

# Non-Financial Report of the LUG S.A. Capital Group for 2022



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# Year 2022

# at LUG Group:



480 856 units of produced luminaires



PLN 239,97

million in revenue



5 288,1 MWh o



650,82 thousand Mg CO<sub>2</sub>e (Scope 1+ 2 market-

based+3)



8 306,6 m<sup>3</sup> of



396,37 Mg of

# The average LUG luminaire:



On average, nearly 470 employees of the LUG Group devote approx. 1.96 hours of work per year for its design, production, delivery to the Customer and service.

# THE MOST IMPORTANT EVENTS

# AND AWARDS IN THE REPORTED PERIOD

2022

#### **JANUARY**

- Commissioning of a new part of the LUG Research and Development Centre in Nowy Kisielin

#### **FEBRUARY**

- Opening of the LUG Maroc representative office

#### MARCH

 Award for the Polish pavilion illuminated by LUG during the EXPO 2022 exhibition in Dubai

#### **APRIL**

- iF Design Award for Artera LED and FRAME luminaires

#### MAY

 Presentation of the Safe Lighting Point solution during the Krakow Road Safety Days

#### JUNE

- LUG participation in the National Road VIP Conference

#### SEPTEMBER

- Lubuskie Innovation Leader Award
- Bronze Cross of Merit for Ryszard Wtorkowski, President of LUG

#### **OCTOBER**

- LUG as the winner of the Award of the Marshal of the Lubuskie Voivodeship 2022
- "The Best Annual Report 2021" award for LUG S.A.
- The title of the Climate-Conscious Company in the fourth edition of the Climate Crisis Awareness Survey

#### **NOVEMBER**

- LUG participation in the "Light 2023", "Architect at Work" and "Belektro" fairs
- LUG on the 22nd place of the "TOP100 Polish OEM2022" report

#### DECEMBER

- LUG participation in the "Light 2023", "Architect at Work" and "Belektro" fairs
- LUG on the 22nd place of the "TOP100 Polish OEM2022" report

#### In addition, in 2022 we also worked on other very important projects:

- Implementation of the largest contract for the modernization of urban lighting for the Capital City of Warsaw
- Implementation of many lighting modernization projects around the world
- Work on the new strategic perspective of LUG for 2023-2026



# LETTER FROM THE PRESIDENT OF THE MANAGEMENT BOARD





# 2. Letter from the President of the Management Board

#### Dear Sir or Madam,

This is the 5<sup>th</sup> non-financial report of the LUG S.A. Capital Group, in which we share our approach and activities in the area of sustainable development.

A challenging year 2022 is behind us. Despite the political and economic turmoil and a difficult business environment, we have proven that we can successfully deliver the most challenging projects and that we are a stable partner for our stakeholders. The irreversible changes we have been seeing in business have driven us to work on the new business strategy of the LUG S.A. Group. A key pillar of that is to focus on sustainable development and to support the sustainable development of our business partners. This will be supported by a wide range of professional services and innovative products, including SMART or NCL (Nature Centric Lighting).

In the new strategy for the years 2023-2026, we are focusing on further efficiency improvement and emissions reduction in line with the sustainable development philosophy, so that the company's operations serve the needs of customers, investors and business partners, as well as those working within the organisation's structures. All areas of the organisation, including, for example, production or R&D, will be developed in a sustainable manner in order to neutralise the organisation's environmental impact through modularity, automation and respect of circular economy principles. The next step will also be to implement a detailed sustainability strategy, completed with the elements of circular economy. These are our ambitious plans for the next four years.

Let us now look at what we have already achieved. In this report, for the fifth time we report on greenhouse gas emissions in Scope 1 and 2 in line with the GHG Protocol Corporate Accounting and Reporting Standard and for the second time in Scope 3, thus we count all emissions along the entire Thanks to its continuous work improve to energy the LUG Group has reduced its greenhouse gas emissions in the scopes 1+2 market-based (direct and indirect emissions related to purchased energy) by 11.9% in 2022 compared to 2018, when we started the process of monitoring and reporting data. We have expanded the calculation of Scope 3 emissions to include additional categories (1 and 12), which have been calculated both for 2022 and 2021. Scope 3 emissions for the base year were close to 649,000 Mg CO<sub>2</sub>e and increased by 2.9% year-on-year, driven by the sale of 17.7% (in value terms) more energy-efficient luminaires to our customers than in the previous year. What is crucial, is that the emission rate per 1 million of revenue dropped by 12.6% compared to last year.

