



# SUSTAINABILITY REPORT 2024



# SUSTAINABILITY – At The Core Of All We Do

As a company that got our start rebuilding used batteries from recycled materials,  
our business model has always been sustainable.

**That's the East Penn way.**



**WHAT  
WE MAKE**



**HOW  
WE WORK**



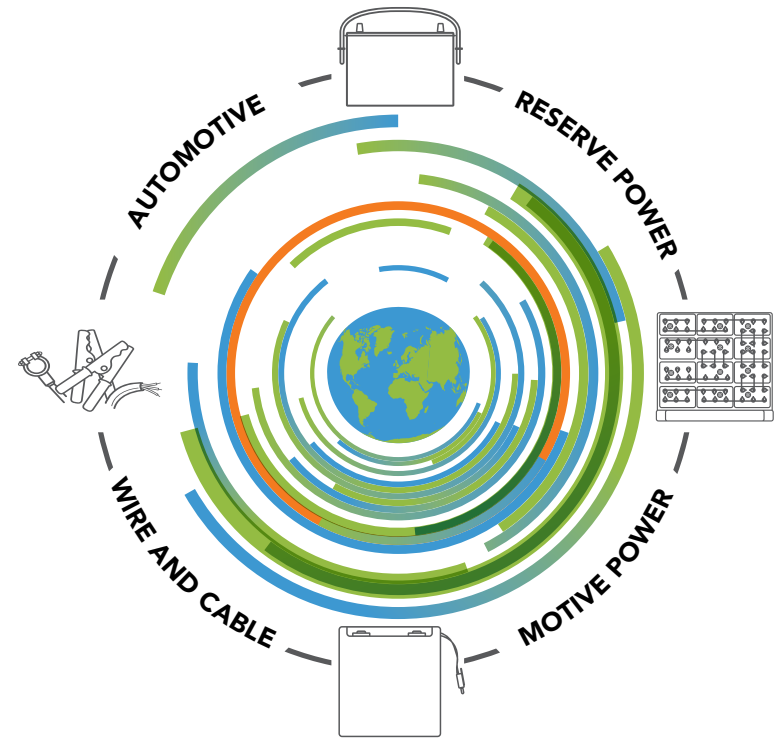
**WHO  
WE ARE**

# ABOUT US

East Penn was founded 78 years ago out of a passion to deliver energy solutions by rebuilding used batteries in a process that generated minimal waste. Today, East Penn has grown into the largest, single-site lead battery manufacturing producer in the world.

We adhere to circular economy principles in the innovation and production of more than 515 battery types for cars, boats, motorcycles, forklifts and other vehicles. Our stationary backup systems provide reliable auxiliary battery power for businesses and communities. And we're expanding our lithium-ion battery expertise and technology for industrial, military and government applications.

Though our company experiences tremendous growth we remain true to our original passion: providing power to our customers – **responsibly and sustainably.**



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## Who We Are

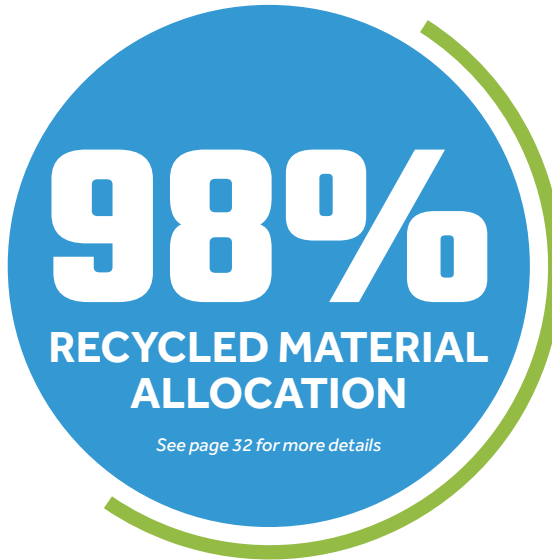
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## EAST PENN – 2023 AT A GLANCE

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# SUSTAINABILITY HIGHLIGHTS

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**As a company that got our start rebuilding used batteries from recycled materials, our business model has always been sustainable. That's the East Penn way.**

**Here are just a few of the ways we embed sustainability into our business today:**

## **We're powering a circular economy.**

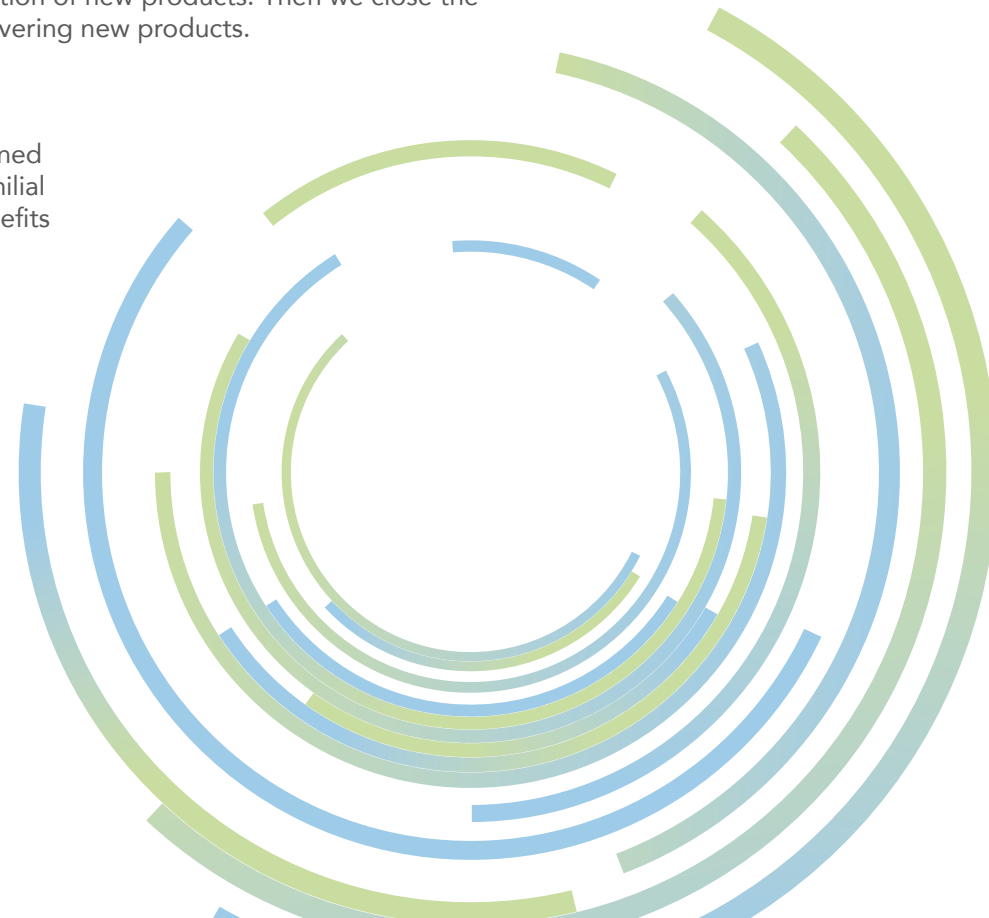
A circular economy conserves natural resources and creates value from waste, and through our lead battery business, we do just that. Lead batteries have safe, infinite recycling possibilities, resulting in a 99 percent recycling rate. In practice, we recycle and reuse all three major components of a lead battery – lead, plastic and acid – in the production of new products. Then we close the loop with our distribution system that collects used batteries for recycling when delivering new products.

## **We're invested in our people.**

The heart of our company will always be our people. East Penn has been a family-owned business since our founding in 1946, and today, we still strive to create a sense of familial caring for our more than 10,000 employees. For example, we provide healthcare benefits above industry benchmarks. Our people truly are our most important asset.

## **We're committed to a renewable energy future.**

East Penn is investing in solutions for a low-carbon future. We're accelerating our expansion into lithium-ion and advanced lead battery technology to meet customers' expanding demands for electrification and serving as an essential component of electrical systems in electric vehicles. And we've entered into a power purchase agreement with a new solar energy project, in which we've committed to procure 15MW of renewable electricity over a 15 year period. This project, located near our Lyon Station, PA facility, began powering about five percent of that facility's manufacturing operations in December of 2023.



# THE BREIDEGAM MIKSIEWICZ FAMILY – A LEGACY OF SUSTAINABILITY

*When DeLight Breidegam, Jr and his father founded East Penn in 1946, they worked hard to take care of their customers, co-workers, and community as they grew the business. Their passion has been passed down through the generations of the Breidegam Miksiewicz family. Seventy-eight years later, East Penn is still experiencing growth and innovation as a privately-held, family-owned company, and the Breidegam Miksiewicz family is just as dedicated as they were on day one. With their full support East Penn remains intently focused on ensuring that our actions protect the health, safety and vitality of the surrounding community.*



**Dan Breidegam, Chairman**  
Joined East Penn in 1974, later assuming the role of Chairman in 2015 following in the footsteps of his father.



**Dan Miksiewicz, Personnel Analyst**  
Joined East Penn in 2014 after graduating Moravian College with a degree in Economics.



**Tim Miksiewicz, Project Manager**  
Joined East Penn in 2015 after graduating from the University of Scranton with a degree in Business Administration.



**Matt Miksiewicz, Financial Analyst, Navitas Systems**  
Joined East Penn in 2018 after graduating from Moravian College with a degree in Business Management.



**Katelyn Kline (Miksiewicz), Family Council Member**  
A member of the East Penn Family Council and a 2016 graduate of Moravian College with a degree in Business Management/Organizational Leadership.



# THE FOUNDING FAMILY – REMEMBERING OUR LEGACY

**1946**

DeLight and his father founded East Penn after returning from serving in the Air Force during WWII.

**1948**

DeLight marries his wife Helen, who became East Penn's first nurse.

**1978/79**

DeLight serves as Battery Council International (BCI) President.

**1984**

Sally becomes a national accounts sales representative after graduating Moravian College.

**1992**

DeLight Sr. passes away at the age of 93.

**1994**

Dan Breidegam is promoted to VP Metals and Commodities Management.

**2009**

Sally Miksiewicz is named as East Penn's CEO.

**2014**

Sally tragically passes away at the age of 52.

**2015**

DeLight passes away at the age of 88.

**2015**

Dan Breidegam becomes East Penn Chairman.

**2021**

Helen Breidegam, wife of DeLight Breidegam Jr., passes away at the age of 94.



DeLight Breidegam Sr., DeLight Breidegam Jr., and Sally Miksiewicz.





## A MESSAGE FROM OUR LEADERSHIP

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When East Penn was founded in 1946, the world was changing. With change came new challenges, and for our founders, that meant new opportunities. In the last seven decades, what started as a small family enterprise has grown to become one of the leading providers of energy storage solutions across the globe.

Today, we are again living in a world that is rapidly changing. New technologies and increasing power demands are creating a vital need for sustainable energy sources. East Penn is dedicated to continuing to grow and innovate with changing energy needs in order to sustainably support each other, customers, environment and surrounding communities.

What hasn't changed is the driving force behind our company, the people of East Penn. The Founding Family may have started the business, but it took a powerful force of amazing individuals to make it a reality. Together, we are a family of over 10,000 employees working side-by-side to power the world.

We have all created a special culture over our 78 years that is undeniably unique. Our culture supports a mission to empower our employees so that they can help make lives better, one battery at a time. Our customers continue to serve critical power needs in our society supported by these products. We offer an open-door policy, competitive benefits, and comprehensive training and career advancement opportunities that allow employees to experience a variety of roles within the company.

A strong safety culture also pervades East Penn empowering our health and safety standards. These standards are considerably more stringent than Federal regulations, and we provide extensive lead safety training beginning on day one of employment.

East Penn's growth has always gone hand-in-hand with our commitment to sustainability. We operate a circular economy that is supported by the recyclability of our batteries, so the only way for us to grow is sustainably.

In 2023, our Lyon Station facility recycled over 175 million pounds of lead, more than 10.6 million pounds of plastic, and over 6.3 million pounds of acid. Our advanced batteries and integrated systems help automakers improve fuel economy and reduce vehicle CO<sub>2</sub> emissions. Through our company Navitas Systems, we've invested in the manufacturing of lithium-ion batteries, which are paving the way for further electrification and helping to support needs within our National Defense.

Within our operations, we're also working to reduce our own environmental impacts, particularly regarding energy use. We are a participant in the U.S. Department of Energy's Better Plants program, for which we have committed to a 20 percent reduction in non-formation energy by 2028 against a 2018 baseline. We have also set a goal to reduce our scope 1 and 2 carbon emissions by 10 percent by 2030 against a 2021 baseline.

We're excited to share our latest Sustainability Report with you and to showcase the ways in which East Penn is positioning itself for sustainable growth with a family of empowered employees long into the future.

A handwritten signature in black ink, appearing to read 'Chris Pruitt', followed by a stylized flourish.

Chris Pruitt, President & CEO, East Penn Mfg.

# CORPORATE GOVERNANCE



Dan Breidegam,  
Chairman



Chris Pruitt,  
President and CEO



Christy Weeber,  
Executive Vice President  
and CFO



Pete Stanislawczyk,  
Executive Vice President  
and CCO



Norbert Maleschitz,  
Executive Vice President  
and COO



Larry Miksiewicz,  
CMO

East Penn is a privately-held firm guided by a seven-member Board of Directors, two internal and five external. The company's executive team is responsible for setting the company's overall business strategy as well as identifying and managing economic, environmental and social impacts. In 2023, 9% of our 58-person senior management team were women.

Responsibility for environmental, social and governance (ESG) matters, as well as compliance issues, is distributed among the related business functions. For example, our environmental, health and safety team manages lead levels and our human resources department is responsible for compliance with appropriate Federal, State, and local employment regulations.

East Penn's Sustainability Reporting Committee, a multi-department internal body, manages our sustainability materiality assessments; develops, reviews and approves this report; and communicates internally and externally about our sustainability achievements and challenges.

## Risk Analysis & Business Continuity

East Penn continuously evaluates risks and opportunities in all business decisions and interactions related to overall business ventures, system designs, and product & process requirements. Following these evaluations, East Penn develops updates and evaluates Business Continuity Plans to identify, mitigate, and prepare for potential disruptions to the business operations. Through a process of risk assessment and continuity planning East Penn is better prepared to address the risks and disruptions with the potential to impact customer demands and social/ environmental concerns.

# 78 YEARS OF SUSTAINABLE GROWTH

We are proud of our heritage of innovation and sustainable growth that's allowed East Penn to become a global leader in providing high quality, fully sustainable energy storage, transfer and power system solutions.

**1946**

### AUTOMOTIVE

Began rebuilding/recycling batteries for cars and trucks with a goal of 100 batteries per day.

**1968**

### MOTIVE POWER

Released first industrial line of Deka batteries.

**1974/1975**

### CABLE & WIRE

Company adds facilities to produce cable and then wire.

**1976**

### 1 MILLION BATTERY MILESTONE

Produced more than a million batteries in a year for the first time.

**1986**

### AIR SCRUBBER UNITS

Installed new system for scrubbing gasses - a first of its kind in the U.S.

**1992**

### ACID RECLAMATION

Completed construction of first acid reclaim plant in industry.

**1993**

### RESERVE POWER

Released new reserve power line for Telecommunications, Uninterruptible Power Supply, and other Standby Power.

**1993**

### HEALTH & SAFETY CENTER

Opened new, on-site employee health and safety center

**1996**

### WASTEWATER

Introduced wastewater treatment plant processing 100K gallons of wastewater daily as part of our zero-discharge system.

**2006**

### ISO 14001 CERTIFICATION

First time certified ISO 14001 by National Quality Assurance.

**2006**

### Production Plant A5

Expanded manufacturing capabilities by adding a plant in Corydon, IA.

**2017**

### INNOVATION CENTER

Opened new, state-of-the-art facility dedicated to research and development.

**2018**

### Fill Form Finish Facility

Expanded fill, form and finish capabilities by opening a new facility in Oelwein, IA.

**2019**

### LITHIUM-ION EXPANSION

Acquired Navitas Systems, a global leader in larger-format lithium battery technology and systems for motive power as well as government/defense market segments.

**2022**

### Finishing and Distribution Center

Began operations at a new state-of-the-art facility in Temple, TX.

**2023**

### A5 Expansion

Completed construction on a 254,000 sq ft expansion in Corydon, IA to enhance production capabilities.

**2024**

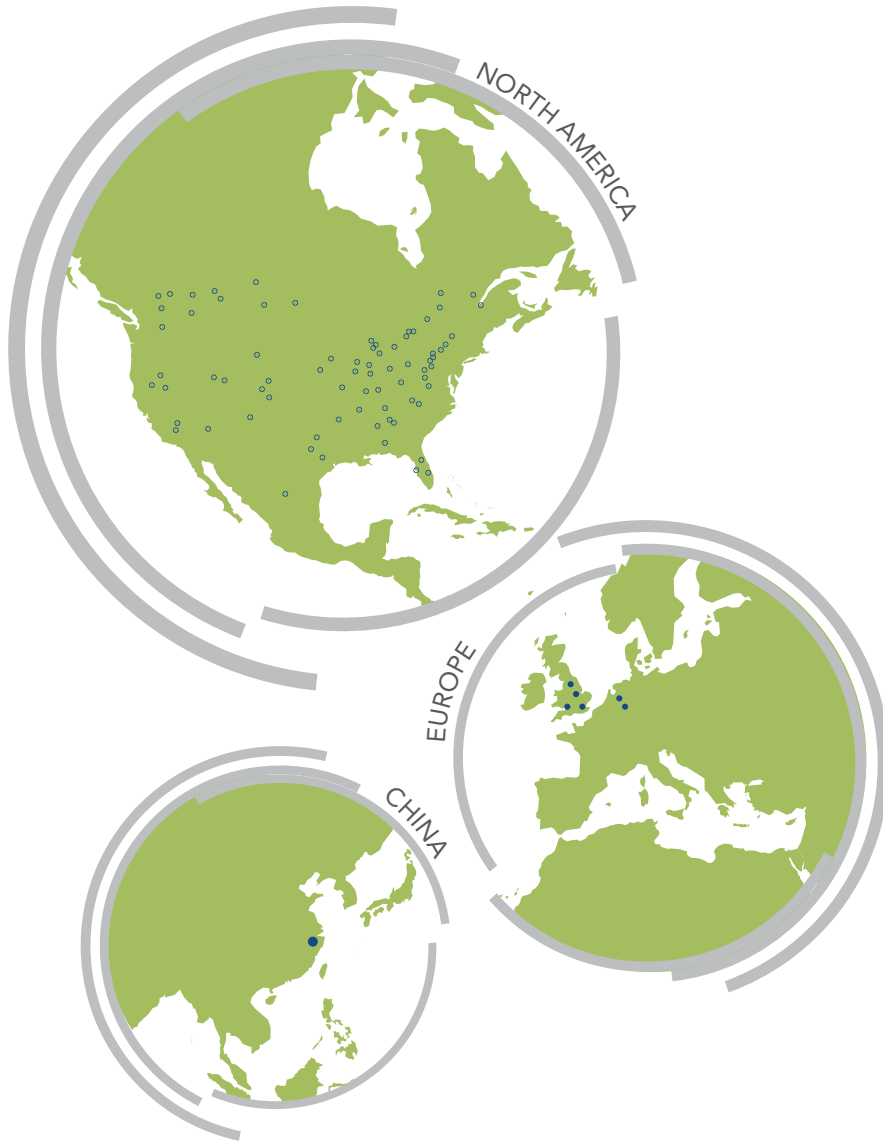
### EAST PENN TODAY

Continues to focus on innovation and investing in automation.



## GLOBAL PRESENCE

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## OUR SUSTAINABILITY PRIORITIES

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In 2021, we completed a comprehensive sustainability materiality assessment to update our priority sustainability issues and understand our impacts, a process we undertake every two to four years. In conjunction with a third-party consultancy, East Penn followed guidance provided by the Global Reporting Initiative (GRI) for identifying material topics. Our assessment used the following methodology:

### IDENTIFY

Finalized a list of topics based on environmental, social and governance issues compiled from industry research, leading ESG disclosure frameworks and customer concerns.

