) 80% GHG emission reduction compared to fossil fuel baseline on a life cycle basis; and ii) biofuel must be sourced from a sustainable feedstock (e.g. source eligibility criteria issued by the California Air Resources Board for its programmes as a reference standard).
[10] To be eligible, one of the following thresholds must be met: i) direct CO_2 emissions from manufacturing of hydrogen: 0.95 tCO_2e/t hydrogen or less; or ii) electricity use for hydrogen produced by electrolysis is at or lower than 50 MWh/t hydrogen; or iii) the average carbon intensity of the electricity produced that is used for hydrogen manufacturing is at or below 100 gCO_2e/kWh.
[11] Blended fuel to meet life cycle intensity thresholds of 240g CO_2e/kwh or less.

	– Energy Star rating of 85 or above
Clean and Mass Transportation	• Expenditures related to electric vehicle (EV) or hydrogen charging infrastructure including: – Manufacture of Energy Servers with EV charging capability – Manufacture of EV charging componentry

Table 2: Use of Proceeds Categories, Eligibility Criteria and Associated KPIs in the 2023 Framework

Use of Proceeds	Key Performance Indicators
Renewable Energy	• Biogas, hydrogen and bioenergy to carbon capture ("BECCS") capacity • CO_2 or other GHG emissions avoided/reduced from biogas, hydrogen and BECCS applications
Energy Efficiency	• Energy savings (MWh) • CO_2 or other GHG emissions avoided or reduced • Weighted average system lifetime efficiency
Climate Change Adaptation	• CO_2 or other GHG emissions avoided or reduced
Sustainable Water and Wastewater Management	• Volume of water consumption avoided or reduced • Volume of treated or recycled water
Pollution Prevention and Control	• CO_2 or other GHG emissions avoided or reduced • Waste prevented, minimized or recycled
Green Buildings	• Total number of buildings certified • Total square feet certified • Percentage of overall company square feet certified
Clean and Mass Transportation	• Commuter carbon Emissions (including metric tons of CO_2e) avoided or reduced • Number of Energy Servers with EV charging capability • Number of EV charging componentry

Issuer's Responsibility

Bloom Energy is responsible for providing accurate information and documentation relating to the details of the projects, including descriptions, amounts allocated and impact.

Independence and Quality Control

Sustainalytics, a leading provider of ESG research and ratings, conducted the verification of the use of proceeds from Bloom Energy's Green Notes. The work undertaken as part of this engagement included collection of documentation from Bloom Energy and review of said documentation to assess conformance with the Framework.

Sustainalytics relied on the information and the facts presented by Bloom Energy. Sustainalytics is not responsible nor shall it be held liable for any inaccuracies in the opinions, findings or conclusions herein due to incorrect or incomplete data provided by Bloom Energy.

Sustainalytics made all efforts to ensure the highest quality and rigor during its assessment process and enlisted its Sustainability Bonds Review Committee to provide oversight of the review.

Conclusion

Based on the limited assurance procedures conducted,[12] nothing has come to Sustainalytics' attention that causes us to believe that, in all material respects, the Nominated Expenditures do not conform with the use of proceeds criteria and reporting commitments in the Framework. Bloom Energy has disclosed to Sustainalytics that the proceeds from the 2020 Green Notes were fully allocated as of 31 December 2023 and 15% of the proceeds from the 2023 Green Notes were allocated as of 31 December 2024.

Detailed Findings

Table 3: Detailed Findings

Framework Requirements	Procedure Performed	Factual Findings	Error or Exceptions Identified
Use of Proceeds Criteria	Verification of projects to determine alignment with the use of proceeds criteria outlined in the Framework.	The Nominated Expenditures comply with the use of proceeds criteria.	None
Reporting Criteria	Verification of projects or assets to determine if impact was reported in line with the KPIs outlined in the Framework.	Bloom Energy reported on at least one KPI per use of proceeds category.	None

[12] 'Sustainalytics' limited assurance process includes reviewing documentation relating to details of projects, as provided by the issuing entity, which is responsible for providing accurate information. These may include descriptions of projects, estimated and realized costs, and reported impact. Sustainalytics has not conducted on-site visits to projects.

Appendices

Appendix 1: Allocation Reporting

Table 4: Allocation Reporting for the Eligible Projects

Use of Proceeds Category	Projects Financed[13]	Allocated Amount (USD million)		Cumulative Allocated Amount (USD million)
		2022 Green Bond	2023 Green Bond	
Renewable Energy[14]	Biogas Applications	17.88	5.53	23.41
	Hydrogen Energy Servers	8.70	1.43	10.14
	Electrolyzes	55.52	17.19	72.71
	CHP Applications	0.00	31.52	31.52
	Carbon Capture Applications	0.00	2.08	2.08
	Marine Applications	0.00	2.52	2.52
Climate Change Adaptation	Microgrid Componentry[15]	24.26	6.34	30.60
	Microgrid R&D	14.99	4.19	19.18
Pollution Prevention and Control	End of Life Recycling Activity	85.71	27.10	112.82
Green Buildings	Bloom Energy's headquarters – LEED Gold certified	22.94	0.00	22.94
Total Amount Allocated		**230.00**	**97.90**	**327.92**
Total Proceeds Unallocated		**0.00**	**534.60**	**534.60**
Total Net Proceeds Raised		**230.00**	**632.50**	**862.50**

[13] Bloom Energy has confirmed to Sustainalytics that all the projects financed met the eligibility criteria as stipulated in the 2023 Framework.
[14] Bloom Energy has informed Sustainalytics that the amount allocated to the Hydrogen Energy Servers, Electrolyzer projects and CHP Applications are for R&D purposes.
[15] Bloom Energy has disclosed to Sustainalytics that microgrids componentry includes batteries.

Appendix 2: Reported Impact

Table 5: Reported Impact for Eligible Projects

Use of Proceeds Category	Environmental Impact Reported
Renewable Energy[16]	In 2024, Bloom's waste-to-energy fuel cell installations reduced a total of 27 tonnes of CO_2e.
	In 2024, Bloom's CHP Applications reduced a total of 1,973 metric tonnes of CO_2.
Climate Change Adaptation	In 2024, Bloom's microgrids have facilitated 505 ride-through events for customers, carrying a total of 34,483 MWh of energy demand over 452 hours of grid outages.[17] From 11 August 2018 (Bloom's lookback date for the original issuance) to 31 December 2023, Bloom's microgrids facilitated 3,592 ride-through events for customers, carrying a total of 2,830,032 MWh of energy demand over 5,452 hours of grid outages.
Pollution Prevention and Control	Over 99% of products by weight that are sold are either recyclable or reusable. Weight of end-of-life material recovered and avoided landfill by year: i. 1,135 tonnes in 2019 ii. 1,420 tonnes in 2020 iii. 1,738 tonnes in 2021 iv. 3,028 tonnes in 2022 v. 3,559 tonnes in 2023 vi. 3,795 tonnes in 2024
Green Buildings	Water: i. The building is reducing its indoor potable water use by at least 40% compared to baseline building. ii. Irrigation and outdoor water uses are reducing potable water use by at least 50% compared to similar landscaped area. Energy: i. Core and Shell building is reducing its energy consumption by 28% compared to similar baseline building. Materials: i. The project was able to divert at least 75% of its construction and demolition waste from the landfill during the construction phase. ii. At least 20% of the building's material (by cost) were sourced from recycled content. iii. At least 20% of the building materials (by cost) were harvested and manufactured within 500 miles of the project site. Indoor Environmental Quality: i. 90% or more of the floor areas have direct line of sight to the outdoors. ii. 75% or more of the floor plan have at least 25 foot-candles of daylight during typical occupancy hours.

[16] Bloom Energy has informed Sustainalytics that the impact figures for Renewable Energy expenditures are currently available only for waste-to-energy cell and CHP applications (re)financed by the 2023 Green Notes. Impact figures for other applications are not available at this stage.
[17] Bloom Energy's microgrid systems facilitate customers' energy needs during grid outages. Events where a Bloom microgrid supplies power to a customer during a grid outage is called a "ride-through event".

Disclaimer

About Morningstar Sustainalytics

Morningstar Sustainalytics is a leading ESG research, ratings and data firm that supports investors around the world with the development and implementation of responsible investment strategies. For more than 30 years, the firm has been at the forefront of developing high-quality, innovative solutions to meet the evolving needs of global investors. Today, Sustainalytics works with hundreds of the world's leading asset managers and pension funds, which incorporate ESG and corporate governance information and assessments into their investment processes. Sustainalytics also works with hundreds of companies and their financial intermediaries to help them consider sustainability in policies, practices and capital projects. For more information, visit www.sustainalytics.com.

