



# SUSTAINABILITY REPORT 2023

**SUSTAINABILITY ISN'T A TREND, IT'S OUR MISSION**





AEC ILLUMINAZIONE

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“ *Driving change,  
Embracing  
Sustainability.* ”





AEC ILLUMINAZIONE

## MESSAGE FROM THE **PRESIDENT**

Alessandro Cini

Dear Stakeholders,

With this letter I would like to underline the fundamental importance of our commitment to sustainability, a central value for AEC Illuminazione. We are excited to share with you our strategy and vision to responsibly manage the impact of our activities on the economy, environment and society. The publication of our second Sustainability Report marks a crucial step in our journey and represents an opportunity to reveal the numerous initiatives undertaken in recent years. In this document, you will be able to discover the significant goals we have achieved and the concrete actions we are taking to promote sustainable development.

As a completely Made in Italy lighting company, we are fully aware of the environmental and social challenges we face. We believe that every step towards a sustainable future is fundamental, and for this reason we are committed to improving energy efficiency not only in our territory, but also in cities around the world. In 2024, we inaugurated our new Assembly & Logistic Center, a strategic investment that represents a significant advancement in our manufacturing capacity. This factory is designed according to the highest standards of energy efficiency and sustainability, thanks to the implementation of innovative technologies and optimized processes that allow us to further reduce environmental impact and improve logistics management.

**“ In the coming years, we will maintain a strong focus on strategic priorities, such as achieving **energy self-sufficiency and continually minimizing the environmental impact of our operations.** ”**

A key element of our commitment is the installation of a photovoltaic system in the new factory, with an installed power of 1430 kWp. This system contributes to a lower dependence on traditional energy sources and a significant reduction in CO2 emissions. The construction of this plant reinforces our responsible approach towards the environment.

We are aware that important challenges await us in the future. In the coming years, we will continue to focus our efforts on strategic areas such as self-production of energy and the continuous reduction of the environmental impact of our activities. We will address these challenges with an approach oriented towards collaboration and innovation, continuing our commitment to growing sustainability. While we have already taken significant steps, we recognize that there is still much to do. We are confident that, through constant commitment and collaboration with our employees and stakeholders, we will be able to promote long-term sustainable development, bringing value not only to our business, but also to the people and communities we support.

  
**ALESSANDRO CINI**

Chairman of the Board of Directors



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To request information regarding the Sustainability Report, you can contact the following address: [info@aecilluminazione.it](mailto:info@aecilluminazione.it)

This document was shared with the Board of Directors.  
The editorial project was studied and built with the support of the Rewind S.r.l. team.

METHODOLOGY  
NOTE

Year 2023

SECOND SUSTAINABILITY REPORT

This document is the second Sustainability Report, hereinafter referred to as the Report, of AEC Illuminazione and contains information on economic, environmental, social, personnel-related, human rights and anti-corruption issues to the extent necessary to ensure an understanding of the company's activities.

The Report was prepared on a voluntary basis by reporting a selection of the “GRI Sustainability Reporting Standards” published by the Global Reporting Initiative (GRI), in the 2016 version and subsequent updates, with reference to GRI Standards.  
The general principles applied are those established by the GRI Standards: relevance, inclusiveness, sustainability context, completeness, balance between positive and negative aspects, comparability, accuracy, timeliness, reliability and clarity.

This Annual Report, published annually, contains non-financial data and information for the financial year from 1 January 2023 to 31 December 2023. The topics covered are presented so as to ensure, where possible, a comparison with the previous year in order to allow all stakeholders to compare performance over time. To ensure the accuracy of the data, the use of estimates has been minimized as much as possible. When estimates are necessary, they are clearly identified and grounded in the most reliable methodologies available.

The scope of the information in the document includes  
- the **registered and operational headquarters**, in via A.Righi, 4, Z.I. Castelnuovo, Subbiano (AR)  
- the Local Unit named “**Pole Division**”, in Via Fermi, 93, Z.I. Castelnuovo, Subbiano (AR)

This is in line with the scope of the annual financial statements. Any exclusions are appropriately described in the relevant sections of the document.

This document is not a Consolidated Non-Financial Statement (DNF) as required by Legislative Decree 254/16, and has not been subject to third-party verification. In response to the Corporate Sustainability Reporting Directive (CSRD), adopted by the European Parliament in November 2022, the Company plans to begin a process in the coming months to ensure compliance with the new reporting obligations, which will apply from the fiscal year ending on December 31, 2025. Furthermore, the information and data reported in the document refer to issues that were identified as relevant, through a materiality analysis, for the company and its stakeholders.

This information has been summarized in the GRI content index, which allows for easy tracking of the indicators and other quantitative and qualitative information contained in the document.



PROFILE AND IDENTITY OF  
AEC ILLUMINAZIONE

HISTORY

AEC Illuminazione was founded in 1957 thanks to the intuition and foresight of its founder Cino Cini, who dedicated himself to the production of indoor lighting fixtures for industrial-commercial use and outdoor lighting fixtures for public and private gardens. Since 1966, when AEC Illuminazione made its contribution to the reconstruction of Florence following the disastrous flood event that struck the city, it has undertaken the production of artistic cast-iron candelabra, destined to embellish the historic centres of various Italian localities. Starting in 1982, AEC Illuminazione successfully launched its growth phase by dedicating significant investments to the production of street lighting fixtures. The company officially entered the public

lighting market, gaining a prominent position within a few years. Company growth and development prompted AEC Illuminazione to move its headquarters from the centre of Subbiano to the Castelnuovo Industrial Area in 2000. The headquarters became a state-of-the-art technological hub, housing both the production units and the administrative and organisational offices for the management of the company's activities. In those years, AEC Illuminazione's commitment to promoting awareness of environmental issues and encouraging energy saving gained momentum when the company began to invest its resources in the design of state-of-the-art lighting fixtures and systems, based on LED technology and enabling ever higher levels of energy efficiency. The path taken bears witness to the company's contribution in raising the awareness of authorities and citizens of the importance of these issues. Since 2016, AEC Illuminazione has been developing innovative SMART solutions for public lighting, intensifying its R&D of integrated systems with sensors, cameras and accessories such as Wi-Fi hot-spots. The company's strategy is therefore based on the synergetic integration of technological innovation and



energy efficiency for long-term progress and a positive impact on the environment and society. The following years were dedicated to targeted investments to expand its headquarters, which now covers a total area of approximately 126,000 square meters. In 2017, it built a 2,420 square meters logistics centre for the automated warehouse, with a handling and storage capacity of 12,800 containers and 9,800 cubic meters of goods. In 2019, on the other hand, a new ITC Innovation technology centre was built to house laboratories and internal R&D departments. Finally, in 2022, an additional 13,000 square meters will be added to the building for a new multi-storey factory equipped with an automatic warehouse for 12,000 pallets, a bridge connecting the two warehouses for the automatic transfer of goods, a new shipping department and a new area for assembly activities.

#### Vision, Mission and Company Brand

The Vision of AEC Illuminazione is to shape innovation, without

the development of solutions with cutting-edge performance and the filing of numerous patents as far back as the 1960s, as is appropriate for an innovative company. Inspired by tradition - Translating the legacy of the craftsmanship of the 1960s into the industrial automation and technological innovation of Industry 4.0 of today, AEC Illuminazione has been able to intercept the demands of an ever-expanding market and has reacted to the technological evolution of LED as a forerunner, creating innovation, without setting limits on investments in machinery, laboratories and production facilities, without ever losing touch with tradition.

#### THE VALUE CHAIN OF AEC ILLUMINAZIONE

AEC Illuminazione, operating in the industrial and public lighting sector, is a market leader in the design and production of lighting fixtures, public lighting poles and accessories.

The company, guided by 'Total Quality System' principles permeating every aspect of the organisation, manages all phases of



ever losing sight of its values which are rooted in tradition and in strong ties with the territory, with the aim of fully realising its mission to:

"Investigate people's needs and forms of use of light, studying the link between public lighting and life in cities and how this can affect the well-being of citizens."

Since its inception, AEC Illuminazione has been able to demonstrate its ability to anticipate the times, thanks to the values that have proved fundamental to its development and success:

True to perfection- Design and the pursuit of aesthetic and technical perfection have always been the essence of the AEC brand: a tradition, in which the fusion of refined elegance, distinctive design and innovation guides our actions. Moreover, we are Italian, we love the idea of being able to export the culture of beauty to every part of the world, and every detail is essential to us. The design of our products is the perfect harmony between beauty and function, between technology, performance and emotion.

Driven by innovation- The future looks in one direction and the quest for innovation has always driven our actions. Constant research and development of new, highly innovative forms of lighting have always guided the company's choices, leading to

the production process, from product design and industrialisation to distribution. The internalisation of the design and production phases, is an element of distinction for AEC Illuminazione, but also pursues the objective of presiding over all strategic processes in the Italian plants. The operational activity of AEC Illuminazione takes place at its two Italian plants located at the Castelnuovo Industrial Zone in Subbiano in the province of Arezzo.

The Headquarters in Via Righi is used for the co-ordination of the various company functions, as well as for production activities, the assembly of lighting fixtures, and the handling of goods; while the plant in Via Fermi, called the 'Pole Division', is used for the performance of lighting pole manufacturing activities.

The company's core business can be divided into the following phases:

- **Conceptualisation:** based on market analyses, the design team is dedicated to generating new ideas for unique and innovative solutions, defining the technical and aesthetic specifications of the light fixtures and lighting poles in order to meet industry requirements and comply with current regulations.

- **Engineering and development:** the design team translates the

#### VALUE CHAIN

idea into a detailed plan for the realisation of the products: technical drawings and bills of materials are developed, defining the materials to be used and the processes to be carried out. All activities relating to the development of the mechanical and electrical part of the products are also planned. Also included in this phase is the design of die-casting moulds for the production of complex, high-precision metal components.

- **Product testing:** Various tests are carried out internally, involving operation under boundary conditions, including with fault simulation, to verify compliance with electrical safety, electromagnetic compatibility and photometric performance requirements.

- **Marketing and sales campaign:** a product sheet is created for each light fixture and pole, to be presented to the sales network or customers at trade fairs. Area agencies and foreign distributors are in charge of collecting orders from customers. The latter have the possibility of using a commercial configurator to choose the specific characteristics of the products to be manufactured.

- **Procurement of raw materials and workmanship:** based on the orders received and the configurations requested by customers, AEC Illuminazione either takes materials and semi-finished products already stored in the warehouse or uses its own external suppliers to procure them. In addition, it relies on subcontractors to carry out any machining necessary for the production of the components.

- **Assembly and Testing:** Raw materials, semi-finished products manufactured in-house and those processed by our own subcontractors are assembled by the dedicated team. All finished products are tested for final acceptance. Once conformity has been attested and certified, they are packaged and palletised to be ready for shipment, which in Italy takes place via the company's own vehicles or other couriers, and abroad via the forwarding agents requested by customers.

#### RESEARCH & DEVELOPMENT

AEC Illuminazione constantly invests in Research & Development, whose main objective is to pursue the company's strategic lines in terms of developing lighting systems, optimising production

processes and increasing the environmental sustainability of production.

The areas involved in Research & Development refer to the optical, mechanical and electronic design of light fixtures.

In detail, the optical system developed by AEC Illuminazione offers advanced LED source management through the use of high-efficiency aluminium reflectors and tempered glass screens. This combination of optical elements aims to provide excellent lighting quality, high energy efficiency and easy cleaning. The study, design and development of the systems takes place within the company's photometric laboratory, using this technology to test and evaluate the performance of their systems.

The activities of the Research & Development department are carried out with the aid of sophisticated CAE simulation software, which allows the thermal and mechanical behaviour of the product to be studied and designed, with the aim of maximising the final performance of the lighting system.

Finally, an important role is played by the electronic components, especially power supplies and electronic boards, which must be carefully chosen and tested to guarantee the reliability, safety and performance of the lighting fixtures under normal and stressful operating conditions.

#### Molds and Die Casting Department

Within AEC Illuminazione's production units there is a large area, known as Molds & Die Casting, dedicated to the construction of moulds, mechanical equipment and prototyping of its designs. In this department, moulds are made for a variety of applications, including aluminium die-casting, sheet metal deep-drawing, stamping and plastic injection. These moulds can reach a considerable size, up to 14 tonnes, and are mounted on a die-casting machine with a capacity of 2,500 tonnes.

The department uses advanced 3D CAD systems for mould design and simulation software to optimise the mould filling and moulding process. These tools make it possible to assess and predict the characteristics and performance of the moulds before actual production, helping to improve the efficiency and quality of



the process.

In addition, there is modern production equipment, including 5- and 3-axis machining centres, EDM, grinding and lathe control. These tools make it possible to precisely manufacture the moulds and mechanical equipment required for the production of AEC products.

In addition to mould design, the area also deals with the development of the equipment and its components, working with the department responsible for product development itself via a co-design approach.

#### ITC – Innovation Technological Center

The Innovation Technological Centre (ITC) is the technological hub of AEC Illuminazione, located inside the Headquarters, which includes test laboratories where all the tests required by current regulations are performed, two photometric laboratories, where the staff carry out certified photometric and radiometric measurements, and numerous laboratories for testing dedicated to research and development.

The focus on environmental sustainability and innovation is also reflected in the building's design. In fact, typical dry construction techniques have been used, with metal carpentry. The advantages, compared to traditional methods, are not only related to greater efficiency in terms of construction time and costs and design innovation, but also to greater energy efficiency and use of material resources. In addition, the façade is made of Dekton, a highly UV-resistant material that guarantees high thermal insulation.

#### Certification and laboratory accreditation of AEC Illuminazione

The AEC photometric laboratory is accredited by ACCREDIA, which ensures the technical competence of the personnel, the adequacy of the equipment and facilities, and the suitability of the facility, in accordance with the requirements of ISO/IEC 17025.

The AEC photometric laboratory is under supervision by UL International Italy, to ensure maximum light fixture performance.

AEC's electrical safety laboratory is under supervision by DEKRA, to ensure compliance with safety standards for light fixtures.

Most of AEC's light fixtures are ENEC certified, a mark issued by a 'Certification body' to products that comply with safety standards.

AEC's most representative products are also ENEC+ certified, an index of quality and performance.

#### Ulbricht Spheres

The Ulbricht sphere, also called 'Integrating Sphere', is a device used to measure the luminous flux, colour rendering index (CRI) and colour temperature (CCT) of light fixtures. This instrument consists of a hollow sphere with a highly diffuse inner surface that allows total reflection of light. Measurements are performed using a spectroradiometer positioned behind a small slit on the surface of the sphere.

The ITC is equipped with two spheres, 1.5 m and 2 m in diameter, for conducting tests directly inside the laboratory on individual LED modules and on complete light fixtures, including large ones.



The larger sphere is connected to a climatic chamber, where the internal temperature can be adjusted in a range between 15°C and 80°C, allowing products to be tested under real installation conditions. This approach ensures accurate data on the performance and behaviour of the fixtures under different thermal conditions.