We have also completed the first material assessment in line with the CSRD requirements and the European Sustainability Reporting Standards (ESRS). In the assesment we have taken into account the principle of double materiality, meaning that we have included a perspective of the impact materiality, the impact the Group has on sustainability issues, and from the perspective of financial materiality, i.e. the impact of a sustainability issue on LUG's financial performance in the future. These parameters are examined for the five stages of the value chain, from the sourcing of primary raw materials through their processing, the supply chain, the Group's operations and end users up to the end of the product or service life cycle and the waste generated. The materiality assessment identified 10 material stakeholder groups, 27 material sustainability issues, as well as 14 material sustainability risks. The issues were analysed in terms of four parameters related to impact materiality: scale of impact, scope of impact, likelihood of impact and remediability of impact. We describe this topic in-depth in chapter four hereof, and I also encourage you to read the materiality matrix.

Once again, we are also disclosing information regarding the so-called EU taxonomy. An examination of the compliance of the LUG Group's activities with the EU taxonomy showed that environmental sustainable activities in 2022 were derived from: 77.27% of turnover, 89.05% of capital expenditure and 75.58% of operating expenditure. The non-taxonomy-eligible activities were from: 22.73% of turnover, 5.27% of capital expenditure and 0.00% of Group's operating expenditure. We are proud of these results.

What I said above is confirmed by the high score of our actions awarded by independent experts. Last year, in the Climate Crisis Awareness 2022 survey, the LUG Group was awarded the title of Climate Aware Company 2022 for the fourth time in a row, thus joining the still small group of Polish companies that are aware of the risks associated with the negative impact of companies on the environment and that reliably report their impact. For my part, I assure you that we are also consciously taking a series of measures to not only report accurately, but also to make a real contribution to reducing our impact on the environment and climate change.

A key element in the development of any company is its employees. That is why, in the LUG Group, we systematically support the intellectual development of our employees, providing them with opportunities to raise their competences and motivating them to exchange knowledge and education. I am proud that in the past year the average number of training hours per person increased by 83.5% among all employees, thanks to an extensive training programme - both managerial as well as professional and safety and health-related training for our staff.

Another area relevant to running a socially responsible company is business ethics. We take a number of due diligence measures, particularly in terms of ethics and respect of human rights. We have developed and implemented a Code of Ethics and an Anti-Corruption Policy. These documents are complementary to our standards and values, which formally support our activities related to countering unethical attitudes.

I would like to encourage you to read the Non-Financial Report of the LUG S.A. Capital Group for the past year. It is a resource that describes many different aspects of running a company and its impact on the environment.

Yours faithfully,

Ryszard Wtorkowski, President of the Management Board of LUG S.A.



# BUSINESS MODEL AND GOVERNANCE



# 3 Business model and governance

#### 3.1 Business model

[G.1.2] LUG provides professional lighting solutions to customers worldwide. As a manufacturer of luminaires and developer of intelligent lighting management systems, we meet the needs of modern society every day. We started in 1989 as a small local family business and now operate as an international group of 10 companies with a presence in more than 70 markets around the world.

We operate in the *general lighting* segment, in which we specialise in providing professional solutions dedicated in particular to professional customers (B2B). The product portfolio includes a wide range of luminaires:

- infrastructure, including those for lighting urban spaces, parks, roads, among others;
- industrial, dedicated to facilities such as factories, warehouses, sports facilities, car parks;
- architectural, used for the illumination of: retail facilities, offices, hotels, medical, educational, cultural and public buildings.