GRI Index

Statement of use	Bloom Energy Corporation has reported the information cited in this GRI content index for the period January 1 - December 31, 2024 with reference to the GRI Standards.
GRI 1 used	**GRI: Foundation 2021**

DISCLOSURE	LOCATION
Statement of use	Bloom Energy Corporation has reported the information cited in this GRI content index for the period January 1 - December 31, 2024 with reference to the GRI Standards.
GRI 1 used	GRI: Foundation 2021
GRI 2: General Disclosures 2021	
2-1 Organizational details	**Name of the organization:** Bloom Energy Corporation (**NYSE: BE**) **Ownership and legal form:** A Delaware Corporation **Location of headquarters:** 4353 North First Street, San Jose, CA 95134 **Location of operations:** About Us — Bloom Energy Corporate Visual, pages 7-13 2024 Form 10-K: Item 1. Business—Corporate Facilities, page 17; Item 2. Properties, page 45; Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—International Channel Partners, pages 61-62
2-2 Entities included in the organization's sustainability reporting	About Us—Bloom Energy Corporate Visual, pages 7-13
2-3 Reporting period, frequency and contact point	**Reporting period:** 12 month period ending December 31, 2024 **Reporting cycle:** Annual basis **Publication date:** April 1, 2025 **Contact point for questions regarding the report:** sustainability@bloomenergy.com
2-4 Restatements of information	Not applicable—no restatements from prior reporting period.
2-5 External assurance	Environment—Green Notes 2024 Progress Report, page 33; GHG Emissions, page 32

DISCLOSURE	LOCATION
2-6 Activities, value chain and other business relationships	Innovation, pages 24-30 About Us, pages 7-13 Management—Responsible Sourcing and Supply Chain Management, page 48 2024 Form 10-K: Item 1. Business—Overview, pages 5-6; Products and Services, pages 7-11; Supply Chain, pages 12-13; Manufacturing Facilities, page 12; Services, page 13; Purchase and Financing Options, page 13; Sales, Marketing and Partnerships, pages 13-14; Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Purchase and Financing Options, pages 57-61; International Channel Partners, pages 61-62 2025 Proxy Statement: Our Business and Strategy—Mission and Values, pages 8-12; 2024 Business Highlights, page 14
2-7 Employees	2024 Form 10-K: Item 1. Business—Human Capital Management, page 17
2-8 Workers who are not employees	In the U.S., as of 12/31/2024, we have 284 contractors, mostly in the manufacturing facilities.
2-9 Governance structure and composition	Management—ESG Management and Oversight, page 46 2025 Proxy Statement: Sustainability at Bloom, page 14; Governance Highlights—Our Board at a Glance, page 15-16; Board Composition, page 16; Corporate Governance—How We Build an Effective Board—Board Membership Criteria—Director Skills and Experience, pages 21-24; Board Diversity, page 25; Board Refreshment and Director Nominations, pages 26-28; No Tenure Limits or Retirement Age, page 28; Our Nominees and Board of Directors, pages 29-37; Our Board's Oversight Role and Responsibilities, pages 38-39; Enterprise Risk Management Program, page 39; Sustainability Management and Oversight, page 40; Cybersecurity Governance, page 40; Our Board and Governance Structure, pages 42-43; Board Leadership Structure, page 44; Board Chairman and Lead Independent Director, pages 45-46; Board Leadership Structure—Our Board Committees and Activities, pages 46-49; Board Effectiveness, pages 50-51; Board Effectiveness—Director Independence, pages 52-53 Corporate Governance Guidelines—14. Number and Composition of Board Committees, pages 6-7; 29. Sustainability and Political Contributions, page 11

DISCLOSURE	LOCATION
2-10 Nomination and selection of the highest governance body	2025 Proxy Statement: Corporate Governance—How We Build an Effective Board—Board Membership Criteria, pages 21-25; Our Board's Skills and Attributes, page 25; Annual Nomination Process, page 26; Stockholder Proposals and Nominations—Stockholder Nominations and Other Proposals, page 104; Corporate Governance Guidelines—2. Independence of the Board, page 2; 8. Selection of Directors, pages 3-4; 9. Board Membership Criteria, pages 4-5
2-11 Chair of the highest governance body	2025 Proxy Statement: Board Leadership Structure, pages 44-46 Corporate Governance Guidelines—7. Chairperson of the Board; Lead Independent Director, page 3
2-12 Role of the highest governance body in overseeing the management of impacts	Management—ESG Management and Oversight, page 46 2025 Proxy Statement: Our Board's Oversight Role and Responsibilities—Sustainability Management and Oversight, page 40; Corporate Governance—Board Leadership Structure—Our Board Committees and Activities, pages 46-49
2-13 Delegation of responsibility for managing impacts	Management—ESG Management and Oversight, page 46 2025 Proxy Statement: Corporate Governance—Board Leadership Structure—Our Board Committees and Activities, pages 46-49; Our Board's Oversight Role and Responsibilities—Enterprise Risk Management Program, page 39; Sustainability Management and Oversight, page 40
2-14 Role of the highest governance body in sustainability reporting	Management—ESG Management and Oversight, page 46; Board Oversight of ESG, page 46 2025 Proxy Statement: Our Board's Oversight Role and Responsibilities—Strategy Risk Oversight—Enterprise Risk Management Program—Sustainability Management and Oversight, page 40
2-15 Conflicts of interest	Corporate Governance Guidelines—11. Code of Conduct, Conflicts of Interest, Related Party Transactions, and Complaints, pages 5-6 2025 Proxy Statement: Our Board's Oversight Role and Responsibilities—Sustainability Management and Oversight, page 40; Corporate Governance—Related Party Transactions, pages 55-56
2-16 Communication of critical concerns	2025 Proxy Statement: Board Processes and Policies—Related Party Transactions, pages 55-56; Corporate Governance—Board Processes and Policies—Stockholder Communications with Our Board of Directors, page 54 Corporate Governance Guidelines—28. Stockholder Communications with the Board, pages 10-11

DISCLOSURE	LOCATION
2-17 Collective knowledge of the highest governance body	2025 Proxy Statement: Board Effectiveness Director Orientation and Director Education, and Board Evaluations, page 50; Corporate Governance—Board Processes and Policies—Director Orientation, page 50; Director Education, page 50 Corporate Governance Guidelines—22. Director Orientation and Continuing Education, pages 8-9
2-18 Evaluation of the performance of the highest governance body	2025 Proxy Statement: Corporate Governance—Board Effectiveness—Board and Committee Evaluations, pages 50-51 Corporate Governance Guidelines—23. Evaluation of Board Performance, page 9 Frequency of the evaluations: Annually
2-19 Remuneration policies	2025 Proxy Statement: Corporate Governance—Director Compensation, pages 57-58; Executive Compensation, pages 64-93; Executive Compensation—Potential Payments on Termination or Change in Control, pages 87-89
2-20 Process to determine remuneration	2025 Proxy Statement: Corporate Governance—Director Compensation, pages 57-58; Executive Summary—Stockholder Engagement and Consideration of 2024 Say-on-Pay Vote, page 65; Executive Compensation—Compensation Philosophy and Objectives, page 66; Role of the Consultants, page 70; Compensation Decision—Making Process—Role of the Compensation Committee, page 71; Corporate Governance Guidelines—18. Director Compensation, page 8; 24. Chief Executive Officer and Executive Officer Performance Review, page 9
2-21 Annual total compensation ratio	2025 Proxy Statement: Executive Compensation—Pay Ratio Disclosure, page 89
2-22 Statement on sustainable development strategy	Message from Leadership, pages 2-3 2025 Proxy Statement: Sustainability at Bloom, page 14
2-23 Policy commitments	Management—Responsible Sourcing and Supply Chain Management, page 48; Business Ethics and Compliance, page 49 2025 Proxy Statement: Corporate Governance—Board Processes and Policies—Business Conduct and Ethics, page 54 Global Code of Business Conduct and Ethics Global Business Partner Standards Responsible Sourcing Policy California Supply Chain Disclosure Statement Environmental Policy Conflict Minerals Report Hazardous Materials Communication Program Environmental Management System Manual