### PRIORITIZE

Surveyed internal stakeholders who rated the level of impact each topic might have on East Penn's business success over the next five years and ranked topics that present the greatest environmental and social opportunities and challenges.

### VALIDATE

Synthesized results to assign topics to one of a three-tiered structure that aligned with our greatest ESG opportunities for leadership; ESG risks to monitor; and responsible business practices to manage. The final prioritization was reviewed and approved by our management team.

# SUSTAINABILITY MATERIAL ASSESSMENT

Based on our 2021 material assessment, tier one material issues include:

ISSUE	DEFINITION
<b>Responsible Sourcing</b>	Fostering supplier social and environmental responsibility through screenings, audits and partnerships.
<b>Occupational Health and Safety</b>	Building a safety-first culture and environment that supports accident and injury prevention and reduces exposure to workplace hazards.
<b>Energy &amp; GHG Emissions</b>	Conservation initiatives, such as the use of renewable energy, across East Penn's operations and facilities to reduce energy use and GHG emissions, including reducing the footprint associated with shipping and logistics of products.
<b>Employee Engagement &amp; Retention</b>	Cultivating an engaged and satisfied workforce through retention and development practices such as training, compensation, benefits and employee engagement opportunities.
<b>Inclusion &amp; Equal Opportunity</b>	Building an inclusive workforce through practices, policies and programs to ensure all employees feel a sense of belonging in the workplace, and are treated fairly, including in regard to pay.
<b>Product Recycling</b>	Providing the infrastructure to recycle spent lead batteries to contribute to a closed-loop system and promoting the safe management of lithium batteries at end-of-life.
<b>Water Stewardship</b>	Reducing the use and maximizing the reuse of water in East Penn's operations, particularly in water-stressed regions, through a zero-discharge system.
<b>Waste Management</b>	Minimizing waste generation by means of responsible production, consumption, and reuse/recycle/recovery of byproducts, packaging, and materials.
<b>Product Transparency</b>	Disclosing information on product materials, impact, and sourcing to customers and end-users of product.

# ENGAGING OUR STAKEHOLDERS

*We regularly engage our key stakeholders to better understand the sustainability issues that matter most to them and our business and to leverage their insights to advance our efforts to operate responsibly.*

STAKEHOLDER GROUP	DEFINITION	KEY INTERESTS/CONCERNS
<b>Employees</b>	Full-time, part-time and temporary workers	Employment opportunities, benefits, job security, training, safety and health
<b>Local Community Members and Groups</b>	Includes the Chambers of Commerce, Economic Development Offices, healthcare providers, local schools, nonprofits and other neighbors of all of our facilities	Local jobs; water and air emissions; support of community initiatives, e.g., United Way fundraising
<b>Customers</b>	Those who purchase our products, such as automotive aftermarket retailers; manufacturers of cars, trucks, buses and other vehicles; users of lift trucks; data centers; telecommunications; utilities; various government and defense agencies and their suppliers; etc.	Environmental and safety performance, human rights practices, quality, manufacturing domestication, hazardous waste reduction, scrap reduction
<b>Government Agencies</b>	Includes local, state and federal regulatory agencies such as U.S. Environmental Protection Agency; Pennsylvania Department of Environmental Protection and Department of Energy as well as its research bodies, such as Argonne National Laboratory	Environmental, health and safety performance; economic impacts; battery efficiency; R&D
<b>Suppliers</b>	Raw material suppliers of lead, plastics and other goods	Quality, procurement practices
<b>Industry Associations</b>	Various industry groups and associations (see full list on page 28)	Economic impact, safety, environmental performance
<b>Financial Institutions</b>	Lending institutions, investment partners	Sales, business excellence
<b>Academic Institutions</b>	Leading universities such as Lehigh, Penn State, Moravian, Alvernia, Reading Area Community College, Kutztown University, University of Michigan, Michigan State University, Eastern Michigan University, and Kettering University	R&D, job/internship opportunities, product development engineering, operations, corporate functions



# NETWORK & DATA SECURITY

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## Data Security and Privacy

As a global company, East Penn maintains robust data security and privacy across its operations. East Penn has established a dedicated cross-departmental team, led by East Penn's Chief Financial Officer, that regularly addresses its information governance practices and network management. As part of its ongoing due diligence, East Penn conducts regular reviews of its process and systems to address changing legal, regulatory, and policy requirements across all of its operations. East Penn continues to mature its overall data privacy and information security posture to meet industry standards and evolving technological environments, and to support objectives set by East Penn's executive leadership.

## ISO 27001

Cyber incidents are the leading risk to businesses globally, according to a recent survey among risk management experts. This includes things such as cybercrime, IT failure or outages, data breaches, and fines and penalties.

East Penn is getting ahead of the issue with its pursuit of ISO 27001 certification. ISO 27001 will help mitigate risks and build trust with customers, suppliers, and vendors. Our current security plan is already in alignment with ISO 27001. We expect to complete our compliance project in 2024 and have scheduled an external audit for the first quarter of 2025. This project has the full support of our management, who recognize the importance of securing our footprint in the era of digital transformation.

## Network Security Team

We have a dedicated network security department that is responsible for safe harboring of East Penn Manufacturing systems. The purpose of a network security engineer is to plan, design, implement, audit, and troubleshoot the security systems. East Penn Manufacturing uses a 24x7x365 Security Operations Center which monitors all activity. The Security team meets regularly with local, state, and national agencies (FBI, CISA, DHS, State Department) for debriefs, potential threats, training and policy updates.

## East Penn Manufacturing End Users

We perform quarterly training for all office-based personnel which includes knowledge retention testing, phishing exercises, and video content.



# WHAT WE MAKE:

POWER SOLUTIONS FOR  
A RANGE OF MARKETS







*East Penn operates the largest single-site, lead battery manufacturing facility in the world. We design and manufacture more than 515 types of durable batteries with one of the highest reputations for product quality in the industry. Our batteries range in size from six pounds to over 50,000 pounds. We also manufacture wire, cable and battery accessories which, together with our batteries, provide power solutions to thousands of applications in need of safe and reliable energy storage.*



# EAST PENN PRODUCT SEGMENTS



Automotive  
(cars and light trucks)



Marine



Recreational Vehicles

**TRANSPORTATION/SLI**  
(Starting, Lighting and Ignition)

*In North America we are the second-largest provider of Transportation/SLI batteries, a lead-based rechargeable battery that is mainly used in automobiles and other types of vehicles. Most of our products are sold as private label, including distribution through many of the major auto parts retailers in North America.*



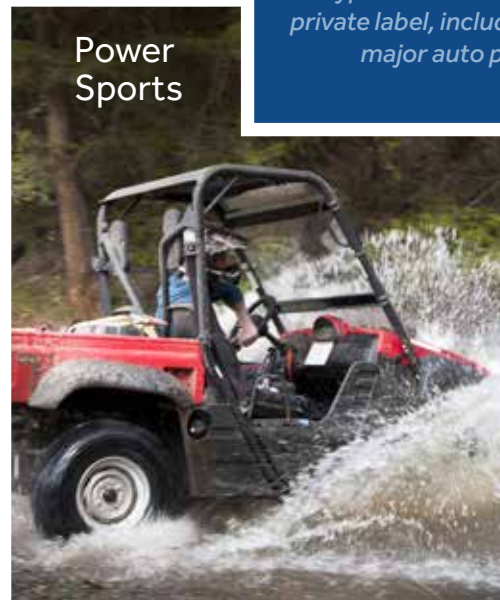
Lawn & Garden



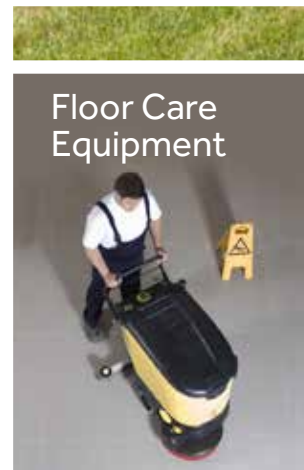
Agricultural



Trucks, Buses  
and Equipment



Power  
Sports



Floor Care  
Equipment



Golf Cars  
& Recreational  
Electric Vehicles



Mobility  
(through our  
MK Subsidiary)



# EAST PENN PRODUCT SEGMENTS

Industrial  
Lift Trucks



Mining

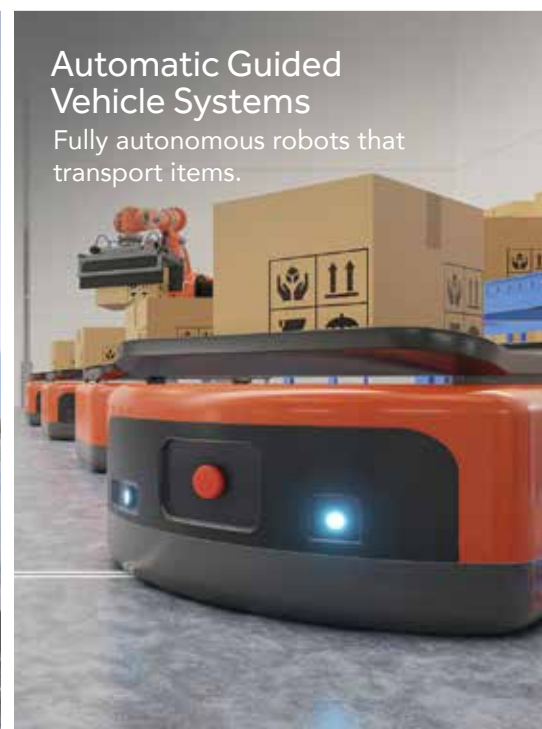


## MOTIVE POWER BATTERIES

*East Penn ranks second in North America for the manufacture and sale of motive power batteries, which are those used in off-road applications where the battery energy is used to produce motion. We also offer lithium-powered solutions as part of our extensive Deka portfolio. We provide a broad range of motive power lead and lithium battery solutions.*

Automatic Guided  
Vehicle Systems

Fully autonomous robots that transport items.



Airline  
Ground  
Support



Rail and Locomotive





# EAST PENN PRODUCT SEGMENTS



## Communications (5G/Wireline/Cable)

Cellular towers and wire lines depend on a system of batteries that deliver instantaneous reserve power.




## Uninterruptible Power Supply (Data Centers)

Reserve power is essential to protecting vital information and/or sustaining critical emergency systems.

### RESERVE POWER BATTERIES

*We rank second in the valve-regulated lead battery market in North America. These products are typically used in uninterruptible power supply (UPS) as a backup when the electrical power goes down. They also meet vital communication needs in the telecom market.*



## Renewable Energy

Support for renewable energy applications like solar and wind systems.



## Utility and Switchgear

The energy grid requires battery technology to function efficiently and deliver affordable, reliable service with reduced environmental impact.

## EAST PENN PRODUCT SEGMENTS

### Wire and Cable

For automotive, marine, commercial, lawn & garden, RV, trailers and many more applications.



### Marine

Including high-quality, reliable battery accessories and wire products critical to a boat's electrical system performance.



### WIRE, CABLE, AND BATTERY ACCESSORIES

*East Penn is one of the largest providers of wire and cable products in North America. We also largely support our battery manufacturing with accessories and parts made from this facility.*

### Battery Accessories

Including battery terminals, battery cables, booster cables, clamps and more.




### Fleet

Including booster and cable clamps, battery terminals, lugs and battery hold-downs.





## EAST PENN PRODUCT SEGMENTS – NAVITAS SYSTEMS



Material Handling  
Equipment

Including class I, II  
and III forklifts.



### LITHIUM-ION BATTERIES

*Through Navitas Systems, East Penn is a leader in  
large format lithium battery technology and systems.*

### Military applications

Including military vehicles and confidential major advanced  
battery product and system development programs for  
soldier, under sea, aircraft and space applications.

# NAVITAS SYSTEMS OVERVIEW

## WHAT WE MAKE

A leader in comprehensive energy storage solutions, Navitas Systems engages in the research, design, development, and manufacture of advanced lithium cells and energy storage products and systems for both commercial and U.S. Government/military customers. The company produces both small- and large-format lithium batteries for a range of high power and high energy applications. It also makes battery management systems with custom hardware/firmware and communications, as well as assembles these components into a variety of low and high voltage lithium battery packs.

## Battery Leadership

Navitas Systems is a founding board member of the Military Power Sources Committee. The Committee was founded to address several critical issues for military advanced batteries including, standardization, domestic manufacturing, demand streams, research and development, and work force.

## Research and Product Development

Navitas Systems is focused on innovation. The company's in-house R&D capabilities are on the forefront of designing new battery chemistries. Skilled systems engineers design these advanced cells into robust battery products and systems. The advanced research product development group consists of over 60 employees and is recognized as a cutting-edge organization managing 12 R&D projects.



## Government and Defense Initiatives for Sustainability

Additionally, the company's Government and Defense efforts include the expansion of R&D efforts to address National Security. Navitas Systems is evaluating several methods to aid our reuse and recycling efforts. The company is currently researching the reuse of oil sludge materials for battery electrode Advance Carbon Product Technology (ACPT). The company has also been working closely with ever-evolving lithium recyclers to help advance the current state-of-the-art recycling processes for cell-related components such as active materials, copper, aluminum, and electrolyte, as well as pack materials such as electronics, metal, wiring, etc. Some of these recycling efforts focus on minimizing how much material is sent to landfills while other efforts focus on lowering costs by driving these components back into the manufacturing stream. In partnership with the U.S. Army Ground Vehicle Systems Center (GVSC), Navitas is working to advance the electrification of the Army's ground forces to reduce logistical dependence on liquid petroleum. They are also researching new lighter, more energy dense lithium sulfur materials for the U.S. Space Force for sustainability of U.S. satellites.

## Department of Energy (DOE) Partnership

Navitas Systems has recently completed a program with the Department of Energy (DOE) focused on developing dry electrode for manufacturing, which eliminates the use and recovery cost of volatile solvents from the electrode manufacturing process along with significant reductions in energy consumption. The main goal of our partnership with the DOE is the reduction of manufacturing time and cost while sustaining or improving materials that are critical to U.S. manufacturing.

Other programs are distributed throughout the U.S. Department of Defense, Navy, Army, Air Force, Space Force.

# NAVITAS SYSTEMS OVERVIEW

## Energy Efficiency

Navitas Systems is focused on energy reduction. The company is installing new, energy efficient DHUs (Dehumidifier Handling Units) and turning off power to equipment and spaces that are not in use. The company is also participating in a program with DTE Energy. The program provides electricity at a lower cost to businesses who reduce energy waste by maintaining equipment efficiency, such as regularly checking air lines for leaks to decrease compressor use. Navitas Systems is also establishing a building management system to monitor and adjust energy use based on production and HVAC needs.

## WHO WE ARE

Navitas Systems is a leader in integrated design, technology development, and manufacturing of innovative lithium-ion energy storage products for commercial, industrial, and government agency customers. Navitas Systems products range from customized energy storage solutions for motive, idle-reduction and defense related applications, along with custom renewable energy integrated power systems. The company is located in Ann Arbor, Michigan and has three facilities that cover 200,000 square feet of commercial and industrial production pack assembly, government and defense production cell and pack assembly, and research and product development centers of expertise. From advanced R&D, safe/high energy cell design, in-house custom lithium cell manufacturing to sophisticated battery pack and assembly including in-house designed battery management systems, Navitas Systems is a premier source for comprehensive energy storage solutions. Navitas Systems meets all supplier goals required by law under government contracting compliance. East Penn Manufacturing acquired Navitas Systems in 2019.



## Community Involvement

In 2023 Navitas Systems again participated in Ann Arbor's largest tech-inspired public event. Aimed to bring new technology to the Ann Arbor area, A2 Tech Trek and Mobility Row is a free community street fair and company open house where regional technology companies showcase their innovations and culture.

Navitas Systems has provided financial support to the community-based nonprofit, SOS Community Services. The agency is dedicated to preventing and ending family homelessness in Washtenaw County through partnerships with caring individuals, local businesses and organizations, social service agencies, and professionals.



The company also participated in the American Heart Association's Washtenaw County Heart and Stroke Walk. Employees and their families, along with support from generous suppliers, raised \$11,250 to support local research and services relating to heart disease and stroke. Navitas Systems was proud to be a key sponsor of the event and had a large group of employees and family members come out to support this impactful community event.

Navitas employees also participated in other various initiatives, such as sending 14 care packages with Michigan-made items to our brave troops in South Korea and donating Christmas presents to Toys for Tots and the Humane Society of Huron Valley. Navitas also has a stewardship program that involved employees and their families helping to remove invasive plants at Bird Hills Nature Area in Ann Arbor.





# NAVITAS SYSTEMS OVERVIEW



## Supply Chain Overview

Navitas Systems manages a diverse, international supply chain that provides goods and services to the company. The supply chain consists of more than 200 suppliers located on three continents. Navitas relies on these suppliers for electronics, sheet metal, cable, PCBA, lithium cells, electrode, electrolyte, separator, pouch, tabs, copper/aluminum foil, graphite, resin, anode and cathode electrode roll, other materials, and machined, stamped, and molded parts to support cell and pack manufacturing for the company's three plants within Ann Arbor, Michigan. The Purchasing team manages a very diverse supply base responsible for a multitude of commodities. It conducts regular audits focused on quality, delivery, and service. Scorecards and risk assessments are used to help determine necessary onsite visits.

Suppliers to Navitas Systems recognize being good stewards to the environment is important and have programs designed to reduce their carbon footprint, better utilize natural gas and other resources, and perform environmental impact assessments to determine the biggest needs for improvement.

Supply chain breadth is important to Navitas Systems. There is a strong emphasis placed on partnering with small businesses. Small businesses make up approximately 40 percent of what the company spends through the supply chain, and diverse-owned businesses make up about 15 percent.

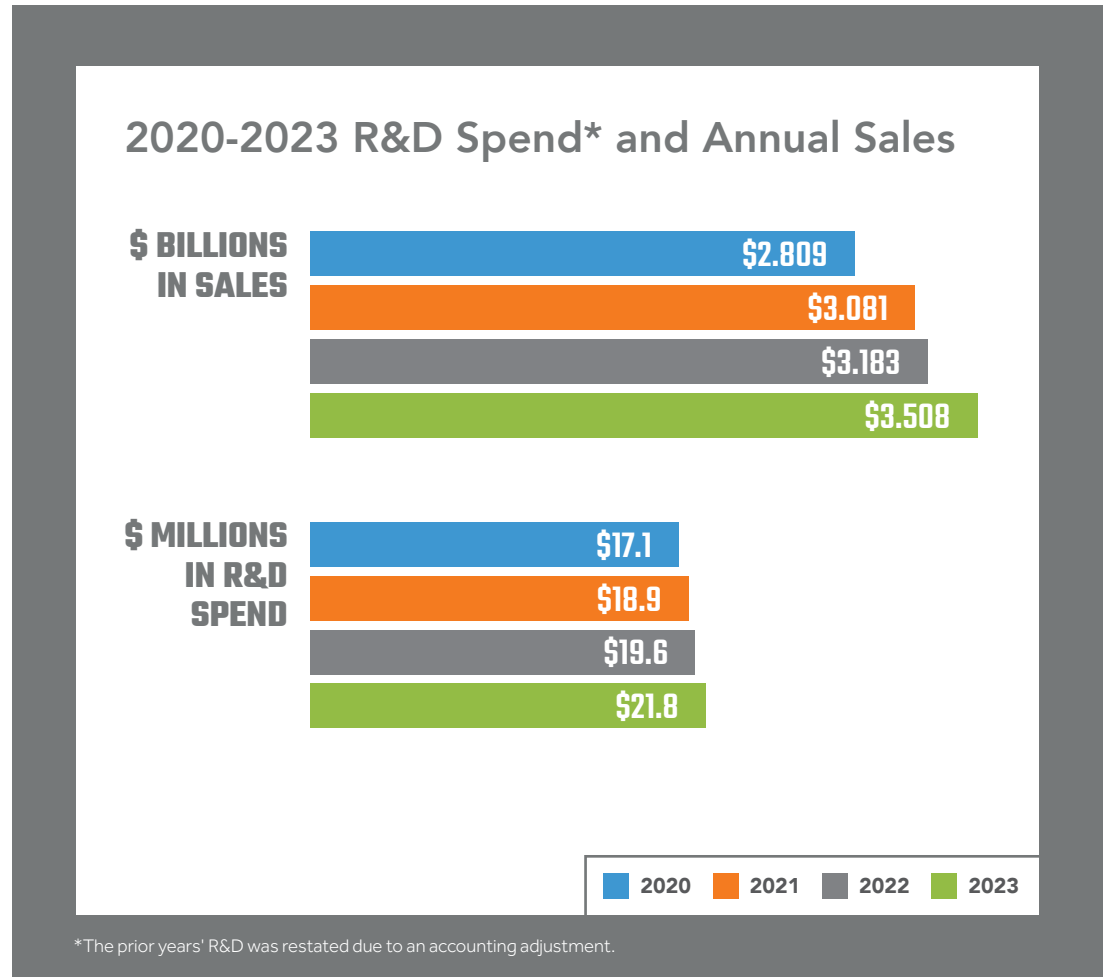


# PRODUCT RESEARCH AND DEVELOPMENT

For more than 75 years, East Penn has reinvested our earnings into growth, innovated solutions for customers and developed processes that reduce waste and emissions, such as recycling technology. We focus on the long term, emphasizing investments in expanded manufacturing capacity, research and development (R&D), and emerging technologies in the changing energy-storage landscape. Many of these investments have paved the way for advancements in sustainability.

