

BIOSPECTRA

Annual Corporate Sustainability Report

2024

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Introduction

The Sustainability Program of BioSpectra, Inc. has endured rapid development over the past three years.

- ❖ The Annual Sustainability Report covers data between 1-January-2024 and 31-December-2024. This report focuses on the environmental, social and governance (ESG) topics as presented in our Materiality Assessment. In alignment with our transparency in reporting policy, this disclosure is public on our website.
- ❖ With the growing emphasis on environmental protection, we understand our role as a manufacturer is to minimize our carbon footprint. We have established processes and procedures that are executed by our Product Portfolio and Sustainability Department as well as the Department of Environmental, Health, and Safety to ensure the sustainability of our organization and this program.
- ❖ We currently track Scope 1, 2, and upstream Scope 3 emissions data with set reduction targets on Scopes 1 and 2. We will continue to track and report Scope 3 emissions data.

We strive to improve our reporting tactics as we further our ongoing effort to strengthen and expand our Sustainability Program.

- ❖ All greenhouse gas calculations are made in collaboration with the M2030 and Emitwise platforms. These third-party verifications enable us to thoroughly understand our emissions scope and further set our materiality goals. We openly track and report on air emissions in compliance with our air permit exemption, determined by Pennsylvania's Department of Environmental Protection.
- ❖ Direct Scope 1 emissions are primarily emitted through Mobile Sources. With the development of our sustainability program, we intend to track more aspects of our Scope 1 emissions.
- ❖ In 2024, BioSpectra secured the purchase of Carbon Offsets and Renewable Energy Credits (RECs) to help offset some of our Scope 2 emissions, reduce our waste and increase recycling.

By the 2029 reporting year, renewable energy will be 100% implemented at all BioSpectra facilities.

Platforms and Memberships



Manufacture 2023 (M2030) is a platform used to track our Scope 1 and Scope 2 emissions with customizable action plan for carbon reduction.



The Carbon Disclosure Project (CDP) is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts. *In 2024, BioSpectra, Inc. completed their first disclosure and scored a 'B'; which is the highest score available for an SME.*



Science-based targets give companies a clearly-defined path to reduce greenhouse gas emissions in line with limiting global warming to 1.5C. These goals define how much and how quickly a business must reduce its emissions to be in line with the Paris Agreement goals. *In 2024, BioSpectra committed to reduce Scope 1 and Scope 2 GHG emissions by 42% by 2030 from a 2022 baseline year, and to measure and reduce its Scope 3 emissions with no targets set.*



CyberVadis is a platform developed by EcoVadis. This is a third-party verification platform used to assess a company's cybersecurity risks across the supply chain. *In 2024, BioSpectra, Inc. completed their first CyberVadis assessment and was awarded a Bronze medal.*



Worldfavor is a platform used to track goals and implemented policies for Environmental, Social and Governance themes.

2024 Highlights...



Secured Renewable Energy Credits (RECs) for BioSpectra facilities



Secured Carbon Offsets for our natural gas consumption at BioSpectra facilities



Implemented an in-depth mandatory Ethics training module for all employees



Completed first Carbon Disclosure assessment through the CDP and scored a “B”. Highest available score to an SME



First edition of the BioSpectra Corporate Sustainability Report was published on our website for the 2023 reporting year

BioSpectra's Materiality Assessment



○ BioSpectra's Materiality Assessment was created to identify the most relevant environmental, social, and governance topics for our company.

○ Understanding our sustainability priorities has aided the organization in tackling environmental concerns while drawing attention to the necessary implementations needed.

○ Ongoing analysis of relevant financial and impact data aids in developing future regulations and internal policies for our operations, which is part of this effort.

Our EcoVadis Score is assessed on the following topics:



Environment

- Energy Consumption and GHGs
- Water
- Materials, Chemicals & Waste
- Product Use
- Product End-of-Life
- Customer Health & Safety



Labor & Human Rights

- Career Management and Training
- Diversity, Discrimination and Harassment
- Employee Health & Safety
- Child Labor, Forced Labor and Human Trafficking
- Working Conditions



Ethics

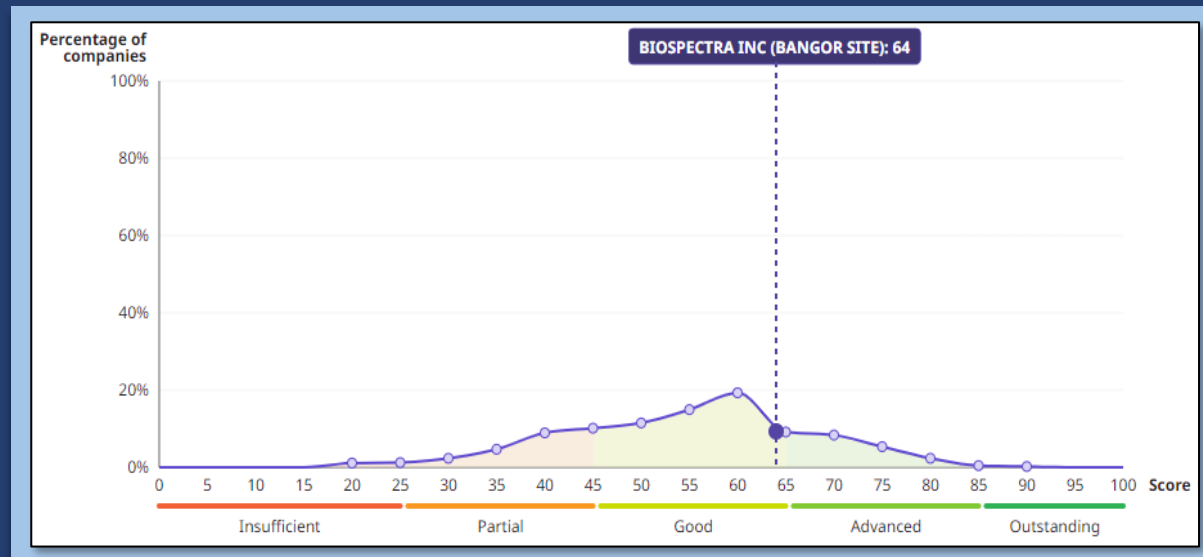
- Ethics Policy and Reporting
- Whistleblowing
- Anti-Corruption
- Information Security



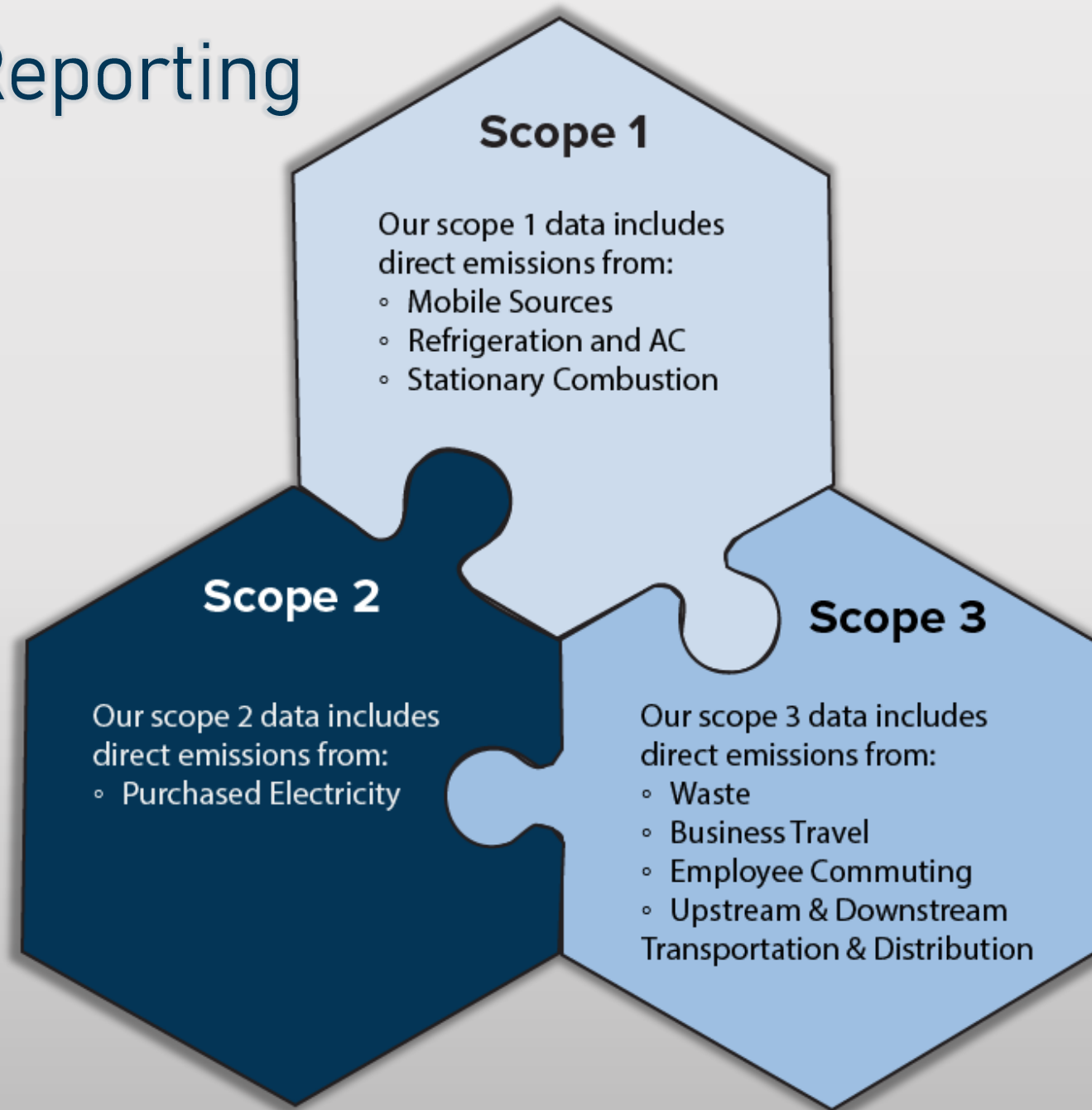
Sustainable Procurement

- Sustainable Procurement Policy & Reporting
- Supplier Code of Conduct & Contract Clauses
- Value Chain Risk Management

August 2024 Scorecard Results



Our Scope of Reporting



Our Corporate Carbon Footprint– Majestic

We understand the significance of our emissions as a manufacturer, which is why we track Scope 1, Scope 2, and Scope 3 emissions.