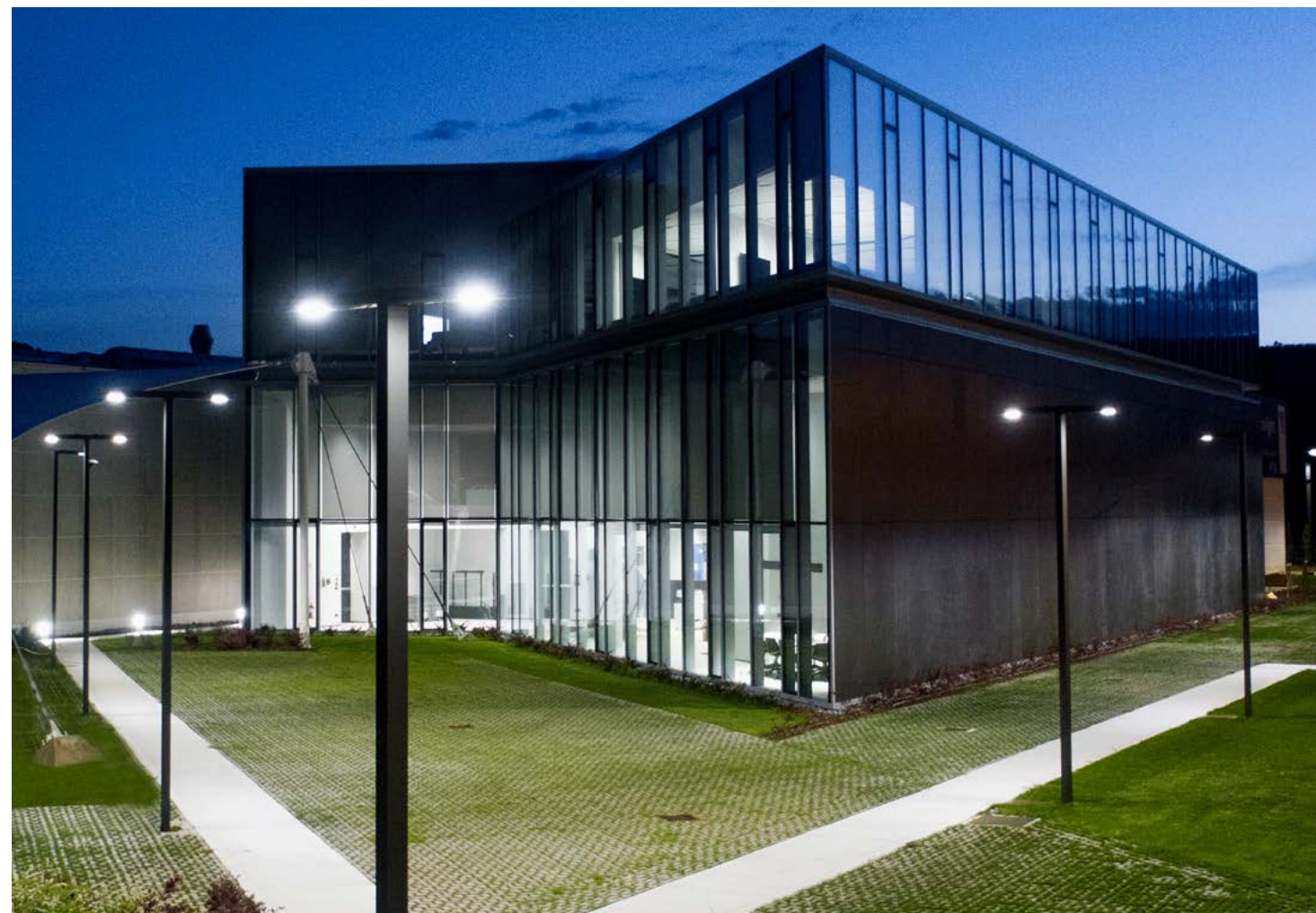
#### Anechoic chamber and EMC Chamber

AEC Illuminazione recognises the importance of constant and accurate control of the electronic components of light fixtures in order to meet international electromagnetic compatibility regulations.

For this reason, the company has installed an anechoic chamber, specifically a full anechoic chamber. This is an isolated and fully shielded environment whose walls are designed to absorb electromagnetic waves, thus eliminating reflections. This simulated environment allows fixtures to be tested under conditions similar to those that would occur in an unobstructed outdoor environment.

AEC Lighting is equipped with an EMC Chamber where the electromagnetic quantity emitted by the light fixtures is measured and susceptibility to external interference is tested to determine its resilience to electromagnetic disturbances. In detail, the tests performed are:

- of low-frequency radiated emission, between 9kHz and 30MHz, using the Large Loop Antenna. The latter is concatenated with the electromagnetic field emitted by the device under test, which is analysed using a spectrum meter, its electromagnetic content is assessed.
- of high-frequency radiated emission, between 30MHz and





300MHZ, makes it possible to assess the level of electromagnetic field emissions of the VHF type, which propagate in space towards other devices coexisting in the same area.

- of conducted emission 30MHz-300MHz, which makes it possible to assess the level of electromagnetic field emissions, of the VHF type, propagating through cables to other devices connected to the same electrical system.

Goniophotometers, spectroradiometer and Flicker module

There are two darkrooms lined with materials that minimise external light, inside of which two goniophotometers have been installed to measure the flux emitted by the fixture and to detect its photometric emission distribution. The rooms are equipped with an air conditioning system that keeps the temperature, humidity and speed of the ambient air within regulatory limits. These factors are crucial for an accurate LED measurement.

Furthermore, thanks to the presence of a spectroradiometer, it is possible to measure the electromagnetic radiation spectrum of the luminaires. This instrument makes it possible to obtain information on the spectral distribution of the light emitted by the lighting fixture, i.e., how the radiation is distributed in the different wavelengths. The spectroradiometer can measure light intensity in different wavelength bands and provide information on colour, colour rendering and other spectral properties of the emitted light.

The dedicated Flicker module is a component used to evaluate and measure the flicker phenomenon or flicker of a light source. This module makes it possible to analyse the light intensity over time and identify any periodic variations that could cause visual disturbances or interfere with television footage, especially in sport facilities.



Thermal cameras

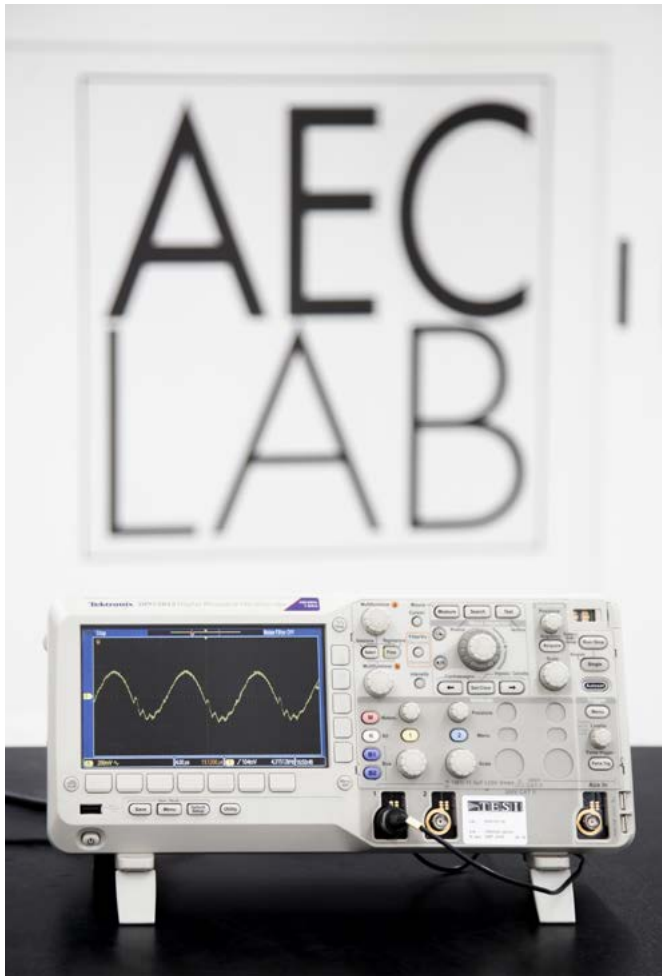
The technology centre includes two thermal chambers, where up to 200 fixtures can be installed for the purpose of long-term testing at controlled temperature and humidity. The aim is to estimate the actual life of the luminaire and its components.

AEC Illuminazione also performs specific "Accelerated life" and "ON-OFF Cycle" tests to verify compliance with the requirements of the technical standard EN 62717 "LED modules for general lighting – Performance requirements".

Other endurance and immunity tests

Further tests carried out in their own laboratories are:

- the IP Test, for resistance to penetration by solid foreign bodies and to infiltration of liquids;
- the IK Test, for the mechanical resistance of glass, caps and other parts intended to protect the luminaire;
- the Corrosion Test, for the resistance of the paintwork and galvanic couplings of the materials to the passage of time and to atmospheric agents in general;
- the Vibration Test, carried out in the Vibration Test Chamber where a vibrating platform connected to an accelerometer allows the mechanical resistance of the fixtures to be tested.
- the ESD Test, for resistance to electrostatic discharges;
- the Surge Test, for immunity to high-voltage pulses
- the Fast Transient Test, for resistance and immunity to electrical disturbances that may occur in the power grid.



MARKETING AND SALES

AEC Illuminazione distributes its products worldwide. Through its official partners, the company supports customers and municipalities in as many as 45 countries around the globe, from Norway to the United Arab Emirates, the USA, New Zealand, Singapore and Canada.

In addition, it opened a subsidiary in Frankfurt in 2015 and directly controls the German market through its own network of agents.

AEC’s marketing efforts are focused on effective communication and continuous market development. The Marketing Department plays a crucial role, managing both internal and external communication. This is achieved through the constant updating of the corporate website, management of social media channels (Facebook, LinkedIn, Instagram, YouTube, Pinterest), and the dissemination of information via videowalls in production and reception areas. Internal communication between departments is primarily managed through email, ensuring a continuous and coordinated flow of information.

Participation in International Trade Fairs

In 2023, AEC Illuminazione participated in several key international trade fairs, strengthening existing relationships and opening new business opportunities on a global scale. These events provided an important platform to showcase the company's innovations and reinforce its position in strategic markets.

- LIGHT EXPO**, the largest trade fair dedicated to the lighting market in East Africa, saw AEC Illuminazione as a leading exhibitor. Now in its eighth edition, the event brought together the key players in the industry to present the latest innovations in residential, commercial, and industrial lighting, offering AEC the opportunity to strengthen its presence in a rapidly growing geographical area.
- SMARTECH ASEAN**, a fair focused on intelligent and sustainable technologies for the industrial sector, was another key milestone for AEC. During the event, the company showcased its advanced solutions in automation, robotics, and energy management, reinforcing its position in the Asian markets and establishing new strategic connections.
- SALON DES MAIRES**, one of the most prestigious fairs in France dedicated to local authorities and public administrations, provided AEC Illuminazione with the opportunity to engage directly with local decision-makers. The event allowed the company to promote its solutions for public lighting and urban furniture, solidifying its position as a reliable partner for French municipalities and further strengthening its presence in the European market.

Customer care

To guarantee a product and service that fully satisfies its customers, AEC Illuminazione implements an after-sales support strategy that involves the reception and handling of support requests via an online form on its corporate website: <https://www.aecilluminazione.com/customer-care/>

With the goal of continuously improving its quality standards, in

2023 AEC implemented a specific questionnaire to monitor and analyze customer satisfaction. This tool allows the company to receive direct feedback on various aspects of its service and products, helping to identify areas for improvement.

The customer satisfaction evaluation process began in November 2023, when AEC started automatically sending post-sale questionnaires to customers through an internal software system.

This system has enabled the company to gather initial impressions and feedback from customers regarding the quality of service and products received.

As of December 31, 2023, 14 questionnaires had been completed. The results indicate general customer satisfaction, with an average score of approximately 3.5 on a scale of 1 to 5.

A full and detailed review of the results will be available in the next 2024 sustainability report, when the number of responses will be sufficiently representative to provide a comprehensive annual overview.

RESPONSIBLE SUPPLY CHAIN

For AEC Illuminazione, it is crucial to develop stable and lasting partnerships with its suppliers, starting with the most strategic ones. Synergies and the resulting involvement guarantee not only the reliability of production performance, but also the sharing of AEC Illuminazione's values and expectations in terms of ethical and environmental requirements.

The historicity of the relationships also ensures production reliability and allows AEC Illuminazione to share and enjoy economic advantages, agility and flexibility in supply management.

Yeas	Total suppliers	Historical suppliers
2022	390	308
2023	426	292

The main services and goods purchased are:

- Raw materials and semi-finished products;
- Services and contract manufacturing

In line with its desire to emphasise craftsmanship, innovation and design, typical attributes of products which are Made in Italy , the company has always tried to favour Italian suppliers, with important benefits in terms of logistics, delivery times, and supporting the local economy. This focus is also reflected in the percentage of spending allocated to Italian suppliers, which accounts for 95% of the total.

Geographic location of suppliers¹		
Geographic Area	2022	2023
Italy	92%	92%
Abroad	8%	8%

1) The percentage refers to the monetary value of purchase orders.



In order to reinforce its commitment to greater sustainability in its activities, AEC Illuminazione, in its relations with its supply chain, operates in compliance with current regulations, its Code of Ethics, existing contracts and company procedures, starting with the process of selecting new suppliers. Likewise, the company expects its suppliers to share the values of AEC Illuminazione. They are required to act responsibly towards those involved and the environment, prohibiting behaviour that is corrupt, discriminatory and contrary to fundamental human rights.

Evaluation of Suppliers

AEC Illuminazione evaluates all suppliers annually. The outcome of the evaluation carried out in 2023 was extremely positive, with 76% of the total suppliers receiving a high score. The evaluation criteria used relate to delivery time, price and quality of supply, as well as skills, know-how and flexibility

Score class			
Year	<3	3-4	4-5
2022	-	14%	86%
2023	-	24%	76%

AEC Illuminazione includes environmental criteria in its supplier evaluation process. The analysis is carried out only for subcontractors and the environmental aspects considered concern atmospheric emissions, water discharges, waste and noise impacts. The result obtained represents the supplier's level of environmental relevance, ranging from a minimum of 0 to a maximum of 100.

SMART FACTORY 4.0

In line with the company's strategy based on the synergy between technological innovation and energy efficiency, AEC Illuminazione has equipped itself with the latest generation of machinery for the automation of production processes. The technological investments made are consistent with the company's focus not only on aesthetics and attention to detail, but also on those key elements that enable it to guarantee high standards of product quality and functionality. The choice to implement solutions capable of improving the production performance and reliability of its lighting fixtures is not AEC Illuminazione's only focus. In fact, the company's further objective is to guarantee the maximum safety and well-being of operators and the containment of energy consumption and environmental impacts. With the setup of Industry 4.0, AEC Illuminazione has embarked on a radical transformation, allocating significant resources to completely convert its production processes to become a 100% sustainable SMART Factory 4.0 today. The company has adopted new machinery, collaborative robots, automated plants and digital data transmission technologies that have led to significant benefits in productivity and industrial competitiveness, and has further improved staff working conditions, early detection of inefficiencies and management of energy and material resources.

