Company
_Sustainability Report

2025 | 2026

SPECTRA LIGHTING

START

Light
_builds tomorrow

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1.1. Introduction

At Spectra Lighting, we understand that our future and the planet's health depend on the decisions we make today. Sustainability, environmental stewardship, and social responsibility are fundamental to our operations. Our diverse workforce and their innovative ideas drive our commitment to a sustainable future.

For years, we have focused on solutions aligned with the principles of the UN Global Compact and ESG (Environmental, Social, Governance) standards. Our strategy integrates cutting-edge technologies with ecological responsibility, aiming to minimize our environmental footprint. This includes optimizing production processes, reducing CO_2 emissions, and investing in renewable energy sources.

As an active participant in the UN Global Compact, we proudly support the UN Sustainable Development Goals (SDGs). Our efforts are particularly concentrated in sustainable production, energy efficiency, and advancing the circular economy. We uphold corporate social responsibility (CSR) by advocating for human rights, ethical labor practices, and transparent business operations.

In our Environmental Report 2025/2026, we highlight our achievements and actions from the past year. This document serves not only as a record of data but also as a testament to our commitment to creating a more sustainable future for our organization and the environment.

We invite you to explore our initiatives and strategies for the future. Together, through collaboration, accountability, and innovation, we can work toward a more sustainable world.

Respectfully,
The Management Board of Spectra Lighting Ltd.

SINCE 2000, WE HAVE ESTABLISHED OURSELVES AS A LEADER IN THE PRODUCTION OF INNOVATIVE LIGHTING SOLUTIONS, DRAWING INSPIRATION FROM DESIGNERS ACROSS THE GLOBE.

Our vision transcends the mere illumination of spaces; we endeavor to craft experiences that enhance quality of life while nurturing our planet for future generations.

26

YEARS ON THE MARKET

48

DISTRIBUTION NATIONS

1.2. Company Overview

Spectra Lighting Ltd. has been a leading manufacturer of contemporary lighting systems for over two decades. Since our founding in 2000, we have combined a passion for illumination with cutting-edge technology, collaborating with designers and architects worldwide. With operations in 48 countries, we provide lighting solutions for offices, hotels, commercial spaces, and public venues.
Our approach integrates aesthetics, functionality, and ecological responsibility, ensuring our products enhance both visual appeal and environmental sustainability. All our lighting solutions comply with relevant health, safety, and environmental certifications.

In 2021, we became a participant in the UN Global Compact, the world's largest initiative for businesses committed to the Sustainable Development Goals (SDGs) and ethical business practices. Our sustainability efforts were recognized in the „Yearbook UN GCNP 2025", which highlights key collaborations between businesses and government partners, evolving corporate strategies, and the latest ESG trends. We take pride in being among the companies shaping the future of responsible business in Poland.

Photo 1. Spectra Lighting at the UN Global Compact Poland Gala in October 2025.

1.2.1. Our people

Our corporate culture is built on strong ethical principles, including the Universal Declaration of Human Rights and the EU Charter of Fundamental Rights. As a UN Global Compact participant, we incorporate these principles into our daily operations, ensuring they guide our workplace policies and business strategies.

Employee well-being and workplace safety are top priorities. We are committed to fostering a work environment that promotes diversity, collaboration, and professional growth, while maintaining the highest standards of occupational safety and ethics.

1.3. Forward-Looking Initiatives

By 2030, we aim to achieve climate neutrality concerning energy dependence and the potential recycling of materials. However, our commitment extends beyond internal operations. We are dedicated to actively supporting local initiatives.

Pro-ecological initiatives, investment in education, and participation in community projects are our focus. Our objective is to foster a better future for subsequent generations, as we hold that genuine change commences with collective action.

Our sustainability strategy is built on three key pillars:

Advancement of sustainable technologies

Our R&D teams focus on developing innovative lighting solutions that reduce energy and material consumption while maintaining superior quality.

Collaboration for Sustainable Development

We build long-term partnerships with suppliers and customers who share our sustainability values, actively participating in ecological initiatives.

Compensation for Unavoidable Emissions

We work with accredited carbon offset programs to mitigate our carbon footprint effectively.

ECOLOGICAL ACCOUNTABILITY

2

2.1. Evolving for a Sustainable Future

This report outlines our progress in sustainable lighting, production, logistics, and product life cycle management, with a special focus on energy consumption and efficiency. A significant area of our analysis is the annual review of energy consumption from proprietary installations, particularly photovoltaic systems at our Załuski and Warsaw locations for 2025 and 2026. The results are presented using numerical data and graphical comparisons, showcasing the positive outcomes of our initiatives.

Our commitment to environmental responsibility is demonstrated through the responsible management of natural resources, continuous improvements in energy efficiency, and efforts to reduce our environmental impact.

Investments in renewable energy, sustainable product design, and digital transformation allow us to minimize our carbon footprint while optimizing resource utilization. Every initiative aligns with international environmental standards, reinforcing our obligations to future generations. However, our goal goes beyond merely mitigating negative impacts; we seek to drive meaningful change across the industry by exemplifying responsible decision-making.

In the upcoming years, we plan to expand our photovoltaic infrastructure and optimize our renewable energy sources further. We will enhance eco-design principles by introducing low-emission materials and innovative technologies to ensure our products remain both efficient and environmentally responsible. Digitalization and automation will play a crucial role in improving operational efficiency while minimizing resource consumption. At the same time, we are implementing increasingly stringent quality standards and certifications to validate our environmental stewardship.

2.2. Sustainable Lighting

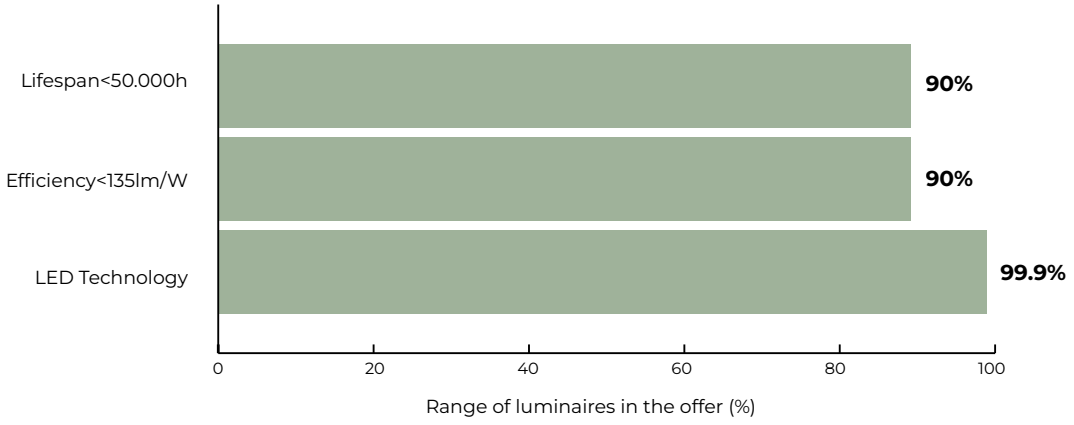
2.2.1. Energy Efficiency and Performance

Energy efficiency is vital for sustainable development, as it reduces greenhouse gas emissions while lowering operational costs. Our approach focuses on maximizing performance while consuming less energy, ensuring that our products contribute to a sustainable future.

Product Efficiency and Longevity
Almost all of our luminaires—99.9%—are based on highly efficient LED technology, significantly lowering power consumption compared to traditional lighting systems. At least 90% of our products achieve a luminous efficiency of no less than 135 lm/W (Class D) and have a service life exceeding 50,000 hours. These features guarantee long-term energy savings and a reduced environmental footprint throughout the product lifecycle (see graph 1).
A key technological advancement in our production process is the integration of the new bending center. This high-precision manufacturing system has improved the sustainability of our operations by optimizing material use, enhancing light efficiency, and decreasing energy consumption in production. The durability of our luminaires and their modular construction support sustainability by facilitating the easy replacement of individual components, thereby extending the overall lifespan of our products.

Intelligent control
Intelligent lighting control systems contribute to further energy reduction. The implementation of advanced automation solutions such as DALI and Casambi allows for precise control of light intensity and color, adapting illumination to user needs in real-time. Integrating these systems with broader building automation platforms, including heating, ventilation, and air conditioning (HVAC), ensures a holistic approach to energy management, significantly minimizing unnecessary consumption.

Percentage of energy-saving and long-lasting products offered by the company



Graph 1. Percentage distribution of products featuring LED technology and the associated luminaires, highlighting enhanced efficiency and durability.

2.2.2. Sustainable materials

A core aspect of our sustainability strategy is to reduce dependency on primary raw materials while increasing the use of recycled content. By focusing on material efficiency, we limit environmental degradation and support a circular economy.