For example, we have developed new innovations in clean energy storage, and our role in advanced lead-based technology supports all five powertrain iterations from Start-stop micro-hybrids to full Electric Vehicles, serving as an essential component for 12-volt system’s safety, reliability, and redundancy. The company also developed advanced battery solutions that support smart electrical grid technology and renewable energy generation like wind and solar power.

In 2023, our sales were \$3.508 billion (on a fiscal year basis, June 1 to May 31). Our annual R&D budget for the year was \$21.8 million.



# PRODUCT RESEARCH AND DEVELOPMENT

## On-Site Innovation Centers

Near our headquarters in Lyon Station, Pennsylvania, East Penn operates a 42,000-square-foot facility dedicated to R&D and continuous process and product improvement. The Breidegam Miksiewicz Innovation Center focuses on the latest in advanced lead battery development, process automation and robotics, lithium-ion battery development, and the exploration of alternative battery technologies.

## Lithium-ion Battery R&D/Product Engineering/Manufacturing

Our Navitas facilities in Ann Arbor, Michigan, houses world class materials science labs, cell testing, pilot scale electrode coating capabilities, a 720-square-foot R&D dry room, wet lab, prototype assembly, machine shop, and a 30,000 square-foot automated lithium cell production line which includes a 10,000 square foot production dry room that is currently making cells and packs for an underwater sonar battery for the Navy. Together with Navitas' R&D team, and in East Penn's 2,000-square-foot dry room in the Breidegam Miksiewicz Innovation Center, our scientists are working on a number of advanced cells and packs for military applications including wearable battery units for soldiers, batteries for combat vehicles and finally batteries for air and space craft. We are also evaluating the life cycle enhancements, safety improvements as well as increasing both power and energy of various lithium-ion battery materials in the development of better battery performance.

Among our various battery technology research projects are advanced silicon and lithium metal anode, Ni-rich layered oxides (NMC, NCA), lithium sulfur battery, and finally electrode coating process improvements.

## Academic and Research Partnerships

East Penn understands that R&D is most effective when partners bring their respective expertise to shared vision and goals and we have a range of partners to advance technology in our industry.

Under an agreement with the U.S. Department of Energy's (DOE) Argonne National Laboratory (ANL), East Penn and 14 other members of the Consortium for Battery Innovation (CBI), have joined to explore new ways to enhance the performance of lead and other materials in lead batteries. Similarly, East Penn has joined with four other companies including three lead battery producers in sponsoring another project to develop expanders to enhance lead battery performance. This project is run by the DOE, ANL and the University of Toledo. In 2021, the CBI and Battery Council International published an innovation roadmap to demonstrate the lead battery industry's role in helping the DOE create and sustain American leadership in energy storage. The roadmap identifies key research areas which offer opportunities for the next generation of advanced lead batteries to deliver significant performance gains and to play an even greater role in the diverse energy mix that will power the nation's grid. We are extending this program for another 2 years, which will enable us to explore other research areas, such as the sulfation of batteries, which impact battery life.

**The roadmap's 13 research areas identified to aid the DOE in meeting the challenge include:**

LEAD INDUSTRY SUPPORT	LEAD BATTERY SCIENCE RESEARCH PROGRAM	
ADDITIVE MODELING	BIPOLAR INNOVATION	LOGISTICS
MANUFACTURING	TECHNOECONOMIC ANALYSIS	RECYCLING
PILOT MANUFACTURING	SUPPLY CHAIN ISSUES	OPERATIONAL ISSUES
BALANCE OF PLANT OPTIMIZATION	ENERGY STORAGE SYSTEM DEMONSTRATION	



## PRODUCT RESEARCH AND DEVELOPMENT

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We also have a cooperative R&D agreement with other battery companies and suppliers to help tap into more of a lead battery's unused potential. By identifying new ways to predict battery behavior through analysis and calculation, we can better model lead batteries without having to build prototypes. This has enabled us to innovate without disrupting production and drive cost efficiencies in the R&D process.

East Penn also has a partnership with ArcActive, a New Zealand-based company, to further develop ArcActive's electrode technology for lead batteries. This innovation has the potential to dramatically improve a lead battery's dynamic charge acceptance (DCA), which is its ability to store large pulses of energy.

Higher levels of DCA allow more of the available energy from regenerative braking to be stored. That means the battery can reliably service the vehicle's electrical loads while delivering greater fuel economy and reducing CO<sub>2</sub> emissions. Manufacturing technology for prototype ArcActive batteries has advanced significantly for both AGM and flooded designs. Integration of these batteries into vehicles would result in a very substantial and affordable means toward a broader range of carbon emission savings.



*Exploring the untapped potential of lead battery technology.*

**PARTNERSHIP TO PROMOTE PROPER RECYCLING**

**Promoting Safe Battery Recycling and Lead Smelting in Ghana**

*As a market leader in lead battery manufacturing, East Penn has a wealth of insight and expertise to share with others when it comes to managing potentially hazardous substances like lead.*

*East Penn participates in a Sustainable Recycling Industries (SRI) program formed by the International Lead Association (ILA), Battery Council International, EUROBAT and the Association of Battery Recyclers to improve standards in lead battery manufacturing and recycling. Informal and substandard lead battery recycling occurs in countries where little or no regulation is in place, and where often vulnerable and poor communities take part in unsafe practices to earn income, despite the risks.*

*Through the program, East Penn has helped establish and maintain effective air pollution controls, so there is little impact from smelting operations on the surrounding community.*

# INDUSTRY MEMBERSHIPS & PARTNERS

7x24 Exchange International	The American Boat & Yacht Council	American Clean Power Association	American Industrial Hygiene Association
The American Society of Mechanical Engineers	American Society of Safety Engineers	American Trucking Associations	Association of Battery Recyclers
Autocare Association	Automotive Aftermarket Suppliers Association	The Battery Council International	California Automotive Wholesale Association
California Energy Storage Alliance	Consortium for Battery Innovation	Defense Industrial Base Consortium	The Electrochemical Society
Industrial Truck Association	Institute of Electrical & Electronics Engineers Power & Energy Society	International Lead Association	Material Handling Equipment Distributors Association
Material Handling Industry	Military Power Sources Consortium	NAATBatt	National Advanced Mobility Consortium
National Defense Industry Association	National Marine Manufacturers Association	National RV Dealers Association	North American Board of Certified Energy Practitioners
Outdoor Power Equipment Institute	PRBA Portable Rechargeable Battery Association	Rehabilitation Engineering and Assistive Technology Society of North America	Suppliers Partnership for the Environment
Society of Automotive Engineers			U.S. Chamber of Commerce
Technology & Maintenance Council			

**EAST PENN TODAY**  
Supports dozens of multifaceted associations internationally



# HOW WE WORK:

SUSTAINABLY & RESPONSIBLY



# BUILDING A CIRCULAR ECONOMY

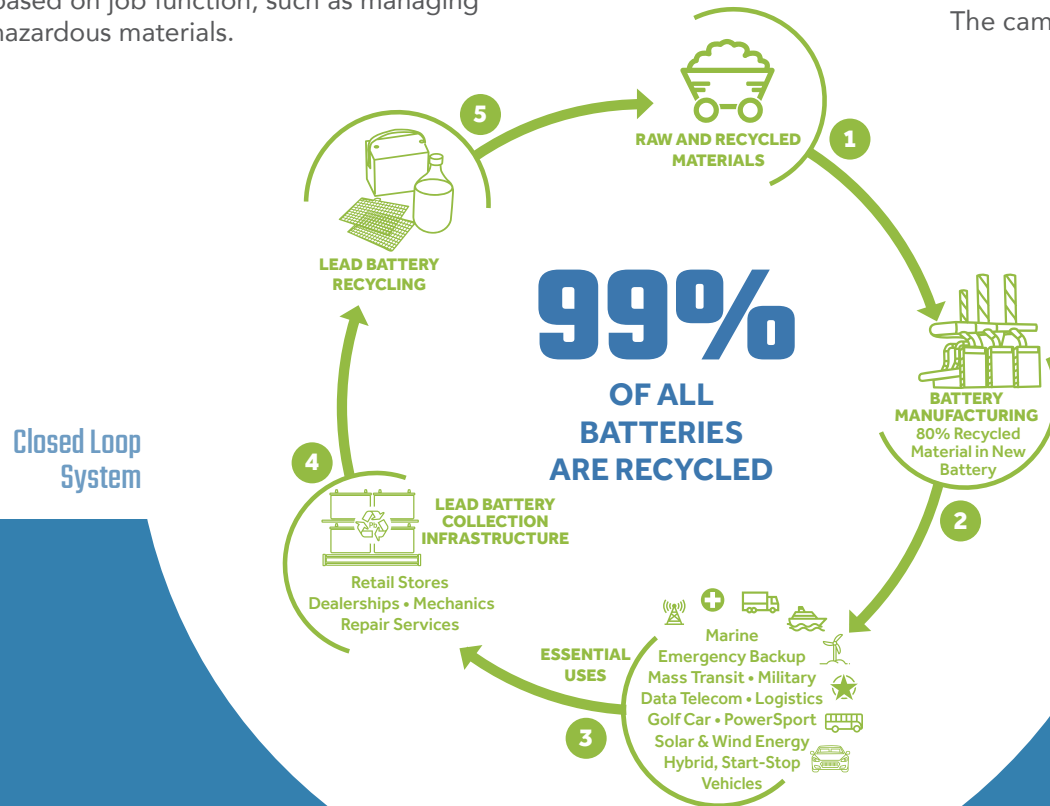
Environmental sustainability and stewardship pervade the operational structure of East Penn’s business. From the circular nature of our lead battery manufacturing operations to the energy storage solutions that our products provide, we are focused and have put in place actions that benefit the environment.

To guide these efforts, we have an environmental management system (EMS) at all of our manufacturing locations. The EMS at our lead battery manufacturing plants in Pennsylvania facilities in Lyon Station, Kutztown and Tipton and our plant in China are third-party certified to ISO 14001. Each year, we train employees to help them manage environmental issues in their job functions. This training includes general awareness training of our EMS as well as topic-specific training where needed, based on job function, such as managing hazardous materials.

East Penn was founded on the practice of manufacturing batteries from recycled materials. Going on a century later, we continue to apply circular principles to our manufacturing process, helping to build a sustainable future by minimizing waste at every step - from design through production, distribution and use, before we ultimately recover end-of-life products and reuse them in new products.

## SUPPORTING RECYCLING PARTNERSHIPS

In 2023, East Penn launched Power2Recycle, a unique environmental campaign highlighting the importance of partnerships between the lead battery industry and the public for proper battery recycling. The ongoing effort emphasizes how everyone can help the industry support resource conservation, integrated recycling, and carbon reduction technologies. The campaign’s initial launch reached over 1.6 million people.



Power2Recycle™

Check out our webpage to learn more.  
[eastpennmanufacturing.com/power2recycle](http://eastpennmanufacturing.com/power2recycle)

# BUILDING A CIRCULAR ECONOMY

## PRODUCT RECYCLING, REUSE AND MANUFACTURING

Lead batteries have safe and infinite recycling possibilities. These batteries are virtually 100 percent recyclable, allowing us to reuse the materials in the manufacture of new batteries.

At our Lyon Station campus, where the majority of manufacturing takes place, we co-operate our recycling facility and manufacturing plants. Doing so enables us to efficiently recycle and reuse all three major components of a lead battery.

### Lead

90 percent of the lead we used in 2023 came from recycled sources. Our lead smelter in Lyon Station recycled 175 million pounds of lead from batteries, collected from customers, as well as nonconforming material from our battery manufacturing plants.

### Plastic

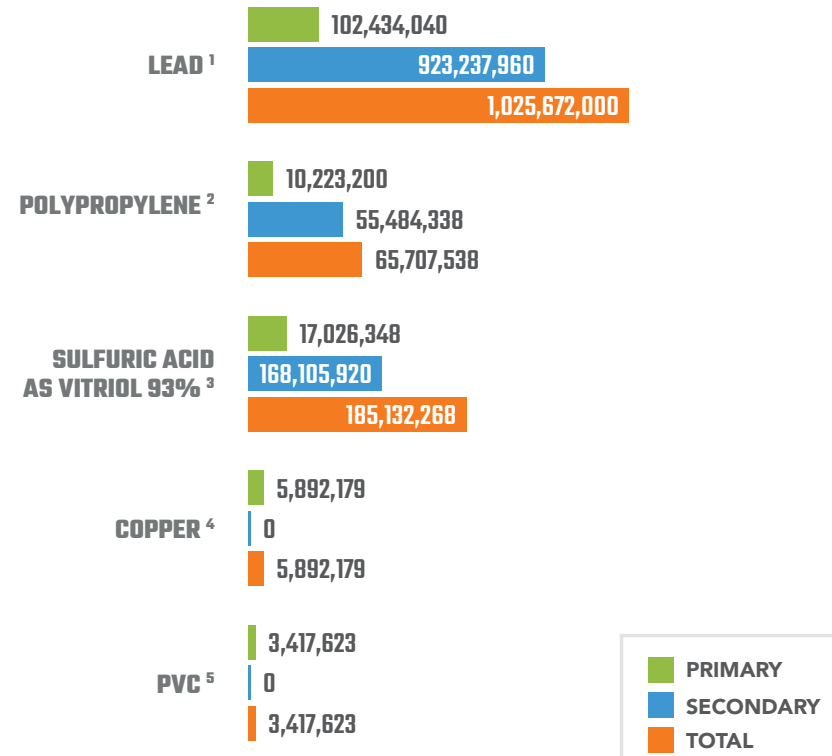
84.4 percent of the plastic we used in 2023 came from recycled sources. We use polypropylene in battery cases and covers, which we later recover, clean and extrude into polypropylene pellets. The material is then pneumatically conveyed to our on-site injection molding facility where it is molded into new cases and parts. East Penn’s smelter recycled and reclaimed 10.6 million pounds of plastic in 2023.

### Sulfuric acid

In 2023, we used over 6.3 million pounds of recycled sulfuric acid retrieved from our recycling process. East Penn researchers developed the patented process that reclaims sulfuric acid from spent lead acid batteries (SLABs). At our acid reclamation facility in Lyon Station, this process allows us to remove impurities and convert the solution into new electrolyte while avoiding disposal of a hazardous waste. This process also reduces the use of well water, conserving a natural resource.

## 2023 Raw Material Inputs

**SCOPE:** Manufacturing Plants in Lyon Station, Kutztown and Lancaster, PA; Temple, TX; and Corydon and Oelwein, IA. Statistics shown in pounds.



1 Primary lead is from mined sources. Secondary lead includes lead recycled from previous usage, for example, at the Lyon Station smelter, plus lead recycled at other facilities and transported to Lyon Station. Secondary lead comes mainly from spent batteries collected from customers; a much smaller portion comes from factory scrap material from battery manufacturing that is recycled at smelters.

2 This data does not include polypropylene in purchased cases and covers. Primary refers to virgin polypropylene, while secondary is recycled from previous usage.

3 In the U.S., East Penn purchases sulfuric acid for its two manufacturing sites and finishing distribution centers in Lyon Station, PA; Temple, TX; and Iowa (primary sulfuric acid). In Lyon Station, a portion is recycled from spent batteries (secondary sulfuric acid).

4 Copper is purchased to manufacture wires and cables at Kutztown. All copper is virgin (primary) material.

5 PVC is purchased to manufacture wires and cables at Kutztown. All PVC is virgin (primary) material.



## BUILDING A CIRCULAR ECONOMY

### Product Use

Extending the useful life of our batteries is an important element of a sustainable product lifecycle. Doing so not only reduces material costs for the company, but also lowers the products' overall environmental impact by reducing the energy and water used to manufacture and distribute new products. East Penn invests heavily into research and development in search of opportunities to improve the performance of our batteries.

### Recovery

Lead batteries have a recycling rate greater than 99 percent, making them the most recycled consumer products in the U.S. This remarkable rate is due to lead's ability to be reused infinitely in the production of new batteries without loss of performance. We ensure our distribution trucks' return trips are full of used batteries brought back to recycling facilities, thereby closing the loop on the products we sell.

### Byproduct Reuse

The battery recycling process creates a sulfur oxide byproduct. This material cannot be reused in new batteries. East Penn's secondary lead smelter in Lyon Station, however, is designed to maximize the capture of sulfur oxides and reprocess them into a liquid nitrogen sulfur solution, which we sell to agricultural fertilizer manufacturers for use as a raw material.

## LITHIUM-ION BATTERY RECYCLING

Given the increased demand for lithium-ion batteries worldwide, the need to develop and deploy cost-effective and energy-efficient solutions for recycling end-of-life lithium-ion batteries has never been greater. Although various solutions already exist, lithium-ion battery recycling is still in the infancy stage and further investment, policy changes and R&D are needed to bring it to scale.



## LEAD BATTERY UL VALIDATION

In 2023, East Penn elected to submit the company's transportation product line to Underwriters Laboratories (UL) for evaluation to UL's 2809 Environmental Claim Validation Procedure, which determines the amount of recycled content in products. The validation also speaks to the efficiency and integrity of a supply chain and represents the commitment manufacturers made to product circularity and environmental stewardship.

After rigorous evaluation using globally accepted standards and robust scientific analysis,



the Transportation battery line has been validated for an allocation of 98% recycled material, the highest UL Recycled Content Validation for batteries in the world.