New Factory

To support its transformation into a Smart Factory 4.0, AEC Illuminazione has identified the need to expand its production infrastructure. The growing demand for products, along with the introduction of new technologies and processes, highlighted the opportunity to further optimize the company's layout. As a result, the company has decided to invest in the construction of a new facility, which will house assembly lines and the shipping department. This expansion will not only improve operational efficiency but also enable the implementation of innovative solutions, such as the use of automated guided vehicles (LGVs) to replace traditional forklifts. These innovations will increase workplace safety by reducing the risks associated with manual handling and will also enhance internal logistics, contributing to a smoother and more sustainable production flow. Furthermore, in 2023, a mold testing press and a Restart line for optics were introduced. At the same time, AEC Illuminazione is strengthening its IT infrastructure to support the interconnection of production processes, optimize resource management, and improve overall operational efficiency. The goal is to make the company more agile and competitive while ensuring operations are safe, sustainable, and adaptable to changes. By integrating advanced digital technologies, AEC aims to enhance its ability to analyze real-time data, optimize workflows, and support continuous and sustainable long-term growth.







## PRODUCT LINES AND APPLICATION

AEC Illuminazione offers a wide range of products, including both light fixtures and poles, for public, sports, large area and industrial interior lighting.

All luminaires are manufactured with LED technology, which contributes to high energy savings and the reduction of carbon emissions, which are among the main causes of the greenhouse effect. In addition, fixtures are designed for maximum durability and LED fixtures are completely free of pollutants such as metal halides and sodium vapour.

AEC products are equipped with electronic devices, so-called remote-control nodes or smart nodes, through which the lighting system can be monitored and managed remotely. In detail, the information flow is managed through a Wireless Sensor Network (WSN) communication network towards Gateways, i.e., control units located throughout the territory, typically at switchboards or in the positions which are most favourable for communication. This allows 24-hour monitoring of the device's operating conditions and intervention in the event of faults. The stored data can be analysed on several levels, temporal and geolocation. In addition, the system makes it possible to manage luminaire maintenance, schedule periodic interventions or open repair activities where required.

AEC Illuminazione shares the product catalogue containing all technical specifications of the fixtures and lighting poles, energy class and certifications held, with its customers, including via its corporate website <https://www.aecilluminazione.com/download-catalogue/>



### PUBLIC LIGHTING

For public lighting, AEC Illuminazione offers LED luminaires for roads and motorways, tunnels and urban decor. The systems offer numerous benefits for both citizens and the environment. Colour rendering is guaranteed for better visibility and usability for motorists and pedestrians, making environments safer and more enhanced at night.

### SPORT LIGHTING

Sport facilities, both amateur and professional, require a quality of light output that ensures a high level of visual experience and comfort. Our lighting fixtures are designed to provide uniform light distribution, minimising shadow areas and unwanted reflections. High-intensity systems are used to provide good visibility for athletes and spectators, making the facilities safer, and meeting all video and photographic requirements.

“*The most representative products of AEC are certified ENEC+*”

### ENEC & DEKRA CERTIFICATIONS

Most of AEC Illuminazione's products are ENEC certified, a voluntary quality mark recognized throughout Europe which aims to identify compliance with the standards relating to the safety of lighting fixtures.

They are also DEKRA tested and certified to meet the safety and performance standards required by national and international standards and regulations.



### LARGE AREAS LIGHTING

In order to cover large areas such as car parks, airports, ports and large road and industrial areas, AEC Illuminazione offers luminaires with high lighting performance. The systems are designed to make the handling of goods and the movement of people within the perimeter safer and easier.

### INDUSTRIAL INDOOR LIGHTING

Industrial interior lighting concerns work spaces within industrial buildings, such as warehouses or logistics centres, large sales areas and for the horticultural sector. AEC Illuminazione offers luminaires designed to ensure a homogeneous spread of the light beam, high visibility and visual comfort, and the absence of glare, creating safe and welcoming workplaces.



STAKEHOLDER  
MAPPING AND ENGAGEMENT

ENGAGEMENT

AEC Illuminazione, in carrying out its production and business activities, interacts with various subjects that in various ways influence and are influenced by the actions and operations of the company, sharing with them its vision of value creation.

In this context, AEC Illuminazione considers it important to involve its stakeholders through an active and proactive dialogue, with the dual objective of understanding their needs and activating a virtuous circle of continuous comparison with the various subjects.



The frequency of involvement for the various categories of stakeholders is influenced by the type of tool or channel adopted, by the company strategies, as well as by the need to fulfil any applicable regulatory obligations.

STAKEHOLDER	EXPECTATIONS	INTERACTION TOOLS
Customers	Quality and energy efficiency of products, Punctual delivery, Competitive prices, Assistance service, Transparency in communications and information, Safety and reduced environmental impact of company activities	Events; After-sales assistance; Social media and company website
Employees	Respect for workers' rights, Health and safety in the workplace, guarantee of remuneration, Training to strengthen knowledge and skills, Information and communication on company activities and their impacts	Internal communication tools (company email, intranet); internal events; periodic meetings
Processing contractors/raw material suppliers	Handling orders, Punctuality of payments, Collaboration, Controls of compliance with contractual environmental and safety requirements	Supplier performance review meetings; supplier evaluation; partnerships
Trade Unions	Respect for workers' rights, health and safety in the workplace, listening and collaboration from management	Collective negotiation meetings; open and transparent communication
Board of Directors	Customer satisfaction and loyalty, increase in margins and containment of production and energy costs, Keeping the number of accidents and occupational diseases at zero	Periodic reports; Periodic Meetings
Local bodies and authorities	Compliance with laws, punctuality of payments, Protection of the environment and the health and safety of workers, Awareness of energy impact, Information and communication on company activities and their impacts	Participation in public consultations; Institutional meetings
Local Community	Reduction of the impacts of processes on the surrounding environment, information and communication on company activities and their impacts	Collaboration with local bodies and associations; meetings with representatives of the local community
Banks	Investments and liquidity	Financial presentations; meetings with banking relationship managers



MATERIALITY  
ASSESSMENT

The analysis below follows the principle of materiality, which defines material issues as those aspects that "reflect the most significant impacts of the organization on the economy, environment, and people, including impacts on their human rights," as defined by the GRI 3 Standard. In particular, for the survey of significant issues, in 2022 all first respondents were asked to fill in a questionnaire, the result of which, shown below, provides a summary view of the issues analysed and their degree of relevance.

In 2023, AEC Illuminazione launched a series of initiatives to align its sustainability practices with emerging regulations, including

the CSRD. This European directive, which requires companies to publish detailed sustainability reports, represents a significant step forward compared to previous regulations like the Non-Financial Reporting Directive (NFRD), placing increased focus on environmental, social, and governance (ESG) aspects.

To comply with these new requirements, AEC has begun revising its materiality analysis, which involves identifying and assessing issues relevant to the company and its stakeholders, based on their potential financial and non-financial impacts.

This review aims to ensure that the company can meet the new CSRD requirements, which demand greater transparency and a more structured approach to communicating ESG impacts. The initial results of this analysis will be presented in the 2024 report.



IDENTIFICATION OF IMPACTS AND MATERIAL TOPICS

According to the Materiality Determination Process seven macro-areas were identified relating to governance and compliance, economic responsibility, human resources, responsibility towards suppliers, customers and local communities, environmental responsibility, i.e. the variables that enable AEC Illuminazione to create and distribute value. These, in turn, are broken down into sub-areas

In particular, the following steps were taken:

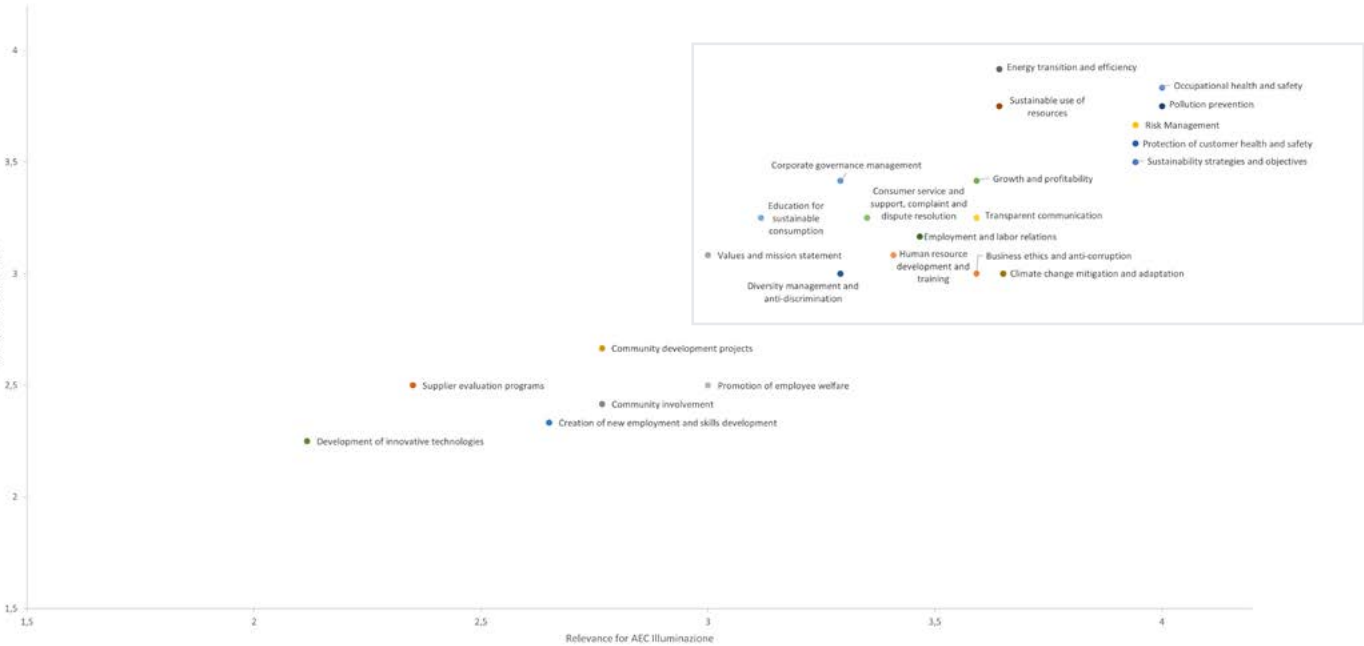
- The identification of economic, social and environmental responsibility issues on the basis of internal information, found in the preliminary assessment activity with the Management and in the analysis of company documentation (Code of Ethics, Integrated Company Policy, etc.), and external information, analysing references contained in the GRI Standards, Sustainability Accounting Standards of SASB, ISO 26000, European Directives on non-financial disclosure and current stakeholders' expectations, the material topics of peers and competitors, and the evaluations of external experts contained in reports and analyses (for example, among others, The Global Risk Report 2023 by the World Economic Forum, The Sustainable Development Goals

Report 2023 by the United Nations, and the 2023 ASViS Report).

- The identification and analysis of the impacts associated with potentially material topics, through a reflection on processes, business activities, and relationships, and on the actual and potential positive and negative impacts they generate or may generate on the economy, environment, and people, including impacts on human rights.
- The prioritisation and internal validation of issues identified on the basis of their strategic importance to the business and the assessment of their impact on business performance.

Impact Assessment

The chart summarizes the results from the materiality analysis: After identifying potentially relevant sustainability issues and their related impacts, a quantitative evaluation was carried out. Specifically, in 2022, all senior management members were invited to participate in a questionnaire, asking them to assign a relevance rating on a scale from 1 to 4 (where 1 indicates low relevance and 4 indicates high relevance) to determine the significance of each issue and its related impacts.



“The path undertaken encompasses and influences all aspects of the business.”

The topics with a rating above 3 (defined as materiality threshold) for both axes are considered relevant. They are in the upper right quadrant of the matrix and are as follows:

- Occupational health and safety
- Pollution prevention
- Energy transition and efficiency
- Sustainable use of resources
- Risk management
- Protection of customer health and safety
- Sustainability strategies and objectives
- Growth and profitability
- Corporate governance management
- Transparent communication
- Customer support services, complaint and dispute resolution
- Education for sustainable consumption
- Employment and labour relations
- Human resources development and training
- Values and mission
- Climate change mitigation
- Business ethics and anti-corruption
- Diversity management and anti-discrimination

The relevant issues that have emerged are consistent with the activities and strategies planned and implemented by AEC Illuminazione over the years.

In particular, the path undertaken involves and impacts all aspects of its business: governance and compliance, human resources, economic and environmental responsibility, and responsibility towards its suppliers and the local community.

“The relevant issues that have emerged are consistent with the activities and strategies planned and implemented by AEC Illuminazione over the years.”

THE CONTRIBUTION TO THE SDGS

<i>Temi rilevanti &gt; 3</i>	<i>SDG</i>
<b>Governance e compliance</b> Business ethics and anti-corruption; Sustainability strategies and goals; Values and mission; Risk management; Corporate governance management	16 PEACE, JUSTICE AND STRONG INSTITUTIONS 17 PARTNERSHIPS FOR THE GOALS
<b>Responsibility economical and towards customers</b> Growth and profitability; Transparent communication; Education for sustainable consumption; Customer service and support, complaint and dispute resolution; Protection of customer health and safety	3 GOOD HEALTH AND WELL-BEING 8 DECENT WORK AND ECONOMIC GROWTH 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 12 RESPONSIBLE CONSUMPTION AND PRODUCTION
<b>Environmental responsibility</b> Pollution prevention; Sustainable use of resources; Energy transition and efficiency; Climate change mitigation	6 CLEAN WATER AND SANITATION 7 AFFORDABLE AND CLEAN ENERGY 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 11 SUSTAINABLE CITIES AND COMMUNITIES 13 CLIMATE ACTION
<b>Responsibility to employees</b> Diversity management and anti-discrimination; Employment and labour relations; Occupational health and safety; Human resources development and training	3 GOOD HEALTH AND WELL-BEING 8 DECENT WORK AND ECONOMIC GROWTH

The same data are reported in the table alongside, associating them with a selection of the SDGs, with the aim of identifying the areas of action and improvement to increase the positive impacts on people and the environment and to mitigate the negative ones.

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STRUCTURE AND  
COMPOSITION OF  
GOVERNANCE

Year 2023

CORPORATE GOVERNANCE

AEC Illuminazione, whose share capital is entirely held by Cini Holding S.p.A., has adopted a so-called traditional corporate governance model and provides for the presence of a Board of Directors, appointed by the Shareholders' Meeting and chaired by Alessandro Cini, which is vested with the broadest powers of strategic guidance and ordinary and extraordinary management of the Company, and a Board of Statutory Auditors, elected by the Shareholders' Meeting for a three-year term, chaired by Faralli Gino, which is responsible for supervising compliance with the law, the articles of association and the bylaws and compliance with the principles of proper administration of the company's activities. It is also in charge of verifying the adequacy of the organisational, administrative and accounting structure.