DISCLOSURE	LOCATION
2-24 Embedding policy commitments	Management—Responsible Sourcing and Supply Chain Management, page 48; Business Ethics and Compliance—Employee Training, page 49; Business Partners, page 49 2025 Proxy Statement: Corporate Governance—Board Processes and Policies—Business Conduct and Ethics, page 54 Global Code of Business Conduct and Ethics Global Business Partner Standards Corporate Governance Guidelines—11. Code of Conduct, Conflicts of Interest, Related Party Transactions, and Complaints, pages 5-6 Hazardous Materials Communication Program Environmental Management System Manual
2-25 Processes to remediate negative impacts	Management—Business Ethics and Compliance—Whistleblower Protection, page 49
2-26 Mechanisms for seeking advice and raising concerns	Management—Business Ethics and Compliance—Whistleblower Protection, page 49 Global Code of Business Conduct and Ethics Global Business Partner Standards
2-27 Compliance with laws and regulations	2024 Form 10-K: Item 1A. Risk Factors—Risks Related to Legal Matters and Regulations, pages 31-34; Item 8. Financial Statements and Supplementary Data—13. Commitments and Contingencies—Contingencies, pages 131-133 of PDF
2-28 Membership associations	National associations include Business Council for Sustainable Energy, Fuel Cell and Hydrogen Energy Association, American Council on Renewable Energy, Hydrogen Council, Coalition for Renewable Natural Gas, and the American Biogas Council
2-29 Approach to stakeholder engagement	Our Strategy—Materiality, page 15 List of stakeholder groups: Bloom leadership, customers, investors, policymakers, employees, and suppliers

DISCLOSURE	LOCATION
GRI 3: Material Topics 2021	
3-1 Process to determine material topics	Our Strategy—Materiality, page 15
3-2 List of material topics	Our Strategy—Materiality, page 15
3-3 Management of material topics	Environment, pages 31-38; Hazardous Materials and Waste Management, page 37; People, pages 39-44; Employee Health, Safety, and Training, page 43; Management—Environmental Management System, page 47; Business Ethics and Compliance—Employee Training, page 49 2024 Form 10-K: Item 1. Business—Sustainability, page 14; Human Capital Management, page 17 2025 Proxy Statement: Sustainability at Bloom, page 14 Global Code of Business Conduct and Ethics Global Business Partner Standards Responsible Sourcing Policy California Supply Chain Disclosure Statement Environmental Policy Conflict Minerals Report Hazardous Materials Communication Program Environmental Management System Manual
GRI 201: Economic Performance 2016	
201-1 Direct economic value generated and distributed	2024 Form 10-K, page 64: $1.47B 2024 Form 10-K, page 67
201-2 Financial implications and other risks and opportunities due to climate change	Our Strategy—Climate Related Risks and Opportunities, pages 16-18 2024 Form 10-K: Item 1. Business—Global Climate Issues, pages 14-15; 1A. Risk Factors—Risks Related to Our Products and Manufacturing, pages 25-29; Risks Related to Legal Matters and Regulations, pages 31-34; Risks Related to Our Operations, pages 39-41

DISCLOSURE	LOCATION
201-3 Defined benefit plan obligations and other retirement plans	2024 Form 10-K: Item 8. Financial Statements and Supplementary Data—9. Stock-Based Compensation and Employee Benefit Plans, pages 116-122
201-4 Financial assistance received from government	Our Strategy—Scenario Planning, pages 19-21; Innovation—Advancing Our Technology, page 26 2024 Form 10-K: Item 8. Financial Statements and Supplementary Data—2. Summary of Significant Accounting Policies—Investment Tax Credits, pages 93-94
GRI 202: Market Presence 2016	
202-1 Ratios of standard entry level wage by gender compared to local minimum wage	U.S. employees are paid on wages subject to the minimum wages regulations. Our entry level rate is higher than minimum wage in all locations where we have operations and does not differ by gender.
202-2 Proportion of senior management hired from the local community	This data is not tracked – we hire locally but also provide relocation for hires from other regions
GRI 203: Indirect Economic Impacts 2016	
203-1 Infrastructure investments and services supported	Innovation—Driving Innovation at Bloom—Manufacturing Innovation, page 25; People—Connecting to Communities, page 44 2024 Form 10-K: Item 8. Financial Statements and Supplementary Data—13. Commitments and Contingencies—Contingencies, pages 131-132 of PDF
203-2 Significant indirect economic impacts	Innovation—Driving Innovation at Bloom—Manufacturing Innovation, page 25; People—Connecting to Communities, page 44 2024 Form 10-K: Item 8. Financial Statements and Supplementary Data—13. Commitments and Contingencies—Contingencies, pages 131-132 of PDF

DISCLOSURE	LOCATION
GRI 205: Anti-corruption 2016	
205-1 Operations assessed for risks related to corruption	2024 Form 10-K: Item 1A. Risk Factors—Risks Related to Our Operations—Expanding operations, pages 39-41
205-2 Communication and training about anti-corruption policies and procedures	Bloom provides regular education to relevant employees on anti-corruption policies and procedures, using a variety of communication methods such as electronic communication, live training, and computer-based training. In the calendar year 2024, 97% of employees completed the company's anti-corruption training. They also communicate the anti-corruption policies and requirements to business partners through their Global Business Partner Standards and contract language, which is mutually agreed upon.
205-3 Confirmed incidents of corruption and actions taken	In accordance with our Global Code of Business Conduct and Ethics, we investigate all reports of potential bribery and corruption promptly, fairly and in accordance with our legal obligations. There were no confirmed incidents of corruption in 2024.
GRI 206: Anti-competitive Behavior 2016	
206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	None, 2024 Form 10-K: Item 8. Financial Statements and Supplementary Data—13. Commitments and Contingencies—Contingencies, pages 131-132 of PDF
GRI 207: Tax 2019	
207-1 Approach to tax	2024 Form 10-K: Item 8. Financial Statements and Supplementary Data—15. Income Taxes, pages 130-133. Our tax strategy is primarily focused on compliance with all applicable laws and tax efficiency.
207-2 Tax governance, control, and risk management	The company stays current on tax law changes and utilizes outside tax advisors if needed. Significant tax issues are analyzed, tax risks are assessed and tax positions are documented.

DISCLOSURE	LOCATION
207-3 Stakeholder engagement and management of concerns related to tax	Bloom and its project finance partners may recognize tax benefit from a variety of IRA provisions including the Section 48 federal investment tax credit, Section 45Q tax credit for carbon capture and sequestration and Section 45V hydrogen production tax credit. As such, Bloom does work with industry partners and environmental NGOs to advocate for clarified guidance, program extensions, other tax credits, and payment alternatives which would support project economics. 2024 Form 10-K: Item 1A. Risk Factors—Risks Related to Government Incentive Programs, pages 29-30
207-4 Country-by-country reporting	The company stays compliant with country-by-country reporting in each jurisdiction.
GRI 301: Materials 2016	
301-1 Materials used by weight or volume	Information unavailable / incomplete - we are working on implementing systems and processes to provide us with this level of visibility into our material sourcing.
301-2 Recycled input materials used	Environment—Green Notes 2024 Progress Report, page 33; Product End-of-Life Management & Circularity, page 38
301-3 Reclaimed products and their packaging materials	Environment—Product End-of-Life Management & Circularity, page 38
GRI 302: Energy 2016	
302-1 Energy consumption within the organization	Environment—GHG Emissions, page 32; Energy Management, page 34
302-2 Energy consumption outside of the organization	Environment—Avoided Emissions, page 32
302-3 Energy intensity	We calculated our energy intensity of 207 for the reporting year using the total amount of energy produced by our fuel cell fleet divided by our market-based scope 2 emissions. This means our fleet produced 207 times the amount of electricity that we consumed in the reporting year.

DISCLOSURE	LOCATION
302-4 Reduction of energy consumption	Information unavailable / incomplete - we are working to implement processes to better track direct impacts of efficiency initiatives
302-5 Reductions in energy requirements of products and services	Environment—Product Efficiency, page 34
GRI 303: Water and Effluents 2018	
303-1 Interactions with water as a shared resource	Environment—Water Management, page 36 2024 Form 10-K: Item 1. Business—Sustainability, page 14
303-2 Management of water discharge-related impacts	Environment—Water Management, page 36
303-3 Water withdrawal	Environment—Water Management, page 36
303-4 Water discharge	Environment—Water Management, page 36
303-5 Water consumption	Environment—Water Management, page 36
GRI 305: Emissions 2016	
305-1 Direct (Scope 1) GHG emissions	Environment—GHG Emissions, page 32
305-2 Energy indirect (Scope 2) GHG emissions	Environment—GHG Emissions, page 32; Energy Management, page 34
305-3 Other indirect (Scope 3) GHG emissions	Environment—Avoided Emissions, page 32
305-4 GHG emissions intensity	See GRI 302-3
305-5 Reduction of GHG emissions	Environment—Avoided Emissions, page 32; Air Quality, page 35 2025 Proxy Statement: Sustainability at Bloom, page 14
305-6 Emissions of ozone-depleting substances (ODS)	ODS emissions are negligible
305-7 Nitrogen oxides (NO_x), sulfur oxides (SO_x), and other significant air emissions	Environment—Air Quality, page 35