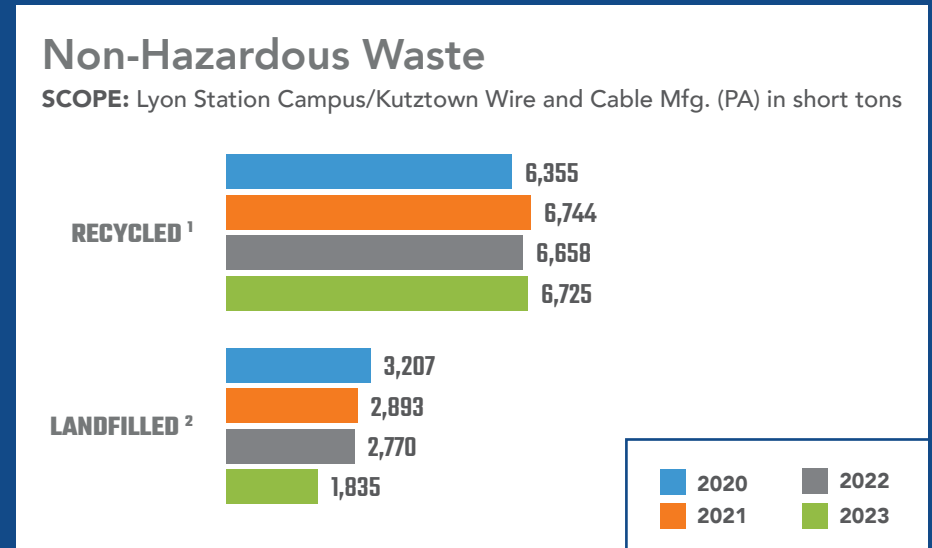
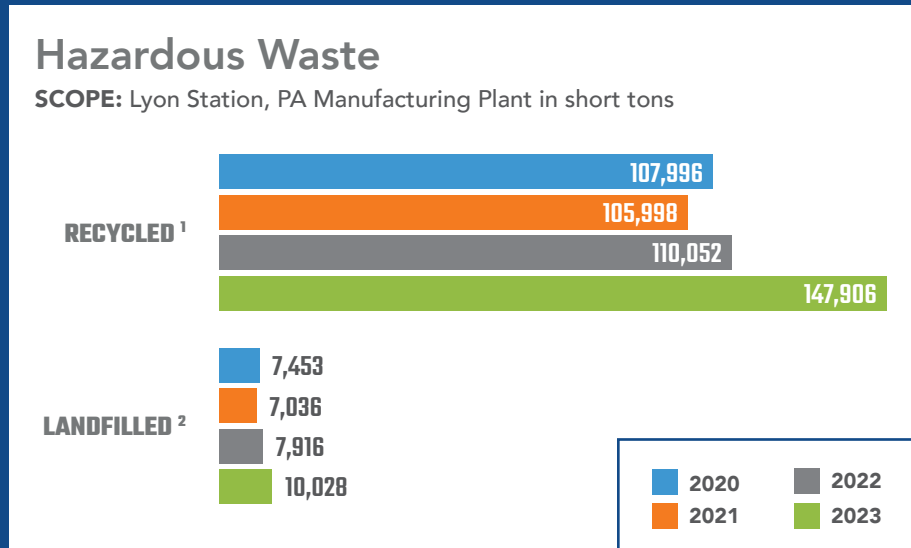
# HAZARDOUS AND NON-HAZARDOUS WASTE

Given the closed-loop nature of our lead battery manufacturing process, a large proportion of the waste we create—both hazardous and non-hazardous—is recycled. In 2023, we recycled 93 percent of our waste. However, we create waste from support functions within the company as well. If we cannot recycle waste from our other support functions, we send it to be recycled by other local recycling facilities. Throughout our facilities, employees drive our efforts to recycle a full range of scrap and excess materials.



Recycled hazardous waste includes spent lead batteries collected from third parties and factory scrap material, such as batteries that do not pass quality checks, dross and lead wastes. East Penn also generates landfilled hazardous waste at our Lyon Station campus. This waste includes slag, refractory waste, wastewater treatment plant sludge and remediation waste (not including concrete and blacktop). We send such wastes to landfills in accordance with all regulatory requirements.

Recycled non-hazardous waste includes scrap metal, copper wire, wood pellets, cardboard, plastic wrap, universal waste (such as mercury-containing light bulbs), office paper and commingled waste (plastic and glass bottles, aluminum cans). We send municipal solid waste and out of specification wastewater treatment plant salt to landfill.



**NOTE:** Hazardous waste is only generated at the manufacturing facilities in Pennsylvania. Total hazardous waste increased by 14 percent, 2020 to 2023. During this time, the amount of hazardous waste landfilled decreased 5 percent.

<sup>1</sup> Recycled hazardous waste consists of spent lead batteries collected from third parties and factory scrap material, which are recycled at the Lyon Station recycling facility to make new batteries. Factory scrap material is generated at the Lyon Station campus and includes batteries that do not pass quality checks, dross and lead wastes.

<sup>2</sup> Hazardous waste landfilled includes slag, refractory waste, wastewater treatment plant sludge and remediation waste (not including concrete and blacktop). Disposal of hazardous wastes in landfills is done in accordance with all regulatory requirements.

<sup>1</sup> Recycled non-hazardous waste includes scrap metal, copper wire, wood pallets, cardboard, plastic wrap, universal waste (such as used oil and mercury-containing light bulbs), office paper and commingled waste (plastic and glass bottles, aluminum cans).

<sup>2</sup> Landfilled non-hazardous waste includes municipal solid waste and wastewater treatment plant salt.

## ENERGY AND EMISSIONS

Manufacturing batteries is an energy-intensive business, so we continuously look for opportunities to reduce energy use. Each year, East Penn uses 600 million kilowatt hours of energy at our Lyon Station facility, which accounts for more than 80 percent of our total energy use. Approximately 40 percent of overall energy use goes toward charging our battery products. While charging batteries prior to delivery increases our energy use and emissions, this practice optimizes battery performance and reduces our customers' energy use.



### Energy Efficiency

As a participant in the U.S. Department of Energy's Better Plants program, we have committed to a 20 percent reduction in energy use per unit of production by 2028 against a 2018 baseline. To date, we have achieved a nearly 7500 MWh reduction, primarily by converting to LED lighting and process improvements in all of our plants since 2018.

### Renewable Energy

East Penn is investing in solutions for a low carbon future. In 2021, East Penn entered into a new power purchase agreement for renewable energy.

Under the agreement, the company purchased approximately 15 megawatts of solar power over 15 years from a new solar farm being built near Lyon Station, PA. The clean energy accounts for about five percent of our electricity needs at this campus, resulting in a reduction of some 9,500 metric tons of carbon equivalent per year.

The solar farm entered into production for the last two weeks of December 2023. Within this span, East Penn received 455 MWh of solar renewable energy credits. This equates to 148.26 metric tons of CO<sub>2</sub> that was voided from entering the surrounding atmosphere. With just two weeks' worth of production, East Penn replaced one percent of its Lyons campus's electrical consumption with clean renewable energy for the month of December 2023.

*As we continue along our energy-reduction path, East Penn has identified opportunities to further reduce energy use by switching off automated equipment and robots when not in use, primarily on weekends. East Penn's new equipment is more energy efficient than previous generations, so we expect to see more efficiency gains as we add new automation and upgrade our facilities.*

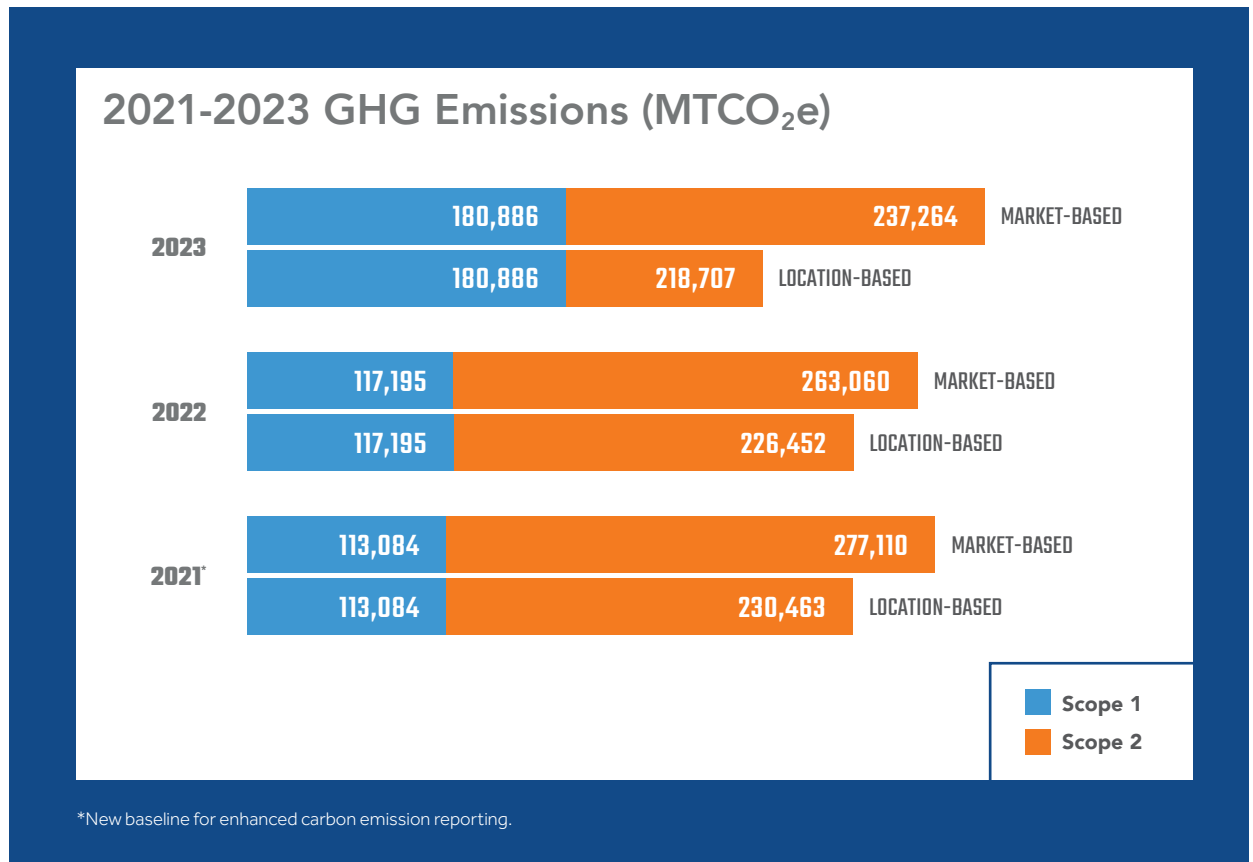
**20%**  
**REDUCTION  
IN ENERGY USE  
BY 2028 FROM A  
2018 BASELINE**



# DECARBONIZATION STRATEGY

East Penn is establishing a strategic decarbonization plan to reduce our impact on the climate. We have improved our annual greenhouse gas reporting process to reflect our complete carbon footprint more accurately, including evaluating upstream and downstream emissions impacts in line with tier one material issues, such as responsible sourcing, product recycling, and waste management. We have set our first greenhouse gas reduction target to drive accountability throughout our operations.

As we establish our first greenhouse gas reduction target, we have undertaken process improvements to our annual greenhouse gas inventory. Our reported emissions in 2021 and going forward now include emissions from all sites within our operational control and an expanded range of emissions sources in alignment with the Greenhouse Gas Protocol.



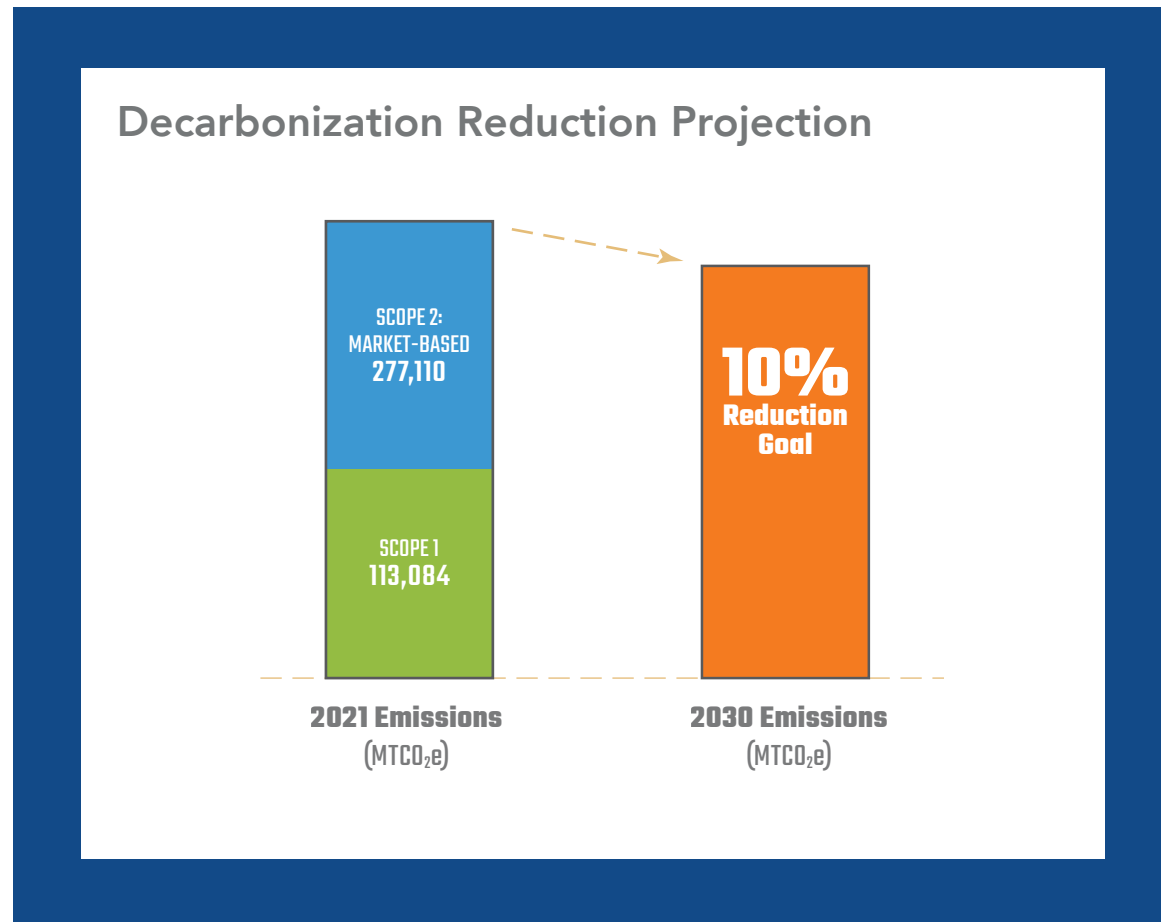
**Notes**

1. East Penn has defined its organizational boundary for reporting greenhouse gas emissions using the operational control approach. Emissions associated with East Penn operations are included, where East Penn has authority to introduce and implement operating policies.
2. The location-based Scope 2 method reflects the grid average emissions intensity of grids on which energy consumption occurs. The market-based method reflects emissions from electricity that companies have purposefully chosen, reflecting emission factors from contractual instruments for purchased electricity.

## DECARBONIZATION STRATEGY

In continuation of our sustainability activities to date we are evolving our decarbonization strategy in partnership with Trio (formerly Edison Energy), a leading energy and sustainability advisory firm. Our annual greenhouse gas emission reductions are now in line with best practices from the Greenhouse Gas Protocol Corporate Standard, and better reflects our full operational emissions and allows us to target our most emissions-intensive activities. Our commitment to our partners, customers and suppliers has led us to undertake a screening exercise of our value chain (Scope 3) emissions and identify areas of opportunity in our value chain.

A key pillar for our strategy is our greenhouse gas emissions reduction target. We plan to reduce our absolute Scope 1 & 2 greenhouse gas emissions by 10% across the entire East Penn operation by 2030 from a 2021 baseline. This reduction target incorporates potential opportunities for company growth. Setting this target embeds sustainability throughout our business and helps our customers meet their supply chain targets. Going forward, we will report our performance against our goals to ensure transparency on our progress.



# CARBON REDUCTION PROJECTS

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## Achieving Energy Efficiencies in the Plate Curing Process

A project to optimize the plate curing process was recently implemented. The advancement reduces the time that battery plates are in the curing ovens, resulting in less water and electricity being used in the process. The optimization process also enhances the plate's active material's ability to receive a charge which saves energy. With the current process implementations, our Lyon Station campus saved nearly 38,500 MWh combined from 2021 to 2023, resulting in a nearly 14,000 MTCO<sub>2</sub> reduction. Over these three years, the new process reduced the carbon footprint for electrical consumption of our main campus by 2.13%. As this process becomes more widely integrated, the company expects even greater achievements in overall carbon reduction.

## Automating the Plate Formation Process

Automating plate formation in our Motive Power division has significantly added to efficiencies within this production process. Compared to individually forming the plates, the battery process can now form the entire battery after assembly, while maintaining the same exceptional quality performance. This considerably reduces the time and electricity used within the former process. Since 2021, approximately 7300 MWh (equivalent to 2598.07 MTCO<sub>2</sub>) has been voided from entering the surrounding atmosphere. As this project expands, monitoring and improvements will continue with the goal of consistent MWh reductions every year.

## Researching New Projects and Evaluations

East Penn is exploring potential projects to further enhance our operational efficiency and reduce our carbon footprint. We are currently evaluating best opportunities for solar installations and we are upgrading our gas metering capabilities at each plant to provide an even more accurate Scope 1 emissions calculation. We are also evaluating yard truck conversions to use renewable energy (electric, compressed natural gas, etc.). We will challenge ourselves as a company to continuously improve when it comes to the efficiencies of our operational processes and the minimization of our environmental impacts.





# CARBON DISCLOSURE PROGRAM REPORTING

In 2023, as a privately-owned company, East Penn took its own initiative for a more proactive approach with its carbon disclosure by participating in three programs: the Carbon Disclosure Project's (CDP) Climate Change Questionnaire, M2030's disclosure platform, and Walmart's Project Gigaton. As interest across the globe becomes more intense concerning the requisites of carbon disclosure, we are continuing to strengthen our analysis and business strategy around climate change. Through our participation of carbon disclosure programs, East Penn is establishing a higher level of transparency of our carbon footprint between our customers, suppliers, and other stakeholders.

## CDP

The CDP is a nonprofit charity that runs the disclosure system for investors, companies, cities, states, and regions to manage their environmental impacts. It focuses on helping these entities build a sustainable economy by measuring and acting on their environmental impact. It gives grades based on the answers submitted in the Climate Change Questionnaire.

East Penn's first submission to the CDP resulted in a letter grade of C. This is the same as the averages for the North America, the world, and the electrical and electronic equipment sector. East Penn outperformed the Activity group average in the category of Scope 3 emissions by one letter grade.

## M2030

M2030 is similar to CDP but focuses more on manufacturers and suppliers. Its framework is built on specific sustainable development goals that are intended to be achieved by 2030.

For the first time, East Penn submitted to the M2030 disclosure platform in accordance with customer requests. East Penn's involvement in M2030 demonstrates our dedication to sustainable practices and maintains good standing with our customers who use the platform.

## Project Gigaton

Created in 2017, Project Gigaton is the name of Walmart's carbon reduction program with an emission reduction target. Its mission is to reduce or avoid one billion metric tons of greenhouse gases from the global value chain by 2030 through engagement with suppliers, NGOs, and stakeholders.

From our first submission, East Penn was recognized as being a "Giga-Guru" supplier—the highest level of recognition a participant can receive.



## EAST PENN'S ECO-FRIENDLY DRIVING PROGRAM

**In partnership with East Penn's drivers, driver supervisors, fleet maintenance, and company management, East Penn has formed multiple initiatives over the last several years to reduce the carbon emissions of the company's private fleet.**

### Electronic Logging Devices

In 2018, East Penn integrated Electronic Logging Devices (ELDs), enabling a significant improvement in capturing driver and truck performance data. This data was used to optimize truck routes and implement cross-dock solutions. It was also used in partnership with the company's drivers, who rose to the challenge to embrace new eco-friendly driving techniques that would be key to the success of this initiative.

Since ELD implementation, the result has been nothing short of astounding. In five years, the fleet has reduced its idle time by over 60 percent. These tremendous improvements were a perfect combination of the ELD data, optimized planning, and the support of a unique culture of driving professionals who fully supported the program.