Scope 1 Emissions	
Stationary Combustion	3,107 CO ₂ -e (metric tons)
Mobile Sources	30 CO ₂ -e (metric tons)
Refrigeration / AC Equipment Use	55 CO ₂ -e (metric tons)
Fire Suppression	-
Purchased Gases	-
Summary	
Gross	3,192 CO ₂ -e (metric tons)
Offsets	-
Net	3,192 CO ₂ -e (metric tons)

Scope 2 Emissions	
Location-Based Scope 2 Emissions	
Purchased and Consumed Electricity	1,024 CO ₂ -e (metric tons)
Purchased and Consumed Steam	0 CO ₂ -e (metric tons)
Market-Based Scope 2 Emissions	
Purchased and Consumed Electricity	1,024 CO ₂ -e (metric tons)
Purchased and Consumed Steam	0 CO ₂ -e (metric tons)
Summary	
Gross	1,024 CO ₂ -e (metric tons)
Offsets	46.08 CO ₂ -e (metric tons)
Net	977.92 CO ₂ -e (metric tons)

Scope 3 Emissions	
Business Travel	35 CO ₂ -e (metric tons)
Employee Commuting	328 CO ₂ -e (metric tons)
Upstream Transportation & Distribution	352 CO ₂ -e (metric tons)
Waste	36 CO ₂ -e (metric tons)
Summary	
Gross	751 CO ₂ -e (metric tons)
Offsets	-
Net	751 CO ₂ -e (metric tons)

Our Corporate Carbon Footprint- Rockdale

Scope 1 Emissions

Stationary Combustion	1,523 CO ₂ -e (metric tons)
Mobile Sources	0 CO ₂ -e (metric tons)
Refrigeration / AC Equipment Use	19 CO ₂ -e (metric tons)
Fire Suppression	-
Purchased Gases	-

Summary

Gross	1,542 CO ₂ -e (metric tons)
Offsets	-
Net	1,542 CO ₂ -e (metric tons)

Scope 2 Emissions

Location-Based Scope 2 Emissions

Purchased and Consumed Electricity	596 CO ₂ -e (metric tons)
Purchased and Consumed Steam	0 CO ₂ -e (metric tons)

Market-Based Scope 2 Emissions

Purchased and Consumed Electricity	0 CO ₂ -e (metric tons)
Purchased and Consumed Steam	0 CO ₂ -e (metric tons)

Summary

Gross	596 CO ₂ -e (metric tons)
Offsets	46.08 CO ₂ -e (metric tons)
Net	549.92 CO ₂ -e (metric tons)

Scope 3 Emissions

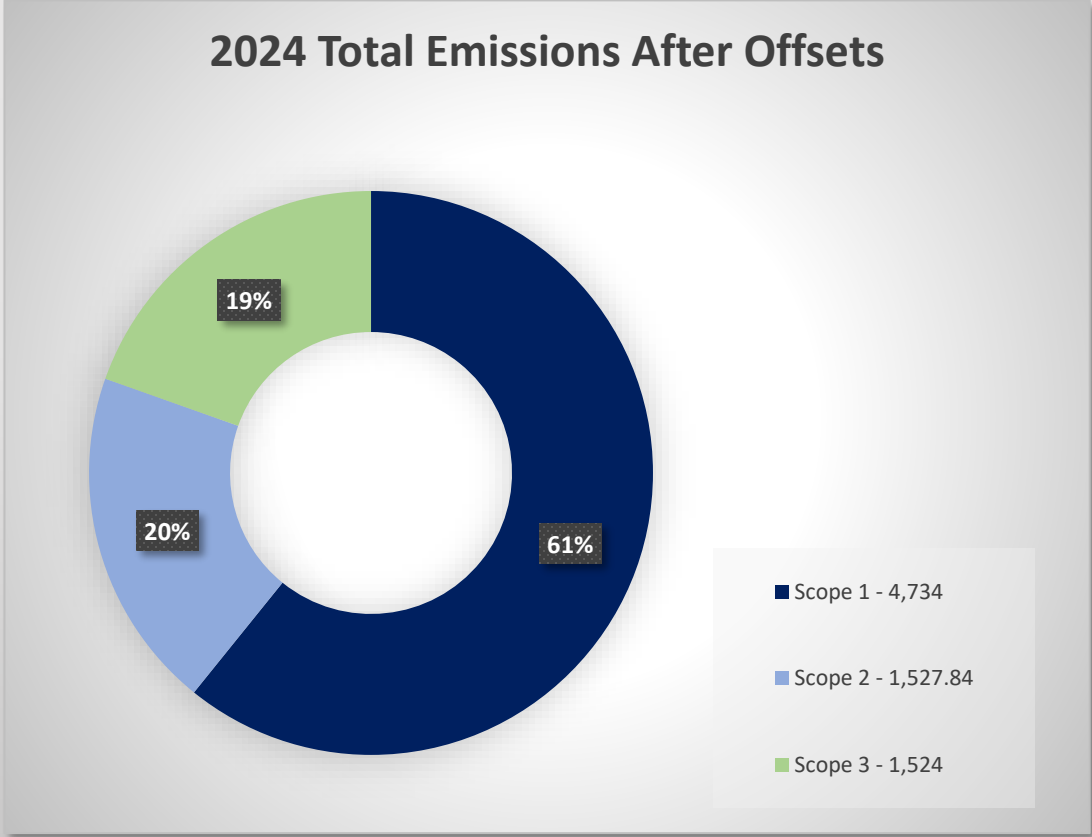
Business Travel	0 CO ₂ -e (metric tons)
Employee Commuting	146 CO ₂ -e (metric tons)
Upstream Transportation & Distribution	570 CO ₂ -e (metric tons)
Waste	57 CO ₂ -e (metric tons)

Summary

Gross	773 CO ₂ -e (metric tons)
Offsets	-
Net	773 CO ₂ -e (metric tons)

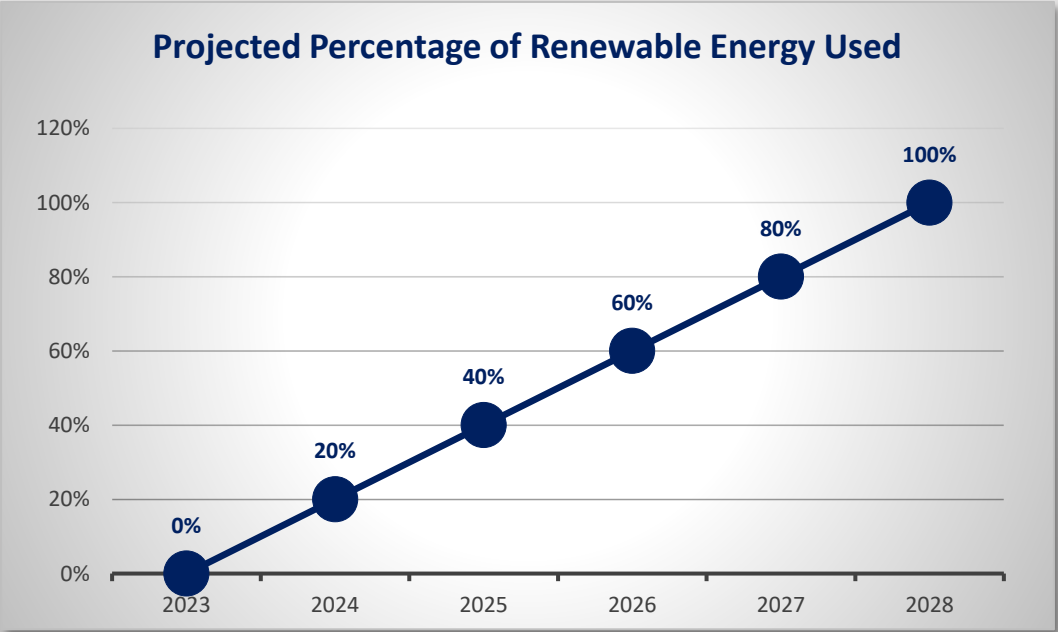
Our Corporate Carbon Footprint– Majestic & Rockdale

Scope 1, 2 & 3 Combined Emissions	
Scope 1	4,734 CO ₂ -e (metric tons)
Scope 2	1,620 CO ₂ -e (metric tons)
Scope 3	1,524 CO ₂ -e (metric tons)
Summary	
Gross	7,878 CO ₂ -e (metric tons)
Offsets (Scope 2)	92.16 CO ₂ -e (metric tons)
Net	7,785.84 CO ₂ -e (metric tons)



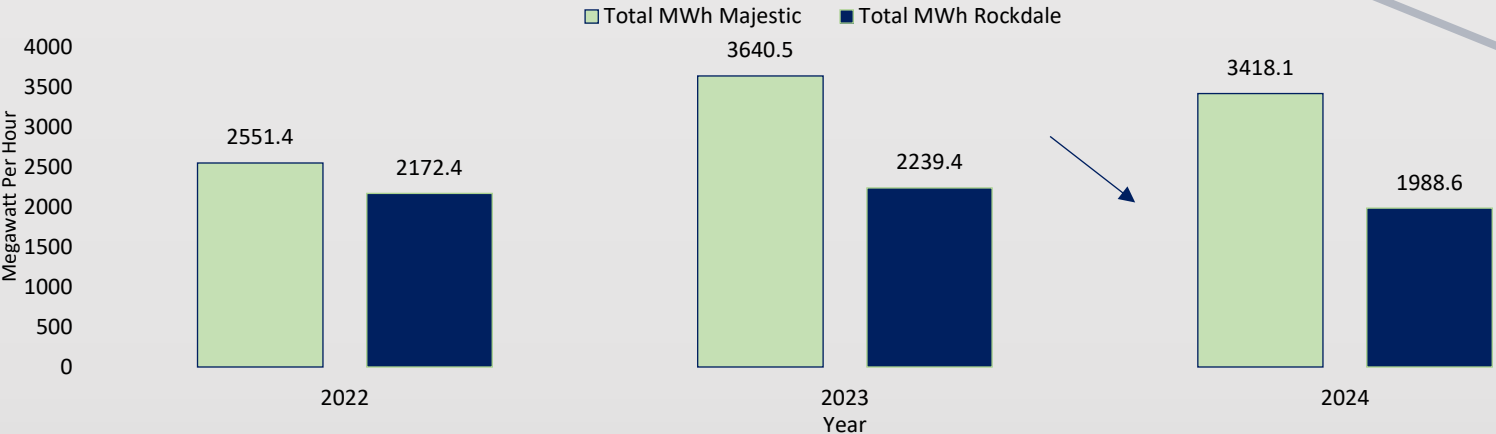
Environment: Carbon Offsets & Renewable Energy

- ✓ In 2024, BioSpectra, Inc. invested in carbon offsets for our Majestic facility to offset our natural gas consumption. These offsets will be increased by 20% over the next 5 years. Our natural gas consumption is neutralized by our verified emission reduction purchase.
- ✓ Our ongoing collaboration with IGS Energy will work to fund green infrastructure and renewable energy projects.
- ✓ BioSpectra, Inc. also purchased Renewable Energy Credits (RECs) for our Majestic facility. Credits will be integrated by an additional 20% each year significantly reducing our Scope 2 emissions in order for BioSpectra to achieve established goals.