The statutory audit of the accounts was assigned, by resolution of the shareholders' meeting, to a specialised and independent external auditor.

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Board of Directors				
Name	Age	Gender	Position	In charge since
Cini Alessandro	>50	Male	President	15/11/2012
Cini Lorenzo	30-50	Male	Vice-President	15/11/2012
Cini Isa	>50	Female	Advisor	15/11/2012
Cini Martina	30-50	Female	Advisor	15/11/2012
Cini Alessia	<30	Female	Advisor	21/07/2021

Board of Auditors				
Name	Age	Gender	Position	In charge since
Faralli Gino	>50	Male	President	21/07/2021
Cavallini Fabrizio	>50	Male	Auditor	21/07/2021
Ferruzzi Giovanni	>50	Male	Auditor	21/07/2021
Brogi Massimiliano	>50	Male	Deputy Auditor	21/07/2021
Salvi Fabio	>50	Male	Deputy Auditor	21/07/2021

Statutory Auditing				
Name	Age	Gender	Position	In charge since
Fratini Gabriele	>50	Male	Auditor	21/07/2021

BUSINESS ETHICS  
AND INTEGRITY

231 Model and Code of Ethics

ORGANISATION, MANAGEMENT AND CONTROL MODEL PURSUANT TO LEGISLATIVE DECREE 231/2001

AEC Illuminazione has adopted and implemented its own Organisation, Management and Control Model pursuant to Legislative Decree 231/2001 (hereinafter, '231 Model') since 2015. It is defined on the basis of the complexity of the company and its level of risk with respect to the offences covered by the Decree.

The company's objective, consistent with the values at the base of its governance culture, is to ensure conditions of fairness and transparency in the management of its business and to protect its position and image, the expectations of its shareholders and creditors, and the work of its employees. The tool not only makes it possible to prevent the commission of the offences identified by Legislative Decree 231/2001, but also plays a role in protecting against their consequences and in promoting legality, responsibility and cooperation among the figures with management, administration, coordination and operational tasks.

CODE OF ETHICS

AEC Illuminazione has endowed itself with its own Code of Ethics, forming part of 231 Model, through which the values and principles underlying its daily operations have been defined.

AEC Illuminazione's guiding values reflect the company's identity and guide its strategic choices within the business in which it operates:

- Centrality of the person, regardless of their role;
- Innovation, understood as a dynamic propensity to change in the search for advanced and effective solutions;
- Listening and confrontation, because the dialectical relationship and the careful evaluation of considerations, even critical ones, is decisive for improvement;
- Fairness and transparency, which a company cannot disregard;
- Customer satisfaction, without which there are no prospects for the company, especially in the market;
- Motivation of human resources, which is the determining factor for the success of any organisation;
- Management by objectives.

In relation to these values, a series of ethical principles have been identified:

- Strategic value of human resources;
- Quality of products supplied and services provided;
- Profitability;
- Integrity;
- Conflict of interest;
- Impartiality;
- Confidentiality and protection of privacy;
- Individual accountability;
- Accounting transparency.

The Code of Ethics, approved by the Board of Directors, is published on the website [www.aecilluminazione.com/231-model-and-code-of-ethics](http://www.aecilluminazione.com/231-model-and-code-of-ethics). It is applicable without exception to the directors and employees of AEC Illuminazione and to all those who, directly or indirectly, permanently or temporarily, establish relationships and collaborative relations with the company, in any capacity, cooperating in the performance of its activities and the pursuit of its aims.

Everyone is required to carry out their work and engage in relations and negotiations, while adhering to the principles of honesty, fairness, integrity, transparency, legitimacy, clarity and mutual respect. Any non-compliant behaviour, even if aimed at facilitating the Company, is neither permitted nor tolerated by AEC Illuminazione.



## SUPERVISORY BODY (SB) AND WHISTLEBLOWING

The Board of Directors appointed the Supervisory Board, which is monocratic in nature, in charge of monitoring the functioning and correct application of Model 231 and the related internal procedures.

It also has the task of informing, raising awareness and training internal and external stakeholders on the organisation's responsibility.

Consistently with its Code of Ethics, AEC Illuminazione has prepared a specific procedure, which sets out the methods for informing the Supervisory Body of any irregularities or offences in work activities. In this regard, anyone who becomes aware of cases of violations may transmit their report to the e-mail address:

[odv@aecilluminazione.it](mailto:odv@aecilluminazione.it)

## INTEGRATED QUALITY, ENVIRONMENT, HEALTH AND SAFETY, ENERGY POLICY

AEC Illuminazione has adopted a specific company policy, aimed at regulating health and safety, environmental, energy and quality aspects. In this sense, therefore, the company is not only committed to complying with all applicable laws and regulations, but to directing its strategic business lines towards improving the quality of its products and services offered, health and safety conditions in the workplace, minimising environmental impacts and maximising energy performance, with reference to both the production processes and the lighting fixtures and poles manufactured.

In detail, through its corporate policy, AEC Illuminazione is committed to:

- Satisfying the customer and all stakeholders;
- Investing in research and development for the design and manufacture of luminaires that increasingly guarantee better energy efficiency, improve the level of reliability over time and optimise the working conditions of their users in terms of safety, ease of use, ergonomics, etc;
- Achieve compliance objectives for its products through the prevention of problems and errors, that is, through compliance with documented rules and information;
- Minimise pollutant emissions in all environmental matrices throughout its production cycle;
- Improve waste management;
- Improve its energy performance;
- Prevent work-related injuries from occurring;
- Prevent workers from contracting occupational diseases of any kind or entity;
- Raise workers' awareness of safety issues by involving and consulting them periodically, mainly through their RLS;
- Informing, training and sensitising all workers and, when necessary, specifically instructing them on risks in order to carry out their tasks safely and to assume their responsibilities with regard to safety at work with reference to the task performed;
- Make the entire company structure participate, according to its attributions and competences, in the achievement of the company objectives;
- Work in compliance with the standards referred to in its Corporate Management System;
- Promote a culture of respect for the environment and commitment to combating climate change.

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## INTEGRATED QUALITY, ENVIRONMENT, HEALTH AND SAFETY, ENERGY MANAGEMENT SYSTEM

The commitments made in company policy are implemented through its integrated management system for Health and Safety, Environment, Energy, Quality.

The implementation of this system began more than 20 years ago, achieving:

- in 1999, certification of the quality management system, under ISO 9001:2015, which provides a structured approach to ensuring that an organisation meets customer needs and provides high quality products and services;
- in 2016, certification of the environmental management system, under ISO 14001:2015, which aims to help organisations responsibly manage the environmental impacts of their activities;
- in 2017, certification of the occupational health and safety management system, pursuant to ISO 45001:2018, for the identification of occupational health and safety risks, implementation of appropriate preventive and protective measures, worker involvement and continuous improvement of occupational health and safety performance;
- in 2021, certification of the energy management system, according to ISO 50001:2018, to improve energy performance, reduce energy costs and the environmental impact associated with energy use.



RISK MANAGEMENT

AEC Illuminazione has an internal control system, designed to guarantee maximum management of all company risks that may affect the creation of value, by means of targeted tools for their identification, evaluation and control.

Year 2023

Each body of the company is directly involved in the implementation of the corporate risk coordination methods: the Board of Directors defines the direction of the control systems for the impact of the various activities on the company's business. The Board of Statutory Auditors monitors that significant business risks are identified and managed appropriately. The Statutory Auditor carries out the statutory audit of the accounts and expresses an opinion on the financial statements in the relevant report; he also verifies that the company's accounts are properly kept. The Supervisory Board carries out periodic checks on company processes to ensure that they are consistent with 231 Model and the Code of Ethics. The Data Protection Officer (DPO) performs the role of informing and advising on the company's obligations laid down in the relevant regulations, and monitors their compliance. The Quality, Environment, Energy and Safety function carries out activities to verify the correct implementation of company procedures and instructions in compliance with Legislative Decree 81/2008 on the protection of health and safety in the workplace, the Testo Unico for Environment, related to Legislative Decree 152/2006, and ISO family standards related to integrated corporate management system.

	RELATED RISKS	RISK HANDLING MODE
Environmental	Poor development of eco-friendly products	Investment in Research and Development processes and lumi-naire design according to Eco-Design logic
	Failure of suppliers to adhere to certain environmental requirements	Planning of second-party audits Qualification system of manufacturing suppliers
	Lack of or incorrect waste management	Instructions for the removal and replacement of luminaire ma-terials
	Unsold AEC products related to negative climate change impact	Design of lighting fixtures to ensure energy savings. R&D investments aimed at maximizing positive impacts on energy consumption and consequently on climate change.
	Imposing penalties for non-compliance with environmental regulations	Maintenance of certified environmental management system
Energy-related	Energy inefficiency related to pro-duction process and office activities	Strengthening of own consumption monitoring system
	Fluctuation of energy market prices	Evaluation of different sources for energy supply
Human resources	Lack of human resources development	Training programmes on hard and soft skill Growth plans for their staff
	Workers health and safety	Awareness and education Healthcare monitoring
Ethics and business integrity	Failure to manage the company's safeguards to prevent violations of regulations	Model 231 Code of Ethics; Procedures and instructions of the company's integrated management system
	Commission of corruption offences	Model 231 Code of Ethics; Procedures and instructions of the company's integrated management system
	Selection of suppliers that do not meet the legal requi-rements	Model 231 Code of Ethics; Procedures and instructions of the company's integrated management system
Respect for human rights and social issues	Unsatisfactory product and service quality	ISO 9001 certified quality management system
	Failure to protect the safety of customers and users	Laboratory testing in accordance with national and international regulatory requirements
	Failure to protect human rights and/or discrimination	Selection process based on principles of fair treatment
	Use of suppliers not meeting minimum quality requirements	Traceability and conformity control of components
Other risks	Loss of image and reputation	Certified integrated Business management system Support of external consultants
	Loss of competitiveness and market share	Analysis of current market expectations and needs
	Penalties and lawsuits for non-compliance with tax and fiscal regulations	Constant monitoring of regulatory changes External audit of the External auditing of financial statement Support of external consultants.
	Protection of personal data	Appointment of Data Protection Officer and Data Processors, establishment of data processing register Adaptation of contractual clauses and disclosures.

“AEC rigorously enforces compliance with the law consistently with its code of ethics and company policy.”

COMPLIANCE WITH REGULATIONS

Consistent with its Code of Ethics and its corporate policy, AEC Illuminazione strictly enforces compliance with laws and regulations for all its activities and in the territory in which it operates. Over the last three years, there have been no cases of non-compliance or fines, nor are there any disputes against AEC Illuminazione with respect to laws and regulations concerning the environment, health and safety of workers and end users, data protection and privacy, and corruption. There have been no incidents of violation of free competition, monopolistic and antitrust practices. Furthermore, no lack of compliance was recorded concerning labelling, product, service information, and marketing communications.



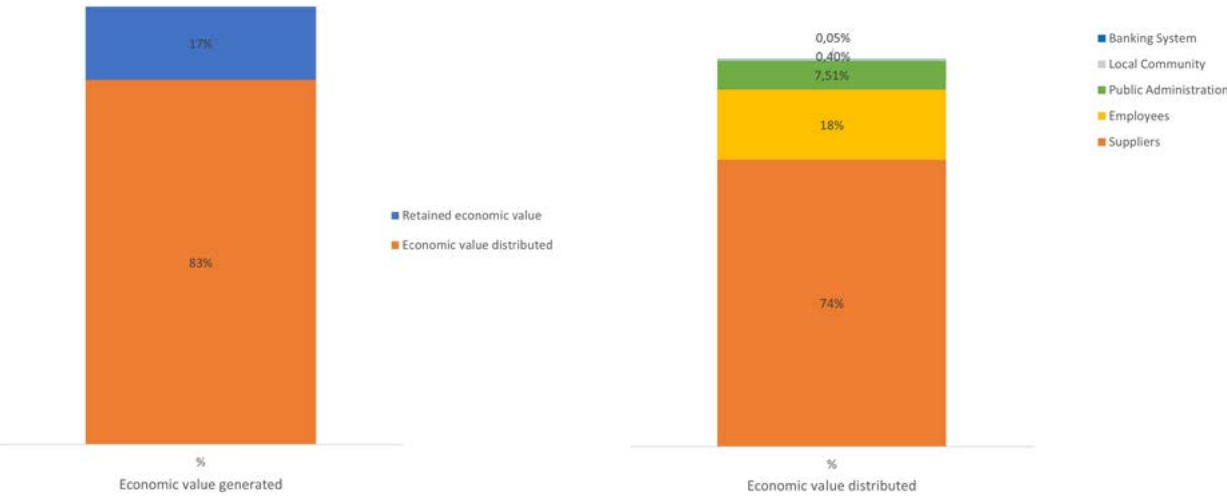
FINANCIAL PERFORMANCE:  
CREATION AND  
ALLOCATION OF VALUE

Annual reports

The economic value generated and distributed represents in monetary terms the relationships between AEC Illuminazione and the socio-economic context in which it is inserted, measuring the economic impact and its ability to create and distribute wealth among the main categories of company stakeholders . The economic value retained, however, mainly concerns the operating result allocated to reserves, depreciation, provisions and write-downs.

ECONOMIC VALUE GENERATED AND DISTRIBUTED

In 2023, the economic value generated was distributed among suppliers of goods and services, employees, the banking system, public administration, and the local community, as shown in the following chart:



APPROACH TO TAXATION

In line with its Code of Ethics, AEC Illuminazione also acts according to moral integrity, transparency and impartiality in the management of its taxation. The company believes that the contribution deriving from the payment of its taxes constitutes a fundamental tool through which it can contribute to the economic and social development of the country in which it operates. Therefore, AEC Illuminazione pays particular attention to compliance with tax regulations and is committed to always having an open and constructive dialogue with the tax authorities. Furthermore, to ensure greater transparency and ensure an impartial and objective analysis of financial statements and accounting practices, the organization has decided to entrust the legal auditing of accounts to a specialized and independent external entity.





PERSONNEL OF  
AEC ILLUMINAZIONE

For AEC Illuminazione, the ability to listen, involvement and continuous dialogue are the guiding principles in the relationship with its collaborators, especially in the field of professional development, training and internal communication.