The results from these efforts continue to accelerate—we had a nearly 20 percent idle time reduction in 2023 from the previous year. This most recent year-over-year improvement is equivalent to reductions of over 6,000 gallons of fuel and 64.5 metric tons of CO<sub>2</sub>. East Penn has always had a long history of taking great pride in the tremendous safety records of our drivers and overall fleet, and now has these significant sustainability achievements to add to their accomplishments.

### Fuel Efficiency Initiative

In 2023, East Penn further continued its carbon reduction efforts by launching an initiative that focused on fuel efficiency. Its primary goal is to increase its national truck fleet's gas mileage to seven miles per gallon by the end of 2025. To reach that goal, this initiative focuses on improving three primary factors: driver behavior, vehicle specifications, and vehicle maintenance.

We have already seen tremendous progress. Compared to a 2021 baseline of 6.10 miles per gallon (MPG), East Penn's truck fleet finished calendar year 2023 at 6.60 MPG. This equates to a reduction of 5,025 metric tons of CO<sub>2</sub> in a two-year period.

### Rail Siding to Reduce Truck Traffic

Recognizing another opportunity to be more environmentally friendly, East Penn put up rail siding in 2013 to receive more raw material via rail instead of trucks. According to the sustainability report of Norfolk Southern, the rail company that serves East Penn, moving freight by rail instead of truck reduces greenhouse gas emissions by 75 percent on average. Trains are also up to seven times more fuel-efficient than trucks.

East Penn tracks the number of railcars holding lead, acid, and polypropylene that our transload facility receives each year. In 2023, we received 1,400 railcars equivalent to over 6,100 truckloads. These numbers represent a reduction of about 25 trucks per day. East Penn looks forward to less reliance on incoming truckloads in the coming years.



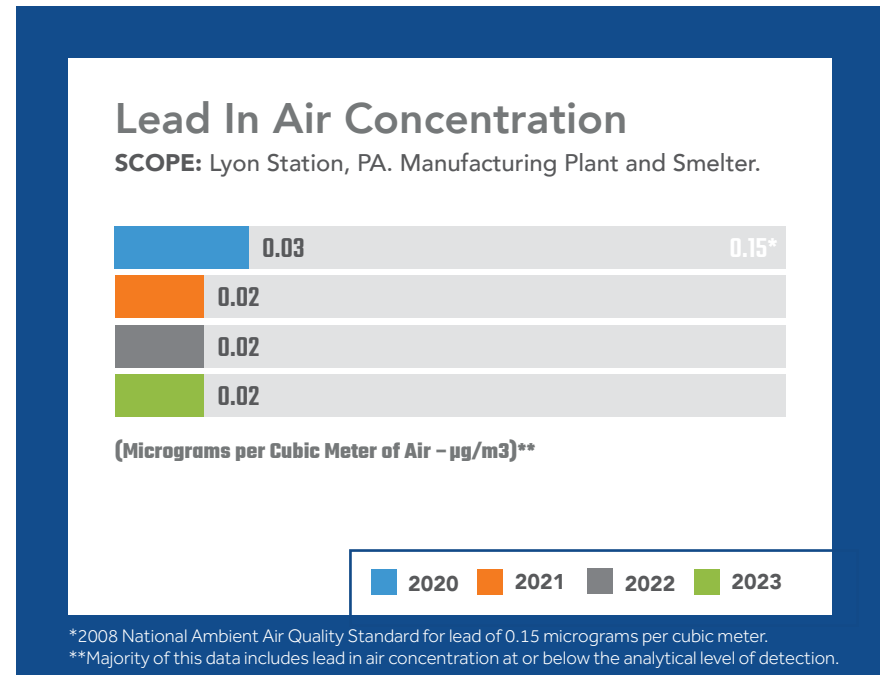
# LEAD EMISSIONS

East Penn’s lead emissions operate in controlled environments with elaborate networks of ventilation and negative air pressure systems to capture any lead particles that might otherwise escape to the outside environment. These particles are captured in fine particle air filters where they are collected and properly recycled. These measures are applied in our Lyon Station and Corydon operations and help to ensure healthy air quality in our surrounding communities, where our employees often live.

At Lyon Station, we deployed High-Efficiency Particulate Air (HEPA) filters more than a quarter century ago to filter plant air before it is released to the environment. Today, the state-of-the-art secondary HEPA filtration units in use are 99.997 percent efficient at 0.3 microns. These systems produce air quality that is cleaner than that found in the surrounding atmosphere.

East Penn continuously monitors air quality from testing stations installed on-site at Lyon Station and in the adjoining community. Even as battery production has increased over time, highly effective emission control technology has made possible reductions in ambient air lead concentration readings. These measures have consistently remained below government-mandated standards, including the highly stringent 2008 National Ambient Air Quality Standard for lead of 0.15 micrograms per cubic meter.

As a result, our permitted lead emissions for battery manufacturing in Lyon Station and Corydon, Iowa, are four times lower than allowable by U.S. Environmental Protection Agency (EPA) and state environmental standards. At our manufacturing facility in China, lead air emissions have been less than 2 pounds in each of the last four years.



*Our stringent protocols and air filtration systems produce air quality that is cleaner than that found in the surrounding atmosphere.*

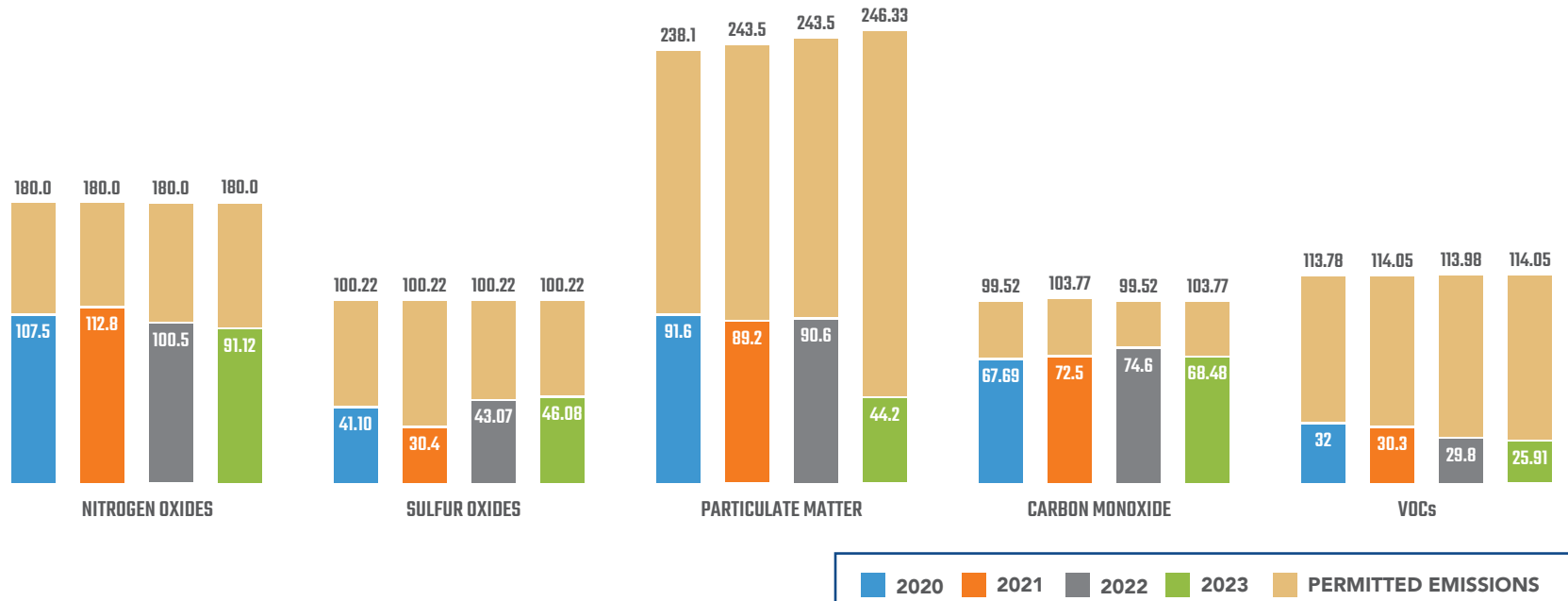


# AIR EMISSIONS

Battery manufacturing also results in the release of air emissions, including nitrogen oxides, sulfur oxides, particulate matter, carbon monoxide and volatile organic compounds. East Penn measures and monitors these emissions using advanced air pollution control equipment and our levels are well below those permitted by government regulations.

## Air Emissions Data

SCOPE: East Penn's Lyon Station, PA. Manufacturing plant. Statistics shown in short tons.



East Penn Air Emissions are well below permitted standards. **NOTE:** Color bars show actual air emissions. Tan bar shows total government permitted emissions.

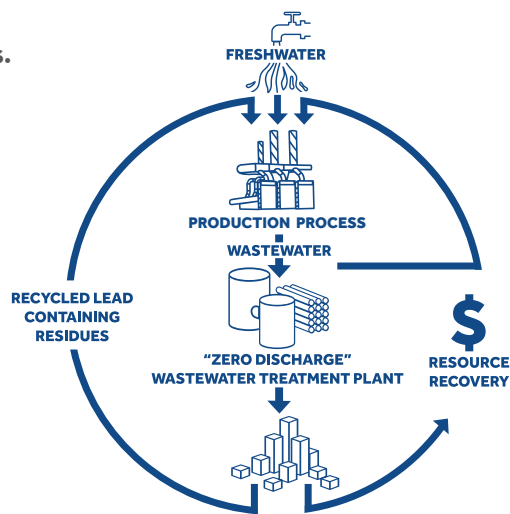
# WATER STEWARDSHIP

Water stewardship is a priority across our operations. At Lyon Station, wastewater treatment is done through an ultramodern wastewater distillation and treatment plant that is unique within the industry and covered under our environmental management system (EMS).

The innovative closed-loop facility recovers distilled water as well as a commercial anhydrous sodium sulfate byproduct from process wastewater, which we sell to a national chemical distributor for use in manufacturing glass products.

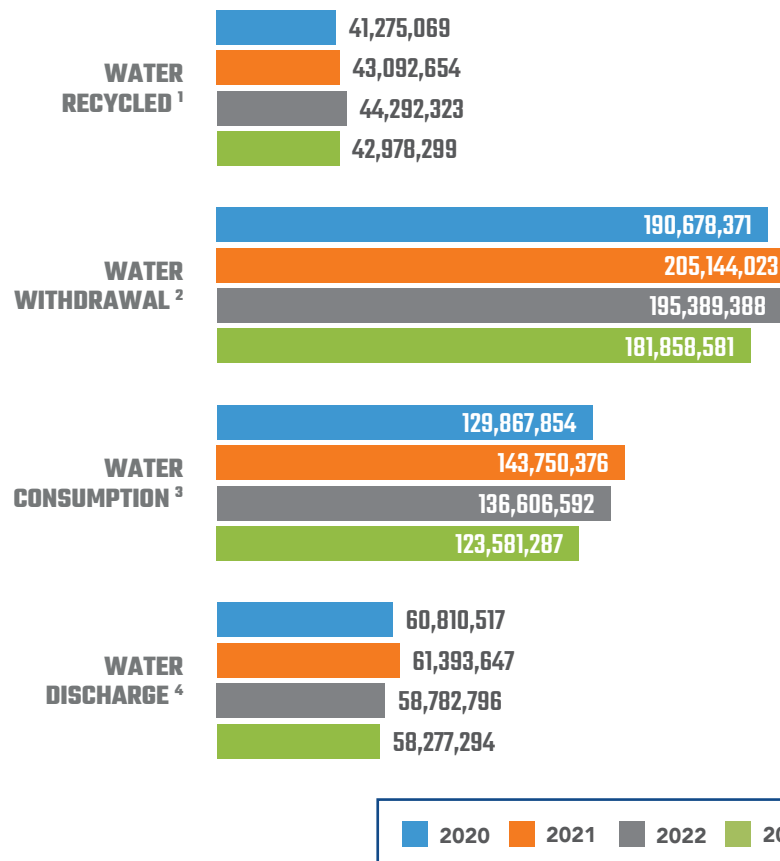
We separate all lead-containing residues from treated water and recycle them in an on-site secondary lead smelter. The treated recovered water is then used in manufacturing. In 2023, we reused a total of 42 million gallons for the year. As a result of this extensive wastewater treatment, we minimize the amount of groundwater we withdraw from the aquifer. All water withdrawn at Lyon Station is from ground sources and does not come from lakes or rivers nearby.

Another component of our water conservation efforts involves rainwater. We capture rainwater on the roofs of several buildings to be used in our manufacturing process. Between the roofs of our new Industrial building and one of our automotive buildings, about 250,000 square feet is available to capture rainwater. In the coming years, our wastewater treatment plant will also start capturing rainwater, adding 10,000 square feet to our total.



## Water Data

SCOPE: Plants at Lyon Station, PA. Statistics shown in gallons



NOTES: Between 2020 and 2023, water withdrawal decreased by 10.5%.

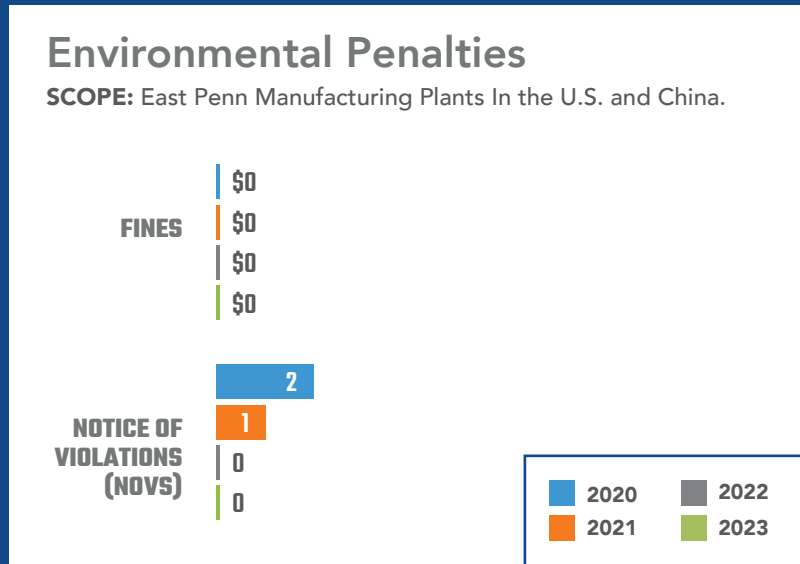
- The Water Recycled at Lyon Station is continuously treated and reused which allows for less volume to be withdrawn from the groundwater sources.
- Water Withdrawn at the Lyon Station, Pennsylvania campus is from groundwater sources.
- Water Consumed includes both evaporated water and water in the product.
- The Lyon Station, Pennsylvania, manufacturing campus is zero discharge for process water and is only discharging sanitary wastewater. Non-processed wastewater such as sanitary wastewater is treated and discharged to the local publicly owned treatment facility.

## ENVIRONMENTAL COMPLIANCE

East Penn conducts regular self-assessments to maintain compliance with various environmental regulations. Our lead batteries comply with the provisions of the following European Union Directives:

- Battery and Accumulators Directive (Directive 2006/66/EC)
- Waste Electronics (WEEE Directive 2002/96/EC)
- End of Life Vehicles Directive (Directive 2000/53/EC)

Our lead batteries are exempt from the “RoHS 2 Directive (EU 2011/65/EU).” However, given that they contain lead, which is listed by Registration, Evaluation, Authorization and Restriction of Chemicals, Directive EC 1907/2006 (REACH) on the Candidate List of substances of very high concern (SVHCs), we comply with all applicable REACH requirements.



**NOTE:** Violations are presented in the year in which the penalty is paid, not in the year the violation occurred.

## SUPPLY CHAIN

East Penn manages a diverse supply chain that provides goods and services to the company and our subsidiaries, each of which manages its own supply chain. Contractors providing services to our plants are managed under our environmental, health and safety (EHS) function.

For East Penn Manufacturing, which manages all our manufacturing facilities in Pennsylvania, Iowa, and Texas, our supply chain consists of more than 340 companies who supply lead, separators, sulfuric acid, battery cases and covers and other materials. We spend more on lead than any other category and most of it is recycled from spent batteries collected in North America. We purchase virgin lead, when needed, from suppliers outside the U.S.

East Penn Manufacturing works hard to ethically source materials. In 2023 the company established the East Penn Manufacturing Supplier Code of Conduct, governed by principles reflecting our commitment to social and environmental responsibilities. These principles, which replace our Sustainability and Corporate Responsibility Guidelines, are intended to be compliant with local and federal laws and consistent with international expectations. East Penn is committed to following these principles, and we insist that our present and future suppliers make the same commitment. In addition, we ask our Tier 1 suppliers to follow our Code of Conduct principles, or similar principles, down to their suppliers. The Supplier Code of Conduct was distributed to our entire supply base during the first quarter of 2024. These principles include:

- Child Labor and Young Workers Rights of Minorities, Indigenous Peoples and Women’s Rights
- Diversity, Equity & Inclusion and Equal Opportunity
- Wages and Benefits
- Forced Labor
- Conflict Minerals
- Freedom of Association
- Health and Safety
- Discrimination and Harassment
- Anti-Corruption and Bribery
- Whistleblowing and Protection against Retaliation
- Sustainable Resources Management
- Energy Efficiency
- Water Consumption
- Waste Reduction
- Renewable Energy
- Soil Quality
- Noise Emissions
- Responsible Chemicals Management
- General Business Activity

In 2023, all of our suppliers to our U.S. manufacturing facilities signed their agreement to these guidelines and/or East Penn accepted more stringent guidelines from our supply base.



# SUPPLY CHAIN

## Supplier Audits

To ensure suppliers are true to their word about implementing our guidelines and passing them to their own suppliers, we conduct regular audits focused on quality and service. East Penn conducted 34 supplier audits in 2023. We select suppliers to audit based on risk factors including level of defects, on-time delivery and previous audit scores. Failure to pass our Sustainability and Corporate Responsibility Guidelines onto their own suppliers is considered nonconformance. In the case of an audit non-conformance, we give suppliers 30 days to respond with a corrective action plan. In the past we terminated one supplier relationship for failure to respond.

## Supplier Diversity

Due to the vertical integration of our operations, much of our procurement spend is directed toward large companies who are capable of making intense capital investments that can handle our needs. However, East Penn recognizes that giving small businesses the opportunity to contract with us drives economic growth and stability. These small business partnerships encourage new ideas, technology enhancements and provides us with a more competitive, sustainable and flexible supply base.

We strive to broaden our U.S. supplier base. We are always looking for opportunities to engage with potential suppliers from all backgrounds. For example, in 2023 we participated in events hosted by Stellantis and BMW. East Penn continues to concentrate our efforts on education, through our buyer training program.

## Conflict Minerals

Conflict minerals, as defined by U.S. legislation, currently includes the metals tantalum, tin, tungsten and gold. These minerals are sometimes extracted from the Democratic Republic of the Congo and adjoining countries ("Conflict Countries") and may either directly or indirectly benefit armed groups in these countries. East Penn uses tin as an alloy in our batteries and as a coating for booster cables in some of our products.

Although East Penn is not a U.S. public company and therefore not subject to the SEC Conflict Mineral disclosure rule, we take seriously our responsibility to ensure materials used in our products are sourced ethically. Each year, we ask tin suppliers for both our smelter in Pennsylvania and our Wire and Cable Division to confirm they are not supplying tin from "Conflict Countries". If a tin supplier cannot provide such assurance, we initiate appropriate action to transition to alternative suppliers who can do so.