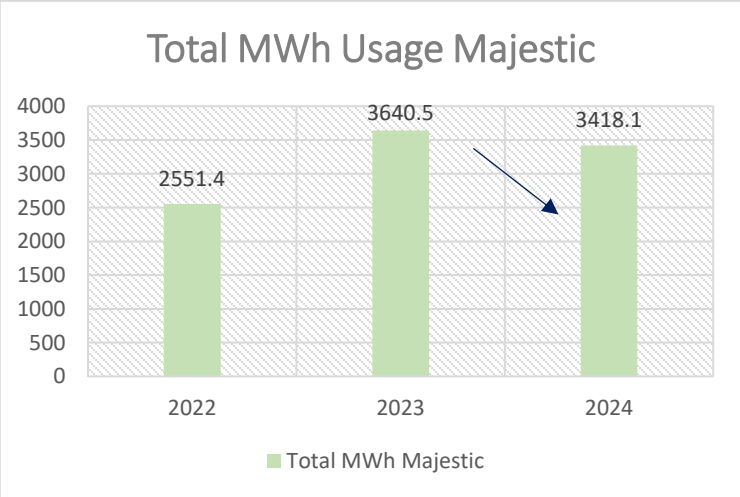


Environment: Energy Metrics

Total MWh Usage per Year from 2022 Baseline - Majestic and Rockdale

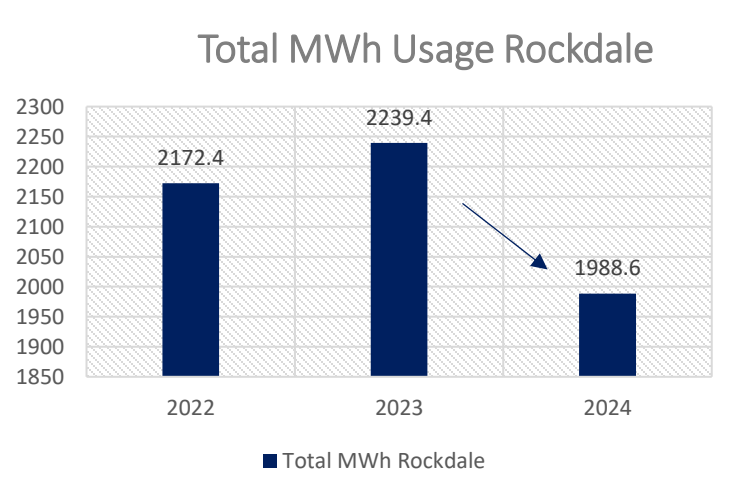


From 2023 to 2024, our total MWh usage decreased by roughly 8%.



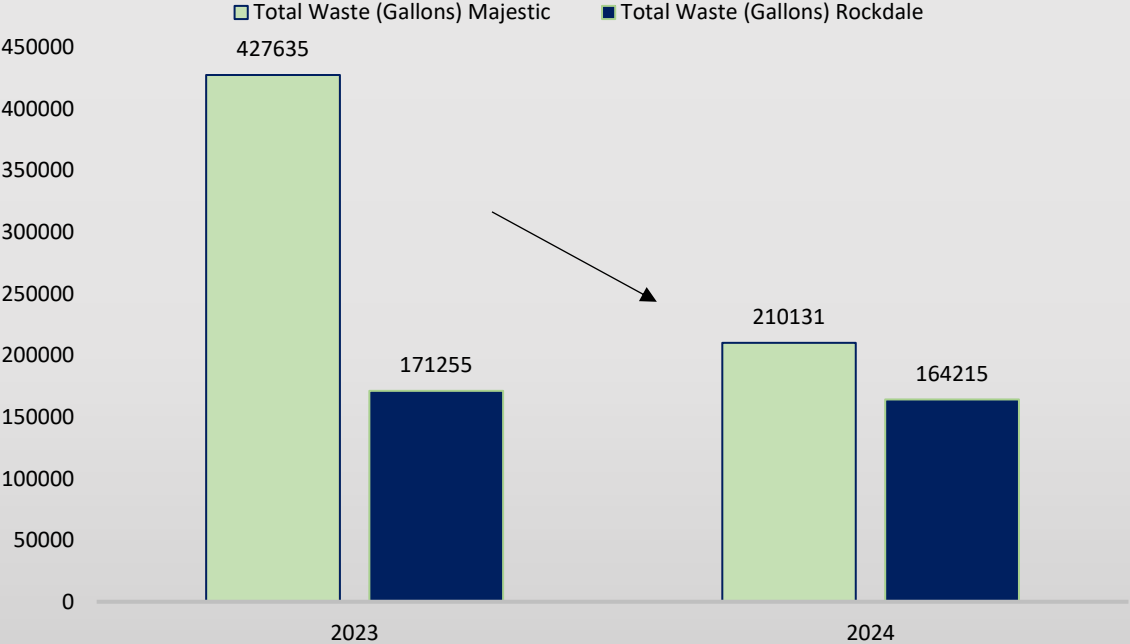
From 2023 to 2024, our MWh usage at the Rockdale facility **decreased by roughly 11%**.

From 2023 to 2024, our MWh usage at the Majestic facility **decreased by roughly 6%**.

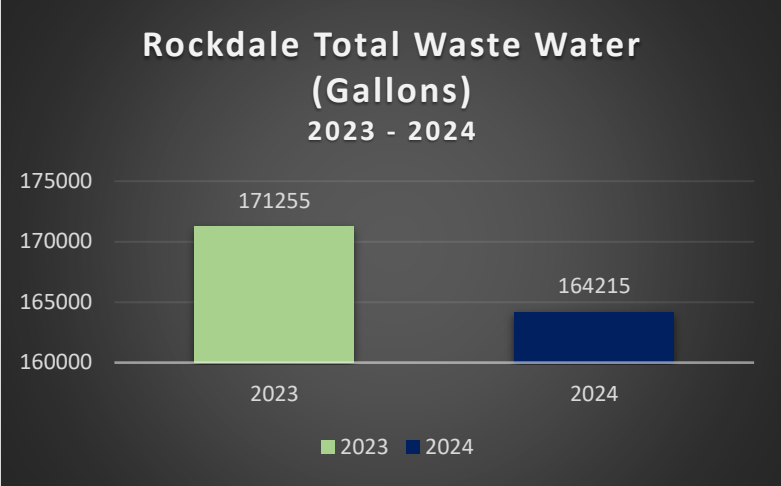


Environment: Waste Water Metrics

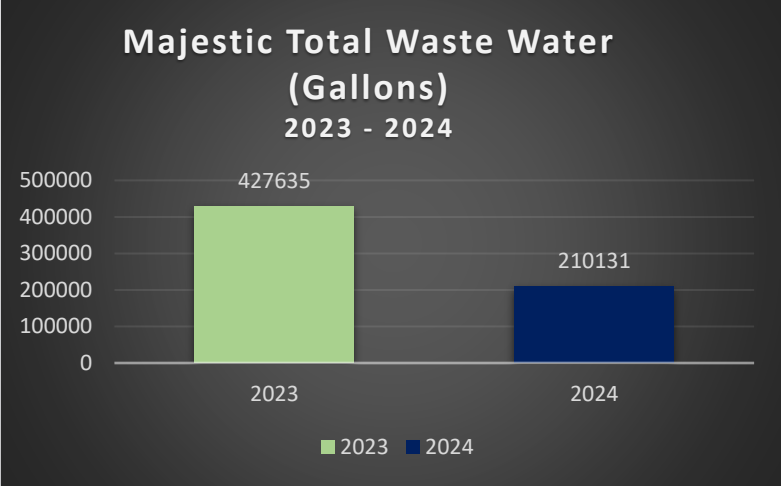
TOTAL WASTE WATER (GALLONS)



From 2023 to 2024, our total waste water dropped from 637,766 gallons to 335,400 gallons, showing that **we have successfully decreased the total gallons of waste water by 47.38%.**



From 2023 to 2024, waste water from the Rockdale facility decreased by approximately **5%.**



From 2023 to 2024, waste water from the Majestic facility decreased by approximately **51%.**

Environment: Waste Reduction Efforts

- ❖ BioSpectra, Inc. is committed to environmental sustainability and responsible corporate citizenship. We recognize the environmental impact associated with the end-of-life phase of our Finished Good Products.
- ❖ In efforts to divert waste from the landfill, BioSpectra upholds our Returned Goods Policy for expired, finished good material.
- ❖ BioSpectra has invested in the validation programs that allow us to use expired, GMP Finished Product as raw material. While this is expensive, it allows us to significantly reduce chemical waste and eliminate the waste from unsold Finished Goods that have exceeded their stated shelf life.

Labor & Human Rights: Working Conditions

- BioSpectra Inc., is committed to providing a safe, healthy, and productive work environment for all employees. We believe that good working conditions contribute to the well-being of our employees and are essential for achieving high levels of employee performance and job satisfaction.
- We are committed to implementing and maintaining policies that ensure every employee receives compensation and essential benefits that allows them to meet their needs, including housing, food, healthcare, and transportation.
- We recognize the importance of work-life balance and encourage our employees to manage their time effectively. We offer flexible work arrangements where feasible to accommodate personal needs.