DISCLOSURE	LOCATION
GRI 306: Waste 2020	
306-1 Waste generation and significant waste-related impacts	Environment—Hazardous Materials and Waste Management Program, page 37
306-2 Management of significant waste-related impacts	Environment—Hazardous Materials and Waste Management Program, page 37 Hazardous Materials Business Plan Binder
306-3 Waste generated	Environment—Hazardous Materials and Waste Management Program, page 37
306-4 Waste diverted from disposal	Environment—Hazardous Materials and Waste Management Program, page 37
306-5 Waste directed to disposal	Environment—Product End-of-Life Management & Circularity, page 38 2025 Proxy Statement: Sustainability at Bloom, page 14
GRI 308: Supplier Environmental Assessment 2016	
308-1 New suppliers that were screened using environmental criteria	100% of new Business Partners and certain direct suppliers were screened using environmental criteria
308-2 Negative environmental impacts in the supply chain and actions taken	Bloom is unaware of any negative environmental impacts in the supply chain in 2024. To ensure compliance with conflict minerals and human rights regulations, certain direct suppliers must respond to annual questionnaires. Additionally, Bloom mandates that suppliers comply with the Know Your Business Partner Standards available at bloomenergy.com/supplychain and all relevant laws and regulations, as outlined in their supplier contracts.
GRI 401: Employment 2016	
401-1 New employee hires and employee turnover	People—Culture of Innovation and Inclusion, page 41
401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	People—Compensation and Benefits, page 42 2025 Form 10-K: Item 1. Business—Human Capital Management—Compensation and Benefits, page 17; Item 8. Financial Statements and Supplementary Data—9. Stock-Based Compensation and Employee Benefit Plans, pages 116-122
401-3 Parental leave	In the U.S., as of 12/31/2024, all full-time employees are entitled to parental leave.

DISCLOSURE	LOCATION
GRI 403: Occupational Health and Safety 2018	
403-1 Occupational health and safety management system	Bloom manages occupational health and safety via its Injury and Illness Prevention Program (IIPP). The IIPP is required by the California Occupational Safety and Health Administration (Cal/OSHA) as outlined in the California Code of Regulations (CCR) Title 8 General Industry Safety Orders Section 3202 and Title 8 Construction Safety Orders Section 1509. The IIPP is Bloom's Corporate Environmental Health & Safety (EHS) standard and applies to all areas. All BE employees, contractors, interns, visitors and subcontractors are expected to follow the EHS policies that are referenced therein and applicable to operations being performed within BE facilities and at customer sites outside of BE facilities. Environment—Hazardous Materials and Waste Management Program, page 37; People—Employee Health, Safety, and Training, page 43
403-2 Hazard identification, risk assessment, and incident investigation	See IIPP 403-1, which includes information on procedures relating to Inspections, Occupational Injury/ Illness Reporting and Investigation, Hazard Correction, Risk Assessment and Training. Bloom Energy and its contractors are required to participate in training on hazard identification and risk assessment. This training is required to be provided to affected employees and contractors on a periodic basis, or as a refresher after a near miss occurs. Moreover, Bloom tracks all incidents via an electronic QuickBase system. To that end, Bloom requires completion and submittal of an electronic incident report within 24 hours of any Accident, Incident, Equipment Damage, Injury, Illness, and/or Near Miss. Among other things, the reporting form requires investigation and the identification of: immediate corrective action(s); short-term corrective action(s); long-term corrective action(s); and root cause(s) and incident reports are not closed until corrective actions are completed. In order to get to root cause(s), Bloom employees utilize common techniques including the 5 Whys. All incident reports are tracked via the electronic system and at any point in time, Bloom can generate quarterly and annual data on each category of incident, including recordable injuries. This data is utilized to identify trends and target EHS resources for purposes of continuous improvement. People—Employee Health, Safety, and Training, page 43

DISCLOSURE	LOCATION
403-3 Occupational health services	See 403-2 and IIPP 403-1. Hazardous Materials Communication Program
403-4 Worker participation, consultation, and communication on occupational health and safety	As indicated above and below, Bloom has a robust occupational health and safety management system that requires training and retraining in a number of areas and circumstances and where workers actively participate in the incident reporting and resolution process. In addition, the Bloom Energy Safety Team (BEST) is a joint cross-functional worker and management committee instated to promote a safe and injury-free workplace. BEST meets at least quarterly to discuss EH&S updates and champion safety communication throughout the organization.
403-5 Worker training on occupational health and safety	In order to ensure that employees receive the information required to complete job tasks appropriately and safely, Bloom uses the following training programs: (1) Training for all new workers prior to or at the time of initial job assignment; (2) Training for all workers given new job assignments for which training has not previously been received; (3) Training whenever new substances, processes, procedures or equipment are introduced to the workplace and represent a new hazard; (4) Training whenever Bloom is made aware of a new or previously unrecognized hazard; and (5) Training for supervisors to familiarize themselves with the safety and health hazards to which workers under their immediate direction and control may be exposed. In addition to the above, the following is also provided as needed: (a) additional training courses are provided to Bloom employees depending on job tasks and additional job duties (i.e., participation in emergency response activities); (b) additional training might also be provided for reasons including, but not limited to, emergency preparation, such as Fire extinguisher, First Aid/ Cardiopulmonary Resuscitation (CPR), and lift trucks; and (c) Site Specific Training: All new employees will be provided site-specific emergency procedures and potential hazards and controls training(s) according to their job tasks and specific workstations. Environment—Hazardous Materials and Waste Management Program, page 37; People—Employee Health, Safety, and Training, page 43 Hazardous Materials Communication Program Hazardous Materials Business Plan Binder
403-6 Promotion of worker health	People—Compensation and Benefits, page 42 2024 Form 10-K: Item 1. Business—Human Capital Management—Compensation and Benefits, page 17
403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	See above and IIPP 403-1
403-8 Workers covered by an occupational health and safety management system	People—Employee Health, Safety, and Training, page 43
403-9 Work-related injuries	SASB Table - Workforce Health and Safety
403-10 Work-related ill health	SASB Table - Workforce Health and Safety
GRI 404: Training and Education 2016	
404-1 Average hours of training per year per employee	Information unavailable / incomplete - we are working to develop processes to support the disclosure of this data and to merge training information across virtual and in-person sessions.
404-2 Programs for upgrading employee skills and transition assistance programs	People—Employee Engagement, page 42 2025 Proxy Statement: Sustainability at Bloom, page 14
404-3 Percentage of employees receiving regular performance and career development reviews	See Talent Acquisition and Development Section.
GRI 405: Diversity and Equal Opportunity 2016	
405-1 Diversity of governance bodies and employees	People—Culture of Innovation and Inclusion, page 41 2025 Proxy Statement: Sustainability at Bloom, page 14; Active and Engaged Board Oversight, page 17; Corporate Governance Best Practices, page 18; How We Build an Effective Board, pages 21-24 2025 Form 10-K: Item 1. Business—Human Capital Management—Culture of Innovation & Inclusion, page 17
405-2 Ratio of basic salary and remuneration of women to men	See Compensation and Benefits Section

DISCLOSURE	LOCATION
GRI 408: Child Labor 2016	
408-1 Operations and suppliers at significant risk for incidents of child labor	Bloom's supply chain operations pose a risk of incidents of child labor due to the use of third-party suppliers worldwide. To ensure compliance, Bloom requires its suppliers adhere to the Global Business Partner Standards, which can be found at bloomenergy.com/supplychain, as well as the relevant laws and regulations outlined in their contracts. In addition, certain direct suppliers are required to complete an annual human rights questionnaire.
GRI 409: Forced or Compulsory Labor 2016	
409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	Bloom's supply chain operations pose a risk of incidents of forced or compulsory labor due to the use of third-party suppliers worldwide. To ensure compliance, Bloom requires its suppliers adhere to the Global Business Partner Standards, which can be found at bloomenergy.com/supplychain, as well as the relevant laws and regulations outlined in their contracts. In addition, certain direct suppliers are required to complete an annual human rights questionnaire.
GRI 413: Local Communities 2016	
413-1 Operations with local community engagement, impact assessments, and development programs	People—Connecting to Communities, page 44
GRI 414: Supplier Social Assessment 2016	
414-1 New suppliers that were screened using social criteria	100% of Business Partners and certain direct suppliers were screened using social criteria.
414-2 Negative social impacts in the supply chain and actions taken	Conflict Minerals Report

DISCLOSURE	LOCATION
GRI 415: Public Policy 2016	
415-1 Political contributions	The vast majority of the company's political contributions are done through the The Bloom Energy Corporation Political Action Committee (Be PAC), which was established in 2021. Be PAC is funded exclusively through voluntary contributions from Bloom Energy employees and shareholders. The purpose of the PAC is to create a forum for Bloom employees and shareholders to engage in the political process and support candidates for federal office that are aligned with Bloom's policy goals. The Be PAC campaign finance data can be found at www.fec.gov.
GRI 417: Marketing and Labeling 2016	
417-1 Requirements for product and service information and labeling	Since we are not a consumer-facing product and manage the servicing and decommissioning of our products ourselves and/or through partner companies, we manage the necessary information on product components with regards to sourcing, impact, usage and disposal. Environment—Hazardous Materials and Waste Management Program, page 37; Product End-of-Life Management & Circularity, page 38; Product Safety, page 38
417-2 Incidents of non-compliance concerning product and service information and labeling	Not applicable; more information can be found in our Product Safety section, page 38

IFRS S2 Climate-related Disclosures Index

This index is based on the International Financial Reporting Standard (IFRS) S2 Climate-related Disclosures issued in June 2023.