PET felt

A notable example is the use of PET felt, an eco-friendly material derived from plastic waste, which has been integrated into our lighting products launched in 2025. This material not only enhances the aesthetic and functional properties of our luminaires but also provides superior soundproofing capabilities. Our sales catalog for 2025 features the following fixtures:

- VAGO ACOUSTIC
- EDEN ACOUSTIC
- ELLE ACOUSTIC
- JAZZ ACOUSTIC
- ESTOS ACOUSTIC (see photo 3)
- OMBRE ACOUSTIC
- HOLY ACOUSTIC (see photo 2)
- ARC ACOUSTIC
- PROFILITE ACOUSTIC
- AVALANCHE EC ACOUSTIC
- DAISY ACOUSTIC

The PET felt used in our products contains at least 60% recycled raw materials and offers high acoustic performance, with Noise Reduction Coefficient (NRC) values ranging from 0.40 to 1.00. Additionally, it is flame-retardant, meeting the B-s2, d0 classification for fire safety, ensuring both user protection and regulatory compliance. The production of this material adheres to ISO-certified processes that uphold strict ecological and social standards. By incorporating PET felt into our designs, we significantly reduce waste, support the recycling industry, lower our carbon footprint, and promote sustainable development.

Aluminum

An important step forward in sustainable development is the use of recycled aluminum for our fixtures. Up to 95% of our products are made from this material (see graph 2). Recycled aluminum has a significantly smaller carbon footprint, with its production capable of reducing CO_2 emissions by up to 95% compared to that of primary materials. Additionally, producing aluminum through recycling requires up to 95% less energy than extracting it from bauxite ore, making it a much more

Photo 2. HOLY Acoustic

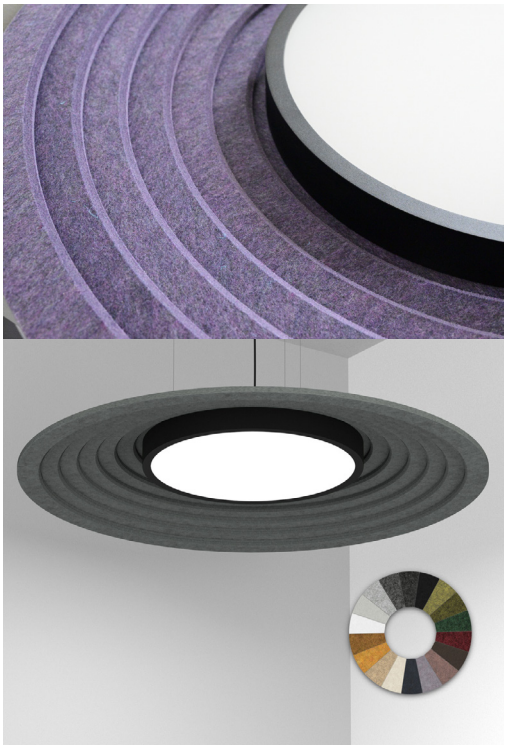


Photo 3. ESTOS Acoustic

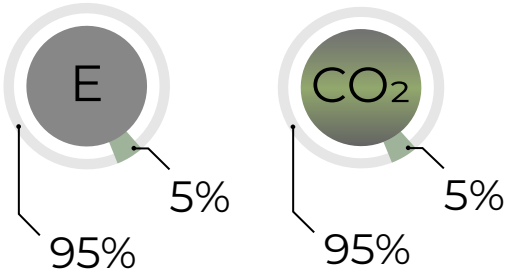
environmentally friendly option (see graph 3). By incorporating recycled aluminum into our luminaires, we not only reduce our dependence on primary raw materials but also support initiatives aimed at lowering greenhouse gas emissions. Our products are designed with a long life cycle in mind and can potentially be reintegrated into the production cycle at the end of their life.

Products in the offering composed of aluminum

- Products made of aluminium
- Other materials

Graph 2. Percentage distribution of products composed of aluminum.

Energy conservation through the utilization of recycled aluminum



- Percentage of use in the manufacturing process
- Saved percentage of use

Graph 3. Percentage distribution conserved energy and reduced carbon dioxide emissions through the utilization of recycled aluminum.

Aluminum is among the most sustainable materials available

due to its exceptional recyclability, energy-efficient processing, and infinite usage cycles.

Photo 4. The manufacturing process of aluminum lighting fixtures at the Spectra facility.

2.3. Sustainable Initiatives

Toxicology
Our company rigorously adheres to the RoHS 3 (2015/863) directive, which prohibits the use of hazardous substances, including mercury and lead, in electrical and electronic devices. Our production processes do not involve materials that could harm the environment or human health. Additionally, our facilities produce only domestic sewage, approximately 260 cm^3 per day, and we do not discharge any industrial sewage.

We uphold a strong commitment to technological advancement while fostering an ecological organizational culture. Annually, we responsibly discharge approximately 2,735 m^3 of rainwater deemed “clean,” resulting in a negligible impact of our operations on the aquatic environment.

2.3.1. Investments in certified quality standards

To maintain the highest standards of quality and environmental care, we comply with international quality management and environmental protection standards. We hold ISO 9001:2015 certifications that affirm the reliability and effectiveness of our production processes and services. Furthermore, we have ISO 14001 certification, which reinforces our commitment to minimizing environmental impact through efficient resource management and emission reduction.
Through our partnership with Axpo, a leading renewable energy provider in Europe, we are progressively increasing the use of green energy in our operations. Our new photovoltaic installations not only allow us to generate renewable energy independently but also enable us to monitor our consumption and assess our environmental impact in real time. This initiative is a crucial part of our strategy to reduce emissions and achieve climate neutrality by 2030. Our collaboration with Axpo supports detailed emissions reporting and adherence to exemplary ESG (Environmental, Social, Governance) practices. With our green energy certification, we are confident that our production processes are powered by renewable energy sources.

We also hold PZH certificates for select medical lighting products, ensuring their safety and compliance with sanitary standards. Our goal is to expand our presence in the medical sector by offering a broader range of options, not only for reception areas and hospital rooms but also for other environments that require high-quality, certified solutions.

2.4. Sustainable Manufacturing and Logistics

In 2025, we developed and refined solutions that promote the circular economy, with the goal of reducing natural resource consumption and minimizing negative environmental impacts.
These initiatives primarily focus on:
Adopting circular materials management
Implementing effective waste management
Enhancing logistics systems

In addition to employing innovative ecological sources of renewable energy, we undertook a thorough modernization of our production facilities at the Załuski plant. Each of these initiatives is elaborated upon in this chapter, along with visual aids.

2.4.1. Enhancement of the production environment

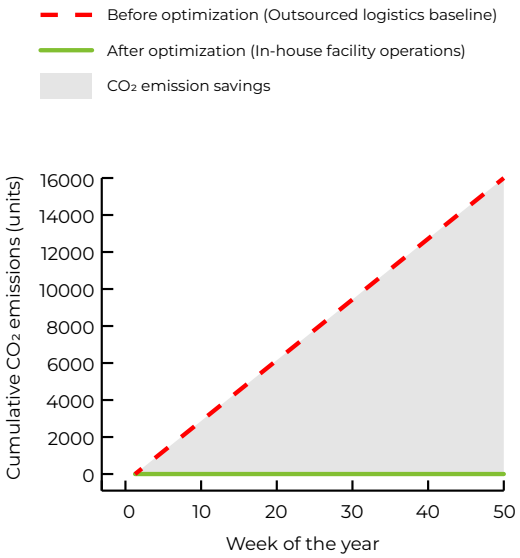
Investment in a New Paint Shop
The text outlines the comprehensive modernization initiatives undertaken at the production facility aimed at enhancing quality and environmental sustainability within the painting process. The primary components of the modernization, set to commence in early 2024, include the establishment of an in-house paint shop and the installation of a rail system for the transportation of components. Previously, painting operations were outsourced to external firms, which resulted in limited oversight regarding scheduling, quality, and transport frequency. On average, three transports were needed, with the duration for painting a single batch taking 2-3 days; some products required rework, leading to significantly prolonged implementation timelines, escalated costs, and increased CO_2 emissions associated with inter-plant transport (see Graph 4).
The introduction of the in-house paint shop has fundamentally transformed this process. The time required to process one batch of components has been reduced to a single working day, effectively eliminating delays related to transport and reliance on external services. Enhanced efficiency now allows for the handling of five batches per week, compared to the previous capacity of 2-3 batches, indicating a 100% increase in production capacity (see Graph 5).

Photo 5. Illustration of the streamlined process for inserting a production batch into the oven, facilitated by the rail transport system.

Furthermore, we have integrated an advanced closed-loop overspray recovery system that reclaims at least 90% of the powder coating material, significantly conserving raw resources and mitigating environmental impact in strict alignment with our Circular Economy strategic framework (discussed in Chapter 2.4.2). Throughout the 2025–2026 cycle, the systematic reduction of production cycle times and the total elimination of operational downtime have permanently contributed to a decrease in overall energy intensity per manufactured luminaire.