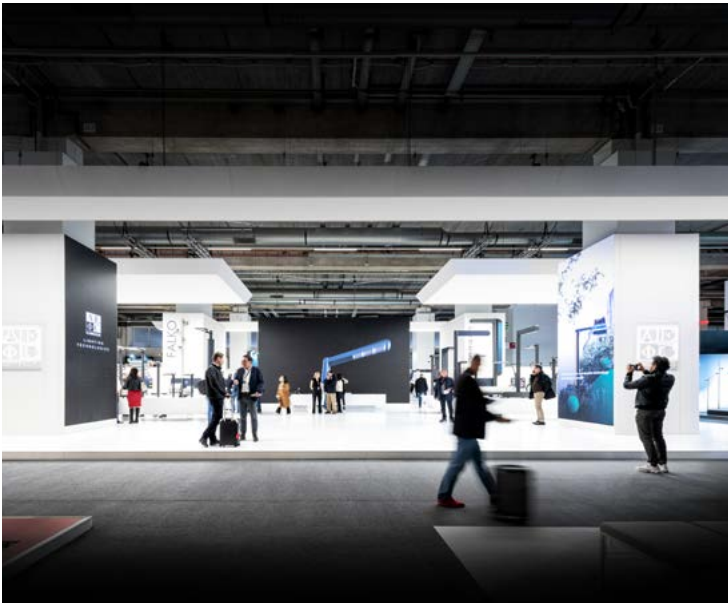
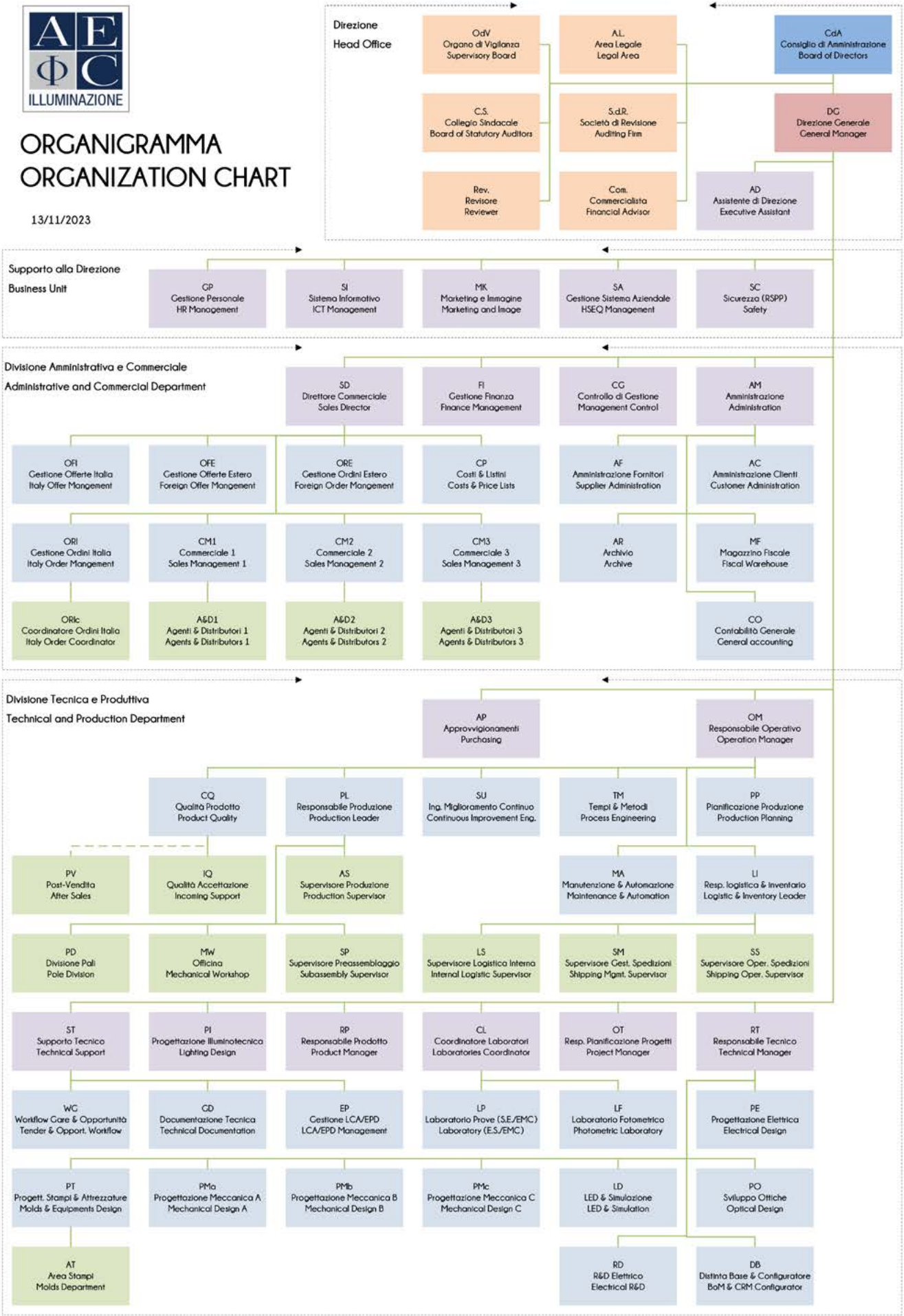
AEC Illuminazione recognizes the value of each of these, which together with its connection with the territory represent unique and distinctive elements of the company. For this reason, it is committed on a daily basis to improving the well-being of the people who contribute to company activities with their dedication, passion and professionalism, to satisfy their needs and enhance their diversity.

ORGANIZATION CHART

AEC Illuminazione, always committed to enhancing human resources, continuously promotes initiatives aimed at improving the efficiency and quality of work within the company, proactively responding to the growing demands of the market and the challenges of the industry.

Starting from the 2021–2022 biennium the company introduced some changes from the functional organization point of view. The main changes relate to the technical area where, in addition to the figure of the Project Manager already present, the figure of the Technical Manager has been introduced. All the Design and Research and Development Teams report directly to the latter.

In 2023, AEC Illuminazione continued to strengthen its organizational structure by reinforcing implemented functions and creating common, well-defined procedures. Under the supervision of the 'Logistic & Inventory Leader,' the role of 'Shipping Management Supervisor' was introduced, distinct from operational management. Additionally, the 'After Sales' function was consolidated to ensure more efficient post-sales





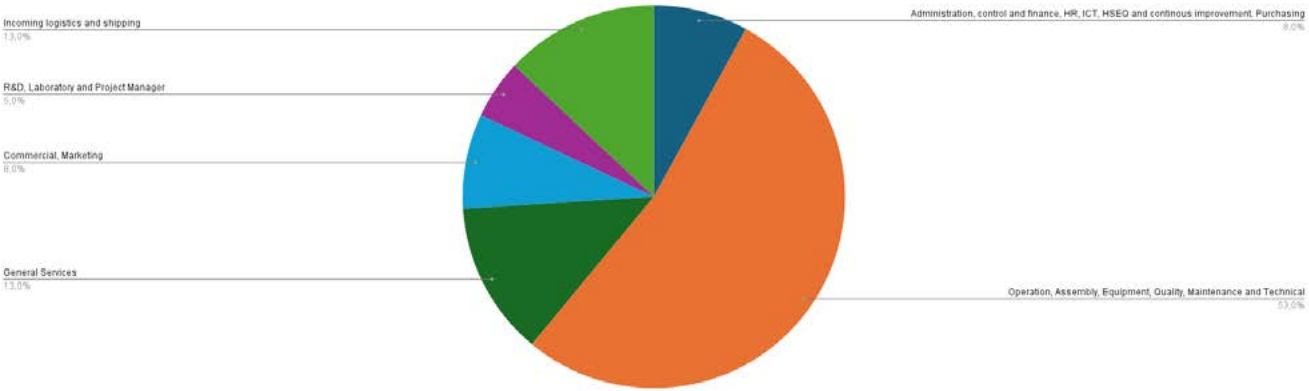
PERSONNEL OF  
AEC ILLUMINAZIONE

COMPOSITION OF STAFF

In 2023, 243 people contributed to the results of AEC Illuminazione, making up the staff as of December 31, 2023at the two offices, legal and operational and the local unit. Compared to the previous year, there was a reduction in headcount of 5 units, equal to 2% of the total. Most of the staff is distributed within the Operations area (54%). Of AEC Illuminazione staff, 63% fall into the worker category.



AREA/OFFICE DISTRIBUTION



DIVERSITY AND INCLUSION

2023 PERSONNEL BY AGE AND GENDER

	Women						Men					
	<30	%	30-50	%	>50	%	<30	%	30-50	%	>50	%
Middle	1	16,67%	1	16,67%	1	16,67%	-	0,00%	2	33,33%	1	16,67%
White-collar	6	6,90%	16	18,39%	1	1,15%	19	21,84%	39	44,83%	6	6,90%
Workers	-	0,00%	1	0,67%	3	2,00%	31	20,67%	88	58,67%	27	18,00%

The company is committed to guaranteeing fair treatment in all processes, starting from personnel selection, in accordance with the employees' ability to satisfy the requirements of their job, avoiding any form of discrimination and respecting human rights, freedom and the dignity of each person. Over the last two years, no incidents of discrimination have been recorded.

	2023					2022					2021				
	D	%	U	%	Totale	D	%	U	%	Totale	D	%	U	%	Totale
Middle	3	50%	3	50%	6	3	50%	3	50%	6	3	50%	3	50%	6
White Collar	23	26%	64	74%	87	22	26%	63	74%	85	22	26%	63	74%	85
Workers	4	3%	146	97%	150	4	3%	153	97%	157	4	2%	160	98%	164

AEC Illuminazione's workforce is made up of 12% women, 77% of whom belong to the white collar category. The average age of the staff is 39years. The largest percentage of managerial positions is made up of people between the ages of 30 and 50. The role is filled equally by men and women. Most of the staff come from the provincial and regional areas of Tuscany. 41% of the personnel have been working at AEC Illuminazione for less than 5 years, a figure that reflects the company's growth since 2018. The development path undertaken has inevitably required the hiring of new qualified staff to support the ongoing evolution and ensure the standards of excellence achieved by the organization. In particular, new resources have been integrated into AEC Illuminazione's key departments, from technical and assembly offices to administrative roles. This impacts the company's average seniority, which stands at 9 years.

Anni	Middle Managers	White collar	Worker
0-5	1	36	63
5-10	-	20	39
10-15	2	6	9
15-20	1	14	17
20-25	1	9	11
25-30	-	1	8
30-25	1	1	3

Approximately 6% of employees have been with the company for over 25 years, and about 29% have been working for more than 10 years.

TYPE OF CONTRACT

Of the 243 employees, 99% is permanent (30 women and 212men) and the remaining 1% is fixed-term (1 man). In the year 2023, 8 fixed-term contracts were transformed into permanent contracts: these are white-collar employees in the technical and R&S, and workers in the production area. in line with the company's policy of stabilizing the employment relationship.

	2023			2022			2021		
	D	U	Tot	D	U	Tot	D	U	Tot
Permanent Contract	30	212	242	28	213	241	26	195	221
Fixed term	-	1	1	1	6	7	3	31	34

Regarding the employees as a group, 98% has a full-time contract. The remaining 7 people have a part-time percentage ranging from a minimum of 52.5% to a maximum of 66.25% of the contractual full-time hours (average 56.87%).



PERSONNEL OF  
AEC ILLUMINAZIONE

HIRING NEW EMPLOYEES AND TURNOVER

With reference to the three-year period 2021-2022-2023, the percentages of incoming and outgoing workers divided by age and gender are shown in the table.

The new resources mainly junior staff with specific technical training and senior specialized professionals, serve to strengthen some offices and corporate areas and to replace lost resources.

EMPLOYEES BEING HIRED BY GENDER AND AGE GROUP

	<30		30-50		>50		Employees being hired %	
	W	M	W	M	W	M	W	M
2023	1	2	1	6	-	-	7%	4%
2022	1	11	-	5	1	-	7%	7%
2021	3	10	-	8	-	-	8%	11%

OFFBOARDING EMPLOYEES BY GENDER AND AGE GROUP

	<30		30-50		>50		Turnover %	
	W	M	W	M	W	M	W	M
2023	1	8	-	2	-	4	3%	6%
2022	1	13	-	6	1	4	7%	10%
2021	-	10	1	10	1	-	7%	10%

The employees who have left in the last year are categorized thus: retirements of staff in the production area, dismissals for just cause, and voluntary resignations, also linked to the trends characterizing the labor market in recent years.

THE ENHANCEMENT OF HUMAN RESOURCES:  
TRAINING AND DEVELOPMENT

The commitment of AEC Illuminazione to recognize the value of its human resources results in constant attention paid to the development and strengthening of staff, through the definition of growth paths.

In fact, the company is committed to internally sharing selection opportunities by enabling its employees to demonstrate interest and undertake new tasks. In 2023, two people changed their qualifications from the production department to the office.. This selection process serves in developing talents and aspirations, motivating, and maintaining human resources.

The activities carried out, associated with monitoring the performance of employees, are aimed not only at strengthening the relationship of trust and their motivation, but also at creating a stimulating and dynamic work environment, where everyone has the opportunity to express their potential.

The growth initiatives implemented in last two years 2022 and 2023 refer to the following actions:

Typology	2023	2022
Promotion	17	32
Transformation from fixed to permanent term	8	25

The enhancement of staff also comes about through training, which allows employees to acquire more and more competence and knowledge in order to understand and face change and external evolutionary conditions, develop new ideas and improve productivity, with benefits for the overall performance of the company as well.

In terms of training, the main objective pursued in 2023 by AEC Illuminazione was to consolidate the so-called “hard and soft skills”. In particular, due to the implementation of a new workflow management method, specific sessions on the topic have been conducted. Attention has been given to leadership and communication training for staff managing teams. Regarding training on hard skills, the company has been offering English courses for the past three years to ensure consistency and continuity in language proficiency. Furthermore, all staff are constantly informed and updated on the protection of safety at work, natural resources and the numerous company initiatives, through meetings, webinars and ad hoc courses.

An annual meeting is organized with supervisors and the external consultant to improve worker engagement on safety, environmental, and energy-related matters. During these occasions, updated guidelines for risk prevention and emergency procedures are shared, with the aim of ensuring greater awareness and alignment across all departments.

During the year, an **average of 5,52 h** was provided per employee, an increase of 16% compared to the previous year, distinguished by category:

Delivered training (h)	2023		2022		2021*	
	Female	Male	Female	Male	Female	Male
Middle managers	1	2	30	-	-	-
Employees	278	693	130	812	9	109
Workers	3	365	-	210	-	186

\* In 2021, the data uploaded to the new corporate training monitoring system is incomplete following the data transfer.

“A stimulating and dynamic working environment, where everyone has the opportunity to express **their potential**.”





WELL-BEING AND HEALTH OF EMPLOYEES

WELFARE INITIATIVES

AEC Illuminazione pays attention to the well-being and quality of life of its employees, committing itself to the implementation of actions aimed at improving their level of satisfaction, focusing on their gratification and a peaceful working environment.

SUPPLEMENTARY CONTRACT

AEC Illuminazione has an active second level agreement signed by the union, in addition to and improving on that provided for by the applicable national contract, with the provision of bonuses for the entire company upon achievement of specific criteria and objectives of turnover, presence and increase in productivity, profitability, quality, efficiency and innovation of production processes.