	SUB-TOPIC	LOCATION OR RESPONSE
Governance		
The objective of climate-related financial disclosures on governance is to enable users of general purpose financial reports to understand the governance processes, controls and procedures an entity uses to monitor, manage and oversee climate-related risks and opportunities.		
IFRS S2-6	**To achieve this objective, an entity shall disclose information about:**	
	(a) The governance body(s) (which can include a board, committee or equivalent body charged with governance) or individual(s) responsible for oversight of climate-related risks and opportunities. Specifically, the entity shall identify that body(s) or individual(s) and disclose information about:	Management, page 46 Our Strategy — Enterprise Risk Management, page 22
	(i) How responsibilities for climate-related risks and opportunities are reflected in the terms of reference, mandates, role descriptions and other related policies applicable to that body(s) or individual(s)	Management — ESG Management and Oversight, page 46 Our Strategy — Enterprise Risk Management, page 22
	(ii) How the body(s) or individual(s) determines whether appropriate skills and competencies are available or will be developed to oversee strategies designed to respond to climate-related risks and opportunities	2025 Proxy Statement: Corporate Governance—How We Build an Effective Board, page 21
	(iii) How and how often the body(s) or individual(s) is informed about climate-related risks and opportunities	Our Strategy — Enterprise Risk Management, page 22
	(iv) How the body(s) or individual(s) takes into account climate-related risks and opportunities when overseeing the entity's strategy, its decisions on major transactions and its risk management processes and related policies, including whether the body(s) or individual(s) has considered trade-offs associated with those risks and opportunities	Management, page 46 Our Strategy — Enterprise Risk Management, page 22
	(v) How the body(s) or individual(s) oversees the setting of targets related to climate-related risks and opportunities, and monitors progress towards those targets (see paragraphs 33–36), including whether and how related performance metrics are included in remuneration policies (see paragraph 29(g)).	Our Strategy — Targets, page 23 2025 Proxy Statement: Executive Compensation—Compensation Decision-Making Process, page 69
	(b) Management's role in the governance processes, controls and procedures used to monitor, manage and oversee climate-related risks and opportunities, including information about:	Management, page 46 Our Strategy — Enterprise Risk Management, page 22
	(i) Whether the role is delegated to a specific management-level position or management-level committee and how oversight is exercised over that position or committee	Our Strategy — Enterprise Risk Management, page 22
	(ii) Whether management uses controls and procedures to support the oversight of climate-related risks and opportunities and, if so, how these controls and procedures are integrated with other internal functions	Our Strategy — Enterprise Risk Management, page 22

	SUB-TOPIC	LOCATION OR RESPONSE
Strategy		
The objective of climate-related financial disclosures on strategy is to enable users of general purpose financial reports to understand an entity's strategy for managing climate-related risks and opportunities.		
Climate-related risks and opportunities		
IFRS S2-10	**An entity shall disclose information that enables users of general purpose financial reports to understand the climate-related risks and opportunities that could reasonably be expected to affect the entity's prospects. Specifically, the entity shall:**	
	(a) Describe climate-related risks and opportunities that could reasonably be expected to affect the entity's prospects	Our Strategy — Climate-Related Risks and Opportunities, pages 16-18
	(b) Explain, for each climate-related risk the entity has identified, whether the entity considers the risk to be a climate-related physical risk or climate-related transition risk	Our Strategy — Climate-Related Risks and Opportunities, pages 16-18
	(c) Specify, for each climate-related risk and opportunity the entity has identified, over which time horizons—short, medium or long term— the effects of each climate-related risk and opportunity could reasonably be expected to occur	Our Strategy — Climate-Related Risks and Opportunities, pages 16-18
	(d) Explain how the entity defines 'short term', 'medium term' and 'long term' and how these definitions are linked to the planning horizons used by the entity for strategic decision-making	Our Strategy — Climate-Related Risks and Opportunities, pages 16-18
Business model and value chain		
IFRS S2-13	**An entity shall disclose information that enables users of general purpose financial reports to understand the current and anticipated effects of climate related risks and opportunities on the entity's business model and value chain. Specifically, the entity shall disclose:**	
	(a) A description of the current and anticipated effects of those climate-related risks and opportunities on the entity's business model and value chain	Our Strategy — Climate-Related Risks and Opportunities, pages 16-18
	(b) A description of where in the entity's business model and value chain climate-related risks and opportunities are concentrated (for example, geographical areas, facilities and types of assets)	Our Strategy — Climate-Related Risks and Opportunities, pages 16-18

	SUB-TOPIC	LOCATION OR RESPONSE
Strategy and decision-making		
IFRS S2-14	**An entity shall disclose information that enables users of general purpose financial reports to understand the effects of climate-related risks and opportunities on its strategy and decision-making. Specifically, the entity shall disclose:**	
	(a) Information about how the entity has responded to, and plans to respond to, climate-related risks and opportunities in its strategy and decision-making, including how the entity plans to achieve any climate-related targets it has set and any targets it is required to meet by law or regulation. Specifically, the entity shall disclose information about:	Our Strategy — Climate-Related Risks and Opportunities and Scenario Planning, pages 16-21 Our Strategy — Targets, page 23
	(i) Current and anticipated changes to the entity's business model, including its resource allocation, to address climate-related risks and opportunities (for example, these changes could include plans to manage or decommission carbon-, energy- or water-intensive operations; resource allocations resulting from demand or supply-chain changes; resource allocations arising from business development through capital expenditure or additional expenditure on research and development; and acquisitions or divestments)	Our Strategy — Climate-Related Risks and Opportunities, pages 16-18 Environment — Green Notes 2024 Progress Report, page 33
	(ii) Current and anticipated direct mitigation and adaptation efforts (for example, through changes in production processes or equipment, relocation of facilities, workforce adjustments, and changes in product specifications)	Our Strategy — Climate-Related Risks and Opportunities and Scenario Planning, pages 16-21
	(iii) Current and anticipated indirect mitigation and adaptation efforts (for example, through working with customers and supply chains)	Our Strategy — Climate-Related Risks and Opportunities, pages 16-18
	(iv) Any climate-related transition plan the entity has, including information about key assumptions used in developing its transition plan, and dependencies on which the entity's transition plan relies	Formal transition planning is anticipated to begin in the next two years
	(v) How the entity plans to achieve any climate-related targets, including any greenhouse gas emissions targets, described in accordance with paragraphs 33–36	Our Strategy — Targets, page 23