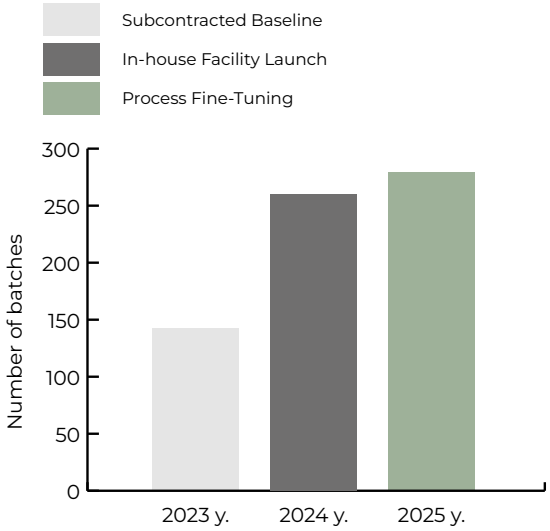
In retrospect, this comprehensive asset modernization has not only elevated operational efficiency but has also served as a cornerstone for meeting our stringent long-term ESG targets. The transition to an optimized, in-house powder coating facility and an au-

Reduction of internal logistics footprint & CO_2 emissions



Graph 4. Permanent mitigation of logistics-associated CO_2 emissions achieved by eliminating component transit to external coating vendors.

Production throughput stability & scalability



Graph 5. Multi-year trend of annual production capacity, demonstrating stabilized high-volume throughput following the powder coating facility integration.

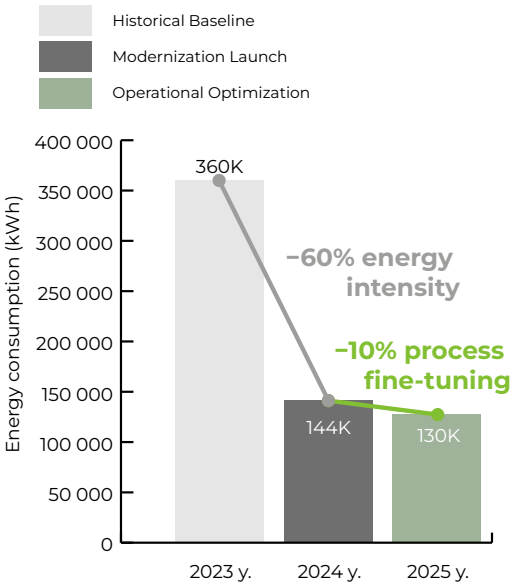
By operating its own state-of-the-art coating facility and deploying automated internal logistics, the plant has permanently secured a two-fold increase in production throughput, drastically reduced operational costs and CO_2 emissions, while shifting quality assurance and process transparency to an unprecedented level.

tomated smart-transport system represents our holistic approach to industrial decarbonization. Critical milestones of this ongoing operation include complete oversight of the luminaire finishing process, the absolute elimination of external supply chain logistics risks, and mitigated operational variances, optimized luminaire production efficiency, and enhanced both product quality and workplace ergonomics, alongside continuous reductions in energy and material consumption. In the 2025–2026 reporting cycle, the advancements in our recycling systems and meticulous process control, combined with the proactive execution of the company's ESG roadmaps aimed at reducing carbon intensity, continue to yield significant environmental dividends. This continuous optimization has anchored our production efficiency while reinforcing strict ecological standards. Through smart process control, the plant seamlessly advances its sustainable development goals while swiftly addressing high-end market demands and enhancing global competitiveness.

Advanced Thermal Curing and Optimization

While our initial investment in a state-of-the-art thermal curing furnace for the powder coating line was executed in Q3 2024 (see Photo 6), the 2025–2026 cycle was defined by rigorous process optimization. This advanced equipment intrinsically minimizes greenhouse gas emissions and limits thermal dissipation. Engineered structural insulation combined with real-time control of micro-climatic parameters has sustained a record-low scrap rate across our architectural and industrial lighting portfolios.

Enhanced plant efficiency due to the new paint shop.



Graph 6. *Multi-year comparison of annual energy consumption between the historical baseline (2023), the technology deployment year (2024), and the continuous operational optimization phase (2025).*

The system utilizes an advanced Siemens Simatic HMI control interface (see Photo 7) for meticulous, automated management of critical parameters, including localized temperature profiling and cycle velocity. The continuous data-logging environment enables predictive analytics, mitigating potential systematic variances before they impact throughput. As a direct result of these incremental

Photo 6. The procedure of firing a batch of products in a new furnace at the manufacturing facility.

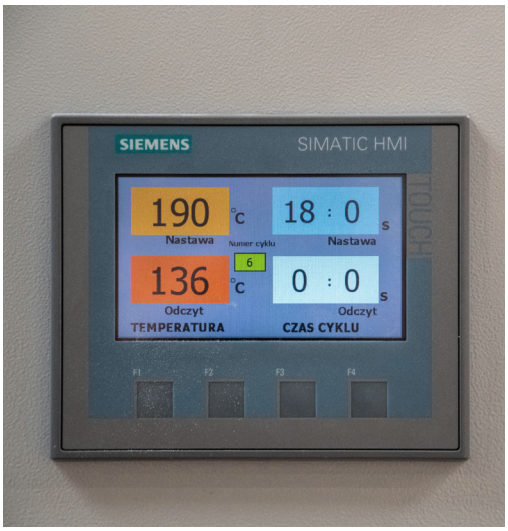


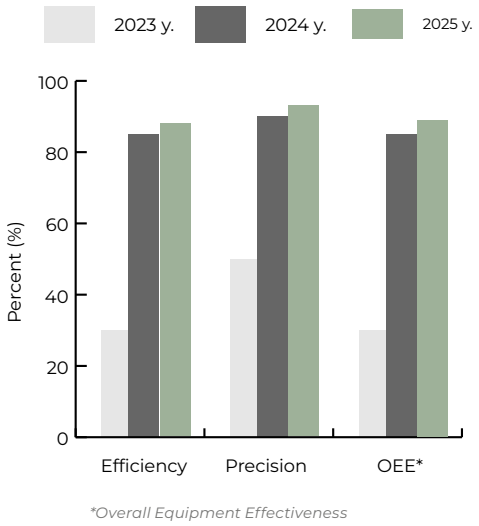
Photo 7. Siemens Simatic HMI control panel integrated into the production furnace.

optimization protocols, the average annual energy consumption of the curing furnace was slashed by an additional 10% in 2025 compared to the already optimized 2024 data. This brings the current annual consumption down to 129,600 kWh, representing a cumulative 64% total reduction against the original 2023 baseline, yielding total annualized savings of 230,400 kWh (see Graph 6).
The new furnace enables automatic monitoring and documentation of process parameters, such as achieved temperatures, cycle durations, and energy consumption. Its real-time data recording capability for potential errors allows for thorough analysis and the implementation of corrective measures. The automatic documentation of parameters eliminates the requirement for manual data logging, completely mitigating human-factor risks and accelerating cross-departmental information flow. Furthermore, the curing infrastructure features an integrated smart signaling suite that instantly notifies technicians upon cycle completion. This telemetry deployment facilitates immediate response loops, eliminates idle times, and maximizes overall floor throughput.
An equivalent level of process automation has been secured within our new aqueous pre-treatment and degreasing station, which operates on an advanced closed-loop water reclamation architecture. The integration of high-efficiency oil-coalescing and sludge filtration matrices guarantees pristine surface preparation quality while radically minimizing fluid waste. Detailed performance data regarding this circular economy infrastructure is outlined in Chapter 2.4.2.

Photo 8. *Automated CNC precision bending center, fully operational since 2024 and continuously driving throughput optimization at our Załuski manufacturing plant.*

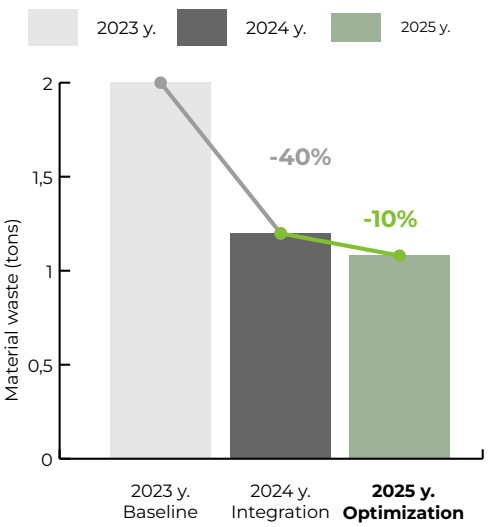
By integrating advanced automated forming systems, Spectra has permanently scaled fabrication efficiency—driving an industry-leading 85% OEE and a 46% reduction in manufacturing scrap, while decoupling production growth from carbon intensity.

Multi-year advancement in fabrication metrics via automated forming



Graph 7. Multi-year comparison of manufacturing efficiency, forming precision, and OEE achieved through transition from manual fabrication to an automated CNC press brake center.

Scrap rate minimization via smart CNC nesting software



Graph 8. Annual tracking of sheet metal fabrication scrap generation, showcasing continuous waste minimization driven by nesting software optimization.