75 markets worldwide 3 production facilities

approx.500 employees

Polish family business

7
foreign
locations

listed on the Warsaw Stock Exchange/ NewConnect Warsaw

8 regional offices in Poland







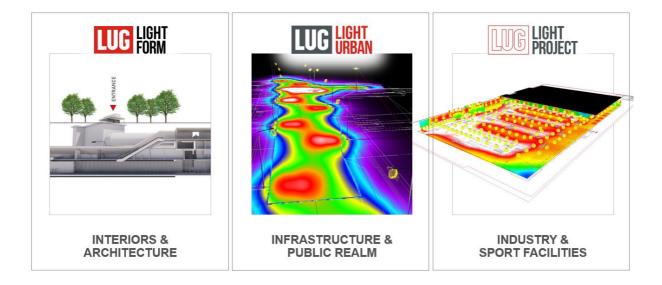


The Polish lighting sector is highly fragmented. In addition to small domestic manufacturers and importers, there is a group of several entities operating in the field of professional lighting technology, which specialise in the production of luminaires for commercial applications (the LUG Group among them).

LUG's business model is based on the design, production and sale of innovative lighting solutions, providing design and consulting services for architects, designers, contractors and wholesalers, as well as offering a comprehensive formula for selling light as a service (LaaS – Light as a Service) with the use of professional knowledge and long-term experience.

The competitive advantage of the LUG Group is the comprehensive service in the scope of design services, providing complete lighting solutions, adjusting ready-made solutions to the individual needs of customers (the so-called customisation), as well as technical consultancy. The three competence hubs dedicated to our core business segments offer our partners extensive knowledge and ever-growing experience to develop solutions that are appropriate even for the most complex projects.





Furthermore, we have our own *Smart City* solutions in the form of the Urban lighting management system, which was developed by our subsidiary, BIOT. The Urban system is designed to monitor and manage infrastructure lighting and the sensors attached to it. Thanks to the available API, the system is flexible and open, meaning that it can work with other available systems. The system's enormous contribution to the sustainable development of our partners is made possible by the highest standards of reporting on energy consumption parameters, which makes it possible not only to manage lighting schedules, but also to reasonably plan maintenance and modernisation work. All this directly translates into less emissions into the atmosphere and a reduction in the negative impact on the climate.



## 3.2 Market context

As part of the *Strategic Development Directions of the LUG S.A. Group for the years* 2023-2026, we examined in detail the accompanying market context for our business, which we divided into three areas:

# Geopolitical and economic changes

In order for the new strategic perspective to support our activities in the years to come, we have looked at the geopolitical and economic changes we are witnessing. A new world order is being created before our eyes, which is not without impact on LUG's activities and the lives of our employees scattered all over the world.

We are watching the development of military action in Ukraine and its possible impact on LUG's operations. Importantly, as a Group, we do not have assets in Ukraine, Russia or Belarus, and the operations of the subsidiary LUG T.O.W. Ukraina have been suspended for many years. In the absence of direct business operations in these areas, it is estimated that the impact of the armed conflict on the LUG Group's operations will remain limited.

The LUG Group's new strategic perspective is based on past experience. After over a year of war, we have learned to operate in a difficult economic environment with high inflation, high interest rates, drop in investments or high exchange rate volatility. We are aware of the risks associated with possible disruptions to supply chains, limited energy resources or rising transport costs, and we manage each of these to minimise their potential impact on LUG's operations.

#### Long-term trends



The environment operate we characterised volatility. in by high uncertainty, complexity and ambiguity, which is best captured by the VUCA model. Awareness of these traits has had a strong influence the assumptions on of our 2023-2026 strategic perspective.

The events of the last three years have confirmed how important flexibility is in business and how much it has helped us to find our way in a dynamically changing environment.