	SUB-TOPIC	LOCATION OR RESPONSE
	(b) Information about how the entity is resourcing, and plans to resource, the activities disclosed in accordance with paragraph 14(a)	Environment — Green Notes 2024 Progress Report, page 33
	(c) Quantitative and qualitative information about the progress of plans disclosed in previous reporting periods in accordance with paragraph 14(a)	Our Strategy — Targets, page 23
Financial position, financial performance and cash flows		
IFRS S2-15	**An entity shall disclose information that enables users of general purpose financial reports to understand:**	
	(a) The effects of climate-related risks and opportunities on the entity's financial position, financial performance and cash flows for the reporting period (current financial effects)	2024 Form 10-K: Item 7 — Management's Discussion and Analysis of Financial Condition and Results of Operations — Results of Operations, page 63
	(b) The anticipated effects of climate-related risks and opportunities on the entity's financial position, financial performance and cash flows over the short, medium and long term, taking into consideration how climate-related risks and opportunities are included in the entity's financial planning (anticipated financial effects)	2024 Form 10-K: Item 1A — Risk Factors, page 18
IFRS S2-16	**Specifically, an entity shall disclose quantitative and qualitative information about:**	
	(a) How climate-related risks and opportunities have affected its financial position, financial performance and cash flows for the reporting period	2024 Form 10-K: Item 7 — Management's Discussion and Analysis of Financial Condition and Results of Operations — Results of Operations, page 63
	(b) The climate-related risks and opportunities identified in paragraph 16(a) for which there is a significant risk of a material adjustment within the next annual reporting period to the carrying amounts of assets and liabilities reported in the related financial statements	2024 Form 10-K: Item 7 — Management's Discussion and Analysis of Financial Condition and Results of Operations — Results of Operations, page 63
	(c) How the entity expects its financial position to change over the short, medium and long term, given its strategy to manage climate-related risks and opportunities, taking into consideration:	2024 Form 10-K: Item 7 — Management's Discussion and Analysis of Financial Condition and Results of Operations— Results of Operations, page 63
	(i) Its investment and disposal plans (for example, plans for capital expenditure, major acquisitions and divestments, joint ventures, business transformation, innovation, new business areas, and asset retirements), including plans the entity is not contractually committed to	2024 Form 10-K: Item 7 — Management's Discussion and Analysis of Financial Condition and Results of Operations — Results of Operations, page 63
	(ii) Its planned sources of funding to implement its strategy	2024 Form 10-K: Item 7— Management's Discussion and Analysis of Financial Condition and Results of Operations — Results of Operations, page 63
	(d) How the entity expects its financial performance and cash flows to change over the short, medium and long term, given its strategy to manage climate-related risks and opportunities (for example, increased revenue from products and services aligned with a lower-carbon economy; costs arising from physical damage to assets from climate events; and expenses associated with climate adaptation or mitigation)	Our Strategy — Climate-Related Risks and Opportunities and Scenario Planning, pages 16-21
IFRS S2-21	**If an entity determines that it need not provide quantitative information about the current or anticipated financial effects of a climate-related risk or opportunity applying the criteria set out in paragraphs 19–20, the entity shall:**	
	(a) Explain why it has not provided quantitative information	Uncertainty around anticipated commercial impacts of a transitioning energy sector
	(b) Provide qualitative information about those financial effects, including identifying line items, totals and subtotals within the related financial statements that are likely to be affected, or have been affected, by that climate-related risk or opportunity	Uncertainty around anticipated commercial impacts of a transitioning energy sector
	(c) Provide quantitative information about the combined financial effects of that climate-related risk or opportunity with other climate-related risks or opportunities and other factors unless the entity determines that quantitative information about the combined financial effects would not be useful	Uncertainty around anticipated commercial impacts of a transitioning energy sector

	SUB-TOPIC	LOCATION OR RESPONSE
Climate resilience		
IFRS S2-22	**An entity shall disclose information that enables users of general purpose financial reports to understand the resilience of the entity's strategy and business model to climate-related changes, developments and uncertainties, taking into consideration the entity's identified climate-related risks and opportunities. The entity shall use climate-related scenario analysis to assess its climate resilience using an approach that is commensurate with the entity's circumstances (see paragraphs B1–B18). In providing quantitative information, the entity may disclose a single amount or a range. Specifically, the entity shall disclose:**	
	(a) The entity's assessment of its climate resilience as at the reporting date, which shall enable users of general purpose financial reports to understand:	Our Strategy — Scenario Planning, pages 19-20
	(i) The implications, if any, of the entity's assessment for its strategy and business model, including how the entity would need to respond to the effects identified in the climate-related scenario analysis	Our Strategy — Scenario Planning, pages 19-20
	(ii) The significant areas of uncertainty considered in the entity's assessment of its climate resilience	Our Strategy — Scenario Planning, pages 19-20
	(iii) The entity's capacity to adjust or adapt its strategy and business model to climate change over the short, medium and long term, including:	Our Strategy — Scenario Planning, pages 19-20
	(1) The availability of, and flexibility in, the entity's existing financial resources to respond to the effects identified in the climate-related scenario analysis, including to address climate-related risks and to take advantage of climate-related opportunities	Our Strategy — Scenario Planning, pages 19-20
	(2) The entity's ability to redeploy, repurpose, upgrade or decommission existing assets	Our Strategy — Scenario Planning, pages 19-20
	(3) The effect of the entity's current and planned investments in climate-related mitigation, adaptation and opportunities for climate resilience	Our Strategy — Scenario Planning, pages 19-20
	(b) How and when the climate-related scenario analysis was carried out, including:	Our Strategy — Scenario Planning, pages 19-20
	(i) Information about the inputs the entity used, including:	
	(1) Which climate-related scenarios the entity used for the analysis and the sources of those scenarios	Our Strategy — Scenario Planning, pages 19-20
	(2) Whether the analysis included a diverse range of climate-related scenarios;	Our Strategy — Scenario Planning, pages 19-20
	(3) Whether the climate-related scenarios used for the analysis are associated with climate-related transition risks or climate-related physical risks;	Our Strategy — Scenario Planning, pages 19-20
	(4) Whether the entity used, among its scenarios, a climate-related scenario aligned with the latest international agreement on climate change;	Our Strategy — Scenario Planning, pages 19-20
	(5) Why the entity decided that its chosen climate-related scenarios are relevant to assessing its resilience to climate-related changes, developments or uncertainties;	Our Strategy — Scenario Planning, pages 19-20
	(6) The time horizons the entity used in the analysis;	Our Strategy — Scenario Planning, pages 19-20
	(7) What scope of operations the entity used in the analysis (for example, the operating locations and business units used in the analysis);	Our Strategy — Scenario Planning, pages 19-20
	(ii) The key assumptions the entity made in the analysis, including assumptions about:	
	(1) Climate-related policies in the jurisdictions in which the entity operates;	Our Strategy — Scenario Planning, pages 19-20
	(2) Macroeconomic trends;	Our Strategy — Scenario Planning, pages 19-20
	(3) National- or regional-level variables (for example, local weather patterns, demographics, land use, infrastructure and availability of natural resources);	Our Strategy — Scenario Planning, pages 19-20

	SUB-TOPIC	LOCATION OR RESPONSE
	(4) Energy usage and mix; and	Our Strategy — Scenario Planning, pages 19-20
	(5) Developments in technology; and	Our Strategy — Scenario Planning, pages 19-20
	(iii) The reporting period in which the climate-related scenario analysis was carried out (see paragraph B18)	Our Strategy — Scenario Planning, pages 19-20
Risk Management		
The objective of climate-related financial disclosures on risk management is to enable users of general purpose financial reports to understand an entity's processes to identify, assess, prioritise and monitor climate-related risks and opportunities, including whether and how those processes are integrated into and inform the entity's overall risk management process.		
IFRS S2-25	**To achieve this objective, an entity shall disclose information about:**	
	(a) The processes and related policies the entity uses to identify, assess, prioritise and monitor climate-related risks, including information about:	Our Strategy — Enterprise Risk Management, page 22
	(i) The inputs and parameters the entity uses (for example, information about data sources and the scope of operations covered in the processes)	Our Strategy — Enterprise Risk Management, page 22
	(ii) Whether and how the entity uses climate-related scenario analysis to inform its identification of climate-related risks	Our Strategy — Scenario Planning, pages 19-20
	(ii) How the entity assesses the nature, likelihood and magnitude of the effects of those risks (for example, whether the entity considers qualitative factors, quantitative thresholds or other criteria)	Our Strategy — Enterprise Risk Management, page 22
	(iv) Whether and how the entity prioritizes climate-related risks relative to other types of risk	Our Strategy — Enterprise Risk Management, page 22
	(v) How the entity monitors climate-related risks	Our Strategy — Enterprise Risk Management, page 22
	(vi) Whether and how the entity has changed the processes it uses compared with the previous reporting period	Our Strategy — Enterprise Risk Management, page 22

	SUB-TOPIC	LOCATION OR RESPONSE
	(b) The processes the entity uses to identify, assess, prioritise and monitor climate-related opportunities, including information about whether and how the entity uses climate-related scenario analysis to inform its identification of climate-related opportunities	Our Strategy — Enterprise Risk Management, page 22
	(c) The extent to which, and how, the processes for identifying, assessing, prioritizing and monitoring climate-related risks and opportunities are integrated into and inform the entity's overall risk management process	Our Strategy — Enterprise Risk Management, page 21
Metrics and Targets		
The objective of climate-related financial disclosures on metrics and targets is to enable users of general purpose financial reports to understand an entity's performance in relation to its climate-related risks and opportunities, including progress towards any climate-related targets it has set, and any targets it is required to meet by law or regulation.		
IFRS S2-28	**To achieve this objective, an entity shall disclose:**	
	(a) Information relevant to the cross-industry metric categories (see paragraphs 29–31)	Environment — GHG Emissions, page 32
	(b) Industry-based metrics that are associated with particular business models, activities or other common features that characterize participation in an industry (see paragraph 32)	SASB Index, pages 73-74
	(c) Targets set by the entity, and any targets it is required to meet by law or regulation, to mitigate or adapt to climate-related risks or take advantage of climate-related opportunities, including metrics used by the governance body or management to measure progress towards these targets (see paragraphs 33–37)	Our Strategy — Targets, page 23
Climate-related metrics		
IFRS S2-29	**An entity shall disclose information relevant to the cross-industry metric categories of:**	
	(a) Greenhouse gases—the entity shall:	