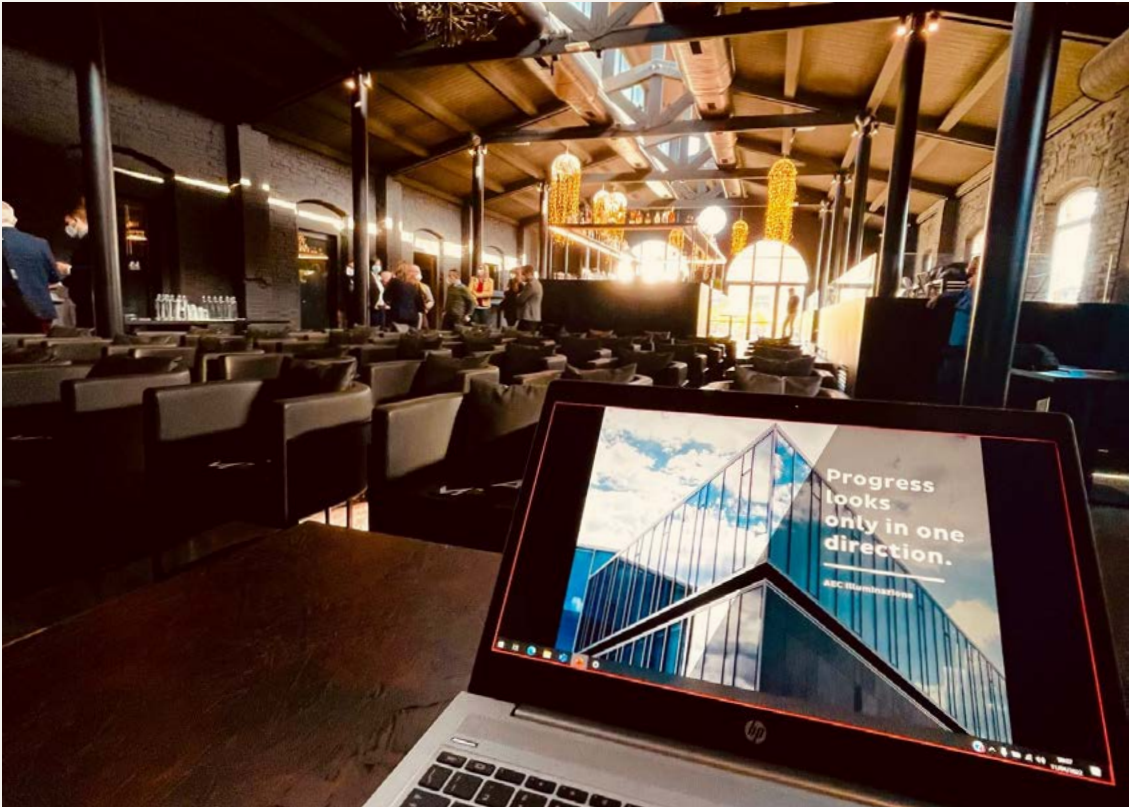
COMPANY CANTEEN

The company offers all employees a company area used as a refectory equipped with comforts for consuming their meals. Furthermore, all staff are given meal vouchers for each day they work at the plant.

HEALTH AND SAFETY MANAGEMENT SYSTEM

With regard to its employees, AEC Illuminazione is committed to ensuring a healthy and safe working environment, in accordance with the provisions of Legislative Decree no. 81/2008 and in compliance with the requirements of the ISO 45001:2018 Standard, pursuant to which since 2017 the company has adopted and certified a management system for health and safety at work.

The company has, therefore, defined and implemented all the essential actions and procedures to minimize risks to the health and safety of personnel, through the identification of hazards, the qualitative and quantitative assessment of risks, the planning of prevention and protection measures and the periodic monitoring

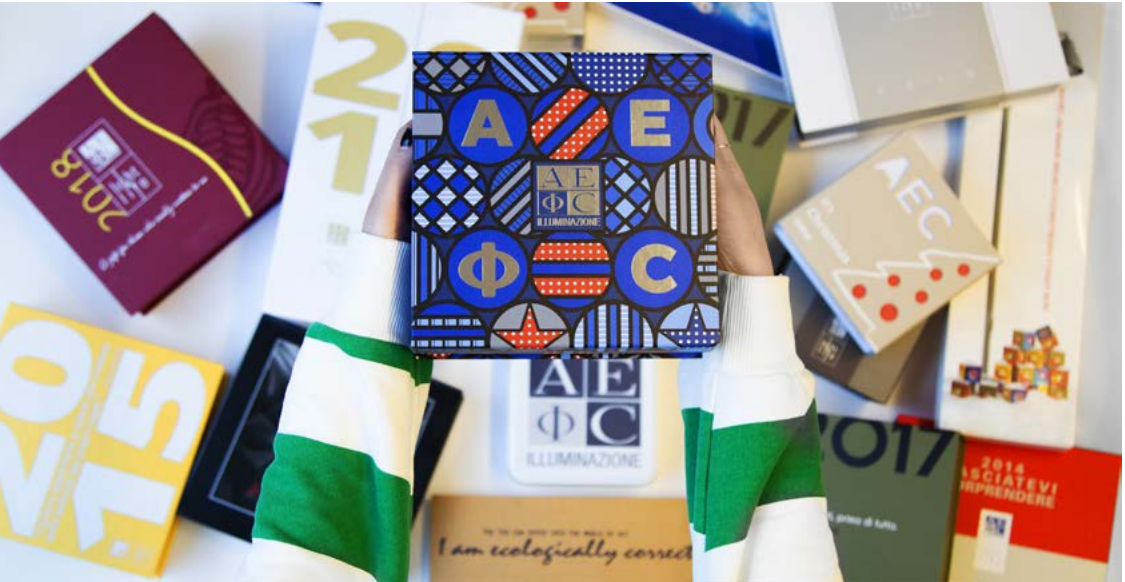


of their effectiveness. The ultimate goal is, in fact, to proactively improve its performance in terms of injury prevention.

From an organizational point of view and in compliance with regulatory requirements, the Head of the Prevention and Protection Service (RSSP) and the Competent Doctor were appointed by the employer, figures in charge of managing all aspects in the field of health and safety, from support to the preparation of the Risk Assessment Document (DVR), to the organization of the occupational medicine service. Workers, in the cases provided for by current legislation, are periodically subjected to medical examinations with the aim of ascertaining the state of health in relation to the work environment and occupational risk factors related to the job.

The workers, on the other hand, have identified three of their representatives (RLS), who have the task of monitoring the application of safety rules, reporting any risk situations and collaborating with the other designated figures and the employer for the preparation of the necessary protection and prevention measures.

In line with the provisions of the Law Decree 81/2001, AEC Illuminazione has included in its DVR a preliminary assessment of the risk related to work stress. In detail, the analysis provided for a first activity of categorization of workers by homogeneous groups. The survey, carried out through the use of a checklist, showed a low exposure of employees to risk from work-related



AEC pays attention to the well-being of its employees

OCCUPATIONAL HEALTH AND SAFETY TRAINING

Staff receive general or specific training, depending on the job performed, as provided for in the Risk Assessment Document (DVR). In 2023, first aid, safety and fire prevention courses were provided for a total of 1.019,5hours. The following table shows the breakdown of hours by gender and the comparison with last year. Note that the greater number of hours associated with the male gender is due to the presence of a greater number of men in the company. Most of them fall into the category of workers, for whom a higher number of hours of training is required than in the category of white-collar employees.

	2023		2022		2021	
	Female	Male	Female	Male	Female	Male
Health and Safety training: hours (h)	78	941,5	37,3	946,2	23	1.548

OCCUPATIONAL INJURIES

AEC Illuminazione cares for the protection of health and safety of its employees, and therefore monitors the incidence of injuries and accidents, with a view to analysing the causes and planning necessary corrective and preventive measures.

	Units	2023	2022	2021
Injuries	n	5	2	7
Excluded in itinere	n	4	-	6
Fatal injuries	n	-	-	-
Serious injuries	n	-	-	-
Days off due to injuries	h/gg	277	19	70
Excluded in itinere	h/gg	80	-	67
Work-related ill health	n	4	-	1

	Injury Rate <sup>1</sup>		
	2023	2022	2021
Injuries	11,80	4,54	14,92
Excluded in itinere	9,44	-	12,79

	Seriousness Rate <sup>2</sup>		
	2023	2022	2021
Injuries	0,54	0,04	0,15
Excluded in itinere	0,19	-	0,14

1 (N. of injuries / hours worked 1 x 1.000.000);

2 (days without injuries / working hours 1,000)



# THE ENVIRONMENTAL IMPACT OF AEC ILLUMINAZIONE

## COMMITMENT TO MANAGING ENVIRONMENTAL IMPACT

AEC Illuminazione is committed to ensuring effective and efficient management of environmental impacts arising from its activities, aiming to reduce or minimize them in each operation conducted at the Via Righi and Via Fermi facilities and in the production of its products.

Since 2016, maintaining its certified environmental management system in accordance with ISO 14001:2015, AEC Illuminazione has implemented a series of corporate procedures and monitoring systems to align its environmental performance with both national and European environmental regulations.

Furthermore, in 2021, activities were carried out to define and implement an Energy Management System in line with ISO 50001:2018. Over the past years, considering the growing need to adopt actions and policies to reduce the environmental impact of its activities, AEC Illuminazione has deeply reflected on its role in environmental protection.

This is why environmental management has become an integral part of the company's philosophy and culture, serving as a predominant factor in its development process and continuous improvement. This evolution in environmental responsibility entails, first and foremost, instilling the value of environmental sustainability among all collaborators and identifying initiatives and investments to reduce its impact within production processes, starting from the design phase focused on minimizing energy consumption and rationalizing material use.





# MATERIAL CONSUMPTION BY AEC ILLUMINAZIONE

## RAW MATERIALS AND THE ECO-DESIGN OF AEC ILLUMINAZIONE

AEC Illuminazione has always been committed to using its materials as efficiently as possible, as well as taking into account the negative impacts on the environment and on human health. The company, in compliance with Regulation (EU) 2019/2020, has adjusted its design process of lighting fixtures. The regulatory measure was issued as part of the European Community's efforts to promote energy efficiency and sustainability in the lighting sector. It establishes specifications and technical requirements that must be respected for products marketed in the European Union in order to reduce environmental impact and promote the use of energy-efficient technologies. The legislative act is based on the three fundamental concepts of accessibility, removal and replacement, which encourage the ease of access and maintenance of products, the possibility of removing them easily when necessary and the ability to replace specific components, thus favouring their durability, reparability and recyclability. AEC Illuminazione has made available to customers, (also through publication on the company website on the dedicated page), <https://www.aecilluminazione.com/ecodesign-guideline-public-lighting/>, the guidelines drawn up in accordance with Regulation (EU) 2019/2020 that describe the operations to be performed for the replacement and removal of some components and give an indication of the methods of disposal.

With particular reference to plastic materials, the company is strongly committed to minimizing their use for the realization of its lighting fixtures. The use is on average not more than 4% of the total components.

The following table shows the raw materials used in the production process, divided by category:  
The data collected do not include other semi-finished components

Non-renewable raw materials used (kg)				
Material Type	2023	2022 <sup>1</sup>	2021	
Steel	1.442.790	1.244.000	2.336.892	
Iron	395.350	288.604	441.161	
Stainless	28.170	25.640	39.277	
Brass	49	49	3.608	
Glass	251.731	279.852	1.181	
Recycled raw materials (% kg)	74%	57%	67%	

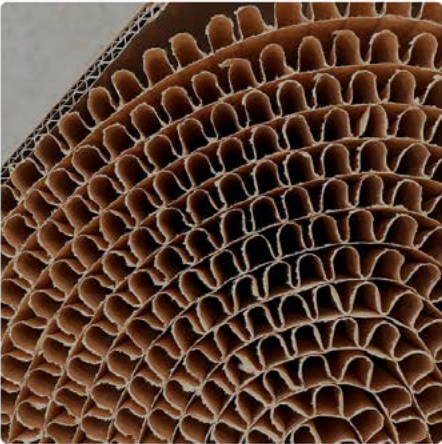
making up the final product because they are not available at the time of preparation of this Financial Statement. Starting in 2023, AEC Illuminazione plans to implement a structured collection system with the aim of improving the process of acquiring this information. In 2023, the overall weight of materials was approximately 15% higher than in 2022, mainly due to the need to increase raw material inventory. This is evident when comparing data from the previous three years, particularly regarding the use of aluminum and iron. Additionally, the percentage of raw materials sourced from recycling increased from 57% in 2022 to 74% in 2023. This significant growth was driven by the company's commitment to engaging suppliers, who, for purchases made in 2023, provided a self-declaration regarding the percentage of recycled content in the materials supplied.

Over the years, AEC has sought increasingly low environmental impact

## PACKAGING WITH REDUCED ENVIRONMENTAL IMPACT

Packaging plays a critical role in protecting AEC Illuminazione's materials and products, especially during distribution and shipping to customers. But the environmental impact associated with their production and use can be significant. Their management represents for AEC Illuminazione a fundamental aspect in pursuing its commitment to the environment. For this reason, the company has researched and adopted over the years increasingly effective solutions with a low impact on the environment. In this regard, an activity that has recorded a positive impact over the years both in environmental terms and with respect to the minimum standards of protection of packaged products, is related to the design of paper and cardboard boxes. The process, which has now become part of the company's daily operations, provides for a continuous improvement in terms of packaging efficiency, designing the size and shape most suitable for the product to be contained. In 2023, the use of paper and cardboard boxes is slightly reduced

Replacing plastic with an environmentally sustainable alternative



compared to the previous year, by approximately 3%. Instead, the use of packaging composed of 100% recycled paper has remained nearly constant by 7%, constituting about 98% of the total. The percentage guarantees the company the highest possible efficiency, which takes into account the essential technical requirements of resistance required for some products, which are essential to ensure their protection during transport and handling. The significant increase in the percentage of boxes made from 100% recycled paper, with a rise of over 5 percentage points between 2021 and 2022, was achieved through a strategic request made to the supplier to increase the recycled content. This improvement was further stabilized in 2023. Among the objectives of the company is to maintain the standard achieved, without neglecting the proactive commitment to

identify further solutions and innovative improvements. Since 2022, in order to protect and cushion products during their transport and shipping, AEC Illuminazione uses cushionPaper™, a packaging solution that is based on the use of layers of light paper, coupled with a wavy texture. In addition to the ability to absorb shock and thus reduce the risk of damage to products, it also offers advantages in terms of weight and space. Compared to other heavier packaging materials such as polyurethane foam or expanded polystyrene, cushionPaper™ is lighter, which can help reduce the total weight of the package and, consequently, the CO2 associated with their transport. In addition, to wrap palletized goods AEC Illuminazione uses an alternative solution to traditional stretch film, TRIOLOOPTM made of 51% post-consumer recycled

plastic. ENVIRONMENTAL LABELLING In compliance with the Italian regulations on Environmental Labelling, AEC Illuminazione has made available to all its customers (also through the publication on its company website at <https://www.aecilluminazione.it/etichettatura-ambientale/>), a document containing information on the material classification of packaging and the correct conferment of the same at the end of life, so as to facilitate the end user in separate collection.

A more sustainable solution than traditional stretch film



Years	No. Boxes	% of boxes made from 100% recycled paper
2023	387.290	97,95%
2022	397.953	96,99%
2021	393.131	91,50%

<sup>1</sup> Data for 2022-2021 have been updated and optimized by improving the internal registration process, ensuring greater accuracy and reliability of information.