Advanced CNC Forming & Enclosure Fabrication

Following the deployment of our automated CNC press brake center in Q1 2024 (see Photo 8), the 2025–2026 operating window focused on scaling software-driven layout optimizations. Prior to this integration, the fabrication of luminaire chassis and housing components relied on manual sheet metal forming, which required repetitive manual handling, multi-axis material positioning, and increased cycle variance.

The transition to automated CNC forming has eliminated manual configuration overheads, radically elevating the dimensional precision and geometric repeatability of our structural lighting components. Operating at an ultra-low energy threshold of less than 3 kW, the center has fundamentally decoupled production growth from carbon intensity. Under our current twin-shift operational schedule, this precision optimization has further reduced structural cycle times, ensuring a lean and highly agile manufacturing flow.

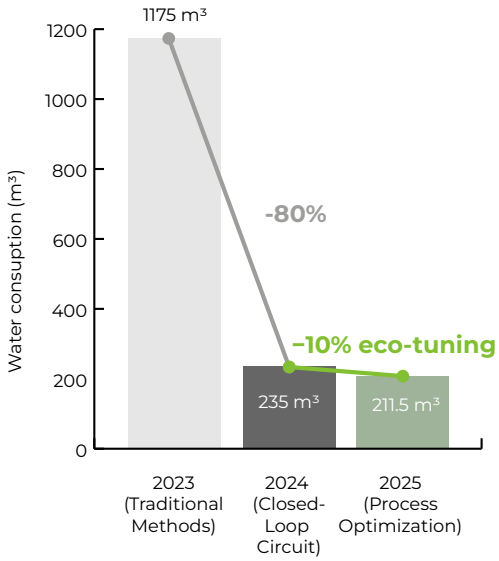
Total energy consumption of the CNC forming center is sustained at a lean 240 kWh per week, performing substantially lower than legacy hydraulic press brakes. Furthermore, software-driven precision control has stabilized our manufacturing waste reduction, yielding a cumulative 46% improvement compared to conventional fabrication methods, permanently curbing raw material intensity **(see Graph 8).**

The machine's compact operational footprint (8m2) optimizes production floor layout, eliminating the need for secondary support infrastructure and reducing auxiliary HVAC loads. Integrated industrial IoT solutions, such as the LINKS platform, facilitate real-time telemetry and continuous optimization, maintaining our Overall Equipment Effectiveness (OEE) at an industry-leading 85%, drastically exceeding the 30% baseline typical of unautomated fabrication environments **(see Graph 7).**

2.4.2. Implementation of a Circular Economy

Closed-Loop Water Reclamation
Following the comprehensive modernization of our manufacturing facility, the 2025–2026 cycle focused on maximizing the efficiency of our closed-loop water reclamation infrastructure within the luminaire pre-treatment sector. This technology guarantees the continuous cascading reuse of process water, minimizing the extraction of freshwater resources. By optimizing multi-stage filtration and fluid recirculation matrices, we have locked in a cumulative 82% reduction in volumetric water consumption per operational cycle compared to legacy single-pass methods (see Graph 9).
The integrated reclamation system utilizes advanced membrane filtration and separation techniques to continuously isolate contaminants, including industrial oils, particulate suspended solids, and chemical process residues. Consequently, cleansed water is instantly reintegrated into the active washing cycles without compromising chemical concentration stability or degreasing efficiency. The deployment of this closed fluid loop delivers profound environmental benefits, driving a 75% reduction in total industrial trade effluent discharge relative to conventional configurations.

Water conservation achieved through closed-loop washing



Graph 9. *Comparison of annual water consumption savings resulting from water recirculation in the washer.*

The closed-loop water reclamation system integrated into our pre-treatment line secures an annual savings of nearly 1M liters of water against historical baselines.

Closed-Loop Powder Coating Systems
Coinciding with our advanced in-house coating facility integration, the automated powder recovery framework has been further calibrated during the 2025 fiscal year. A core asset of this infrastructure is a high-efficiency aerodynamic extraction collector designed to capture overspray particles, facilitating the seamless, real-time recycling of our high-volume white reflective coatings.
The reclamation process operates at peak thermodynamic efficiency, enabling us to consistently retrieve an outstanding 92.5% of airborne powder particles (see Graph 10), ensuring that the recovery system captures excess overspray during its automated application and automatically transfers the reclaimed material for immediate reuse in the spray cycle. This closed-loop configuration eliminates the requirement for long-term storage of surplus coatings, enabling non-disruptive, continuous recovery without halting the production line.

By seamlessly blending financial optimization with environmental stewardship, the system minimizes raw material waste, drives down procurement costs for virgin powders, and substantially mitigates the ecological footprint of our finishing operations.

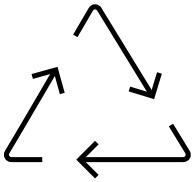
High-grade aluminum alloys represent one of our most valuable structural assets due to their exceptional circular potential. Aluminum scrap retains virtually the same metallurgical properties and commercial value as primary raw material, while its secondary reprocessing demands only a fraction of the energy required for primary smelting. At our manufacturing facility, we guarantee that both fabrication remnants and end-of-life components are systematically reintegrated into the production cycle.

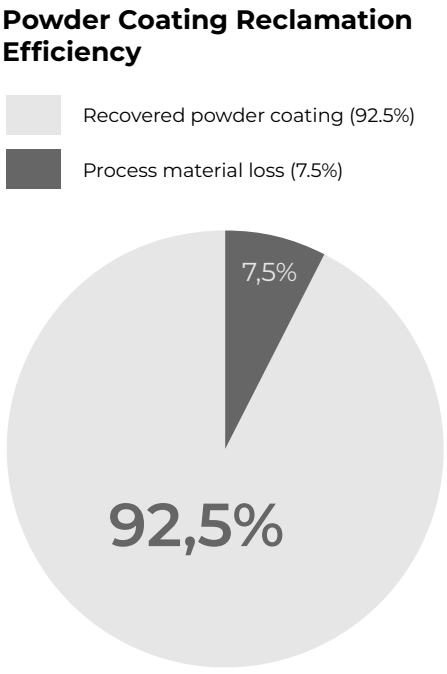
During the machining and extrusion of architectural luminaire housings, structural scraps from larger profiles are generated, stabilized at an optimized benchmark of approximately 2 tons annually. We manage and process this post-industrial stream through a strategic partnership with specialized global recovery operators.

Photo 9. Advanced cyclone separator and fluid transport system integrated within the automated powder recovery loop at the Załuski complex.

Through this collaboration and the deployment of advanced source-segregation protocols, we consistently maintain an aluminum recovery rate of 95%. The remaining 5% consists of micro-particulates, such as fabrication dust, which undergo specialized technical processing.

Our circular strategy prioritizes maximum material utilization within a singular manufacturing run. A prime example of this upcycling approach is the direct repurposing of dimensional scrap from large luminaire enclosures to fabricate smaller ancillary components, including mounting brackets, mechanical fasteners, and compact spotlight housings. This lean practice drastically minimizes material degradation and prevents resource loss across our entire product portfolio.





Graph 10. Operational breakdown of powder coating reclamation efficiency during high-volume luminaire finishing cycles.

2.4.3. Efficient waste management

At Spectra, we imbed rigorous waste mitigation frameworks across every milestone of the product lifecycle. Our sustainable engineering practices span from initial luminaire design concepts and lean fabrication processes to closed-loop logistics and circular packaging management—all fundamentally geared toward minimizing our absolute environmental footprint.

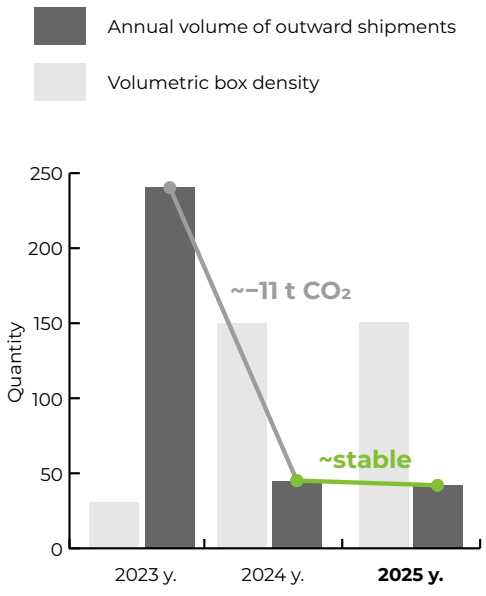
Circular Architecture & Luminaire Modularity

Our specification-grade luminaires leverage a strict modular architecture, facilitating seamless, toolless replacement of critical sub-assemblies, such as LED light engines, optical matrices, and electronic drivers, eliminating the requirement for full fixture decommissioning. Building upon our strategic infrastructure upgrades, our facility is fully optimized to produce specialized, standalone replacement components. This lifecycle-extension strategy substantially delays product obsolescence and curbs post-consumer waste. This paradigm reinforces the industrial principle of sustainable remanufacturing, offering clients high-efficiency, future-proof, and financially viable lighting solutions.