Female Employees

60
34%



Male Employees

116
66%



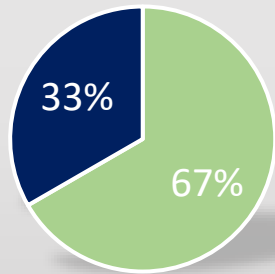
Total Employees

176
100%

Labor & Human Rights: Diversity, Equity & Inclusion

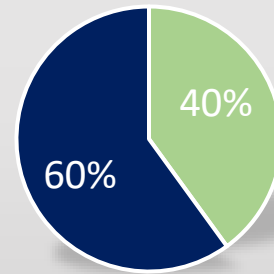
Women in Leadership Roles

Vice Presidents by Gender



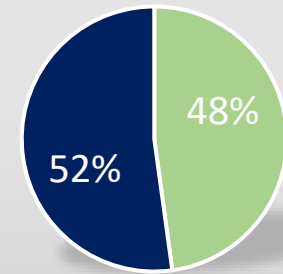
Men Women

Directors by Gender



Men Women

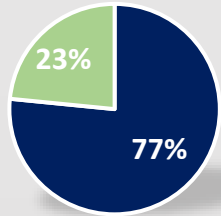
Managers by Gender



Men Women

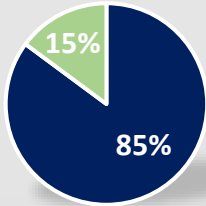
Labor & Human Rights: Employee Benefits

Employees Enrolled in Health Insurance
2024



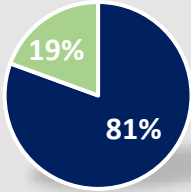
■ Enrolled ■ Unenrolled

Employee Dental Insurance Enrollment
2024



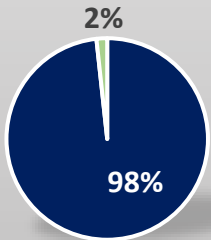
■ Enrolled ■ Unenrolled

Employee Vision Insurance Enrollment
2024



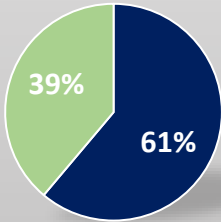
■ Enrolled ■ Unenrolled

Employee Life Insurance Enrollment
2024



■ Enrolled ■ Unenrolled

Employee 401K Enrollment 2024



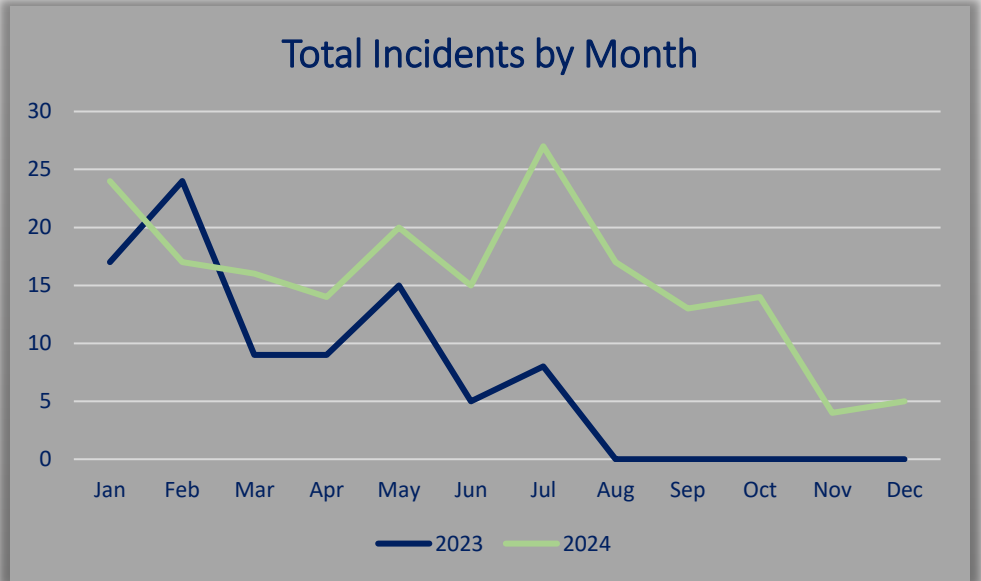
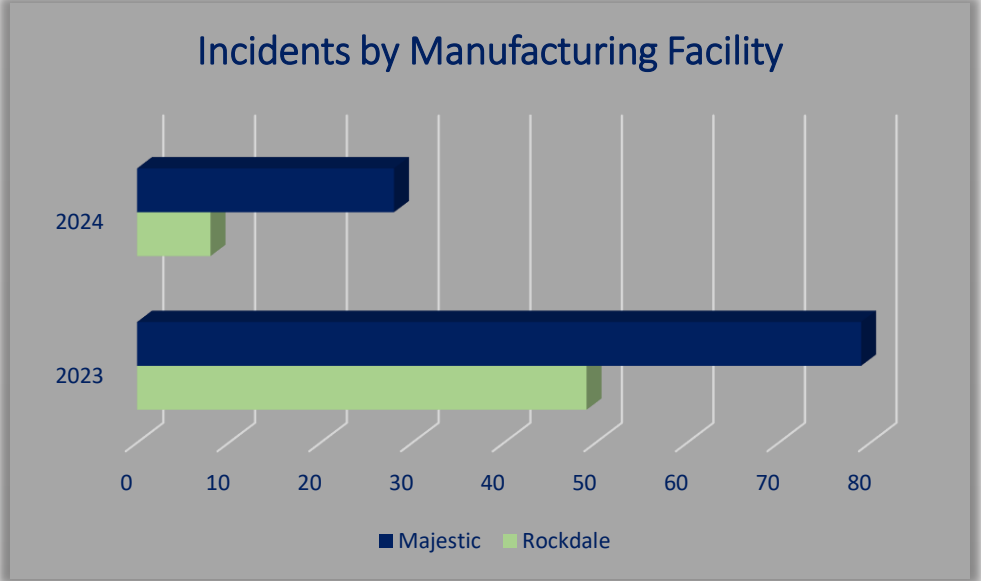
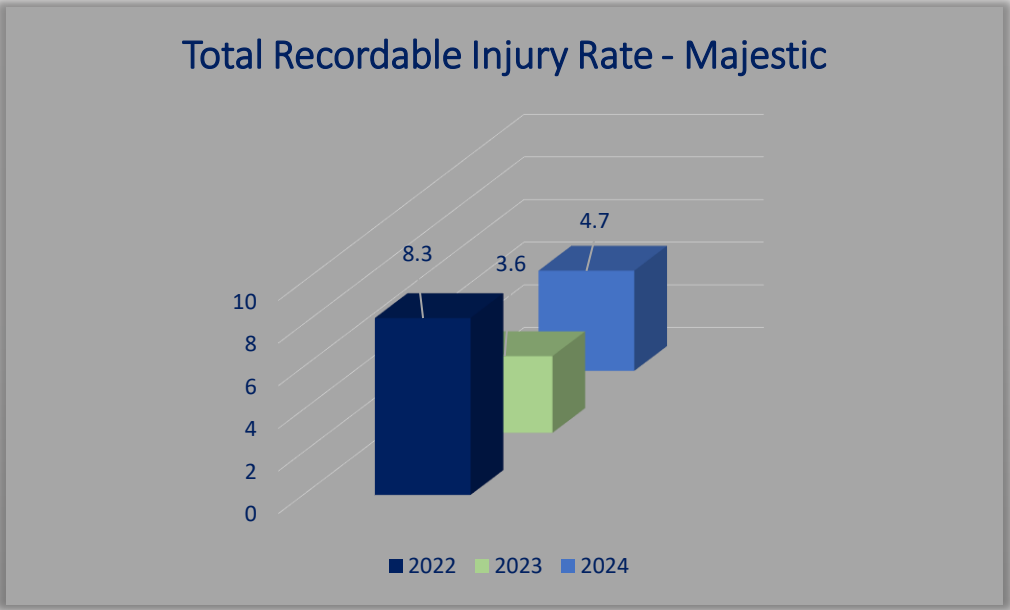
■ Enrolled ■ Unenrolled

Labor & Human Rights: Employee Health & Safety

- ❖ We prioritize the safety of our employees above all else. We adhere to all relevant health and safety regulations and provide necessary training to ensure that our workplace is hazard-free.
- ❖ We encourage employees to report any incidents, near misses, hazards, or health and safety concerns promptly. We investigate all incidents to determine root causes and implement corrective actions to prevent recurrence. BioSpectra implemented an incident reporting tool in 2024 to help better track our total incidents, hazards and near misses. The Environmental, Health and Safety department monitors any reports and implements the corrective actions.
- ❖ The BioSpectra Safety Committee meets on a monthly basis to discuss outstanding safety concerns, open work orders, inspections and reported incidents.
- ❖ All employees are trained on appropriate health and safety conditions to ensure they are aware of hazards and risks associated with their work and understand their responsibilities for maintaining a safe work environment. *Each employee is trained an average of 40 hours per year.*
- ❖ We establish and maintain procedures for responding to emergencies and ensure that employees are prepared to respond effectively. BioSpectra, Inc. provides annual immersive training on emergency situations such as fire prevention and proper procedures regarding facility malfunctions such as chemical spills.

Labor & Human Rights: Incident Metrics

- ❖ All employees are trained on health and safety tactics specified to their particular roles in the organization.
- ❖ Our Total Recordable Incident Rate (TRIR) in 2024 was 4.7. We have cut our rate nearly in half since the 2022 reporting year.
- ❖ Our Environmental, Health and Safety Department (EHS) oversees all operations and incidents to ensure the health, safety and well-being of all our employees.



Environmental, Health and Safety

2024 EHS Incident Trends

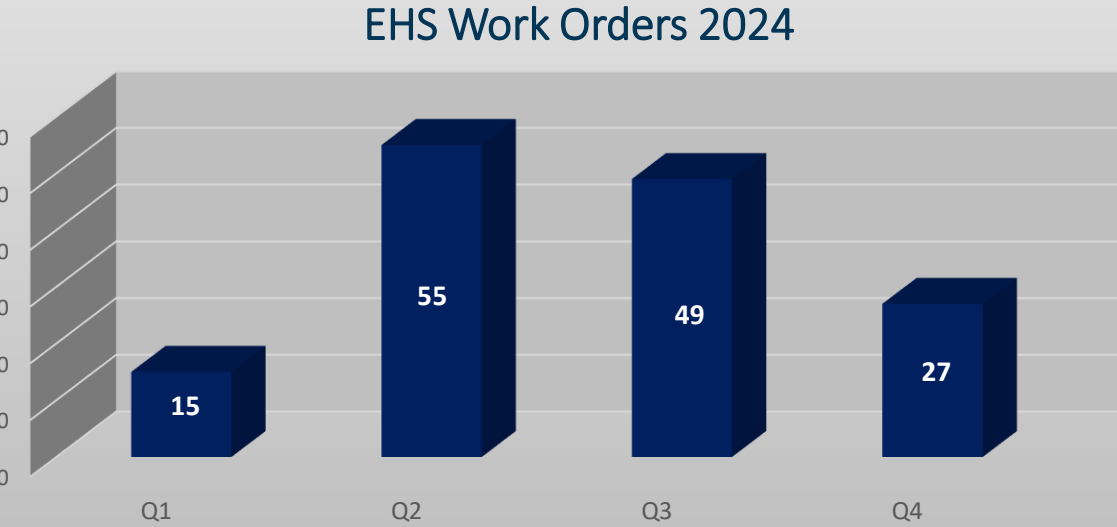
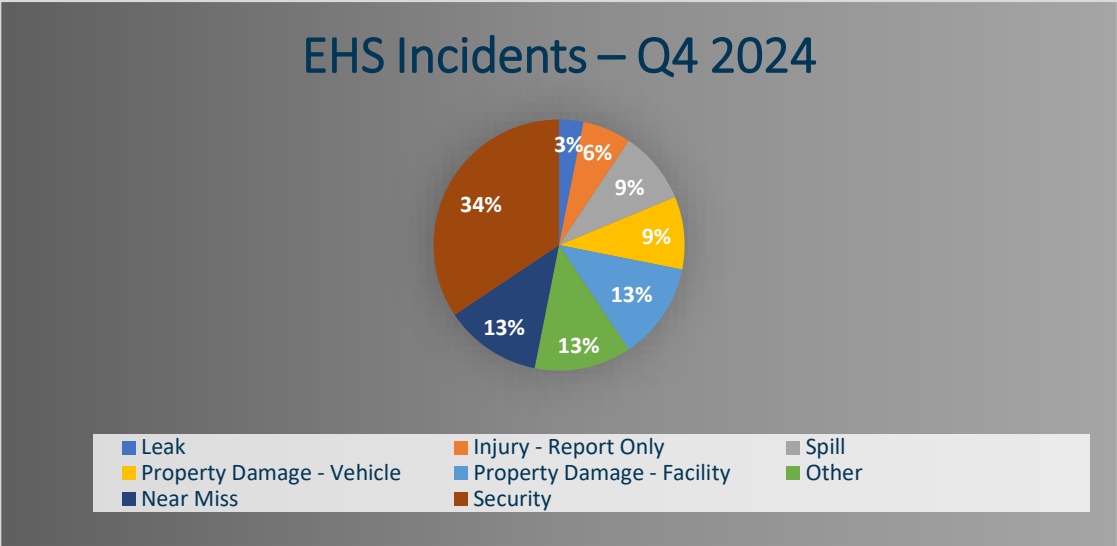
Safety or Security Concern