MATERIAL CONSUMPTION  
BY AEC ILLUMINAZIONE

OFFICE ACTIVITIES: CONSUMPTION OF PAPER,  
TONER AND CARTRIDGES

In line with its commitment to the constant reduction of its consumption related to office activities, AEC Illuminazione promotes a conscientious use of office paper among its employees by encouraging the use of digital document sharing and printing only when strictly necessary.

In 2023, office paper purchases decreased by approximately 47% compared to the previous year, thanks to the use of existing stock accumulated in prior years. Additionally, there was no need to purchase new plotter paper, as the existing stock fully met the company's needs for 2023

Years	Ream (n.)	Weight in tons	Plotter paper (n.)	weight in tons
2023	1.045	28,19	-	-
2022	2.000	51,89	12	0,49
2021	1.760	45,78	8	0,33

On the other hand, the purchase of toner and printer cartridges has increased by 27%, justified by the need to replenish stock. Despite the increase recorded in 2023, the overall three-year trend shows a significant decrease compared to 2021. This trend reflects the effectiveness of the consumption rationalization and optimization initiatives implemented by the company in recent years.

Years	Purchase of toner and cartridges (no.)
2023	33
2022	26
2021	57

“**ECODESIGN:**  
**AEC's commitment to**  
**responsible design.**”

WASTE MANAGEMENT

The activity carried out by the company involves the inevitable production of a significant amount of waste that AEC Illuminazione has always managed based on the procedures and instructions of its integrated management system and in accordance with the provisions of national and regional environmental legislation.

Consistent with the company's policy and the requirements of the Eco-design Directive, the company invests heavily in the design process of its products, which is aimed at maximizing their recyclability and ensuring efficient recovery of materials from waste. The generated waste, which is assigned the relevant CER code (European Waste Code), is placed in storage areas, separated according to whether it is hazardous or non-hazardous. Subsequently the same are collected and transported by authorized companies to specialized centres for their treatment (disposal or recovery).

The waste directly produced by AEC Illuminazione in 2023 is largely non-hazardous, that is, about 97% of the total. The percentage is in line with the data for the previous year. During the two-year period, the percentage of waste destined for recovery is on average 78%.

Waste by type and disposal (kg)	2023	2022	2021
Waste from production			
Not Dangerous	259.885	327.736	410.554
Recovery	205.994	249.505	332.053
Disposal	53.891	78.231	78.501
Dangerous	8.835	21.523	30.270
Recovery	7.335	10.054	16.271
Disposal	1.500	11.469	13.999
Toner			
Not Dangerous	53	62	70
Recovery	53	62	70

MEMBERSHIP OF THE ECOLIGHT CONSORTIUM

In compliance with the legislation on Extended Producer Responsibility for WEEE (waste electrical and electronic equipment), AEC Illuminazione has joined the Ecolight Consortium. The latter, established in 2004, is a national non-profit consortium that operates throughout Italy and Europe for the management of WEEE, batteries and accumulators at the end of life; it manages all the collection, treatment and disposal of waste, through a network of authorized companies.

ENERGY CONSUMPTION

With regard to energy issues, AEC Illuminazione has integrated its company policy with its commitments on the management and continuous improvement of the energy performance of its production process and products.

The attention towards an efficient management of its energy consumption has led AEC Illuminazione to undertake actions aimed both at raising awareness and adopting responsible behaviour by all company personnel, and investments in technologies that lead to a reduction in energy consumption of the products made.

The following data refer to the plants in Via Righi and Via Fermi and relate to the operation of machinery used for production, the air conditioning and heating system for the premises, the lighting system and the various computer devices used for office activities, and the activity of the internal laboratory for the execution of tests. Finally, fuel consumption is used for the company fleet, which consists of both vehicles for transporting goods and finished products across the national territory, and cars used for commercial and representational purposes. **Energy intensity** ratios define " energy consumption in the context of an organization-specific parameter." For AEC Illuminazione, the index was calculated using Full-Time Equivalent (FTE)<sup>3</sup> units and the hours actually worked, in order to contextualize the energy efficiency of the company compared to the electricity and methane purchased.

<sup>3</sup> Full-Time Equivalent (FTE) units represent the number of full-time equivalent workers, taking into account the actual hours worked.



Electricity Purchased	kWh	GJ	Per employee	Per actual hours worked
2023	1.841.184	6.628,26	7.576,89	4,344
2022 <sup>5</sup>	2.016.210	7.258,36	7.906,70	4,577
2021	2.436.481	8.771,33	9.554,83	5,192

Self-Consumed Electricity	kWh	GJ	Per employee	Per actual hours worked
2023	416.673	1.500,02	1.714,70	0,983
2022	328.260	1.181,74	1.287,29	0,745
2021	266.049	957,78	1.043,33	0,567

THE ENVIRONMENTAL IMPACT OF AEC ILLUMINAZIONE

ELECTRICITY

Compared to the previous year, in 2023 there was a 9%reduction in the consumption of purchased electricity. The result was driven both by the expansion of the facility, which required an increase in energy resources, and by the installation of 2 new photovoltaic systems, which significantly contributed to improving the overall energy efficiency of the company. These initiatives allowed for increased production capacity while supporting the commitment to a more sustainable approach. AEC constantly raises awareness among its staff, by sharing practical advice and information on the benefits in terms of energy savings were shared, involving employees in adopting more responsible behaviour. AEC Illuminazione has a total of 3 photovoltaic systems, operating on a net metering basis, installed at the headquarters on Via Righi and 2 more at the branch office on Via Fermi. In 2023, with the addition of the new systems, electricity production increased significantly, reaching an average of 47,055 kWh per month. This resulted in a 61% increase in electricity produced compared to the previous year. Below is a graphic view of the comparison between the energy purchased from the grid and that produced by photovoltaic systems.

COMPARISON OF PURCHASED AND SELF-GENERATED ELECTRICITY



<sup>5</sup> consumption data per employee and actual hours worked for 2022 and 2021 have been updated following an internal review of recording this information, compared with the sustainability report previously published.

NATURAL GAS (METHANE) FOR HEATING

Natural Gas (Methane)	smc	GJ	Per employee	For actual hours worked
2023	55.999	1.985,56	230,45	0,132
2022 <sup>6</sup>	77.035	2.722,19	302,10	0,175
2021	94.893	3.347,92	372,13	0,202

From the measurement of methane for the last three years, in 2023 there was a decrease in consumption of 27% compared to the previous year mainlydue to the higher outdoor temperature in2023.

FUEL CONSUMPTION

Yeas	Litres	GJ
2023	65.995,86	2.362,58
2022 <sup>7</sup>	67.947,16	2.432,44
2021	72.349,60	2.590,04

Conversion to GJ  
Table of National (Italian) Standard Parameters for Fuels and Materials

For the calculation of consumption data, the annual fuel costs incurred were divided by the average consumer diesel prices. In 2023, recorded consumption decreased by 3% compared to the previous year. This reduction was primarily influenced by a significant 11% drop in consumption related to employee transfers, which had the greatest impact on the overall result. Conversely, consumption for freight transport showed minimal variation, with a total increase of 0.9%.

“AEC is committed to continuously improving the energy performance of its production processes.”

<sup>6</sup> 2022 data updated to include methane supplier billed adjustments in 2023 bills.  
<sup>7</sup> 2022-2021 data were updated through rounding of the estimate, thus improving the accuracy of the final results.



THE ENVIRONMENTAL  
IMPACT OF AEC ILLUMINAZIONE

CO<sub>2</sub> EMISSIONS

Air pollution is one of the major drivers of global climate change. This phenomenon is closely linked to the increase in the greenhouse effect, which results from the presence and proportion of greenhouse gases in the Earth's atmosphere. The greenhouse effect itself is a fundamental natural process for maintaining climatic conditions suitable for life, since it retains part of the heat coming from the sun. However, due to human activities, the balance of greenhouse gases in the atmosphere has been significantly altered. The massive emission of carbon dioxide (CO<sub>2</sub>), mainly from the combustion of fossil fuels such as coal, oil and natural gas, is one of the main contributors to the increase in the greenhouse effect. The result is a rise in global temperatures, known as global warming, with negative consequences on the environment and human life.

It is therefore essential to take concrete measures to mitigate the greenhouse effect and limit climate change. Companies, in particular, can play a significant role in the fight against climate change through the implementation of efficiency strategies and business innovation, especially in production processes. It is essential to assess the organization's carbon footprint, which includes all direct and indirect greenhouse gas emissions related to business activities, in order to identify the most effective improvement actions. AEC Illuminazione in its first sustainability report assessed the impact of its CO<sub>2</sub> emissions, both direct and indirect.

The calculation includes:

**Direct emissions of Scope 1**, deriving from stationary combustion (generated by the combustion of natural gas for office heating) and mobile combustion (generated by the company fleet: vehicles for the transport of goods and semi-finished products and cars used for commercial and technical needs). There were no fugitive emissions of refrigerant gases. **Scope 2 emissions**, which come from electricity consumption, purchased from the national grid and used in company locations. The calculation, based on the GHG Protocol Scope 2 Guidance, complies with two approaches:

- location-based method: it determines greenhouse gas



emissions from the production of purchased energy based on average grid emission factors and without considering supplier-specific information or any supply contracts entered into by the company.

- market-based method: Calculate greenhouse gas emissions by taking into account the company's specific energy sourcing choices, using the emission factors associated with energy supply contracts or green energy certificates (such as Guarantees of Origin). For energy not covered by such contracts, emissions are calculated using the Residual Mix, which represents the residual energy mix of the electricity grid.

Direct Emissions - Scope 1 (tCO <sub>2</sub> )	2023	2022	2021
Natural Gas	112,22	153,38	188,17
Fuel	174,63	179,80	191,45
Indirect Emissions - Scope 2 (tCO <sub>2</sub> )	2023	2022	2021
Emissions from electricity consumption	472,45	619,78	661,75
(Location Based Method)			
Emissions from electricity consumption	921,64	921,71	1.112,42
(Market Based Method)			

For the calculation of emissions for each year of the 2021-2022-2023 triennium, the following sources were used:  
Conversion to GJ  
Direct emissions (Scope 1): DEFRA-National fuel-material standard parameters table  
Indirect emissions (Scope 2):  
- Location-based: National Inventory Report - Italian Greenhouse Gas Inventory  
- Market-based: European Residual Mixes - "AIB"

THE ENVIRONMENTAL  
IMPACT OF AEC ILLUMINAZIONE

GHG EMISSION INTENSITY INDEX

AEC Illuminazione reported the greenhouse Gas emission intensity index (GHG): the result was obtained by comparing the sum of CO<sub>2</sub> emissions (Scope 1 and Scope 2) to the total number of employees and hours worked.

Per Employee				
	uom	2023	2022	2021
GHG emitted per employee - Scope 1	tCO <sub>2</sub> e	1,180	1,307	1,489
GHG emitted per employee - Scope 2	tCO <sub>2</sub> e	1,944	2,431	2,595
Location Based Method				
GHG emitted per employee - Scope 2	tCO <sub>2</sub> e	3,793	3,615	4,386
Market Based Method				
For actual hours worked				
	uom	2023	2022	2021
GHG emitted for actual hours worked - Scope 1	tCO <sub>2</sub> e	0,0007	0,0008	0,0008
GHG emitted for actual hours worked - Scope 2	tCO <sub>2</sub> e	0,0011	0,0014	0,0014
Location Based Method				
GHG emitted for actual hours worked - Scope 2	tCO <sub>2</sub> e	0,0022	0,0021	0,0024
Market Based Method				

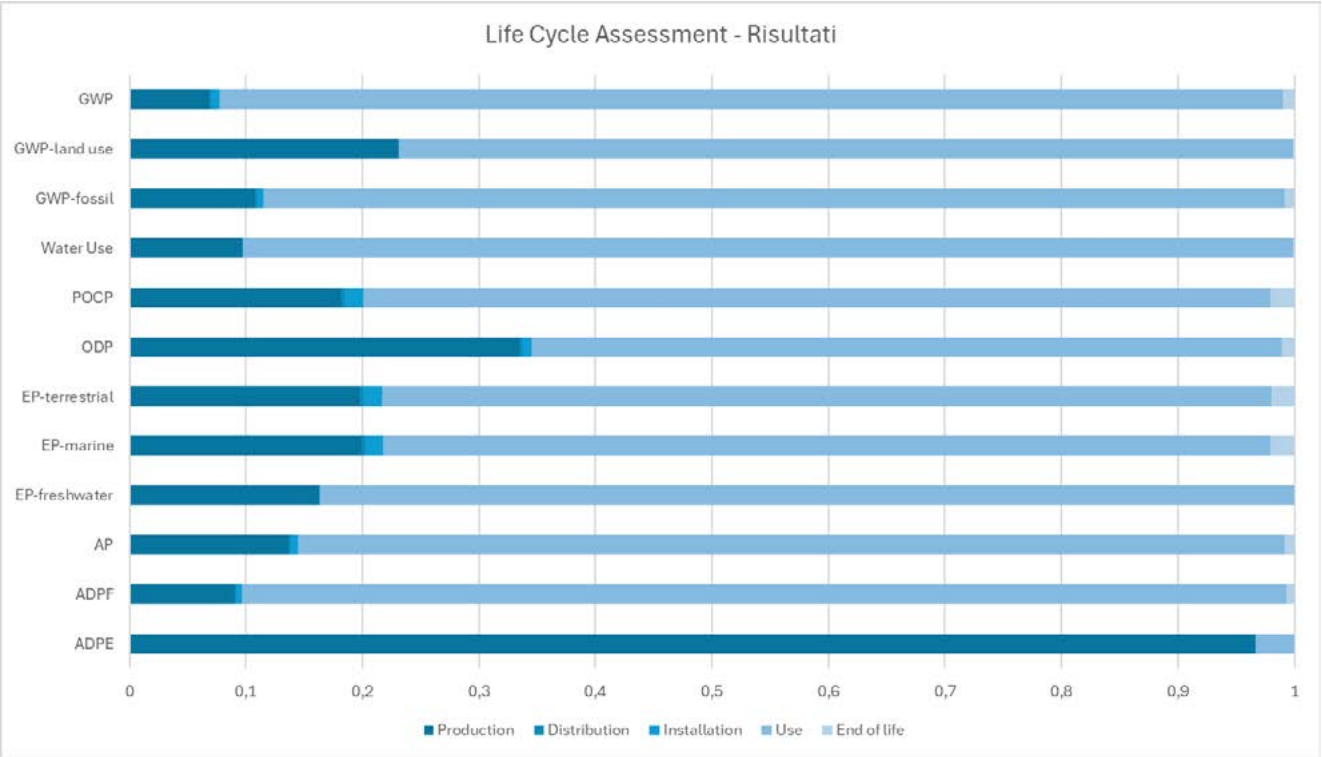


LIFE CYCLE STUDY WITH LCA METHODOLOGY, LIFE CYCLE ASSESSMENT

In 2022 AEC Illuminazione carried out a Life cycle study (LCA, Life C Assessment) for its leading products. The achievement of EPD certification (Environmental Product Declaration) is planned for 2024. It is a methodology, based on the "cradle-to-grave" approach and in accordance with the ISO 14040:2006 standard, used by the company to assess the environmental impact of its products throughout their life cycle, from the extraction phase of raw materials, to their transport, processing and assembly, up to the disposal and recovery of the main components. Therefore, the collection of data, the evaluation of the weight and quantities of each component and the packaging used were prepared. The measurement was carried out with reference to the transport distances in the supply and distribution phase, the production process of the company, the installation phase of the device, the use and end of life of the products, including transport for the subsequent recycling of recovered materials.