Automated Packaging Compaction & Logistics Lean Metrics

Capitalizing on our waste-segregation protocols, the deployment of our automated cardboard compactor (see Photo 10) has completely revolutionized our downstream packaging logistics. This mature operational standard maximizes waste-stream density and optimizes our corporate recycling loops. By utilizing high-pressure hydraulic compaction, the physical volume of secondary packaging waste is compressed by up to 80%. Specifically, uncompacted corrugated cardboard

Multi-year logistics and containment optimization via packaging compaction



Graph 11. Multi-year comparative analysis of container space utilization and transport frequency reductions, demonstrating sustained efficiency benchmarks through the 2025 fiscal year.

Approximate values based on decreasing the volume of the box from 1 m³ to roughly 0.1-0.2 m³.

Photo 10. Heavy-duty vertical hydraulic cardboard baling and compaction system operational at the Załuski logistics hub.

with an initial volume of of 1 m^3 is densified to an ultra-compact footprint.
Consequently, collection containers now accommodate a multi-fold increase in tonnage compared to our historical benchmarks. This volumetric optimization has permanently curtailed our annual outward transport dispatches, slashing transport frequency, reducing regional waste management overheads by up to 70%, and securing a verified reduction of approximately 11 tons of CO_2 equivalents annually (see Graph 11).

Transition to Bulk Liquid Nitrogen Storage
In 2024, we introduced a high-capacity bulk liquid nitrogen storage system (see Photo 11), replacing the legacy framework that relied on high-frequency deliveries of smaller gas cylinders. This infrastructural transition continues to yield substantial environmental and economic advantages. The former model generated ongoing waste in the form of protective plastic valves, metal caps, and other disposable safety components with each gas delivery, amounting to approximately 300–400 kg of non-recyclable material annually that ended up in landfills.
The implementation of the bulk cryogenic tank has completely eliminated this localized waste stream, marking a significant advancement in our circular economy strategy, which focuses on absolute waste reduction at the source. Consequently, we have structuralized lower environmental impacts and minimized industrial waste disposal costs. Additionally, the sustained reduction in the frequency of gas transports (as discussed in Chapter 2.4.4. Optimization of Logistics) further limits indirect carbon emissions associated with supply chain transportation.

Digitalization of Product Portfolios
Our comprehensive product and specification catalogs are fully integrated into digital ecosystems, allowing customers, lighting designers, and architects to instantly access real-time photometric and product data. Printed collateral is now generated exclusively upon direct customer request or for strategic sales representation, effectively preventing overproduction and minimizing raw material waste. This established digital-first approach consistently conserves vital resources such as heavy paper stock and printing inks, while mitigating the environmental footprints traditionally associated with the logistics, physical transportation, and warehouse warehousing of printed marketing assets.

Photo 11. The high-capacity bulk liquid nitrogen storage infrastructure, successfully integrated and operational at the Załuski manufacturing facility.

2.4.4. Optimization of Logistics

The optimization of logistical operations remains a cornerstone for executing our long-term sustainable development and corporate resource strategies. Our primary objectives within transport modernization focus on shrinking absolute carbon footprints, lowering operational overheads, and elevating occupational safety. By deploying advanced architectures across transport pathways, material handling, and warehouse management, we have successfully locked in lower energy demand and emission rates while optimizing floor-level operational ergonomics.

Shielding Gas Supply Chain Optimization

The integration of our bulk liquid nitrogen storage system has structurally transformed the logistics of shielding gas supply required for precision laser-cutting operations of luminaire enclosures. Under our legacy configuration, smaller gas cylinders required weekly replenishment, causing up to 52 logistical transits annually. This high-frequency transport model generated unnecessary CO_2 emissions and required intense manual handling during cylinder changeouts.

With the bulk storage infrastructure fully operational, we have successfully eliminated 45 deliveries annually, restricting the transport frequency to just 4 to 5 high-volume trips per year (see Fig. 1), which represents a 91.3% optimization in total transit loops. Consequently, this has driven a substantial mitigation in downstream transport emissions. Based on empirical logistics calculations where each standard transit loop accounts for approximately 50 kg of CO_2, this streamlined distribution model yields an annual reduction of approximately 2.4 tons of carbon dioxide equivalents (see Graph 12).

This transition has equally enhanced localized operational safety and workplace ergonomics. Previously, replacing individual high-pressure gas cylinders demanded repetitive physical handling and structural coupling of heavy components, elevating localized occupational risks. Today, managing our integrated cryo-storage infrastructure requires only periodic technical oversight, substantially elevating floor-level safety metrics and minimizing the task-specific labor burden by 80% within this manufacturing segment.

Reduction of CO_2 emissions via optimized protective gas logistics

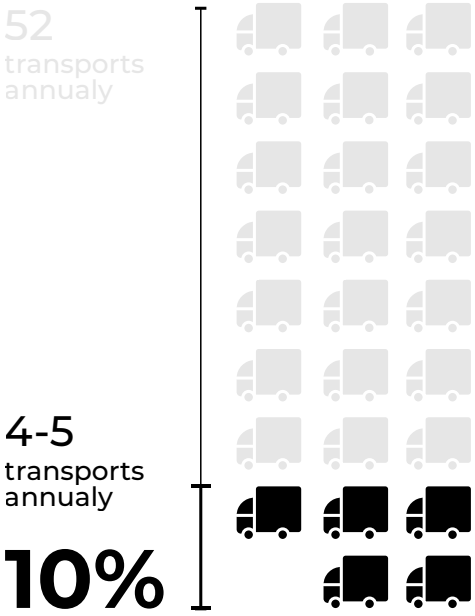
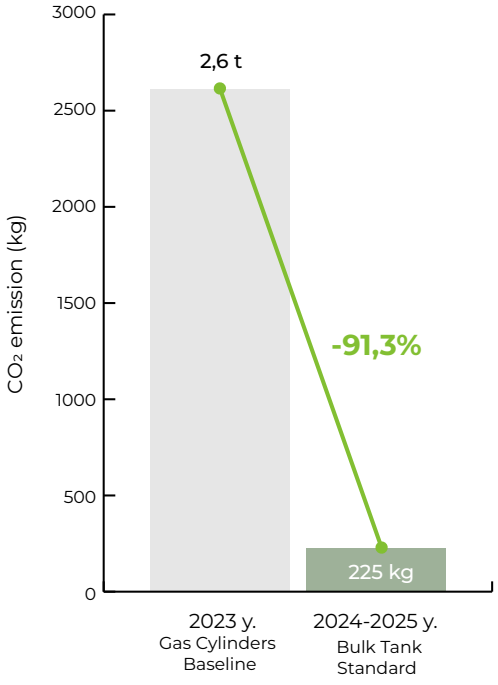


Fig. 1. Logistics diagram showcasing the annual reduction in delivery frequency compared to the legacy protective gas supply framework..

Proportional reduction in CO_2 emissions following cryogenic tank integration



Graph 12. Comparative analysis of localized carbon emissions generated annually during transport loops before and after cryogenic system implementation.

2.4.5. Sustainable Energy Infrastructure

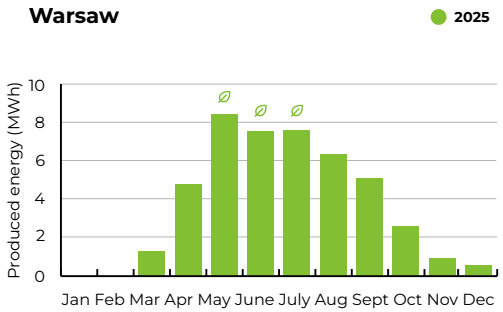
We continuously monitor and evaluate our structural electricity demand alongside the operational metrics secured across our primary locations. By mapping grid consumption against real-time microgeneration from our photovoltaic (PV) arrays (see Graphs 14 and 15), this section outlines how strategic, multi-year investments in renewable energy infrastructure directly enhance our operational efficiency and resource resilience.