Property Damage

Escort

Trespass

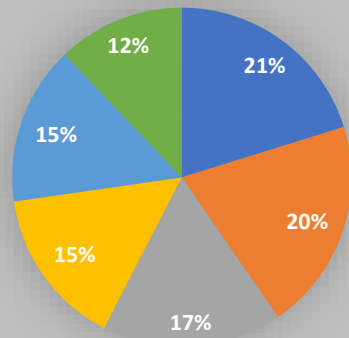
Accident or Near Miss



2024 Internal Audits

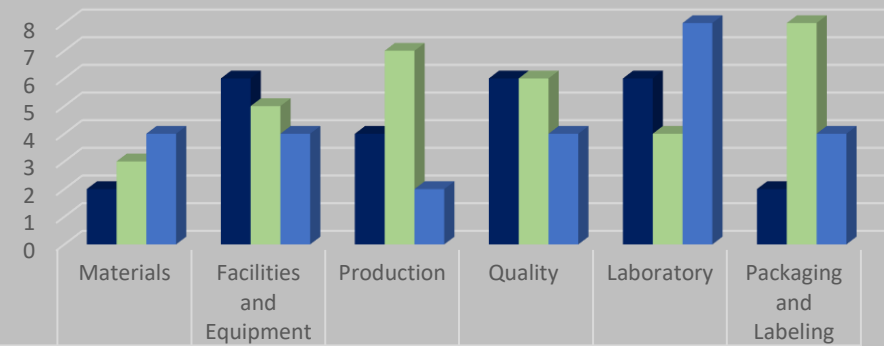
Count	System	Qty of Non-Compliant Observations	Qty of Recommendations	Qty of Minor	Qty of Critical	Quantity of Major	CAPA Open?
1	Facilities and Equipment	9	6	5	0	4	No
2	Laboratory Control	12	6	4	0	8	No
3	Materials	7	2	3	0	4	Yes
4	Packaging and Labeling	12	2	8	0	4	No
5	Production	9	4	7	0	2	No
6	Quality	10	6	6	0	4	No

Non-Compliant Observations



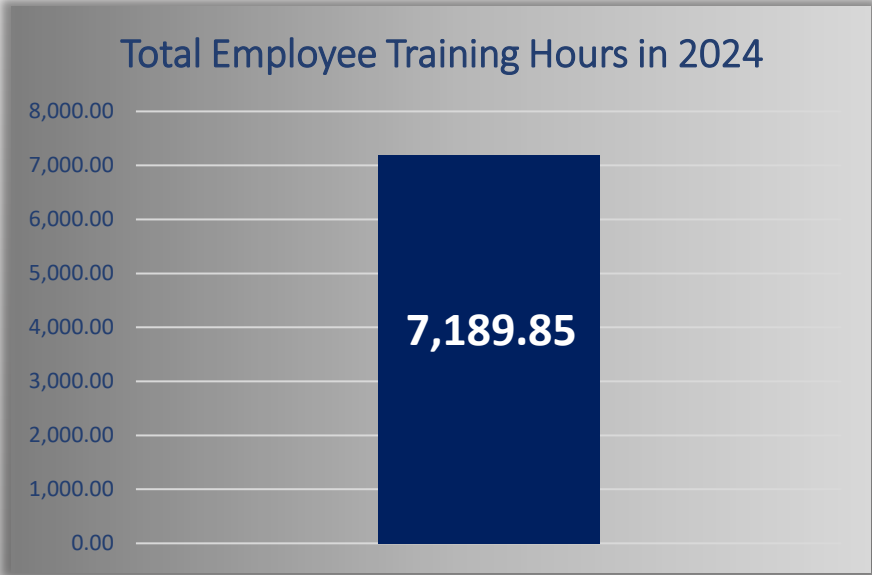
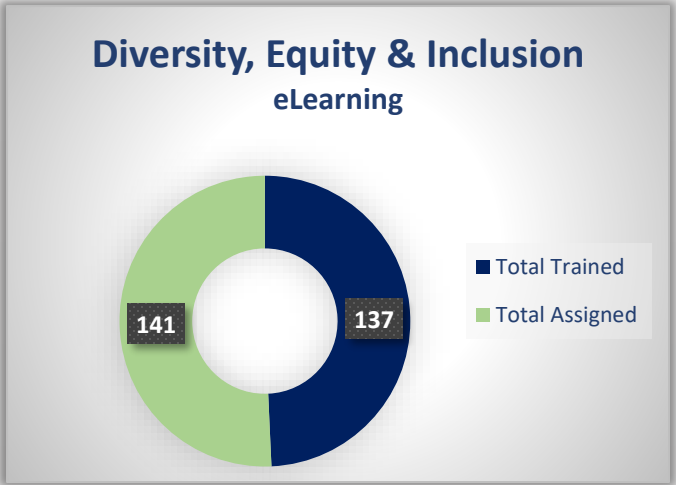
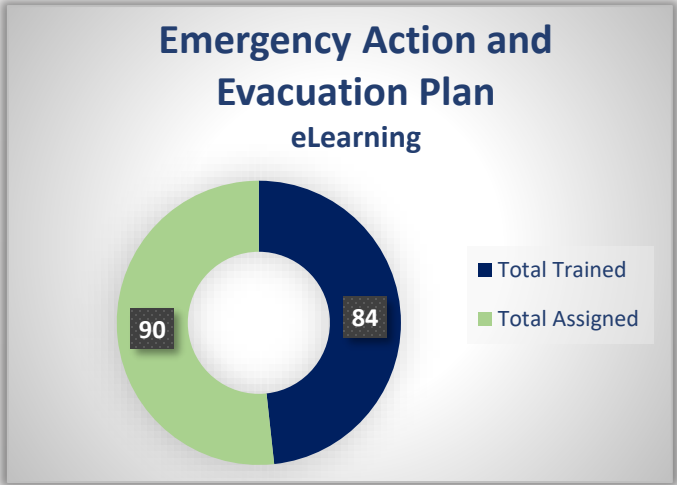
■ Packaging and Labeling ■ Laboratory Control ■ Quality
■ Production ■ Facilities and Equipment ■ Materials

2024 Internal Audits



	Materials	Facilities and Equipment	Production	Quality	Laboratory	Packaging and Labeling
Recommendation	2	6	4	6	6	2
Minor	3	5	7	6	4	8
Major	4	4	2	4	8	4

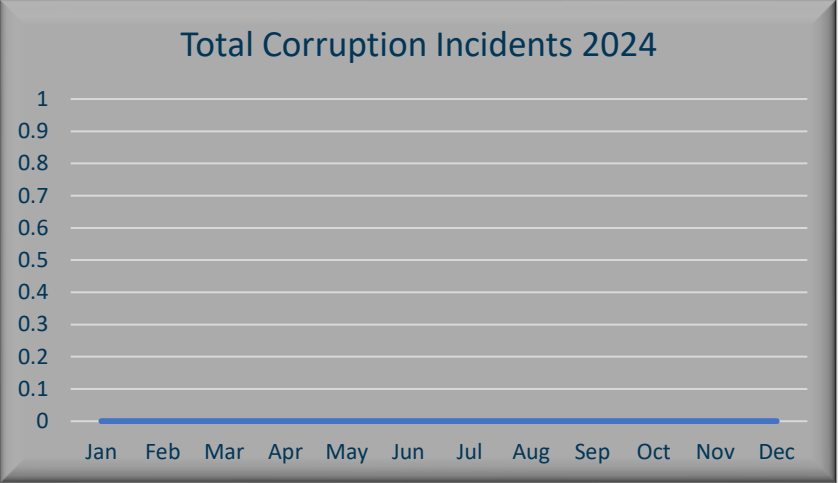
2024 Employee Training Metrics



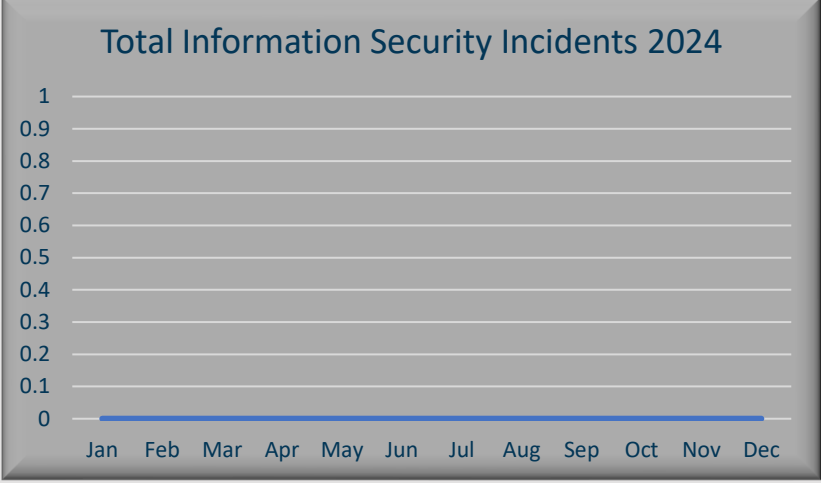
Ethics: Anti-Corruption Policy

- ❖ BioSpectra is committed to conducting its business with honesty, integrity, and transparency. As part of this commitment, we adhere strictly to fair business practices and maintain a zero-tolerance policy towards bribery and fraud in any form.
- ❖ We conduct our business in compliance with all applicable laws and regulations, promoting health competition and fair dealings in the marketplace. Our employees are expected to uphold the highest standards of ethics and integrity in their interactions with customers, suppliers, partners and colleagues.
- ❖ Bribery, whether offering, giving, receiving or soliciting, is strictly prohibited. We do not tolerate any form of bribery or corrupt practices, including facilitation payments. We are committed to preventing fraud in all aspects of our operations. This included but is not limited to financial fraud, misrepresentation of information, falsification of records, and any deceptive practices.
- ❖ The management team is responsible for establishing and maintaining effective controls to prevent bribery and fraud within the organization.