The following graph shows the main indicators of the analysis. The results obtained show that the greatest impacts occur in the use phase, although the second predominant phase is that of production, mainly due to the raw materials that make up the device.



### WATER CONSUMPTION

The water consumption reported mainly refers to the use of sanitation by staff and irrigation of outdoor spaces. Both facilities are supplied by wells, but only the headquarters on Via Righi is also supplied by the municipal water system, though exclusively for drinking purposes

The following table shows the water consumption by type of tapping for both locations.

Values in cubic meters	2023	2022	2021
Groundwater	13.910	15.761	16.518
Third-party water resources	1.621	1.557	298

AEC Illuminazione has installed drinking water dispensers in various areas of the company that are available to all staff. In order to raise awareness of a reduced consumption of plastic, the company also distributed a stainless-steel water bottle to all its employees.



<sup>9</sup> In addition to those depicted in the graph, the company measured additional environmental indicators, relating to the use of renewable and nonrenewable material resources, renewable and nonrenewable energy renewable and nonrenewable primary resources, and water and waste produced, human toxicity, and human exposure to the release of radioactive material.



# COMMITMENT TO THE TERRITORY BY AEC ILLUMINAZIONE

## DEVELOPMENT OF PARTNERSHIP

### Membership in trade associations

AEC Illuminazione is associated with ASSIL, the National Association of Lighting Manufacturers, which brings together companies producing electrical lighting fixtures and components, light sources and LEDs, which are active on the Italian market. The membership aims to encourage dialogue and discussion on a wide range of issues, ranging from technical disclosure and networking to improving the quality and performance of the products. The mission of the association, in fact, is to represent, protect and offer support to member companies, with the aim of promoting the growth of a high-quality lighting industry, based on innovation and internationalization.



### Partnership between AEC, Confindustria Toscana, and the University of Siena

In 2023, AEC Illuminazione initiated a partnership with the University of Siena, further strengthening its commitment to innovation and sustainability. This collaboration is part of the platform created by Confindustria Toscana Sud and the University of Siena called "Univer-so-impresa," an initiative aimed at creating an effective bridge between the academic and industrial worlds. The initiatives emerging from this collaboration will lead to active participation by AEC Illuminazione in the academic world with the goal of promoting innovation and student training by sharing its technical and technological know-how. This synergy will not only foster the development of innovative solutions in the field of public and industrial lighting, but will also support sustainable and responsible growth, in line with the Sustainable Development Goals (SDGs).

### AEC ILLUMINAZIONE LOCAL COMMITMENT

Historically AEC Illuminazione has always given particular importance to its link with the territory in which it was born and currently operates. This implies a deep sense of responsibility and a willingness to positively impact people and the local community. Over the years, in fact, the company has contributed to the economic growth of the territory, promoting local employment and favouring the development of partnerships and collaborations with local entities and partners. In addition to the economic field, during 2022 AEC Illuminazione supported various social and cultural initiatives with the aim of raising awareness among the community on issues related to environmental protection:

#### 100% recycled paper Notebooks

AEC Illuminazione donated personalized notebooks made with 100% recycled paper to the children of the elementary schools of Subbiano. Through the initiative, the company wanted to convey a clear message of environmental responsibility, with the aim of making children feel an active part of change and encouraging them to adopt more responsible behaviours towards the environment.



#### Stainless steel water bottles: stop using plastic

AEC Illuminazione has given the elementary schools of the territory stainless steel water bottles, the # KIDSBOTTLES. They represent a practical and reusable solution intended to promote not only the importance of daily hydration, but also to play an important role in educating children and adults about the consequences of using and disposing of single-use plastic bottles. The aim is to encourage a change of mentality and daily habits, towards a more responsible use of resources, starting from the little ones.

#### Initiative with Mumec Museum di Arezzo

The University of the third age in Subbiano, together with the Mumec Museum of Arezzo, visited the plant of AEC Illuminazione and witnessed a historical re-enactment representing the first electric ignition in Italy, which took place in 1853. The comparison between antiquity and modernity was an opportunity for participants to reflect on the progress and evolution of technologies, highlighting how electricity has revolutionized societies and the life of each person over the centuries and showing how history can inspire and guide current innovations.

#### ITIS in Bibbiena

AEC Illuminazione invited the ITIS high school of Bibbiena (AR) and its students to its establishment. The state-of-the-art plants and machinery that the company is equipped with were shown and the entire production process of public lighting systems was explained. Subsequently, a moment of technical in-depth analysis was organized, focused on the design process of a lighting body, showing how this is conceived, developed and produced.

#### Surveyor School in Arezzo

The students of the Fossombroni Institute in Arezzo visited AEC Illuminazione during the construction phase of the new company plant. This visit was organized with the aim of offering students a direct training experience in the field. Guided by the company administrator, in fact, the students had the opportunity to explore the construction site and closely observe the different phases of construction.

#### Subbiano Marathon

AEC Illuminazione actively participates in numerous sports initiatives and supports the country's team, Subbiano Marathon, as its official sponsor during important running competitions, including the Green Cup. On the occasion all the runners received various gadgets from the company.

#### Collaboration with Social Cooperative "Il Cenacolo"

AEC Illuminazione, committed to promoting the social sustainability of the local community in which it operates, has established a significant collaboration with the Social Cooperative "Il Cenacolo". Founded in 1987, the same is dedicated with determination to facilitate the employment of people with disabilities. Through this partnership, AEC Lighting demonstrates a strong commitment to social inclusion and equal employment opportunities. By entrusting some work orders to the Cooperative within the framework of an agreement pursuant to Law 68/99, the company concretely offers significant job opportunities to people who might otherwise encounter difficulties in accessing the labour market. The cooperative, in turn, is passionately dedicated to ensuring a decent and inclusive work environment, respecting human rights and promoting the autonomy of people with disabilities.



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GRI CONTENTS

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GRI 1 USED GRI 1: Foundation 2021

DISCLOSURE	LOCATION
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GRI 2: General Disclosures 2021

2-1 Organizational details	Methodological note; Board of directors
2-2 Entities included in the organization's sustainability reporting	Methodological note
2-3 Reporting period, frequency and contact point	Methodological note
2-4 Restatements of information	Revisions were made only for the environmental part, to align the calculation methodology and to improve the data collection process. They are appropriately reported in the document.
2-5 External assurance	The Sustainability Report is not subject to Assurance activities.
2-6 Activities, value chain and other business relationships	Value Chain AEC Illuminazione
2-7 Employees	Staff composition - Diversity and inclusion - Type of contract.
2-9 Governance structure and composition	Governing body
2-10 Nomination and selection of the highest governance body	Governing body
2-11 Chair of the highest governance body	Governing body
2-12 Role of the highest governance body in overseeing the management of impacts	Risk management
2-13 Delegation of responsibility for managing impacts	Risk management
2-14 Role of the highest governance body in sustainability reporting	Methodological note
2-15 Conflicts of interest	<a href="https://www.aecilluminazione.it/modello-231-e-codice-etico/">https://www.aecilluminazione.it/modello-231-e-codice-etico/</a>
2-16 Communication of critical concerns	Methodological Note - Supervisory Body (SB) and whistleblowing
2-18 Evaluation of the performance of the highest governance body	Currently, no procedures have been implemented to evaluate the performance of the members of the highest governing body regarding the management of ESG impacts.
2-22 Statement on sustainable development strategy	Letter to stakeholders
2-23 Policy commitments	Integrated Quality, Environment, Safety and Energy Policy - Vision, Missio and Company Manifesto - Code of Ethics
2-24 Embedding policy commitments	Integrated quality, environment, safety and energy management system - Organization, Management and Control Model ex Legislative Decree 231/2001
2-25 Processes to remediate negative impacts	Supervisory body (SB) and whistleblowing - Customer satisfaction
2-26 Mechanisms for seeking advice and raising concerns	Supervisory body (SB) and whistleblowing - Customer satisfaction
2-27 Compliance with laws and regulations	Compliance with standards
2-28 Membership associations	Membership in the Ecolight consortium - Membership in trade associations.
2-29 Approach to stakeholder engagement	Stakeholder mapping and engagement
2-30 Collective bargaining agreements	Contract type
GRI 3: Material Topics 2021	3-1 Process to determine material topics 3-2 List of material topics
MATERIAL TOPIC: Growth and profitability	
GRI 201: Economic Performance 2016	3-3 Management of material topics 201-1 Direct economic value generated and distributed
GRI 204: Procurement Practices 2016	3-3 Management of material topics 204-1 Proportion of spending on local suppliers

DECLARATION OF USE

AEC Illuminazione has reported the information cited in this GRI content index for the reference period.





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MATERIAL TOPIC: Business ethics and anti-corruption		
GRI 205: Anti-corruption 2016	3-3 Management of material topics	Ethics and integrity of business
	205-3 Confirmed incidents of corruption and actions taken	Compliance with standards
GRI 207: Tax 2019	3-3 Management of material topics	Taxation approach
	207-1 Approach to tax	Taxation approach
	207-2 Tax governance, control, and risk management	Risk management - Approach to taxation
	207-3 Stakeholder engagement and management of concerns related to tax	Taxation approach
GRI 206: Anti-competitive Behavior 2016	3-3 Management of material topics	Compliance with standards
	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Compliance with standards
MATERIAL TOPIC: Sustainable use of resources		
GRI 301: Materials 2016	3-3 Management of material topics	L'impegno nella gestione degli impatti ambientali - Consumo materiali
	301-1 Materials used by weight or volume	Commitment to the management of environmental impacts - Material consumption
	301-2 Recycled input materials used	Material consumption
	301-3 Prodotti recuperati e i relativi materiali di confezionamento	Material consumption
GRI 303: Water and Effluents 2018	3-3 Management of material topics	Material consumption
	303-1 Interactions with water as a shared resource	Water consumption
	303-3 Water withdrawal	Water consumption
	303-5 Water consumption	Water consumption
GRI 306: Waste 2020	3-3 Management of material topics	Water consumption
	306-1 Waste generation and significant waste-related impacts	Waste management
	306-2 Management of significant waste-related impacts	Waste management
	306-3 Waste generated	Waste management
	306-4 Waste diverted from disposal	Waste management
	306-5 Waste directed to disposal	Waste management
MATERIAL TOPIC: Energy transition and efficiency		
GRI 302: Energy 2016	3-3 Management of material topics	Energy consumption
	302-1 Energy consumption within the organization	Energy consumption
	302-2 Energy consumption outside of the organization	Fuel consumption
	302-3 Energy intensity	Energy consumption
	302-4 Reduction of energy consumption	Energy consumption
MATERIAL TOPIC: Climate change mitigation		
GRI 305: Emissions 2016	3-3 Gestione dei temi materiali	Commitment to managing environmental impacts; Product lines and applications; CO <sub>2</sub> emissions
	305-1 Direct (Scope 1) GHG emissions	CO <sub>2</sub> emissions
	305-2 Energy indirect (Scope 2) GHG emissions	CO <sub>2</sub> emissions
	305-4 GHG emissions intensity	CO <sub>2</sub> emissions
MATERIAL TOPIC: Employment and labour relations		
GRI 401: Employment 2016	3-3 Management of material topics	Recruitment of new employees and Turnover
	401-1 New employee hires and employee turnover	Recruitment of new employees and Turnover
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	Welfare initiatives





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MATERIAL TOPIC: Occupational health and safety		
	3-3 Management of material topics	Workplace health and safety management system
	403-1 Occupational health and safety management system	Workplace health and safety management system
	403-2 Hazard identification, risk assessment, and incident investigation	Workplace health and safety management system
	403-3 Occupational health services	Workplace health and safety management system
	403-4 Worker participation, consultation, and communication on occupational health and safety	Workplace health and safety management system
GRI 403: Occupational Health and Safety 2018	403-5 Worker training on occupational health and safety	Occupational health and safety management system - ENEC and DEKRA certifications
	403-6 Promotion of worker health	Occupational health and safety management system - ENEC and DEKRA certifications
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Occupational health and safety management system - ENEC and DEKRA certifications
	403-8 Workers covered by an occupational health and safety management system	Workplace health and safety management system
	403-9 Work-related injuries	Injuries
	403-10 Work-related ill health	Injuries
MATERIAL TOPIC: Human resources development and training		
	3-3 Management of material topics	The enhancement of human resources: training and development
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	The enhancement of human resources: training and development
	404-2 Programs for upgrading employee skills and transition assistance programs	The enhancement of human resources: training and development
MATERIAL TOPIC: Diversity management and anti-discrimination		
	3-3 Management of material topics	Governing Body - Diversity and Inclusion.
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Governing Body - Diversity and Inclusion.
	3-3 Management of material topics	Diversity and Inclusion
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	Diversity and Inclusion
MATERIAL TOPIC: Protection of customer health and safety		
	3-3 Management of material topics	ENEC and DEKRA Certifications - AEC Lighting laboratory certifications and accreditation.
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	ENEC and DEKRA Certifications - AEC Lighting laboratory certifications and accreditation.
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Compliance with standards
MATERIAL TOPIC: TRANSPARENT COMMUNICATION		
	3-3 Management of material topics	Product lines and applications
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	Product lines and applications
	417-2 Incidents of non-compliance concerning product and service information and labeling	Compliance with standards
	417-3 Incidents of non-compliance concerning marketing communications	Compliance with standards





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FURTHER MATERIAL TOPICS (not covered by GRI)	REFERENCE PARAGRAPH
Pollution prevention	Commitment to managing environmental impacts; Membership in the Ecolight Consortium; Integrated business management system
Management risk	Management risk
Sustainability strategy and goals	Letter to stakeholders
Corporate governance management	Governance structure and composition
Customer support services	Marketing and sales
Customer support services, complaint and dispute resolution	Marketing and sales
Education for sustainable consumption	Product lines and applications ( <a href="https://www.aecilluminazione.it/download-catalogo/">https://www.aecilluminazione.it/download-catalogo/</a> ); Environmental Labeling
Values and mission	Vision, Mission and Corporate Poster

Ulteriori GRI RENDICONTATI		
GRI 308: Environmental assessment of suppliers 2016	3-3 Management of material topics	Procurement
	308-1 New suppliers that were screened using environmental criteria	Procurement
GRI 418: Customer Privacy 2016	3-3 Management of material topics	Compliance with standards
	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	Compliance with standards







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