Strategic Impact of Photovoltaic Infrastructure

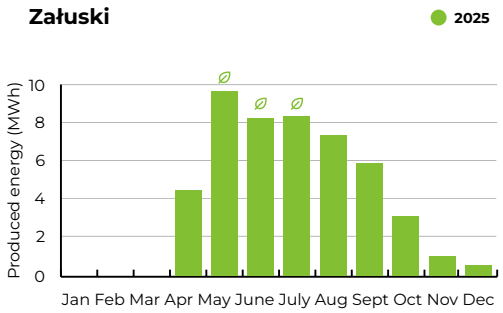
The deployment of on-site solar PV infrastructure at both corporate locations marks a pivotal milestone in our transition toward low-carbon manufacturing. The aggregate generation capacity of these sub-systems allows Spectra to achieve a **sustained clean energy yield of 89.69 MWh per year**, permanently curbing annual greenhouse gas emissions by **approximately 120 tons of CO_2 equivalents.**

Electricity consumption analysis

Historical transition metrics from our initial launch phase (detailed month-by-month in Graph 13) served as the operational blueprint

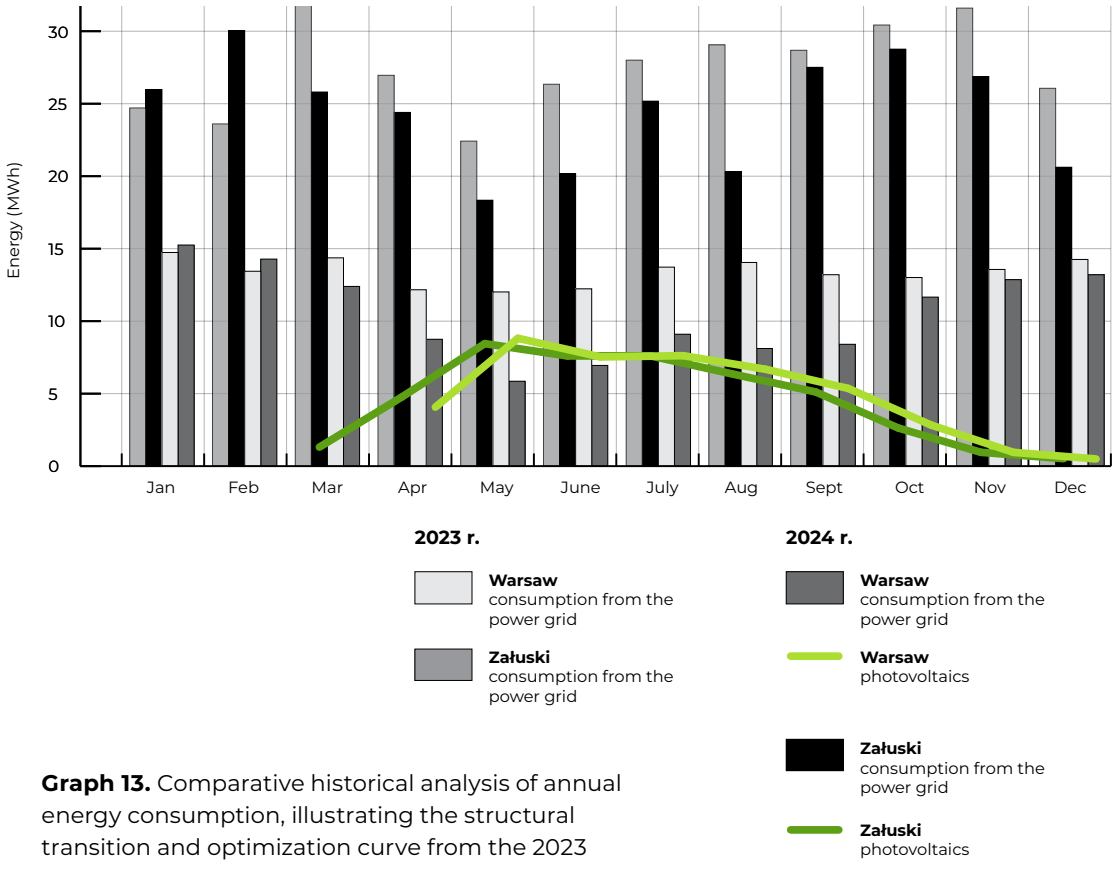


Graph 14. Overview of monthly energy generated by PV in Warsaw during the 2025 operational cycle.



Graph 15. Overview of monthly energy production from PV in Załuski for the 2025 operational cycle.

Grid Reliance vs. Solar Microgeneration (Evolutionary Baseline Phase)

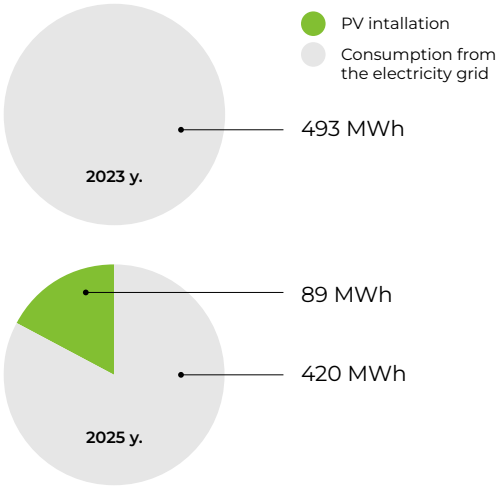


Graph 13. Comparative historical analysis of annual energy consumption, illustrating the structural transition and optimization curve from the 2023 baseline to the 2024 integration phase.

for our current grid independence. **Throughout the 2025 operational cycle,** this infrastructure reached peak reliability: the Załuski solar array yielded 44.37 MWh of clean energy, successfully capturing 13.1% of the complex's total annual energy requirements. Parallel to this, our Warsaw infrastructure generated 45.32 MWh, securing a **grid independence milestone of up to 26.3% autonomous power reliance** (see Graphs 14 and 15).

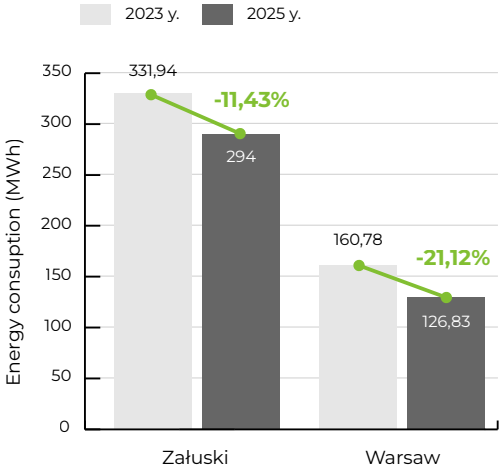
Electricity Consumption & Efficiency Analysis
Consequently, the strategic shift toward high-yield renewable infrastructure and optimized resource frameworks has yielded substantial environmental and commercial dividends. Comprehensive aggregate energy metrics reveal a structural decrease in reliance on traditional grid power, fundamentally improving the proportion of renewable energy within Spectra's overall corporate energy mix.
Our gross energy volume transitioned from a baseline of 493 MWh in 2023 to a stabilized 509 MWh footprint. This volumetric scaling was driven by the successful deployment of 89 MWh of clean, on-site solar PV generation, which consistently suppressed our external grid-supplied energy reliance throughout the 2025 fiscal period (see Graph 16).
A localized examination of energy demand across our manufacturing locations indicates a sustained, structural downward trend: at the Załuski industrial complex, grid reliance decreased from 331.94 MWh in 2023 to a sustained 294.00 MWh, reflecting an 11.5% reduction. Concurrently, our Warsaw facility's grid demand dropped from 160.78 MWh in 2023 to 126.83 MWh—a highly successful, long-term contraction of 21.1% (see Graph 17).

Energy consumption by the company



Graph 16. Comparative analysis of the total corporate energy mix, charting the 2023 baseline grid reliance against the sustained 2025 photovoltaic (PV) integration performance.

Total energy consumption from the power grid



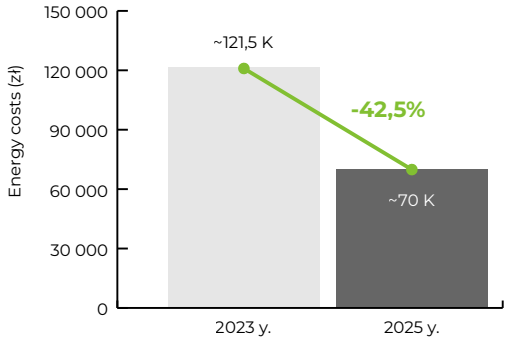
Graph 17. Operational breakdown of localized grid electricity reductions across primary industrial complexes, comparing the 2023 baseline with sustained 2025 efficiency metrics.

Macro-Analysis of Energy Expenditure Performance

Evaluating our consolidated energy expenditures between the historical baseline and recent operational cycles underscores the immediate financial viability of our renewable asset integration. While the overall macro-trend points toward aggressive cost optimization, localized variances across manufacturing sites stem from distinct operating conditions, production volumes, and the progressive optimization of renewable utilization throughout 2025.

The most prominent fiscal optimization remains secured at our Warsaw facility, where localized grid-associated electricity expenses fell from a baseline of PLN 121,500.00 in 2023 to a stabilized PLN 69,865.51 (see Graph 18). The primary driver behind this sharp, multi-year capital optimization was the accelerated consumption of localized, zero-cost energy generated via our integrated photovoltaic systems. This transition effectively insulated our finishing and assembly lines from external market pricing, drastically lowering net operational overheads and securing our financial resilience into the 2026 fiscal year.

Energy expenses incurred



Graph 18. Financial audit of net energy cost reductions and capital utility savings, illustrating the sustained budget optimization maintained through the 2025 fiscal year.

SOCIAL RESPONSIBILITY

3

3.1. People and Organizational Culture

Sustainability at Spectra is built upon three foundational pillars: environmental stewardship, technological innovation, and a deeply rooted, people-centric philosophy. Our human resource strategy reflects a long-term commitment to maintaining a stable, inclusive, and equitable work environment that accelerates individual professional growth while continuously reinforcing our progressive organizational culture.