Ethics: Anti-Corruption and Information Security Incidents

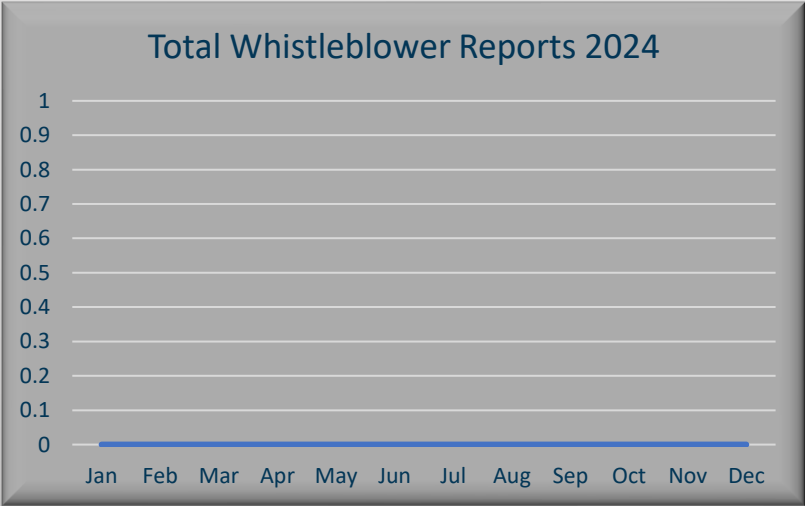


Total number of confirmed Corruption Incidents in 2024: 0



Total number of confirmed Information Security Incidents in 2024: 0

As part of the whistleblower program, BioSpectra uses a platform called *ReportIT*. BioSpectra, Inc. is committed to maintaining a work environment that is safe and free from discrimination, unlawful behavior, and inappropriate conduct. To support this commitment, the company has established a “*See it, say it*” reporting system that encourages employees to report any unethical, abusive, unprofessional, or illegal actions, as well as any violation or concerns related to the code of conduct.



Total number of confirmed Whistleblower Reports in 2024: 0

Sustainable Procurement: Stakeholder Engagement

- ❖ In alignment with our commitment to Sustainable Procurement, we expect our business partners to uphold ethical practices that reflect internationally recognized standards of legal and social responsibility. These expectations are clearly outlined in both BioSpectra's Code of Ethics and Sustainable Procurement Policy.
- ❖ Digital Signage is used to effectively communicate key programs and policies to both employees and visitors, enhancing awareness and engagement across our organization.
- ❖ Supplier audits are conducted in accordance with BioSpectra's internal Standard Operating Procedures (SOPs) and in alignment with ICH Q7 guidelines to ensure compliance, quality, and consistency across the supply chain.
- ❖ Annual employee performance reviews are conducted to ensure that all BioSpectra team members are well-prepared and adequately trained for their roles. We recognize that each individual's contribution is essential to fostering a sustainable and inclusive workplace.
- ❖ An annual Employee Satisfaction Survey will be distributed to all staff, providing an anonymous platform for employees to share their feedback and experiences.

Scope 3 Emissions Tracking Methods

Our upstream Transportation and Distribution is divided into three areas:

Ground Transport
Sea Transport
Air Transport



Employee Commuting is categorized by:

Passenger Car
Light-duty Truck
Motorcycle



Waste Generation is categorized by:

Material
Disposal Method
Weight

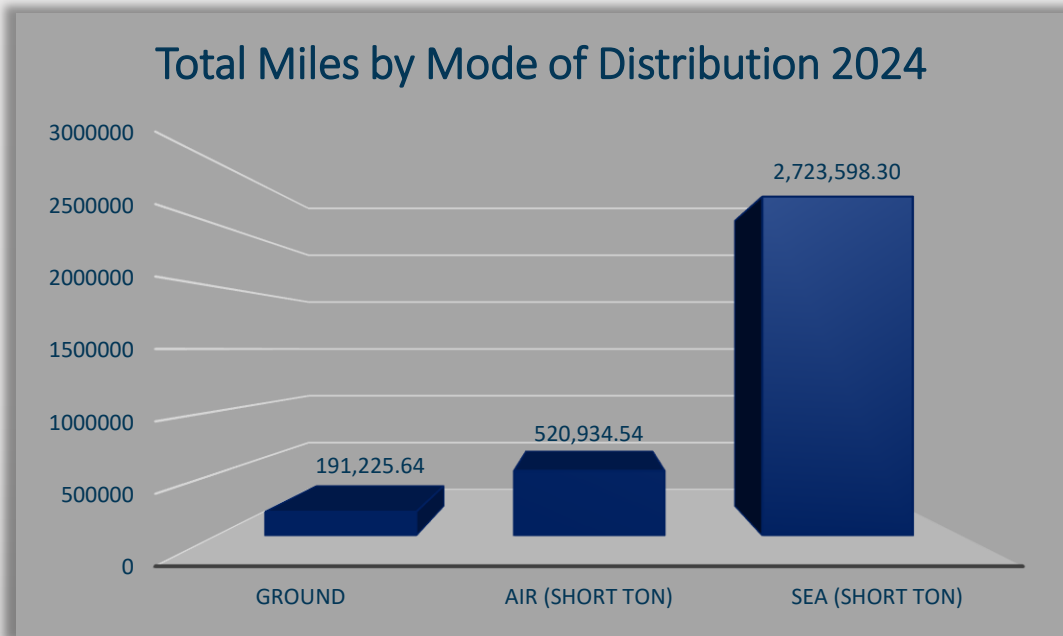


Business Travel is divided into three areas:

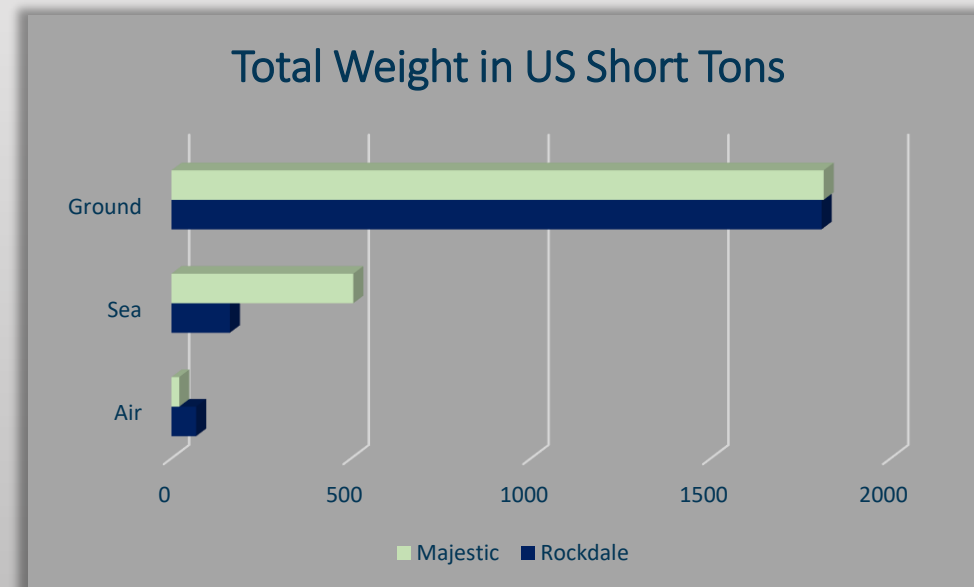
Vehicle Miles
Rail or Bus Passenger Miles
Air Passenger Miles



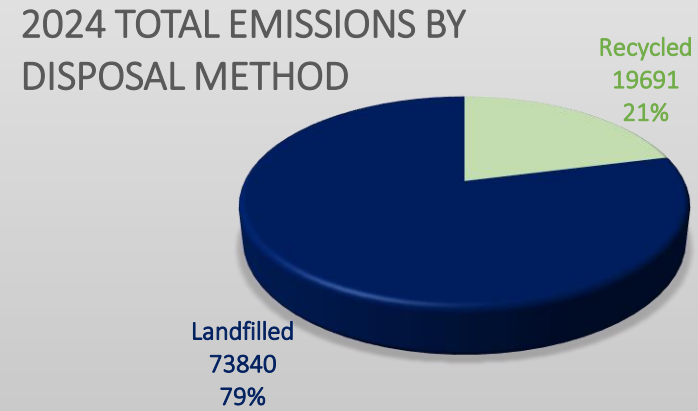
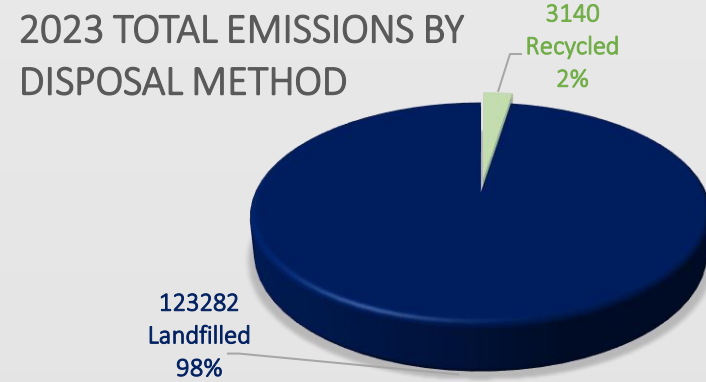
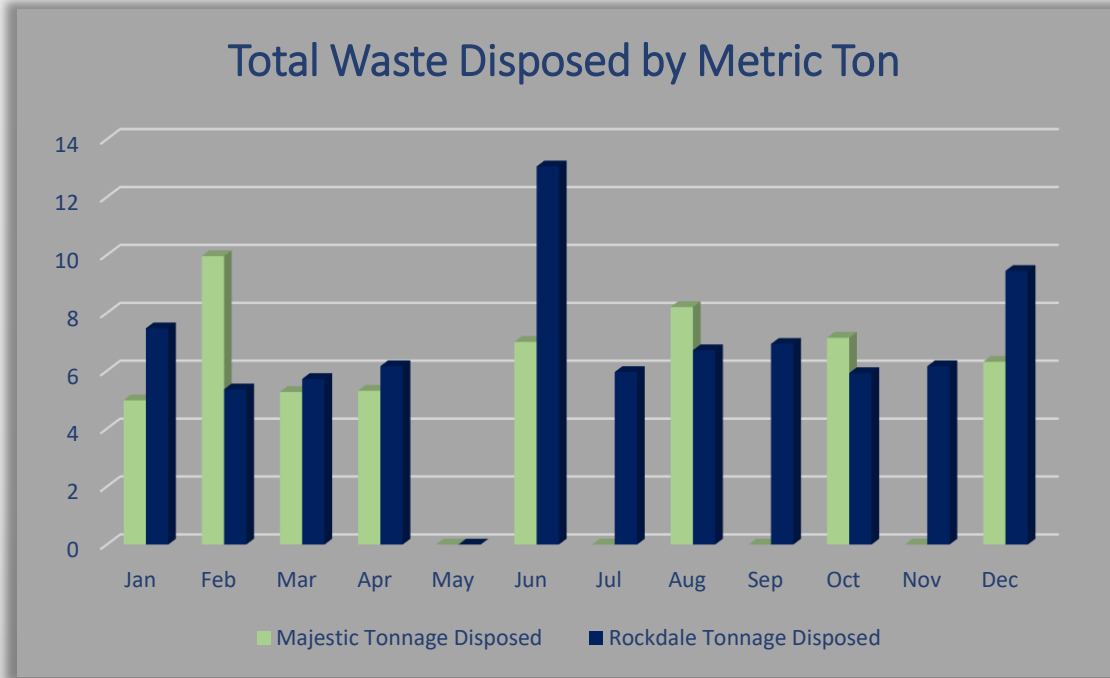
Transportation and Distribution