# WHO WE ARE:

A FAMILY OF  
10,000+ EMPLOYEES

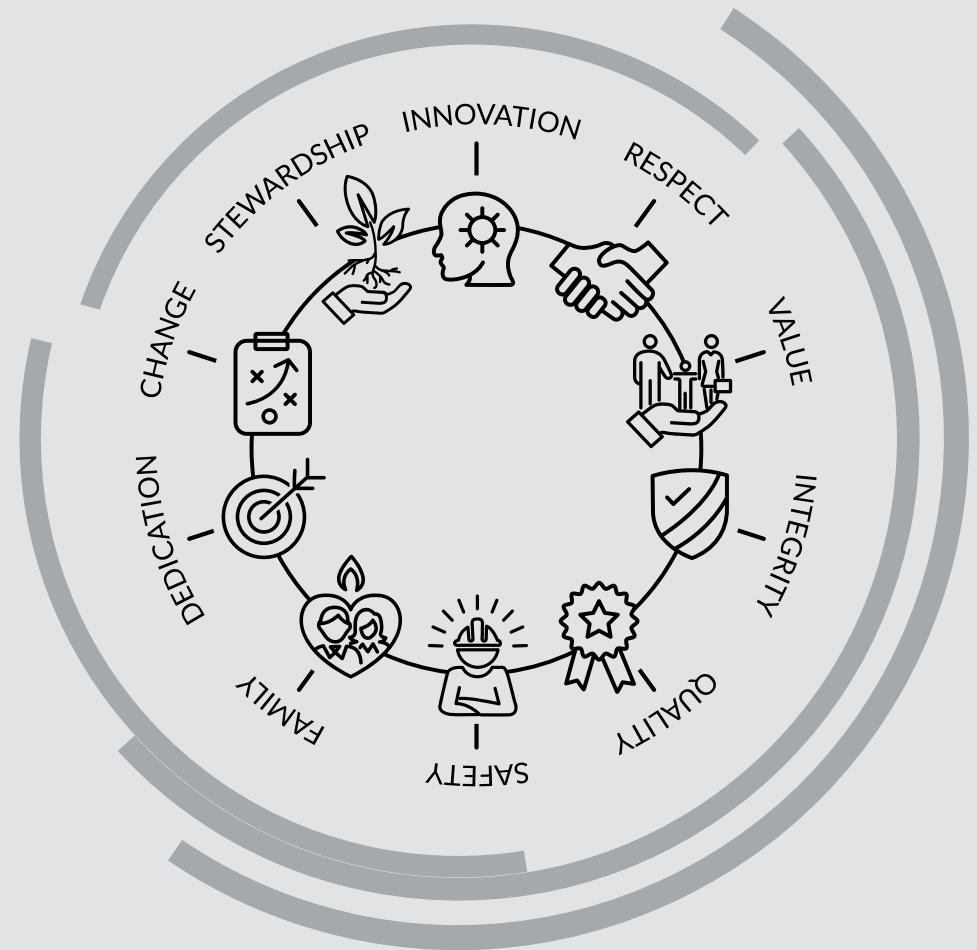


*Put simply, East Penn is like a family. We are a family-owned business that considers each and every employee as an incredibly valued member of our team. We remain dedicated to our employees who have ensured we continue to produce, deliver and service the essential products our customers require.*

*We have leaned into our values, beliefs, and mission as a compass to help us make the right decisions for our employees and our customers. Above all, our value of “family” has helped us to take care of each other, such as extending healthcare benefits to all employees.*

*A career at East Penn provides individuals with considerable opportunities for development, advancement, and experience in different areas of the business. Our goal is for female employees to feel as optimistic and excited about their East Penn careers as their male counterparts.*

*East Penn boasts a high percentage of employees with advanced tenure. One of the primary reasons behind this record is a clear commitment to provide a safe and healthy environment for all employees and the surrounding community. To work in the East Penn family is to look after ourselves and each other. Everyone is responsible for performing their job safely and for minimizing the risk of injury to themselves and fellow employees, contractors and visitors. We also expect all employees to subscribe to proper environmental, safety and health practices.*





# OUR GUIDING PRINCIPLES

## Our Core Beliefs



### PEOPLE

- The heart of the company will always be our people
- We support each other which supports our common purpose
- The personal growth, mentorship and development of our people will remain our legacy and heritage
- Everyone's contributions are valuable and they play a respected role in growing our organization



### PLACES

- A safe, clean, and healthy workplace is imperative for all operations
- The company protects its environment and supports the community
- Reinvestment in equipment, capabilities and expansion is key to our continued growth



### PRINCIPLES

- Work should be rewarding, enjoyable, and gratifying
- Integrity is the basis for everything we do
- Quality, innovation, and continuous improvement are essential to our model of success

## Our Continuing Mission

- To be a global leader in providing the highest quality, fully sustainable and fully supported energy storage, transfer, and power system solutions that enhance lives and promotes strategic growth
- To be a forward-thinking and financially-secure, privately-held company that supports our family of employees, customers, suppliers and all of our partners for future generations to come
- To remain true to the core beliefs and cultural values that have successfully shaped our unique culture and that will continue to sustain our company

# OUR GUIDING PRINCIPLES

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## Our Cultural Values

### **RESPECT.**

We respect people, their diverse ideas, and individual roles. We respect our co-workers, customers, suppliers, partners, competitors, community, and the world.

### **VALUE.**

As co-workers we value each other and show mutual respect. We will continue to have the deepest gratitude for everyone's contributions to our company and its successes.

### **INTEGRITY.**

We operate with ethics and honesty in everything that we do to uphold our integrity.

### **QUALITY.**

It is an inside job. The success of the company and its products were built on quality – we will never lose sight of its importance.

### **SAFETY.**

No task is so important that it cannot be done safely. We protect each other and ourselves through our continuous commitment to safety awareness, education, process improvement and implementation.

### **FAMILY.**

We care for each other through camaraderie, teamwork, mentorship, and mutual support.

### **DEDICATION.**

We are dedicated to our jobs, our ability to exceed customer expectations and our world-class quality reputation in order to remain the leader in our industry.

### **CHANGE.**

Together, we accept it, adapt to it, and use it to move the company forward. Our past challenges have only made us stronger.

### **STEWARDSHIP.**

We take pride in environmental protection, innovative recycling, fiscal responsibility, and cultural sustainment.

### **INNOVATION.**

Remains a part of our DNA. We will continue to research and develop new technologies, opportunities, and operational efficiencies.

## Ethics and Integrity

East Penn's Business Ethics Policy ensures ethical and impartial business practices and informs employees about the standards of behavior we expect in the workplace. Employees are prohibited from using their position at East Penn to secure special advantage in business or personal gain and must avoid any relationship or activity that might impair, or even appear to impair, our ability to make objective and fair decisions when performing our jobs.

We established our Code of Conduct to guide and protect employees and to create a positive workplace in which all employees treat each other with respect. Every employee receives a copy of the Code of Conduct when hired. The Code is also available electronically in English and Mandarin and we adjust the code and our policies to conform with local laws when necessary. East Penn deals firmly with willful, inexcusable violations of the code's rules under a uniform Code of Conduct policy.

Finally, we value and respect the basic human rights of all people, and our Human Trafficking Policy prohibits human trafficking and the use of illegal child labor or any form of forced labor at any time, in any part of the enterprise.

East Penn has made sure to provide employees several avenues of communication to report unethical or illegal behavior. These avenues of communication include talking to their supervisor, reporting to their Personnel representative, using our open-door policy, and contacting our WeTip hotline. The hotline is managed by an independent organization that anonymously forwards information to East Penn.

# SOCIAL ACCOUNTABILITY

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Treating people, places, and principles with respect and value are at the core of East Penn's beliefs. One additional way we exemplify these beliefs is through East Penn's commitment to be socially accountable. In 2023, East Penn introduced its Social Accountability policy to formally highlight the company policies and practices impacting social accountability that have been well established for many years.

East Penn's Social Accountability policy serves as an extension of our cultural values and the company's beliefs about its relationship with people and the well-being of communities in which we operate. The policy further exemplifies our commitment to upholding the dignity, respect, and integrity of employees, customers, suppliers, and all other stakeholders. The Social Accountability policy aligns with general principles of social accountability and promotes transparency and ethical behavior. The policy includes topics on Forced Labor and Human Trafficking, Community Impact, Health & Safety, and Non-Discrimination. East Penn strives to comply with all applicable laws and regulations to make a positive impact on society while also ensuring our own long-term success.

To verify East Penn's effectiveness and commitment to Social Accountability, a third-party SMETA audit was conducted. SMETA (Sedex Members Ethical Trade Audit) is an internationally recognized format for social audits, enabling businesses to access and better understand working conditions in their supply chains. The audit sections included Labor Standards, Health & Safety, Environment, and Business Ethics. Following an in-depth review, East Penn received results that confirmed the effectiveness of our social accountability policies and practices.

## The 4 pillars of SMETA



Labor Standards

Health & Safety

Business Ethics

The Environment



# EMPLOYEE SATISFACTION

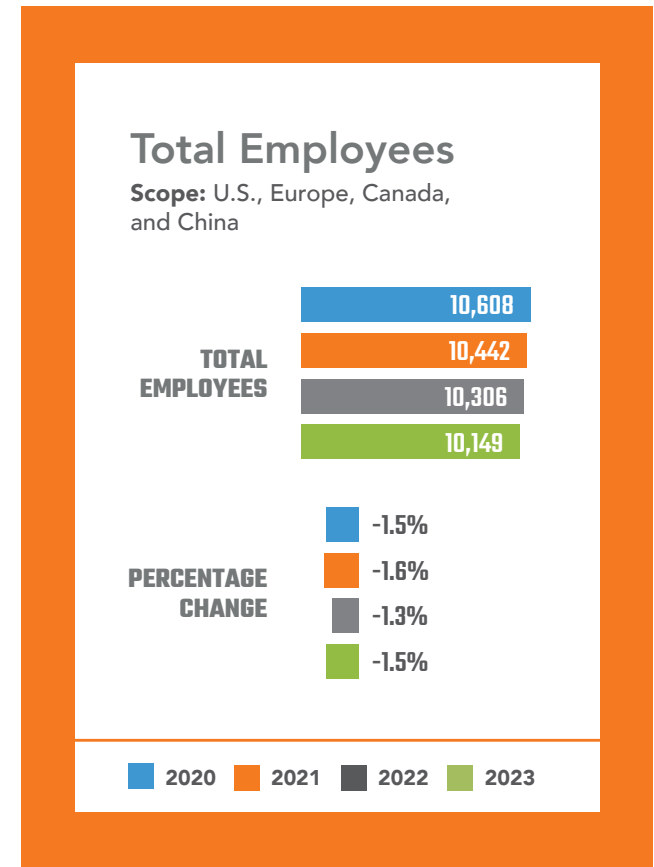
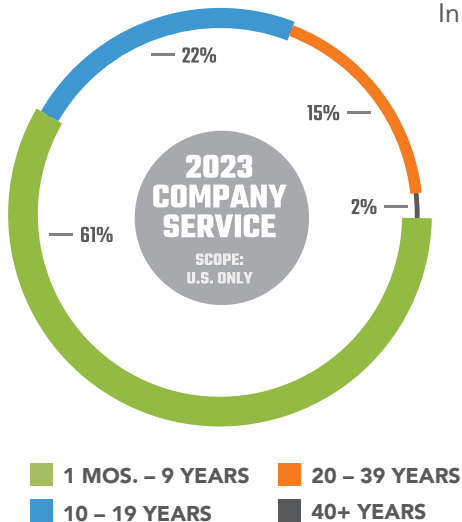
We are a family of 10,149 employees, each of whom contributes to the business in their own meaningful way. Our workforce decreased by 1.4 percent in 2023 over 2022. In 2023, we focused on recruiting talent to the East Penn family as general labor shortages collide with surging demand for our products. To support this effort, we revamped our employment website and implemented strategic recruitment campaigns, making it easier for prospective employees to identify jobs at East Penn and learn about our family-oriented culture.

We offer a competitive package to prospective employees that begins with our commitment to fair compensation. We also respect the principle of equal pay for work of equal value.

Our eligible full-time employees in the U.S. are offered company-paid life insurance and short-term disability insurance, as well as health insurance including coverage under our medical, prescription drug, dental, and vision plans, and our employee assistance program. They are also eligible to participate in the East Penn Manufacturing Company 401(k) Savings Plan which offers a company match on employee contributions and an annual company contribution.

Our eligible full-time employees in the U.S. receive paid vacation, paid personal days and paid company holidays.

In addition, our family-oriented way of working and commitment to sustainability and circular economy are important components of our career offering.



# EMPLOYEE SATISFACTION

As evidence of the strength of our culture, we have a historically low annual turnover rate. In 2023, our voluntary turnover rate was 10.12 percent, due to the continued increase of available jobs, with increasing wages, in the labor market.

We are proud of these results and that employees enjoy long, fulfilling careers at our company. About 39 percent of our co-workers have over a decade of service with us, and 17 percent of employees have over 20 years tenure. We have 160 employees with 40 or more years with East Penn, including 5 who have been part of the East Penn family for more than 50 years.

## Suggestion Committee

East Penn is always striving to find more efficient processes and innovations. One of our most valuable resources for new ideas are the employees who do the job every day, with their experience and expertise providing insight and fresh perspectives. The Suggestion Committee was formed as a way to receive, evaluate and potentially implement these innovative ideas from our employees into our processes. Employees are encouraged to submit ideas for safety practices, conservation of resources and energy saving ideas which further drives participation in these critical endeavors. Some employees receive a monetary compensation.

In 2022, an employee named Richard submitted a record setting idea to the Suggestion Committee. Not only was his suggestion implemented, but he received the highest amount awarded in the history of the program, \$24,500. Richard's suggestion saves on scrapped material and also gives us flexibility to make future changes which will benefit the company.

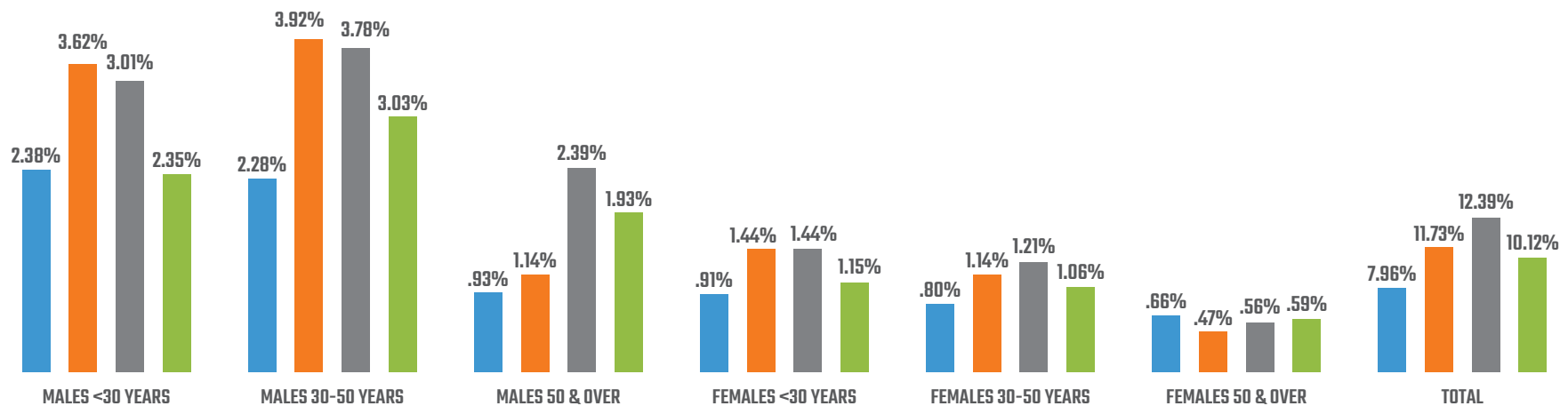


The Suggestion Committee is one of the ways we recognize the skills and talents of the people of East Penn. We believe that employees who are valued and acknowledged for their contributions to sustainability and other important areas feel more engaged and show increased satisfaction within their workplace.

## Voluntary Turnover Rate\*

Scope: U.S., Europe, Canada, and China full time employees

2020 2021 2022 2023



\* Voluntary turnover numbers do not include retired, deceased, or seasonal employees.

# TRAINING AND DEVELOPMENT

We credit our training and development for helping us improve our productivity, driving employee engagement, and retention. East Penn promotes from within, offering employees the opportunity to experience multiple roles within the company. This process ensures that internal candidates are given the first opportunity to apply for job opportunities before we look externally to fill positions.

## Manufacturing Skills Training

We also help employees develop their skills, such that they remain effective contributors to the company. In 2023, we continued to invest heavily in our Manufacturing Skills Training program; total training hours increased 27 percent compared to 2022. All new hires and many existing employees complete the program, learning a foundational skill set for their role in manufacturing. As part of this training program, we selected employees within the organization to be trainers and certified to teach the curriculum and/or learning paths.

Although the program helps all manufacturing employees, we have recently paid particular attention to women in manufacturing roles. Approximately 53 percent of trainers in the Manufacturing Skills Training program are women, giving female co-workers an abundance of mentors and role models within the company to guide their development (see page 57 for more information on women in our workforce).

## Lean Leadership Development Training

Integrating the Lean discipline in manufacturing and other strategic areas of the company, East Penn has instituted a Lean training program to align strategic pillars, increase performance, and improve customer satisfaction. The Lean training curriculum covers the foundational Lean principles and tools as well as multiple modules that focus on aspects of Lean leadership and problem solving. The program is attended by leaders, forepersons, superintendents, plant management, manufacturing operations Vice Presidents, and members from the Quality and Continuous Improvement department. For 2023, 159 more employees completed the program.

## Employee Training Programs

Training Program	Types of Employees Trained	Total Hours of Training Provided in 2023	Total Number of Employees Trained in 2023
Manufacturing Skills Training	Production	127,590	563
Lean Leadership Development Programming	Supervisors and above Quality (All)	954	159
LEAD Programming	Leaders, Forepersons, Superintendents, Plant Managers, VP's	11,008	264
SEE Training	Leaders, Forepersons, Superintendents, Plant Managers, VP's	552	69

## LEAD - Leadership Excellence and Development

In addition to developing manufacturing skills and Lean training, East Penn has made considerable strides in leadership development through LEAD workshops offered to people ranging from those considering a move into supervision up to senior leadership. These modules include developing and applying skills such as communication, coaching, self-awareness, decision making, strategic thinking, and many other critical leadership behaviors and practices.

During 2023 under the company's LEAD program, 11,008 hours of training were provided to 264 people. They participated in learning events that enhanced their business acumen and strategic planning skills. Participants were also provided with insights into their leadership and communication styles, and with strategies and tools to better coach, manage, motivate, delegate, and develop people, as well as manage conflict productively and increase employee engagement, commitment, and motivation.



# TRAINING AND DEVELOPMENT

## Innovation and Technology

East Penn continued its partnership with Lehigh University for the “Innovation and Technology” series in 2024 after training an initial group of 21 participants in 2023. East Penn also launched the “Innovation Space,” an internal cross-functional group focused on creating awareness and fostering an innovative culture amongst all employees. For those with innovative ideas to share, this training will also enable them to obtain guidance, support, and resources to successfully implement their ideas and create value for all stakeholders.

## Strategies for Everyday Engagement

In 2023, East Penn partnered with Right Management to deliver a new training series called Strategies for Everyday Engagement (SEE). Designed to engrain the same skill development across the organization at all leadership levels, SEE applies East Penn’s core values and provides the tools for leaders to have informal “everyday” in-the-moment conversations that coach, align, and engage.

Using these tools, East Penn leaders will know how to give everyday feedback such as providing immediate recognition for a job well done while enhancing relationships with team members to support East Penn’s open-door policy. Our hope is these practices will continue to build a collaborative environment where everyone gives and receives feedback to learn and grow.

## RACC Mechatronics Scholarship Program

In partnership with Reading Area Community College (RACC), East Penn recently launched its Advanced Manufacturing Technology Scholarship program. This program is designed to prepare college students for a rewarding career in the rapidly growing field of mechatronics. Students enrolled in the program receive a full scholarship from East Penn for an associate degree at RACC in Mechatronics Engineering Technology. Program graduates are guaranteed a well-paying, stable job with the company in their field of study. As of February 2024, East Penn had 13 people enrolled in the scholarship program.