Employment structure and workforce composition

In the face of volatile macroeconomic shifts and dynamic transitions within the modern labor market, Spectra remains firmly committed to workforce stability. This structural consistency serves as a direct testament to our proactive HR frameworks and dedicated focus on employee well-being. By investing heavily in professional development, occupational comfort, and long-term engagement, we actively secure the company's future operational resilience.

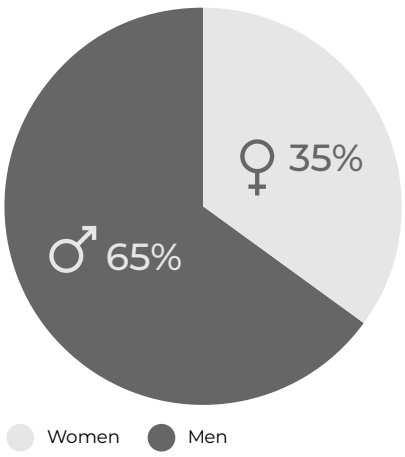
Maintaining the operational benchmarks established across the 2023 and 2024 fiscal periods, Spectra sustains a core workforce of 119 specialists, demonstrating an exceptional capacity to navigate external market fluctuations (see Graph 19). Gender equity remains a key operational metric of our organizational design, with women comprising 35% of our total workforce (42 employees).

The vast majority of our personnel, 87%, are engaged via full-time employment contracts, guaranteeing long-term job security and immediate access to a comprehensive corporate benefits package, including structured paid leave, comprehensive sick leave, and specialized social support initiatives (see Graph 20).

Spectra's overarching human resource policy is anchored in equal opportunity, absolute pay transparency, and merit-based career advancement.

We are rigidly committed to ensuring fair, equitable treatment for all team members, regardless of organizational tier, technical background, or tenure. We actively champion workplace diversity, operating under the firm conviction that a broad spectrum of perspectives, insights, and core competencies serves as the primary engine for industrial innovation and long-term corporate success.

Employment Classification by Personnel



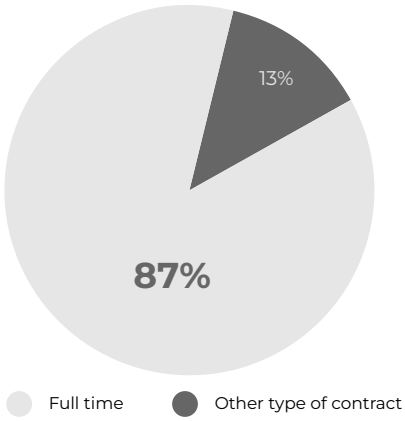
Graph 19. Demographic distribution of corporate personnel categorized by gender.

Long-Term Engagement & Professional Talent Development

One of our highest operational priorities is cultivating enduring, mutually beneficial relationships with our workforce, a strategy directly reflected in our high talent retention rates. A substantial number of our technical specialists and engineers have driven our growth for years, with several core team members having been integral to Spectra since its very inception. Retaining this repository of seasoned expertise is critical to our market positioning, as their deep domain knowledge and dedication directly translate into high-precision project execution and exceptional operational efficiency.

We foster an environment of continuous learning and advanced professional qualifications through a diverse suite of educational and targeted training initiatives (detailed in Section 3.1.1 – Investments in Education). Our personnel enjoy seamless access to specialized, industry-specific courses, professional certification programs, and hands-on training in cutting-edge lighting technologies. These per-

Employment classification of personnel



Graph 20. Proportion of individuals employed, categorized by full-time and alternative contract types.

sonalized developmental pathways are custom-tailored to align with each employee's distinct functional role, enabling agile skill deployment and rapid adaptation to emerging market challenges.

As a core element of our corporate strategy, we prioritize completely transparent, two-way communication and a culture of radical collaboration. Synchronized team briefings, technical workshops, and cross-departmental integration initiatives consistently elevate employee alignment, corporate loyalty, and a profound sense of shared purpose across the enterprise.

Organizational Topology & Key Operational Sectors

Spectra is fundamentally more than a commercial entity supplying standard lighting products—we operate as a technology-driven innovator, engineering and manufacturing bespoke, high-efficiency architectural and industrial lighting solutions that require a diverse range of expertise and specialization. Our organizational architecture is divided into four key functional departments:

- **Administration and Finance** – managing corporate financial strategies and cross-departmental operational processes.
- **Marketing and Strategic Sales** – developing global market positioning strategies and long-term customer relationships.
- **Production and Logistics Operations** – ensuring highly efficient manufacturing processes, rigorous quality control, and supply chain management.
- **Research & Development (R&D)** – driving engineering innovation, custom luminaire design, and technological advancements

Occupational Health, Safety, and Well-Being

Ensuring safe, ergonomic, and protective working conditions remains an absolute priority across all manufacturing tiers at Spectra. Our company operates in absolute compliance with the national Labor Code and all applicable corporate health regulations concerning mandatory employee medical examinations. To safeguard the health and physical well-being of our personnel, we have operationalized a comprehensive occupational health monitoring infrastructure. This framework incorporates mandatory medical check-ups and systematic risk assessments, ensuring that every team member receives specialized health evaluations tailored specifically to their operational roles. Production line specialists undergo comprehensive medical screenings biennially, while corporate office personnel are examined every five years, in strict accordance with localized occupational risk profiles. We continuously audit manufacturing environment variables, thoroughly analyzing environmental factors such as ambient noise levels, photometric task lighting, and advanced ergonomic standards. We operate under the firm conviction that preventive care metrics and regular facility assessments are key to maintaining exceptional workplace comfort and minimizing potential operational hazards.

Health Support and Employee Benefits

To further elevate employee well-being and maintain operational resilience, we provide a structured private healthcare framework. This corporate benefit ensures that our personnel receive direct, accelerated access to a wide spectrum of essential diagnostic tests, medical specialist consultations, and preventative care treatments.

Under our updated benefit allocation model, Spectra fully subsidizes 100% of the premium for the baseline individual medical package for each employee. This framework guarantees a solid foundation of personal health security across our entire workforce. Employees retain the absolute flexibility to customize, scale, or extend their coverage to family tiers or premium packages by independently managing the marginal cost differential. This comprehensive framework underpins the core health, safety, and welfare benefits standard across our organization.

3.1.1. Educational Investments

Development of Employee Competencies
Spectra has long been dedicated to enhancing the core competencies of its personnel by providing seamless access to specialized training courses tailored specifically to the functional needs of each department. Continuous education is a fundamental vector of our corporate strategy, reinforcing market competitiveness, accelerating technical adaptability, and fostering sustainable organizational growth.
The finance and accounting department regularly participates in targeted training sessions focused on volatile updates in tax regulations and legal frameworks, enabling swift adaptation to evolving international standards. Advanced training programs for logistics and warehouse management are conducted in strategic collaboration with external expert trainers and leading logistics system suppliers. Concurrently, the sales and projects departments prioritize professional development in high-level client relations, contract negotiation, and the market introduction of innovative lighting architectures. Additionally, engineering and design specialists regularly upscale their technical proficiency in industry-standard software suites such as DIALux, Relux, and Autodesk.
At our primary manufacturing facility in Załuski, we place a critical emphasis on developing technical skills related to the operation of advanced industrial machinery and specialized equipment. Spectra systematically provides an ongoing series of professional development courses categorized by key engineering and operational areas, as detailed in Table 2.

Internship Programs at Spectra
Spectra is rigidly committed to supporting young talent and engineering students entering the professional landscape by offering high-substance, practical experience through structured employment opportunities. This initiative is engineered around flexible, adaptive contract frameworks, with the company fully subsidizing 100% of the interns' salaries. This corporate framework not only delivers financial stability for participating students but empowers them to absorb critical, real-world operational knowledge within an active industrial environment.
Through our established academic cooperation frameworks, interns consistently secure operational integration across diverse departments, including supply chain logistics, high-volume production management, industrial luminaire design, and strategic sales execution. Participants contribute directly to daily corporate operations—actively managing logistics tracking systems, analyzing complex design documentation, and assisting in the commercial rollout of next-generation lighting technologies.
Spectra's dedicated efforts in this sector align seamlessly with our overarching sustainable development strategy, emphasizing the localized importance of supporting professional education and enhancing the regional labor market. These programs effectively bolster specialized technical competencies among young professionals, securing a vital talent pipeline within the rapidly evolving, technology-driven lighting industry.

Internship programs at Spectra provide young professionals with the strategic opportunity to acquire exceptional industrial experience, fully backed by comprehensive financial compensation and expert mentorship.