SUB-TOPIC	LOCATION OR RESPONSE
(i) Disclose its absolute gross greenhouse gas emissions generated during the reporting period, expressed as metric tonnes of CO2 equivalent (see paragraphs B19–B22), classified as:	Environment — GHG Emissions, page 31
(1) Scope 1 greenhouse gas emissions	Environment — GHG Emissions, page 31
(2) Scope 2 greenhouse gas emissions	Environment — GHG Emissions, page 31
(3) Scope 3 greenhouse gas emissions	Not reported
(ii) Measure its greenhouse gas emissions in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004) unless required by a jurisdictional authority or an exchange on which the entity is listed to use a different method for measuring its greenhouse gas emissions (see paragraphs B23–B25)	Environment — GHG Emissions, page 31
(iii) Disclose the approach it uses to measure its greenhouse gas emissions (see paragraphs B26–B29) including:	Environment — GHG Emissions, page 31
(1) The measurement approach, inputs and assumptions the entity uses to measure its greenhouse gas emissions	Environment — GHG Emissions, page 31
(2) The reason why the entity has chosen the measurement approach, inputs and assumptions it uses to measure its greenhouse gas emissions	Environment — GHG Emissions, page 31
(3) Any changes the entity made to the measurement approach, inputs and assumptions during the reporting period and the reasons for those changes	Environment — GHG Emissions, page 31
(iv) For Scope 1 and Scope 2 greenhouse gas emissions disclosed in accordance with paragraph 29(a)(i)(1)–(2), disaggregate emissions between:	
(1) The consolidated accounting group (for example, for an entity applying IFRS Accounting Standards, this group would comprise the parent and its consolidated subsidiaries)	Environment — GHG Emissions, page 31
(2) Other investees excluded from paragraph 29(a)(iv)(1) (for example, for an entity applying IFRS Accounting Standards, these investees would include associates, joint ventures and unconsolidated subsidiaries)	Not reported
(v) For Scope 2 greenhouse gas emissions disclosed in accordance with paragraph 29(a)(i)(2), disclose its location-based Scope 2 greenhouse gas emissions, and provide information about any contractual instruments that is necessary to inform users' understanding of the entity's Scope 2 greenhouse gas emissions (see paragraphs B30–B31)	Environment — GHG Emissions, page 31
(vi) For Scope 3 greenhouse gas emissions disclosed in accordance with paragraph 29(a)(i)(3), and with reference to paragraphs B32–B57, disclose:	Not reported
(1) The categories included within the entity's measure of Scope 3 greenhouse gas emissions, in accordance with the Scope 3 categories described in the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011)	Not reported
(2) Additional information about the entity's Category 15 greenhouse gas emissions or those associated with its investments (financed emissions), if the entity's activities include asset management, commercial banking or insurance (see paragraphs B58–B63)	Not reported
(b) Climate-related transition risks—the amount and percentage of assets or business activities vulnerable to climate-related transition risks	Our Strategy — Scenario Planning, pages 19-20

	SUB-TOPIC	LOCATION OR RESPONSE
	(c) Climate-related physical risks—the amount and percentage of assets or business activities vulnerable to climate-related physical risks	Our Strategy — Scenario Planning, pages 19-20
	(d) Climate-related opportunities—the amount and percentage of assets or business activities aligned with climate-related opportunities	Our Strategy — Climate-Related Risks and Opportunities, pages 16-18
	(e) Capital deployment—the amount of capital expenditure, financing or investment deployed towards climate-related risks and opportunities	Environment — Green Notes 2024 Progress Report, page 33
	(f) Internal carbon prices—the entity shall disclose:	
	(i) An explanation of whether and how the entity is applying a carbon price in decision-making (for example, investment decisions, transfer pricing and scenario analysis)	Bloom does not use an internal carbon price at this time.
	(ii) The price for each metric tonne of greenhouse gas emissions the entity uses to assess the costs of its greenhouse gas emissions	N/A
	(g) Remuneration—the entity shall disclose:	
	(i) A description of whether and how climate-related considerations are factored into executive remuneration (see also paragraph 6(a)(v))	2025 Proxy Statement: Executive Compensation — Compensation Decision-Making Process, page 69
	(ii) The percentage of executive management remuneration recognised in the current period that is linked to climate-related considerations	2025 Proxy Statement: Executive Compensation — Compensation Decision-Making Process, page 69
IFRS S2-32	**An entity shall disclose industry-based metrics that are associated with one or more particular business models, activities or other common features that characterise participation in an industry. In determining the industry-based metrics that the entity discloses, the entity shall refer to and consider the applicability of the industry-based metrics associated with disclosure topics described in the *Industry-based Guidance on Implementing IFRS S2*.**	SASB Index, Section 1

	SUB-TOPIC	LOCATION OR RESPONSE
Climate-related targets		
IFRS S2-33	**An entity shall disclose the quantitative and qualitative climate-related targets it has set to monitor progress towards achieving its strategic goals, and any targets it is required to meet by law or regulation, including any greenhouse gas emissions targets. For each target, the entity shall disclose:**	
	(a) The metric used to set the target (see paragraphs B66–B67)	Our Strategy — Targets, page 23
	(b) The objective of the target (for example, mitigation, adaptation or conformance with science-based initiatives)	Our Strategy — Targets, page 23
	(c) The part of the entity to which the target applies (for example, whether the target applies to the entity in its entirety or only a part of the entity, such as a specific business unit or specific geographical region)	Our Strategy — Targets, page 23
	(d) The period over which the target applies	Our Strategy — Targets, page 23
	(e) The base period from which progress is measured	Our Strategy — Targets, page 23
	(f) Any milestones and interim targets	Our Strategy — Targets, page 23
	(g) If the target is quantitative, whether it is an absolute target or an intensity target	Our Strategy — Targets, page 23
	(h) How the latest international agreement on climate change, including jurisdictional commitments that arise from that agreement, has informed the target	Our Strategy — Targets, page 23
IFRS S2-34	**An entity shall disclose information about its approach to setting and reviewing each target, and how it monitors progress against each target, including:**	
	(a) Whether the target and the methodology for setting the target has been validated by a third party	Our Strategy — Targets, page 23
	(b) The entity's processes for reviewing the target	Our Strategy — Targets, page 23
	(c) The metrics used to monitor progress towards reaching the target	Our Strategy — Targets, page 23
	(d) Any revisions to the target and an explanation for those revisions	Our Strategy — Targets, page 23

	SUB-TOPIC	LOCATION OR RESPONSE
IFRS S2-35	**An entity shall disclose information about its performance against each climate-related target and an analysis of trends or changes in the entity's performance.**	
IFRS S2-36	**For each greenhouse gas emissions target disclosed in accordance with paragraphs 33–35, an entity shall disclose:**	
	(a) Which greenhouse gases are covered by the target	Our Strategy — Targets, page 23
	(b) Whether Scope 1, Scope 2 or Scope 3 greenhouse gas emissions are covered by the target	Our Strategy — Targets, page 23
	(c) Whether the target is a gross greenhouse gas emissions target or net greenhouse gas emissions target. If the entity discloses a net greenhouse gas emissions target, the entity is also required to separately disclose its associated gross greenhouse gas emissions target (see paragraphs B68–B69)	Our Strategy — Targets, page 23
	(d) Whether the target was derived using a sectoral decarbonisation approach	Our Strategy — Targets, page 23
	(e) The entity's planned use of carbon credits to offset greenhouse gas emissions to achieve any net greenhouse gas emissions target. In explaining its planned use of carbon credits the entity shall disclose information including, and with reference to paragraphs B70–B71:	Bloom does not use carbon offsets at this time.
	(i) The extent to which, and how, achieving any net greenhouse gas emissions target relies on the use of carbon credits	Bloom does not use carbon offsets at this time.
	(ii) Which third-party scheme(s) will verify or certify the carbon credits	Bloom does not use carbon offsets at this time.
	(iii) The type of carbon credit, including whether the underlying offset will be nature-based or based on technological carbon removals, and whether the underlying offset is achieved through carbon reduction or removal	Bloom does not use carbon offsets at this time.
	(iv) Any other factors necessary for users of general purpose financial reports to understand the credibility and integrity of the carbon credits the entity plans to use (for example, assumptions regarding the permanence of the carbon offset)	Bloom does not use carbon offsets at this time.

SASB Index

This SASB index is based on the Industry-based Guidance for International Financial Reporting Standard (IFRS) S2 Climate-related Disclosures for Fuel Cells & Industrial Batteries issued in June 2023 and the Sustainability Accounting Standards Board (SASB) Standards for Fuel Cells & Industrial Batteries version 2023-12. Since the industry-based guidance for IFRS S2 is derived from the SASB Standards, Section 1 of this content index presents the topics and metrics applicable to both standards, and Section 2 presents the topics and metrics applicable only to the SASB Standards.