## Tuition Reimbursement

	2021	2022	2023
# of Employees Receiving Tuition Reimbursement for a Year	23	22	25
Average Years of Service	7.65	6.27	7.22
Gross Tuition Reimbursement for a Year	\$107,022	\$139,418	\$112,819



Consideration will be given to everyone, but the number of applicants, East Penn’s need for the education, cost, timeliness, and business climate will influence final approval.

## Tuition Reimbursement

East Penn has consistently developed its employees via our longstanding Tuition Reimbursement Program, which is available to all employees. Eligible employees are allowed 75 percent reimbursement dependent upon the education need and requirement. East Penn encourages its employees to further their education in order to maintain or update their existing knowledge or skills. To aid our employees to develop themselves to their fullest potential, East Penn has adopted a Tuition Reimbursement Policy.

## EMPLOYEE COMMUNICATIONS



# GATEWAY

### NEW APP INTEGRATED TO ENHANCE EMPLOYEE COMMUNICATION

*In 2022, East Penn launched Gateway, an app that has enhanced communication and engagement with employees. Designed to be a user-friendly platform for employees, the app provides the latest company news, important alerts, and messages from leadership.*

*Gateway also gives employees access to important resource documents and policy updates, open job positions and transfer opportunities, easy access to employee benefits, and the company's newsletter.*

*Since its launch, the app has grown to include our new People Powering the World feature. This section aims to engage employees with the company and emphasizes the essential nature of the job they do to power the world today while building a sustainable future.*

*The app has a high adoption rate. Over 84% of employees are Gateway users with an average of 6,520 active users per month.*

*As electronic communication is steadily growing, the company continuously strives to increase its ability to communicate to everyone on the East Penn Team. Gateway is a valuable access point to keep the entire organization well informed.*

## INCLUSION & EQUAL OPPORTUNITY

We believe an inclusive workforce improves our business competitiveness by making us a more innovative organization that incorporates all perspectives. Our commitment to equal opportunity for persons of all backgrounds has led to historic and sustained growth in our female and Hispanic/Latino population.



## WORKFORCE EDUCATION



### Language Skills Development Program

In 2022, East Penn launched a program focused on developing English language skills among employees. This English as a Second Language (ESL) program provides candidates with a lower level of English proficiency with opportunities to enhance their language skills and upskill in a manufacturing environment.

This effort was made possible through a grant from the Literacy Council of Reading-Berks and is available to full-time and hourly employees. East Penn was the first company in the area to establish this type of program within their organization.

To start, the program was opened to candidates with a Level 2 English proficiency. Participants spend a small portion of their time in their language development class throughout the week. The rest of their time is spent on the floor learning from their department's trainers.

Since the program's launch, 119 employees have graduated and are working full-time in their positions. Employees who participate in the program have a high retention rate, with 79 percent of graduates staying with the company.

As a result of the tremendous success, in 2023 the company expanded the program to include Level 1 English proficiency candidates.

The Language Skills Development program is an exciting opportunity for East Penn to continue to support career development within our communities. Supporting our community in employee development is essential for the company's continued growth.

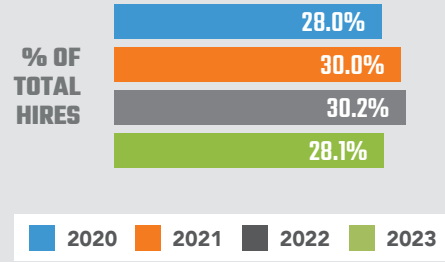


# WORKFORCE DEMOGRAPHICS



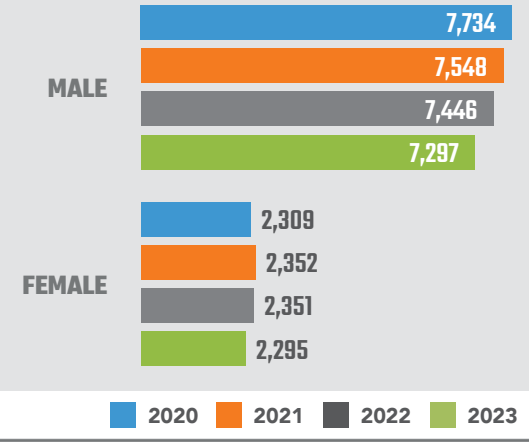
## New Female Hire Rates

Scope: U.S., Europe, Canada, and China



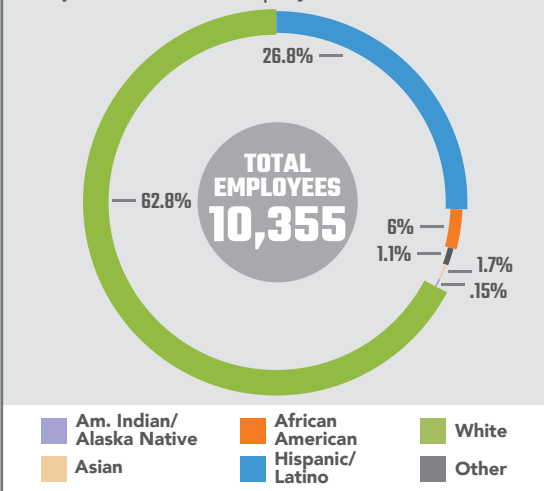
## Gender

Scope: U.S., employees



## 2023 Race

Scope: U.S., China employees





# EMPOWERING WOMEN IN THE WORKPLACE

East Penn prioritizes the recruitment, development, and promotion of women. Through our Women's Leadership Initiative, we seek to highlight opportunities for women in the East Penn family to build their networks, increase their professional confidence, and open opportunities in engineering and production. In 2023, our women's initiative held monthly events with a diverse group of employees in the organization.

East Penn is a Platinum sponsor of Women2Women (W2W), a special program of the Greater Reading Chamber Alliance that encourages women to create connections, gain knowledge and build strategic alliances. In addition, two of our employees serve on the organization's Board of Directors.

The goal of the program is to develop women leaders in Berks County, PA, by providing a forum where women can learn, share ideas and mentor each other. Employees are eligible to attend if they are either endorsed by a manager or nominate themselves and receive approval. In 2023, 85 women from East Penn attended W2W workshops, conferences or webinars.

In addition, we host seasonal experiences and a sales trainee program dedicated to women, while our annual internships help us recruit women from local engineering programs and technical colleges.



*In 2023, East Penn sponsored 37 women to participate in the Women in the Global Battery Industry (WGBI) organization. WGBI is a group comprised of professionals, founded to promote and develop the growth of the battery industry and enhance member's skills and experiences. The group's members represent many different disciplines within the industry, and the organization is open to professionals and STEM program educators and students who are seeking to develop all aspects of their careers. East Penn served as a WGBI Advocate Sponsor starting in 2023.*



## Women's Book Club

*Available to emerging leaders. East Penn maintains a library at our Lyon Station headquarters campus, as well as access to free webinars.*



## Exploring Leadership Women's Preview

*Internal workshop run by female supervisors that aims to open pathways to leadership opportunities and teach others how to market their skillset beyond their current roles. The workshop is open to women who have expressed interest in supervisory roles, and who are endorsed by senior management.*



## Lean-In Circles

*An open environment to network and develop with other women. The program is open to women currently in management or professional roles.*

## SAFETY AND HEALTH

As a company and a family, the people of East Penn are our most valuable asset. Providing a healthy and safe workplace for all our employees, particularly those who work in our manufacturing facilities, is paramount. The concept of health, safety, and wellness at East Penn expands beyond physical health – East Penn has long been committed to preventing workplace illness and injury and continually improving our occupational health and safety performance – to include mental, emotional, and financial health. We believe in protecting each employee’s entire wellbeing, so they can bring their best selves to work.

Achieving a culture of health and safety requires the collaboration of co-workers and external consultants who help us ensure practices are best in class. While we can provide the guidelines and practices to keep employees safe and healthy, we also need all employees to understand and commit to upholding the ideals set forth by our health and safety programs. It’s the responsibility of each employee to practice safe work habits that protect themselves and their co-workers.

Through our training and communications, East Penn ensures this safety awareness is maintained. We live and work by the motto, “No task is so important that it cannot be done safely.” This credo emphasizes that we all devote the proper time and resources to all our tasks safely.

### Managing Health and Safety

Our global health and management system (HSMS) is the lynchpin of our safety culture. The HSMS includes comprehensive procedures to prevent injury and reduce exposure to workplace hazards, along with extensive training, frequent safety audits, and regular health-monitoring programs. The system covers all employees, including temporary workers, at our global manufacturing locations. We also ask contractors to comply with all applicable regulatory requirements, as well as East Penn’s safety practices and procedures while on site.

As part of HSMS, each year our plant and corporate safety staff review the health and safety incident log, identify jobs with the highest safety incidence and severity rates, and develop targeted strategies to reduce risks.

In addition, we have safety committees at each of our plants that meet once a month to assess risks and recommend facility and process improvements. The committees are chaired by an employee and include representatives from all operating shifts at that plant. They also include representation from management and the corporate Environment, Health, and Safety (EHS) team. The committees publish minutes from each meeting for all employees to review and share them with the facility management including the President/CEO, Chris Pruitt; Executive Vice President and Chief Operation Officer, Norbert Maleschitz; Chief Manufacturing Officer, Larry Miksiewicz; and Chairman of the Board, Dan Breidegam.

### ISO 45001

To provide a framework for our organization to enhance our operational control and continuously improve our occupational health and safety performance, we implemented an Occupational Safety and Health Management System consistent with the ISO 45001 international standard.



# SAFETY AND HEALTH

## 2023 Safety Performance

East Penn encourages employees to report injuries and illnesses at the earliest stage so proper care can be administered as soon as possible. This practice has the potential to increase our number of recorded incidents due to the treatments typically associated with soft tissue injuries and illnesses, prescription anti-inflammatory medication, physical therapy, etc.; however, the early reporting reduces the likelihood of developing a more serious medical condition. Our on-site medical facility at Lyon Station, which includes physical therapy, allows for employee treatment during their scheduled work hours. This approach reduces the severity associated with these types of injuries and illnesses, and avoids surgical intervention, as well as reduces the added stress on family life.

East Penn’s Incident Rate includes a variety of Industrial Classifications, which includes the battery industry. Our 2023 recorded incident rate was 3.8 compared to 4.3 in 2022. Our early-reporting practice has allowed our Days Away Restricted or Transferred (DART) rate—1.7 in 2023—to be lower than all industry benchmarks. We also have lower worker compensation costs than the industry average.

### Recordable Incidents<sup>1,2</sup>

Scope: East Penn employees, U.S., and China manufacturing plants and U.S. warehouses



### Safety and Health Violations

Scope: East Penn employees, U.S. sites



### Fatalities

Scope: East Penn employees, U.S., and China manufacturing plants and U.S. warehouses



**NOTES:**

- The safety data reported above represents several industry classifications, which include Battery Manufacturing, Secondary Lead Smelter, Injection Molding Operations, Warehouse/Distribution, Fleet Maintenance, Service Trades: (Electricians, Plumbers, Sheet Metal Workers, and Construction).
- The Days Away, Restricted, or Transferred (DART) Rate is designed to track any OSHA recordable workplace injury or illness that results in time away from work, restricted job roles, or an employee’s permanent transfer to a new position. The DART rate is calculated using the following formula: (Number of OSHA Recordable injuries and illnesses that resulted in Days Away; Restricted; Transferred X 200,000) / Employee hours worked = Days Away Restricted Transferred (DART) Rate.

# SAFETY AND HEALTH

## Safety and Health Training

Developing and maintaining a culture of personal and shared health and safety requires constant training. East Penn has a tradition of investing in employee training and development and Environment, Health and Safety (EHS) training is of particular importance.

We train all employees in EHS at the time of hiring and, for production employees, annually. Training courses cover emergency procedures, injury prevention, vehicle and pedestrian safety, hearing conservation, ergonomics, confined space awareness, hazardous materials transportation and use of personal protective equipment, among others.

Lead exposure is an area of particular health and safety concern. From day one, we arm co-workers with the knowledge they need to limit lead exposure. We also provide new hires extensive training on hygiene, safe handling procedures and techniques to limit exposure. This safety curriculum is repeated annually.

## EHS Training Information

Scope: East Penn employees, U.S., and China manufacturing plants and U.S. warehouses





## WELLNESS

We want our employees to spend their careers with us and retire from East Penn. This means it's important that we do our best to take care of them, which means looking after their physical, mental and financial health. As we continue to grow and develop our wellness offerings, we will build strategies that approach wellness from all three perspectives.

Our Benefits Committee reviews benefits annually to ensure we are providing a competitive package that protects our extended family. In 2023, over 90 percent of U.S. employees took advantage of East Penn's health insurance package. When counting employees and their dependents, the insurance program covers 20,368 people.

### Health Screening and Exposure Prevention

At Lyon Station, East Penn's on-site health and safety facility is staffed by two doctors and 14 registered nurses. The facility offers comprehensive screening and prevention to our co-workers including:

- Approximately 1,850 blood lead tests per month
- Annual hearing tests for all employees in production
- Blood pressure tests
- Flu shots
- Occupational physicals that can include chest X-rays and blood chemistries for employees who might be exposed to lead
- Occupational injury or illness treatments through physical therapy.

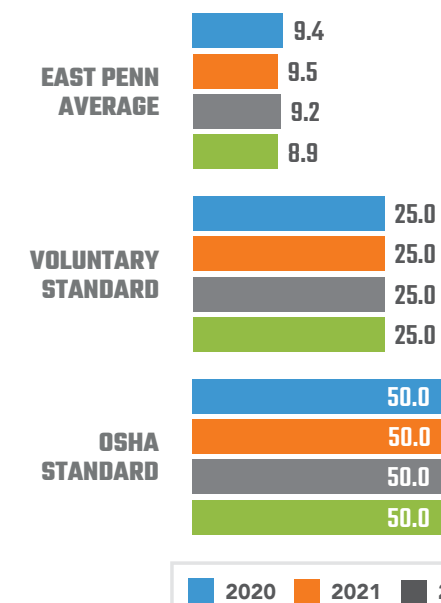
East Penn invests in processes and equipment to improve safety and reduce exposure to potentially harmful materials. We issue safety glasses and respirators to employees assigned to areas with lead exposure; we launder and supply fresh company uniforms each day, as well as fresh respirators for those working in lead areas; and we provide on-site showers and separate work and street-clothes lockers to ensure that any remaining lead residues are removed before an employee leaves the manufacturing site.

East Penn maintains internal lead health standards that are more stringent than the requirements set by the U.S. Occupational Safety and Health Administration (OSHA). Our lead exposure readings fall well below OSHA standards. We take additional steps to monitor the health and safety of our co-workers, providing individual consultations through our on-site health facility to help them manage their blood lead levels. In addition, through management projects like Six Sigma, we look for new and innovative ways to protect human health and the environment.

East Penn participates in a voluntary industry effort to record all employee blood lead levels below 20 by 2025, a measure that is significantly below federal standards. The effort is led by battery manufacturer trade associations, including the Battery Council International, the Association of Battery Recyclers, the International Lead Association and Eurobat.

### Blood Lead Level\*

**Scope:** manufacturing facilities, oxide manufacturing and battery recycle/smelting at Lyon Station, PA, and Corydon, IA



\* Statistics shown in micrograms per deciliter (µg/dl). The East Penn average is based on the lead exposed population (smelter, oxide, paste, grid making, group/battery assembly, plate formation)

# COMMUNITY IMPACT

Part of our continuing mission is to remain true to the core beliefs and values that have successfully shaped our unique culture. For East Penn, a family-owned company, this means contributing to the communities where many of our hardworking employees and their families live. Our employees give us valuable time and energy to help produce and distribute our products and it is equally important that we reciprocate by providing time and resources to the community around us.

We donate more than \$1 million every year to charitable organizations. In 2023, our corporate financial contributions included donations to the Miller-Keystone Blood Center and sponsorship of the Reading and Berks County Centro Hispano's annual gala. We also sponsored a Juneteenth Black History Celebration hosted by the Reading, PA branch of the NAACP. See our Community Outreach section for information about our long-term, ongoing community outreach programs.

Our community impact work isn't just a corporate program – our employees are active participants, too. From the factory floor to our distribution centers and our executive offices, East Penn people are deeply committed to engaging with our neighbors and working to address important community needs. Each year, thousands of co-workers offer their time, talents and financial resources to support organizations and causes that build a stronger community. This includes employee donations every year to key East Penn charitable initiatives.

East Penn employees provide their expertise and skills at a strategic level to many nonprofit organizations by serving on their boards of directors. Nonprofits with East Penn employees in board positions include:

Albright College	Battery Council International (BCI)	Berks Business Coalition	Berks Career & Technical Center
Berks County Community Foundation	Berks County Swim Association	Berks ENCORE	Big Brothers Big Sisters of Berks County
Boy Scouts of America Hawk Mountain Council	Boyertown YMCA Swimming	Court Appointed Special Advocates (CASA) of Berks County	First Tee Lehigh Valley & Berks
Friend Inc. Community Services	Greater Berks Development Fund	Greater Reading Chamber Alliance	John Paul II Center
Kutztown University	Lehigh University	Motor and Equipment Manufacturers Association	Oley Valley Community Education Foundation
Power of the Purse	Shippensburg University	United Way of Berks County	University of the Aftermarket Foundation Board
Women2Women Advisory Council			Lyons Fire Company No. 1

**\$1 Million+**  
Employee & Company  
Charity Contributions



## Celebrating Community Involvement

East Penn participated in the Relay for Life cancer walk, raising \$28,052 for the charity.

# COMMUNITY IMPACT

## Corporate Giving (U.S.)

**2020-2023**

	2020	2021	2022	2023
<b>United Way</b>	\$115,000	\$82,561	\$91,252	\$90,602
<b>Breidegam Family Foundation</b>	\$242,122	\$275,000	\$293,483	\$376,984
<b>Educational Improvement Organizations*</b>	\$200,000	\$320,000	\$346,400	\$345,555
<b>In Kind Products</b>	\$12,151	\$8,838	\$30,418	\$33,966
<b>All Other Donations</b>	\$596,602	\$605,427	\$358,034	\$585,090
<b>Total</b>	\$1,165,875	\$1,291,826	\$1,121,609	\$1,432,197

**Note:** As part of the Educational Improvement Tax Credit (EITC) program, East Penn receives a state tax credit in Pennsylvania for making contributions to an Educational Improvement Organization.

## Employee Giving (U.S. Employees) 2020-2023

	2020	2021	2022	2023
<b>United Way</b>	\$862,108	\$767,370	\$687,101	\$708,338
<b>Moravian College Scholarship</b>	\$10,623	\$13,782	\$50,000	\$85,048
<b>Total</b>	\$872,731	\$781,152	\$737,101	\$793,386



# COMMUNITY OUTREACH

## United Way

East Penn is among the top 10 supporters of United Way in Berks County. Since 2011, we have made a corporate and employee financial contribution. Every year, we host a United Way of Berks County campaign to raise money from employees. In 2023, corporate and employee contributions to United Way totaled \$798,940 which went to support 80 programs. These programs include Ready, Set, Read, which aims to increase literacy among elementary students.

**TOP 10**  
Supporter in  
Berks County

As part of our annual fundraising campaign, we have a United Way Committee that supports the effort and which organizes our annual employee volunteering for the United Way Day of Caring, a community-wide volunteer event that takes place at various nonprofits and other locations throughout Berks County. The Day of Caring brings together large and small groups, along with individuals, to create lasting change in our community by helping others. In 2023, 18 employees participated in the Day of Caring.

We also participate in the United Way of Berks County's Blueprint for Leadership program. Each year, one of our co-workers participates in training to help them become involved in local community boards of directors.

## Paying it Forward

Another way we support our United Way campaign is by designating Loan Campaign Specialists. In this role, Campaign Specialists serve as the primary point of contact for their coworkers and are responsible for assisting in the design and implementation of fundraising plans, customer service and volunteer management. Our Loan Campaign Specialists are employees who are passionate about the work the United Way supports, and many have had their own personal stories with the organization.