Trainings scheduled for 2025

Category	Training topic	Completion
Compulsory training	Regular occupational health and safety training for new employees, along with periodic training for existing staff	Current
	Programs compliant with labor law regulations, including training related to quality management systems	III, IX
	Changes in tax and legal regulations	As needed
Technical training	Operation of modern manufacturing machinery (milling machines, panel saws, industrial plotters)	IV, III
	Courses on advanced software, including those supporting management and production processes	VIII
	Workshops on new industry standards, including current requirements for lighting manufacturers	I, X
	Training in the use of design and simulation software	As needed
	Training in control and programming systems for CNC machines, covering programming and graphical simulation	VIII
Product training	For the sales and warehouse departments, conducted by suppliers, including power supply programming and operation of new product lines	X
	New obligations arising from PN-EN 60598-1:2021-07 standards	As needed
Development training	Programs supporting the development of soft skills, including negotiation, customer service, and project management	As needed
	Workshops on implementing innovative product and service solutions	XI

Table 2. Training courses conducted by Spectra Lighting in 2025.

3.2. Integrating Commitment into Corporate Culture

Spectra Lighting consistently cultivates its organizational culture around the principles of sustainable development, transparency, and mutual respect. The company ensures that employees feel integrated within the organization, actively engage in decision-making processes, and have a tangible influence on the company's direction. This management philosophy fosters greater team engagement and reinforces a collective sense of responsibility for the projects undertaken.
A key component of the Corporate Social Responsibility (CSR) strategy is open communication with employees. Regular meetings and consultations are organized to address current challenges and explore potential training opportunities. The company emphasizes dialogue and collaboration, enabling employees to propose their own ideas for enhancing operational, marketing, and production processes. Such initiatives are integral to the long-term sustainable development strategy and strengthen employees' sense of affiliation with the organization.

Involvement in the local community
Spectra Lighting has been actively engaged in initiatives that support the development of local communities for many years. The company participates in activities that promote an active lifestyle, education, and sustainable development. A notable example of this involvement is its long-term support of the Załuski Team Cycling Club, which aims to popularize cycling and a healthy lifestyle among the region's residents. By sponsoring the club, the company fosters the growth of sports and champions values associated with physical activity, determination, and teamwork.

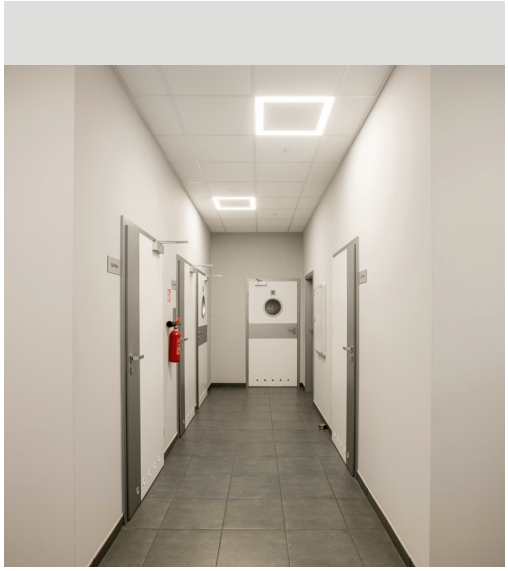
Work organization in human resources management
At Spectra Lighting, work organization in human resources management is customized to the unique needs of each department, founded on adaptable organizational strategies. For employees in the sales department, the company provides options for remote work and flexible hours, facilitating a

Photo 12. The Załuski Team Cycling Club, which receives consistent support for its development from Spectra Lighting.

better balance between work and personal life. In production facilities, however, a two-shift system is implemented (from 6:00 AM to 10:00 PM), allowing optimal utilization of production capacity while enabling employees to tailor their work schedules to their individual needs. The careful organization of shifts demonstrates consideration for workplace comfort, ensuring operational fluidity and timely order fulfillment. Effective communication between teams operating in different shifts allows for the seamless transfer of information and maintenance of operational continuity.

Pro-Ecological Initiatives

Spectra has long focused on minimizing the environmental impact of its operations. Ecological responsibility is increasingly integrated into the company's strategy, which includes efforts to optimize raw material consumption and modernize infrastructure for enhanced energy efficiency. Waste segregation is standard practice not just in production facilities but also in offices and communal areas. Employees have access to designated containers for paper, plastic, glass, mixed waste, and hazardous materials, including used batteries and electronic devices. Promoting these practices fosters pro-ecological attitudes and enhances environmental awareness among staff.
Another crucial aspect of sustainable development is optimizing electricity usage. All office and common areas are equipped with energy-efficient LED lighting that has motion sensors, enabling automatic shut-off in unoccupied spaces. Furthermore, as part of our recent infrastructure modernization phase, automatic closing doors were installed to minimize drafts, reduce noise, and maintain a stable temperature, thereby improving the efficiency of heating and cooling systems. The company is continually seeking innovative solutions to further diminish its carbon footprint and minimize resource consumption.



facility featuring automatic lighting and self-closing doors implemented during the infrastructure modernization framework.

Sustained ESG Integration & Optimization Frameworks

To further advance and implement innovative solutions that align with ESG (Environmental, Social, and Governance) objectives, Spectra systematically scales its corporate ecosystem. A primary milestone is our operational internal portal for employees, which serves as a centralized hub for exchanging information, documents, and corporate ideas. Digitizing internal communication consistently enhances collaboration among departments and increases the transparency of management processes.
In response to the dynamic evolution of the lighting market, the company has successfully expanded its strategic marketing team to enable more effective support for sales departments and reach a broader international customer base. Additionally, Spectra has integrated a system of intelligent gas meters to facilitate precise monitoring of raw material consumption, along with an advanced digital system for tracking waste production. Through these completed initiatives, the company manages resources with exceptional accuracy and optimizes its processes in strict accordance with global sustainability principles.
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3.3. Embracing Corporate Responsibility

Spectra Lighting acknowledges its responsibility towards the environment, employees, and all stakeholders. We understand that transformation must begin within the organization, and a work environment that fosters change can only be achieved with commitment from the highest levels of management.
We believe in being transparent and accountable for our actions, which is why we adhere to clearly defined standards. Since 2021, as a participant in the UN Global Compact initiative, we have been expressing our commitments and outlining our actions taken to fulfill the UN Sustainable Development Goals. Additionally, we hold a green energy certificate from Axpo, affirming our dedication to utilizing renewable energy sources.

Spectra Lighting endorses the United Nations Sustainable Development Goals and its commitment.

3.3.1. Fostering Sustainable Collaboration and Development

Spectra deploys forward-looking production strategies that actively promote sustainable development and commercial scaling while rigidly upholding ethical operational practices and cross-border partnerships. We recognize that the scale of our market success inherently dictates the level of corporate responsibility we must assume.

To maintain these high benchmarks, we implement rigorous, multi-layered measures to guarantee the long-term sustainability of our supply chain. Our executive management is dedicated to allocating all necessary resources to maintain an ethical operational infrastructure. In absolute alignment with the core tenets of the UN Global Compact initiative, Spectra advocates for the development, engineering, and deployment of clean, ecologically advanced technologies.

For decades, we have focused our engineering expertise on manufacturing sustainable, specification-grade luminaire systems that permanently optimize energy efficiency. Furthermore, we systematically mitigate our environmental footprint through the meticulous selection of raw materials and circular design practices initiated at the earliest blueprint phases. We consistently execute proactive measures to address environmental challenges, adopting a strict precautionary principle across all manufacturing levels. Associated economic, social, and ecological impacts—along side their corresponding operational risks and optimization opportunities—are routinely scrutinized via annual comprehensive risk assessments and management reviews in strict accordance with ISO 9001 and ISO 14001 international standards.

Our unyielding dedication to corporate citizenship is an integral component of Spectra's organizational culture, aligning seamlessly with the twelve foundational principles of the UN Global Compact initiative and guaranteeing the absolute protection of human rights across all facets of our global operations. A transparent overview of our targeted initiatives in this domain is formally outlined within our statutory corporate document "Sustainable Development – Global Success Strategy," which is fully accessible via our official international portal (www.spectra-lighting.pl/en/downloads).

We hold our enterprise strictly accountable for its corporate actions daily. Within our institutional Code of Ethics (likewise available for public review at www.spectra-lighting.pl/en/downloads), we pledge absolute adherence to international human rights declarations. We maintain a strict, zero-tolerance policy toward child labor, forced labor, or modern slavery across all tiers of our supply chain; our certified suppliers formally affirm that their operations entirely exclude hazardous employment conditions or unlawful labor practices.

Spectra is deeply committed to guaranteeing equal employment opportunities and fair, merit-based treatment for all personnel in strict accordance with national labor frameworks and international standards. We place paramount emphasis on ethical business conduct and actively defend the personal dignity of every individual, completely irrespective of ethnic origin, race, culture, nationality, religion, worldview, age, disability, sexual identity, or gender. We strive to maintain a safe, supportive, and psychologically secure corporate environment for all team members, empowering them to fully leverage their technical skills and pursue advanced professional trajectories.

Open, respectful communication and strategic collaboration—both across our internal departments and with external B2B clients—remain foundational core values to us. Every individual within our enterprise retains the absolute right to terminate their employment freely and is fully entitled to associate and engage in collective bargaining processes without any structural or operational restrictions.

CONTACT INFORMATION

Contact for questions regarding Spectra Lighting's
Sustainable Development Strategy

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