- ❖ Transportation and Distribution miles are calculated manually by using the approximate starting location to the approximate ending location.
- ❖ For Example, Ground miles are calculated from the BioSpectra location to the Customer location. Air miles are calculated from BioSpectra's "home" airport to the nearest airport to the customer.
- ❖ The amount of total short ton miles is used to calculate the total CO₂ emissions per mode of Distribution.



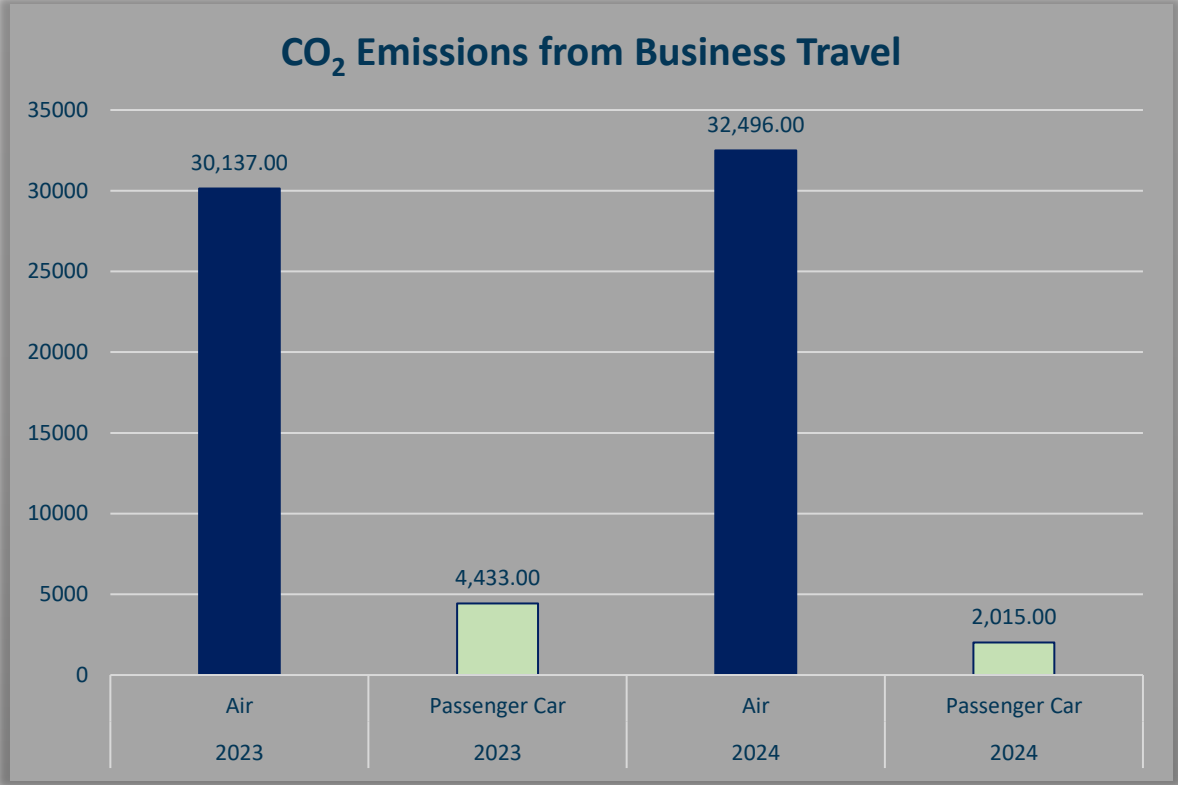
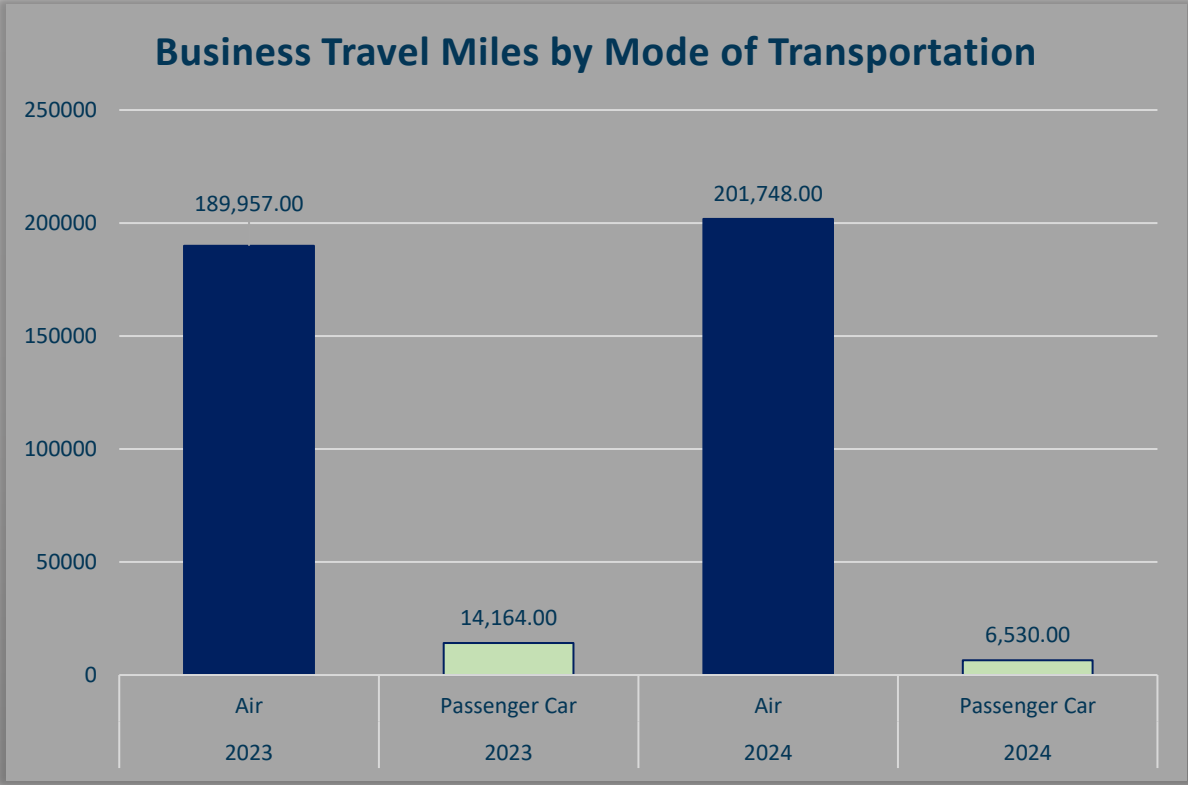
Waste Disposal



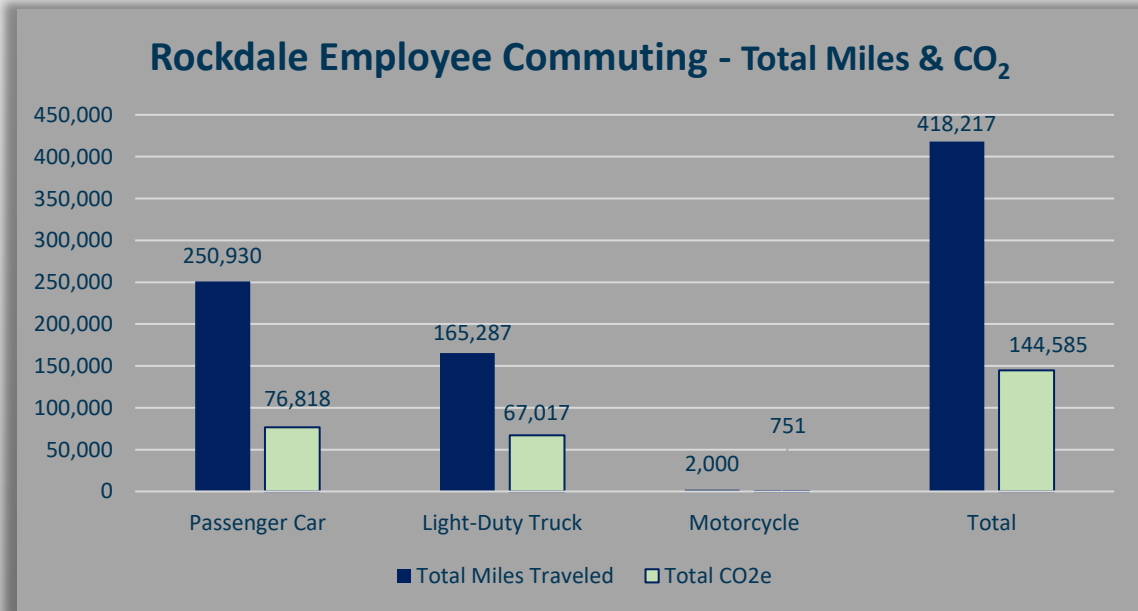
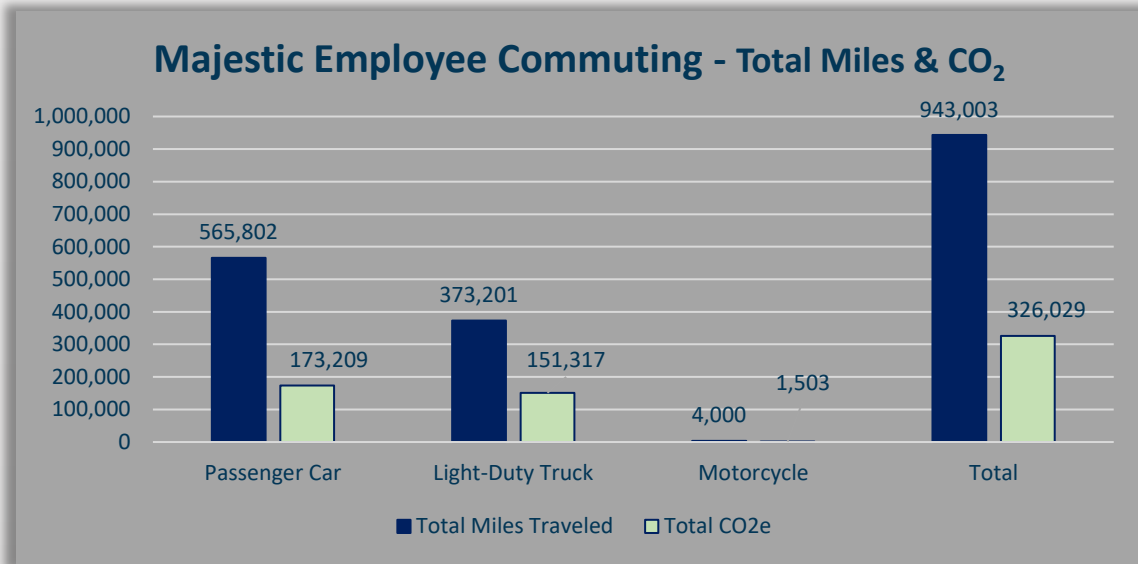
In 2024, emissions from landfilled waste were 73,840 units, a large decrease from 123,282 units in 2023. **This shows a reduction of 49,442 units, or a 40.1% decrease from 2023.**