Sandra was inspired to serve as the Loan Campaign Specialist by her own



story. When she and her daughters needed to escape a domestic violence situation, they turned to Safe Berks, one of the many programs supported through the United Way. The program provides a safe haven and an ongoing support system for domestic violence and sexual assault victims. Sandra has been honored to serve as a loan specialist while providing direction for others who need help.

As a child, our Loan Specialist Marcus grew up going to his local Olivet Boys Club, a program supported by the United Way that provides a safe, fun and positive environment for youths to thrive in. The group kept him focused on school and out of trouble. Marcus says his role as the Loan Specialist has put life into perspective and allowed him to see the world in a different way.





## COMMUNITY OUTREACH



### U.S. Power Soccer Association

East Penn's subsidiary, MK Battery, is proud to sponsor of the United States Power Soccer Association (USPSA) and TEAM USA National Power Soccer Team. Power soccer is the first competitive team sport designed for power wheelchair users. Athletes' disabilities include quadriplegia, multiple sclerosis, muscular dystrophy, cerebral palsy and many others. MK sponsors the annual MK Battery Conference Cup Championship Tournament, held every year in June, as well as a number of other national and international tournaments.



### Friend, Inc.

Each year around the holiday season, East Penn employees generously contribute to the Friend, Inc. Community Services. Friend, Inc. is a multi-service social agency that supports the well-being of those in need and is committed to strengthening the lives of families and individuals living in Northeastern Berks County, where East Penn's main campus is located.

Through Friend, Inc.'s Christmas Cheer program, the East Penn family comes together to donate toys and gift wrap, providing gifts for children in need. It also donates many turkeys to the Friend, Inc. Food Pantry. Due to East Penn's longstanding tradition of providing a turkey to each employee, many of them choose to donate their turkeys to help feed additional families.



## COMMUNITY OUTREACH

### Blood Drive

For over 25 years, East Penn has partnered with the Miller-Keystone Blood Center to host periodic blood drives at its Lyon Station facilities. The program is managed by representatives of East Penn's Medical department, which works with Miller-Keystone to continue enhancing the program.

In 2023, East Penn totaled 802 registered donors, with 736 of them participating onsite. An additional 66 donated at Miller-Keystone blood donor centers, reflecting our employees' commitment to the blood donation program. Thanks to those registered donors, 706 units of blood were collected for the year.

Even though the Covid-19 pandemic has impacted the number of blood drives East Penn has held in recent years, we look forward to holding a more regular schedule of once every month in 2024.



**Breidegam**  
*Family Foundation*

### Breidegam Family Foundation

The Breidegam Miksiewicz family established the Breidegam Family Foundation as a way to positively impact the communities where employees and their families live and work. The group focuses on supporting local charities and programs that focus on key areas including the preservation of nature and natural resources, preserving the past for the future, and supporting the development and wellbeing of others.



## ABOUT THIS REPORT

The 2023 East Penn Sustainability Report contains information from East Penn Manufacturing Company, (“East Penn”) locations and subsidiaries under the company’s consolidated financial control. This includes locations and subsidiaries in the U.S. as well as international locations including East Penn Canada, East Penn International, and MK Battery. Where data or information differ in scope, the scope is clearly noted.

The reporting period for this report is January 1, 2023 to December 31, 2023. All data is presented on a calendar year basis, with the exception of financial and community-giving data, both of which are reported on a fiscal year basis (June 1 to May 31). We have included a GRI Index in accordance with the Core option and are responding to select SASB metrics for the Industrial Batteries Standard.

This report is East Penn’s sixth sustainability report. Our first report was published in 2011. No restatements are being made in this report. East Penn plans to issue a sustainability report every year. Our President and Chief Executive Officer, Chief Financial Officer, Chief Manufacturing Officer, Chief Operating Officer, Chief Commercial Officer, and Chairman of the Board review and approve this report.

### Contact

East Penn Manufacturing Company, Deka Road, Lyon Station, PA 19536

Email: [contactus@eastpenn-deka.com](mailto:contactus@eastpenn-deka.com)  
[www.eastpennmanufacturing.com/contact](http://www.eastpennmanufacturing.com/contact)

METRIC	2022	2023
<b>OUR BUSINESS</b>		
Net sales	\$3B	\$3.5B
R&D spend	\$19.6M	\$21.8M
Number of employees	10.3K	10.1K
<b>ENVIRONMENT</b>		
Pounds of lead recycled from spent batteries	188M	175M
Lead from recycled sources	79.8%	90%
Plastic from recycled sources	82.7%	84.4%
Gallons of water recycled	44M	43M
Gallons of water withdrawn	195.4M	181.9M
Non-hazardous waste recycled	71%	78.5%
Hazardous waste recycled	94.3%	93.7%
Reduction in energy use per unit of production, compared to 2018 baseline	7500 MWh	7500 MWh
Metric tons of CO <sub>2</sub> emissions	380,255	348,439
Lead-in-air concentration	0.02	0.02
<b>WORKFORCE</b>		
Voluntary turnover rate	12.39%	10.12%
Female representation in full time U.S. workforce	24%	23.9%
New female hire rate	30.2%	28.1%
Minority representation	35.77%	37.2%
Recordable incident rate	4.3	3.8
Percent of employees taking advantage of East Penn’s health insurance package	>90%	>90%
<b>COMMUNITY</b>		
Total corporate giving	\$1,121,609	\$1,432,197
Total employee giving	\$737,101	\$793,386

# GRI CONTENT INDEX

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION/RESPONSE
<b>GENERAL DISCLOSURES</b> GRI 2: General Disclosures 2021		
<b>THE ORGANIZATION AND ITS REPORTING</b>		
2-1	Organizational details	East Penn Manufacturing Company, Lyon Station, PA
2-2	Entities included in the organization's sustainability reporting	East Penn Manufacturing Company
2-3	Reporting period, frequency and contact point	Annually December 31, 2023 contactus@eastpenn-deka.com
2-4	Restatements of information	Our reported emissions in 2021 and going forward now include emissions from all sites within our operational control and an expanded range of emissions sources in alignment with the Greenhouse Gas Protocol.
2-5	External assurance	To verify East Penn's effectiveness and commitment to Social Accountability, a third-party SMETA (Sedex Members Ethical Trade Audit) audit was conducted
<b>ACTIVITIES AND WORKERS</b>		
2-6	Activities, value chain and other business relationships	2024 Sustainability Report> What We Make
2-7	Employees	2024 Sustainability Report> Who We Are> Employee Satisfaction; Diversity; Appendix> About This Report
2-8	Workers who are not employees	While we use contract employees to meet production demand and unique business needs, this labor type is not formally tracked as a part of our ESG Data.



# GRI CONTENT INDEX

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION/RESPONSE
<b>GOVERNANCE</b>		
2-9	Governance structure and composition	2024 Sustainability Report> Introduction> Corporate Governance
2-10	Nomination and selection of the highest governance body	East Penn is a privately-held firm guided by a seven-member Board of Directors, two internal employees and five external. Our Board of Directors is comprised of family members, senior management and external, independent members who bring expertise to a variety of areas.
2-11	Chair of the highest governance body	The position of board chair and the position of president/CEO are two separate roles. However, the president/CEO is also a board member. We believe this structure provides a balanced approach to the effective governance and operations of the business.
2-12	Role of the highest governance body in overseeing the management of impacts	2024 Sustainability Report> Introduction> Corporate Governance
2-13	Delegation of responsibility for managing impacts	2024 Sustainability Report> Introduction> Corporate Governance
2-14	Role of the highest governance body in sustainability reporting	2024 Sustainability Report> Introduction> Corporate Governance
2-15	Conflicts of interest	2024 Sustainability Report> Who We Are> Our Guiding Principles> Ethics and Integrity
2-16	Communication of critical concerns	Our Board of Directors receives regular updates from senior management, two of whom are also board members. These updates include any significant concerns expressed by employees, regulators, customers and other key stakeholders.
2-17	Collective knowledge of the highest governance body	The Board of Directors includes seven board members with extensive experience in a variety of industries including logistics, manufacturing, consulting, and the public sector. These directors bring expertise in areas such as strategic planning, asset management, marketing, regulatory affairs, and supply chain management. The Board often consults with outside experts and stays abreast of industry trends and customer priorities including environmental stewardship and social responsibility.

# GRI CONTENT INDEX

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION/RESPONSE
<b>GOVERNANCE (CONTINUED)</b>		
2-18	Evaluation of the performance of the highest governance body	The Board evaluates its effectiveness based on the financial performance of the Company. That performance is, in part, dependent on how well the Company manages its impact on people and the environment. As an example, the Company must strive to be a workplace of choice in order to attract and retain the required talent to compete and satisfy customers.
2-19	Remuneration policies	Our senior management team is compensated based, in part, on overall company performance and effective management of all functional areas that include many aspects of environmental and people such as safety, EHS and human resources.
2-20	Process to determine remuneration	We respect the principle of equal pay for work of equal value. We strive to offer a competitive employment package for all employees, including senior management. Our Wage and Compensation Team evaluates every position for which we hire and ensures all compensation packages are competitive with market offerings.
<b>STRATEGY, POLICIES AND PRACTICES</b>		
2-22	Statement on sustainable development strategy	2024 Sustainability Report> Introduction> A Message From Leadership
2-23	Policy commitments	Business Ethics Policy, Code of Conduct, Human Trafficking Policy, Social Accountability Policy, Tuition Reimbursement Policy
2-24	Embedding policy commitments	2024 Sustainability Report> Who We Are> Our Guiding Principles> Ethics and Integrity; Social Accountability; Training and Development> Tuition Reimbursement
2-25	Processes to remediate negative impacts	2024 sustainability Report> Who We Are> Our Guiding Principles> Ethics and Integrity
2-26	Mechanisms for seeking advice and raising concerns	2024 Sustainability Report> Who We Are> Our Guiding Principles> Ethics and Integrity

# GRI CONTENT INDEX

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION/RESPONSE
<b>STRATEGY, POLICIES AND PRACTICES (CONTINUED)</b>		
2-27	Compliance with laws and regulations	In 2023, we did not have any environmental or safety violations.
2-28	Membership associations	2024 Sustainability Report> What We Make> Industry Memberships and Partners
<b>STAKEHOLDER ENGAGEMENT</b>		
2-29	Approach to stakeholder engagement	2024 Sustainability Report> Introduction> Engaging Our Stakeholders
2-30	Collective bargaining agreements	East Penn is proud of our strong working relationship with employees, who are not represented by any collective bargaining agreements.
<b>MATERIAL TOPICS</b>		
<b>GRI 3: Material Topics 2021</b>		
3-1	Process to determine material topics	2024 Sustainability Report> Introduction> Our Sustainability Priorities
3-2	List of material topics	2024 Sustainability Report> Introduction> Sustainability Material Assessment
<b>GRI 200: ECONOMIC</b>		
<b>GRI 205: Anti-corruption</b>		
3-3	Management of material topic	2024 Sustainability Report> Who We Are> Our Guiding Principles> Ethics and Integrity
205-1	Operations assessed for risks related to corruption	2024 Sustainability Report> Who We Are> Our Guiding Principles> Ethics and Integrity
205-2	Communication and training about anti-corruption policies and procedures	2024 Sustainability Report> Who We Are> Our Guiding Principles> Ethics and Integrity
205-3	Confirmed incidents of corruption and actions taken	2024 Sustainability Report> Who We Are> Our Guiding Principles> Ethics and Integrity

# GRI CONTENT INDEX

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION/RESPONSE
<b>GRI 300: ENVIRONMENTAL</b>		
<b>GRI 301: Materials</b>		
3-3	Management of material topic	2024 Sustainability Report> How We Work> Building a Circular Economy> Product Recycling, Reuse and Manufacturing
301-1	Materials used by weight or volume	2024 Sustainability Report> How We Work> Building a Circular Economy> Product Recycling, Reuse and Manufacturing
301-2	Recycled input materials used	2024 Sustainability Report> How We Work> Building a Circular Economy> Product Recycling, Reuse and Manufacturing
301-3	Reclaimed products and their packaging materials	2024 Sustainability Report> How We Work> Building a Circular Economy> Product Recycling, Reuse and Manufacturing
<b>GRI 302: Energy</b>		
3-3	Management of material topic	2024 Sustainability Report> How We Work> Energy and Emissions
302-1	Energy consumption within the organization	2024 Sustainability Report> How We Work> Energy and Emissions
302-4	Reduction of energy consumption	2024 Sustainability Report> How We Work> Energy and Emissions
<b>GRI 303: Water and Effluents</b>		
3-3	Management of material topic	2024 Sustainability Report> How We Work> Water Stewardship
303-1	Interactions with water as a shared resource	2024 Sustainability Report> How We Work> Water Stewardship
303-2	Management of water discharge-related impacts	2024 Sustainability Report> How We Work> Water Stewardship
303-3	Water withdrawal	2024 Sustainability Report> How We Work> Water Stewardship
303-4	Water discharge	2024 Sustainability Report> How We Work> Water Stewardship
303-5	Water consumption	2024 Sustainability Report> How We Work> Water Stewardship



# GRI CONTENT INDEX

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION/RESPONSE
<b>GRI 305: Emissions</b>		
3-3	Management of material topic	2024 Sustainability Report> How We Work> Decarbonization Strategy
305-1	Direct (Scope 1) GHG emissions	2024 Sustainability Report> How We Work> Decarbonization Strategy
305-2	Energy indirect (Scope 2) GHG emissions	2024 Sustainability Report> How We Work> Decarbonization Strategy
305-4	GHG emissions intensity	2024 Sustainability Report> How We Work> Decarbonization Strategy
305-5	Reduction of GHG emissions	2024 Sustainability Report> How We Work> Decarbonization Strategy
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions: Significant air emissions, Nox, Sox, POP, VOC, HAP, PM	2024 Sustainability Report> How We Work> Air Emissions
<b>GRI 306: Waste</b>		
3-3	Management of material topic	2024 Sustainability Report> How We Work> Hazardous and Nonhazardous Waste
306-1	Waste generation and significant waste-related impacts	2024 Sustainability Report> How We Work> Hazardous and Nonhazardous Waste
306-2	Management of significant waste-related impacts	2024 Sustainability Report> How We Work> Hazardous and Nonhazardous Waste
306-3	Waste generated	2024 Sustainability Report> How We Work> Hazardous and Nonhazardous Waste
306-4	Waste diverted from disposal	2024 Sustainability Report> How We Work> Hazardous and Nonhazardous Waste
306-5	Waste directed to disposal	2024 Sustainability Report> How We Work> Hazardous and Nonhazardous Waste
<b>GRI 308: Supplier Environmental Assessment</b>		
3-3	Management of material topic	2024 Sustainability Report> How We Work> Supply Chain
308-1	New suppliers that were screened using environmental criteria	2024 Sustainability Report> How We Work> Supply Chain

# GRI CONTENT INDEX

308-2	Negative environmental impacts in the supply chain and actions taken	2024 Sustainability Report> How We Work> Supply Chain
GRI STANDARD/ OTHER SOURCE		
DISCLOSURE		
LOCATION/RESPONSE		
GRI 400: SOCIAL		
GRI 401: Employment		
3-3	Management of material topic	2024 Sustainability Report> Who We Are> Employee Satisfaction
401-1	New employee hires and employee turnover	2024 Sustainability Report> Who We Are> Employee Satisfaction
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	2024 Sustainability Report> Who We Are> Employee Satisfaction
GRI 403: Occupational Health and Safety		
3-3	Management of material topic	2024 Sustainability Report> Who We Are> Safety and Health
403-1	Occupational health and safety management system	2024 Sustainability Report> Who We Are> Safety and Health
403-2	Hazard identification, risk assessment, and incident investigation	2024 Sustainability Report> Who We Are> Safety and Health
403-3	Occupational health services	2024 Sustainability Report> Who We Are> Safety and Health
403-4	Worker participation, consultation, and communication on occupational health and safety	2024 Sustainability Report> Who We Are> Safety and Health
403-5	Worker training on occupational health and safety	2024 Sustainability Report> Who We Are> Safety and Health
403-6	Promotion of worker health	2024 Sustainability Report> Who We Are> Safety and Health
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	2024 Sustainability Report> Who We Are> Safety and Health

# GRI CONTENT INDEX

403-8	Workers covered by an occupational health and safety management system	2024 Sustainability Report> Who We Are> Safety and Health
GRI STANDARD/ OTHER SOURCE		
DISCLOSURE		
LOCATION/RESPONSE		
GRI 403: Occupational Health and Safety (CONTINUED)		
403-9	Work-related injuries	2024 Sustainability Report> Who We Are> Safety and Health
403-10	Work-related ill health	2024 Sustainability Report> Who We Are> Safety and Health
GRI 404: Training and Education		
3-3	Management of material topic	2024 Sustainability Report> Who We Are> Training and Development
404-1	Average hours of training per year per employee	2024 Sustainability Report> Who We Are> Training and Development
404-2	Programs for upgrading employee skills and transition assistance programs	2024 Sustainability Report> Who We Are> Training and Development
404-3	Percentage of employees receiving regular performance and career development reviews	2024 Sustainability Report> Who We Are> Training and Development
GRI 405: Inclusion and Equal Opportunity		
3-3	Management of material topic	2024 Sustainability Report> Who We Are> Workforce
405-1	Diversity of governance bodies and employees	2024 Sustainability Report> Who We Are> Workforce
405-2	Ratio of basic salary and remuneration of women to men	2024 Sustainability Report> Who We Are> Workforce
GRI 414: Supplier Social Assessment		
3-3	Management of material topic	2024 Sustainability Report> How We Work > Supply Chain
414-1	New suppliers that were screened using social criteria	2024 Sustainability Report> How We Work > Supply Chain > Supplier Audits
414-2	Negative social impacts in the supply chain and actions taken	2024 Sustainability Report> How We Work > Supply Chain

# SASB INDEX

TOPIC	ACCOUNTING METRIC	CODE	RESPONSE
<b>Energy Management</b>	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	RR-FC-130a.1	2024 Sustainability Report> How We Work > Energy and Emissions
<b>Workforce Health &amp; Safety</b>	(1) Total recordable incident rate (TRIR) and (2) fatality rate for (a) direct employees and (b) contract employees	RR-FC-320a.1	1) TRIR 3.7 2) 0 fatalities For more data and information on our safety performance, see the 2024 Sustainability Report> Who We Are > Safety and Health> 2023 Safety Performance
	Description of efforts to assess, monitor, and reduce exposure of workforce to human health hazards	RR-FC-320a.2	2024 Sustainability Report> Who We Are > Safety and Health
<b>Product End-of-life Management</b>	Percentage of products sold that are recyclable or reusable	RR-FC-410b.1	99% of all batteries are recycled.
	(1) Weight of end-of-life material recovered, (2) percentage recycled	RR-FC-410b.2	Building a Circular Economy > Product Recycling, Reuse and Manufacturing; Recovery; Byproduct Reuse
	Description of approach to manage use, reclamation, and disposal of hazardous materials	RR-FC-410b.3	2024 Sustainability Report> How We Work> Hazardous and Non-Hazardous Waste 2024 Sustainability Report> Building a Circular Economy> Product Recycling, Reuse and Manufacturing
<b>Materials Sourcing</b>	Description of the management of risks associated with the use of critical materials	RR-FC-440a.1	2024 Sustainability Report> How We Work> Supply Chain
ACTIVITY METRIC		CATEGORY	RESPONSE
<b>Number of units sold</b>		RR-FC-000.A	We manufacture more than 515 types of durable batteries with 2023 sales of over \$3.5 billion.

**NOTE:**

East Penn is responding to the Sustainability Accounting Standards Board's Fuel Cells & Industrial Batteries Standard.





East Penn Manufacturing Co.  
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