Section 1: IFRS S2/SASB Fuel Cells & Industrial Batteries

Table 1. Sustainability Disclosure Topics & Metrics

CODE	ACCOUNTING METRIC	LOCATION RESPONSE
Energy Management		
RR-FC-130a.1	(1) Total energy consumed	(1) Environment—Energy Management, page 34
	(2) Percentage grid electricity	(2) Environment—Energy Management, page 34
	(3) Percentage renewable	(3) Environment—Energy Management, page 34
Product Efficiency		
RR-FC-410a.1	Average storage capacity of batteries, by product application and technology type	[N/A]
RR-FC-410a.2	Average energy efficiency of fuel cells as (1) electrical efficiency	(1) 55.42%
	(2) thermal efficiency, by product application and technology type	(2) [N/A]
RR-FC-410a.3	Average battery efficiency as coulombic efficiency, by product application and technology type	[N/A]
RR-FC-410a.4	Average operating lifetime of fuel cells, by product application and technology type	5.0 years
RR-FC-410a.5	Average operating lifetime of batteries, by product application and technology type	N/A

Table 2. Activity Metrics

CODE	ACCOUNTING METRIC	LOCATION RESPONSE
Energy Management		
RR-FC-000.A	Number of units sold	2024 Form 10-K: Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations, pages 63-70
RR-FC-000.B	Total storage capacity of batteries sold	N/A
RR-FC-000.C	Total energy production capacity of fuel cells sold	2024 Form 10-K: Item 7—Management's Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations, pages 63-70

Section 2: SASB Fuel Cells & Industrial Batteries

CODE	ACCOUNTING METRIC	LOCATION RESPONSE
Air Quality		

Within our operational portfolio, at our California manufacturing facilities, we operate production processes including ink production, cell manufacturing, interconnect manufacturing and stack physical assembly processes. Some of these processes result in emissions of organic compounds that trigger Bay Area Air Quality Management District (BAAQMD) permitting requirements. In 2020, Bloom amended its Plant 1 permit to install an emission control device, a regenerative thermal oxidizer (RTO), which controls Volatile Organic Compound (VOC) emissions from the cell printer dryer lines. In 2022, Bloom opened a second manufacturing facility in Fremont, CA that also triggered BAAQMD permitting requirements. It is similarly subject to permit limits that ensure compliance with BAAQMD rules. Our Delaware facility includes the final stages of fuel cell manufacturing and among other things includes a pad where fuel cells are tested before going out into the field. The emissions associated with the testing process trigger Delaware Department of Natural Resources and Environmental Control (DNREC) jurisdiction. Up until 2021, Bloom maintained a permit for the facility that limited NOx, CO, VOC and SO2 emissions from that process. In 2021, Bloom certified its newest model natural gas energy server with the California Air Resources Board (CARB). Additional emission benefits/reductions were documented in the source test report that was conducted to support that application. Using these updated and improved emission factors, Bloom was able to work with DNREC and expand its testing capabilities in Delaware, while also moving from a permit to a less stringent registration.

CODE	ACCOUNTING METRIC	LOCATION OR RESPONSE
Workforce Health & Safety		
RR-FC-320a.1	(1) Total recordable incident rate (TRIR)	1.56
	(2) Fatality rate	0
RR-FC-320a.2	Description of efforts to assess, monitor, and reduce exposure of workforce to human health hazards	Bloom's management is fully committed to providing a safe working environment. We believe in the principle of 'safety first' and that all incidents are preventable. We foster an environment with ongoing integration of safety into all activities to eliminate illness and injuries. To achieve this, the company has established well-defined safety, health and environmental policies and procedures and ongoing training. We focus on prevention programs and driving continuous improvement via Design for Safety initiatives during development, interactive training programs with all employees, hands-on audits, employee engagement through monthly team meetings, and relentless focus on deep dive investigations ensuring that we learn and improve from incidents.

CODE	ACCOUNTING METRIC	LOCATION OR RESPONSE
Product End-of-Life Management		
RR-FC-410b.1	Percentage of products sold that are recyclable or reusable	Environment—Product End-of-Life Management & Circularity, page 38
RR-FC-410b.2	Weight of end-of-life material recovered, percentage recycled	Environment—Product End-of-Life Management & Circularity, page 38
RR-FC-410b.3	Description of approach to manage use, reclamation, and disposal of hazardous materials	Environment—Hazardous Materials and Waste Management Program, page 37
Materials Sourcing		
RR-FC-440a.1	Description of the management of risks associated with the use of critical materials	Environment—Product End-of-Life Management & Circularity, page 38
Hazardous Waste Management		
RT-EE-150a.1	Amount of hazardous waste generated, percentage recycled	224 tonnes generated, 79% recycled
RT-EE-150a.2	Number and aggregate quantity of reportable spills, quantity recovered	0

CODE	ACCOUNTING METRIC	RESPONSE
Product Safety		
Bloom's current product lines, both ES 5.5 and 6.5 fuel cells and ancillary equipment are UL certified. UL is a third-party certification company that has been around for over a century and is universally recognized. UL Certification means that UL has determined that the product meets specific, defined requirements, requirements most often based on UL's published and nationally recognized Standards for Safety. Being UL certified illustrates a businesses' dedication to consumer safety, as well as the quality of their products. For reference, the ES 5.5 and 6.5 fuel cells are UL Listed as a "Stationary Fuel Cell Power System" to ANSI/CSA America FC 1-2014. It is UL Listed under UL Category IRGZ and UL File Number MH45102.		
RT-EE-250a.1	Number of recalls issued, total units recalled	0
RT-EE-250a.2	Total amount of monetary losses as a result of legal proceedings associated with product safety	0
Product Lifecycle Management		
RT-EE-410a.1	Percentage of products by revenue that contain IEC 62474 declarable substances	Not applicable as Bloom does not have any downstream manufacturers.
RT-EE-410a.2	Percentage of eligible products, by revenue, certified to an energy efficiency certification	0
RT-EE-410a.3	Revenue from renewable energy-related and energy efficiency-related products	$0
Business Ethics		
RT-EE-510a.1	Description of policies and practices for prevention of: (1) corruption and bribery and (2) anti-competitive behavior	Bloom takes a risk based approach to training and requires certain employees to take anti-corruption training.
RT-EE-510a.2	Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption	0
RT-EE-510a.3	Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behavior regulations	0

Assurance

GHG Verification Statement

RAMBØLL

VERIFICATION STATEMENT

Reference	**1620017720**
Client	**Bloom Energy**
Address	**4353 North First Street, San Jose, CA 95134**
Date	**24/03/2025**
Reporting Period	**01st January 2024 to 31st December 2024**
Lead Verifier	**Rebecca Tehan**

Introduction and Scope

This Verification Statement has been prepared for Bloom Energy (Bloom).

Our verification was performed in accordance with the specification and guidance defined in ISO 14064-3:2006 to provide a limited level of assurance about whether the CY24 Bloom's Scope 1 and 2 greenhouse gas assertion is free from material misstatement and has been prepared in accordance with the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas (GHG) Protocol as agreed.

The GHG assertion relates to the following categories against which verification testing was conducted:

- **Scope 1** – Direct GHG emissions from stationary combustion, mobile combustion, fugitives, and fuel cells
- **Scope 2** – GHG emissions from purchased and consumed electricity and purchased natural gas/heat

The management of Bloom is responsible for all institutional, managerial, and technical arrangements made for the collection of data, preparation of the GHG assertion, and implementation of steps to manage the quality of the GHG assertion.

It is Ramboll UK Limited's responsibility to express an independent GHG verification opinion on the GHG assertion in accordance with our contract with Bloom.

The following work was performed by the verification team as a risk-based sampling exercise in order to test the GHG information and associated GHG assertion:

- Reviewed the reporting organisation, roles and responsibilities, tools used and information flow in order to assess the correct understanding and application of criteria
- Compared a sample of reported data and primary evidence
- Performed an arithmetic verification of calculations
- Reviewed the internal controls which have been implemented to ensure the reliability of reported data

A materiality level of 10% was applied.

There have been no exclusions of any emissions sources

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Conclusion and Recommendations

Based upon the process and procedures conducted, there is no evidence that the Scope 1 and 2 GHG emissions assertion for the period 1st January 2024 to 31st December 2024 as summarised in Table 1:

- is not materially correct and is not a fair representation of GHG data and information; and
- has not been prepared in accordance with the requirements defined by the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas (GHG) Protocol as agreed.

Rebecca Tehan
Lead Verifier

On behalf of:
Ramboll UK Limited
240 Blackfriars Road
London
SE1 8NW

Table 1: Summary of Bloom Energy's Scope 1 and 2 GHG Assertion

Category	CY2024 ($MT\ CO_2e$)
Scope 1	2,678,927
Scope 2 Location-based	7,613
Scope 2 Market-based	12,724

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