Emissions from recycled waste increased from 3,140 units in 2023 to 19,691 units in 2024, which is an increase of 16,551 units. **This large jump represents a 527% increase in recycled waste from the previous year.**

Business Travel



Employee Commuting



- ❖ The miles traveled for vehicles is tracked and converted into CO₂ emissions, measured in Kilograms.
- ❖ We report employee commuting vehicle miles which are converted to CO₂ emissions in Kilograms.
- ❖ Personal employee vehicles are the means of transportation for all employees due to the lack of public transportation resources in our geographical location.

Goals and Targets




Reduce our Scope 1 and Scope 2 carbon emissions by 42% by 2028 in accordance with the Paris Protocols and Agreement



Organizational goal of reducing our emissions by 50% by 2030



Complete a third-party Sustainability Audit in 2025



Begin tracking and reporting on Product Carbon Footprints for our top products in 2025

Strategic Sustainability Initiatives

Operations

100% Sustainable Renewed Buildings	
100% of Workspace will be compliant to our Four Levels of Classification	Majestic Office Renovation (In-Progress)
100% Uniform and Standardized Workspaces, Break Areas and Offices	Majestic Office Renovation (In-Progress)
Property Beautification at Every Facility Completed	

Environment

Dust Collection/Cyclone Upgrade Program	
Commercial Recycling Program Implemented	
Solid Waste Reduction Program Implemented	
Liquid Waste Reduction Program Implemented	

Sustainability

Vertically Integrated HCL Gas/Liquid Supply	HCL Gas Generation System (In-Progress)
100% Energy-Efficient HVAC Systems	Majestic Office Renovation (In-Progress)
Unified and Expandable Utilities at Each Site	Utility Loop Systems Majestic & Rockdale (In-Progress)
Inter-Site Supply Chain Management	Supply Chain Center & Fulmer (In-Progress)

Organizational

Business Continuity Plan	Backup/Disaster Recovery (In-Progress)
Succession Plan	Book of Books (In-Progress)
100% Validated and Implemented ERP/MRP	ZAP Dashboards SAGE Implementation (Completed) Dextran ERP Implementation (Completed) Implementing BOMs/Routings in SAGE (In-Progress)
Human Development Plan	

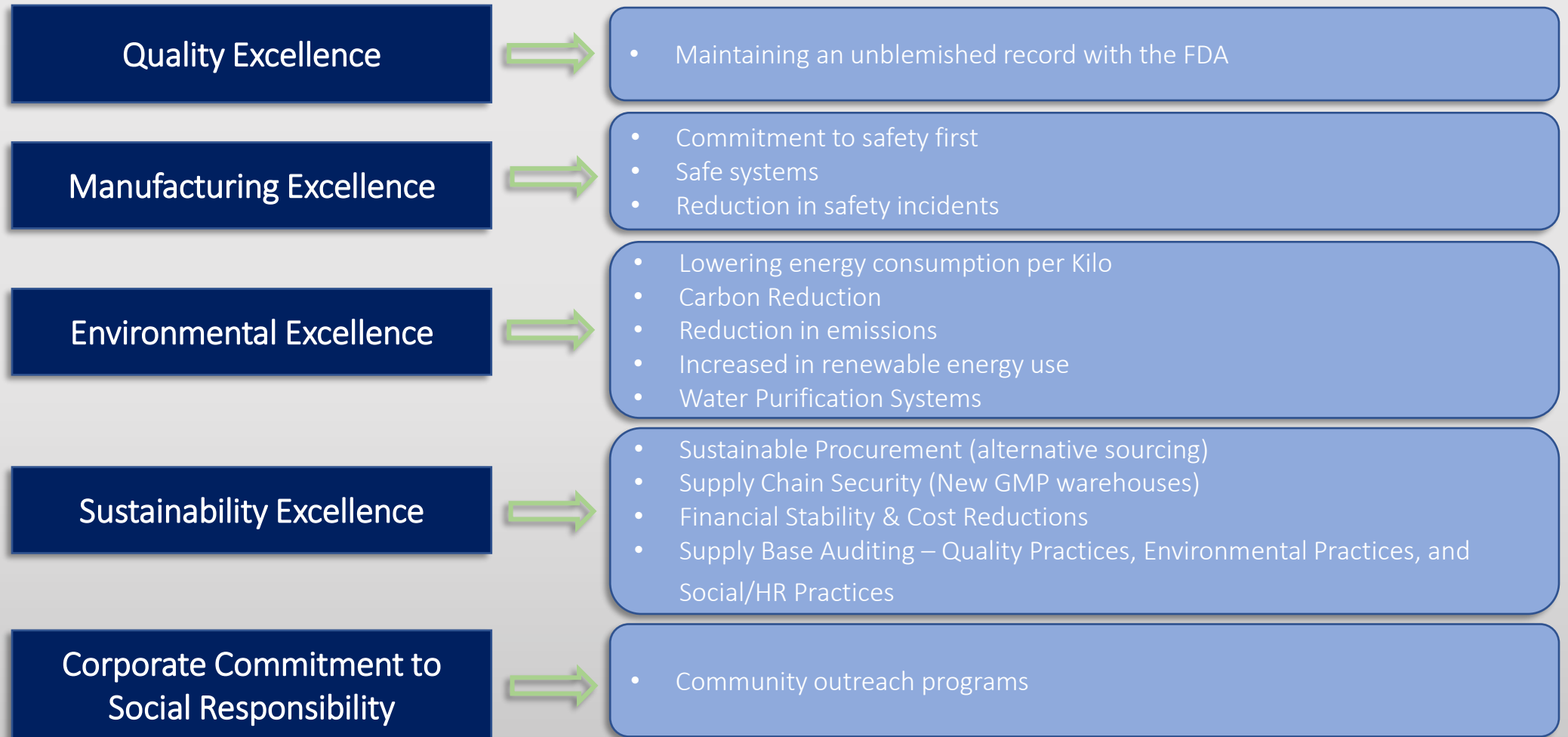
Quality

100% Validated and Implemented QMS	Electronic Training Implementation (In-Progress) MasterControl Field Based Solutions Forms Implementation (Completed) MasterControl Forms Buildout in Docs Modules (Completed) Electronic Batch Records (Completed)
100% Validated and Implemented LIMS	LabWare Implementation (Completed)
Expansion of Data Integrity and Quality Programs	
Buildout of New Laboratory	

Manufacturing

100% Validated and Implemented EBR's	Electronic Batch Records (EBRs) (Completed)
30 Days Critical Product Inventory	
100% Qualified Equipment and Validated Systems	
Spray Drying Technology Expansion	Zone M Spray Dryers (In-Progress) L10 Spray Dryer (Completed)

Strategic Sustainability Initiatives



This Strategic Plan will be based on our expectations and goals for our 30th anniversary and define primary measurables for the 32-month period started February 1, 2023 and ending September 30, 2025.

Environmental, Social and Governance Commitments

Environmental Commitments

- Biodiversity Policy Statement
- Chemicals and Waste Policy Statement
- Product Carbon Footprint Policy Statement
- Product End-of-Life Policy Statement

Ethics Commitments

- Conflict of Interest Policy Statement
- Fair Business Practices Policy Statement

Sustainable Procurement Commitments

- Sustainable Procurement Policy

Labor & Human Rights Commitments

- Employee Health & Safety Policy Statement
- Child Labor, Forced Labor and Human Trafficking Policy Statement
- Risk Exposure to Minors
- Diversity, Equity and Inclusion Policy Statement
- Whistleblower Policy Statement
- Anti-Discrimination Policy Statement
- Risk Assessment and Safe Job and Ergonomics at Work Policy Statement
- Working Conditions Policy Statement
- Living Wage Policy Statement
- Evaluation for Employee Job Performance Policy Statement

Methodology Report

Baseline Year

BioSpectra’s emissions data for the Majestic facility is derived from a 2022 baseline, whereas the data for the Rockdale facility is based on a 2024 baseline. Year to year data trends are subject to change and should be interpreted with that consideration.



Process for Data Collection

BioSpectra currently uses the U.S. Environmental Protection Agency’s Simplified GHG Emissions Calculator to estimate its greenhouse gas emissions.

Calculation System

Greenhouse Gas Emissions reporting includes full coverage of Scope 1 and 2 emissions, along with Scope 3 emissions. Biogenic CO₂ emissions are not accounted for at this time.



Continuous Improvement of Data Collection

Through ongoing collaboration between the Sustainability and EHS Departments, BioSpectra remains committed to continually enhancing its data collection methods each year.