In 2022, we have been redefining the operating model of the Sales Department by creating macro-regions that will make it easier to build lasting relationships with business partners and respond even more quickly and flexibly to their needs. On the other hand, we are intensively developing the production area, which will translate into resilient and agile manufacturing processes and even higher product quality. Operating in such a demanding environment requires openness and innovative ideas. We are trying to minimise risks and look for opportunities in every aspect of our market presence. A very good example of this are the rising electricity prices. As a manufacturer of energy-efficient lighting solutions, we have not only taken care to reduce energy consumption in our facilities, but we also help our customers reduce



their bills, teach them how to manage their lighting wisely through intelligent lighting management systems and generate real savings. We support the idea of monitoring and reducing greenhouse gas emissions, which is linked to increasingly stringent regulations and the need to stop ongoing climate change. We see both energy efficiency and emissions reduction as long-term trends that are stimulating international institutions to offer new financing opportunities for environmentally sustainable investments. This trend supports the idea of energy-efficient LED lighting, which guarantees real returns for investors.

## **New business opportunities**

We are expanding the LUG S.A. Group based on innovation and a bold business outlook. We do not close ourselves off to new business opportunities and consider each opportunity individually. We value our business partners, from whom we draw inspiration to offer increasingly tailored lighting solutions. It is a common phenomenon that investors are seeking new sources of funding, leading to the development of new models. Therefore, we are developing our competences and expanding our offer in terms of financing environmentally sustainable investments, where the decisive role is played by the ESCOLIGHT company from the LUG Group, which offers, among other things, the ESCO or L-a-a-S financing formula. On the other hand, we provide the execution service in lighting modernisation projects through our subsidiary, LUG Services.

# 3.3 Strategic perspective of the LUG Group

[G.1.1] In the first quarter of 2023, we announced the adoption of the "Strategic development directions of the LUG S.A. Group for the years 2023 - 2026". It is our response to the changing economic, geopolitical and social environment, ongoing climate change and environmental needs.

# **LUG Group values**

[G.1.2] We are a Polish family company whose rooted in the values from which we draw strength and inspiration. In practice, this means that every day we are guided by certain values at each decision-making level.

- Innovation we seek out and implement new ways of doing things, we are open to new initiatives and changes, we bravely take on challenges by learning from our actions.
- Partnership we listen carefully to each other, build relationships based on honesty and trust, and focus on reliability and professionalism.
- Responsibility we pursue LUG's vision and fulfil our responsibilities with utmost care, willingly share our knowledge, ensure the highest quality of delivered products and services, and take care of LUG's good name.
- Trust we appreciate the value each of us contributes, we pursue shared goals, we trust each other and our own competence.

 Sustainability - we are constantly improving and learning new things, care for the environment, take responsibility for our impact on the company's environment.

#### **Our Mission**

At LUG, we want to grow based on a philosophy of action reflected in our new mission statement:

Through the light
we create
sustainable environment
for life and development
for a better tomorrow.

LUG's new strategic perspective follows on the Group's development directions implemented between 2017 and 2021, such as innovation or internationalism, but also presents new goals and initiatives for the transformation from a supplier to a service model. An absolute pillar of the current strategic perspective is the development based on SMART technology in the product, technology and manufacturing areas, which is reflected in the integration of further verticals within LUG Urban's proprietary management system or in building intelligent production processes that increase efficiency and eliminate weaknesses in LUG's internal system.

# Strategic objectives

By 2026, we want to achieve our strategic objectives based on 4 pillars of growth:

## Shift to services

- Financing, consultancy, design, execution, maintenance and development available as services.
- Knowledge and experience as added value to products.

#### **Quality of life innovations**

- New solutions for a higher quality of life.
- Agile product and service innovation implementation unit.
- Development of SMART verticals.

# Sustainable development

- Fast, efficient, flexible production.
- Socially responsible organisation.

# International partnerships

- LUG as the centre of an international community of customers, suppliers and partners.
- A strong and recognisable international brand.



# Strategic measures

Our success will be measured by the achievement of the strategic metrics in the perspective up to 2026.

PROFITABILITY

OF LUG S.A. CAPITAL GROUP IN THE PERSPECTIVE UNTIL 2026

7% 75% **REVENUES** FROM FORFIGN MARKETS

> CONSOLIDATED IN THE PERSPECTIVE UNTIL 2026

# Areas of strategic action

The implementation of strategic directions starts within the organisation. We have therefore set out areas of activity around which our projects and initiatives will be focused.





#### Our stakeholders

As part of the Strategic Directions of Development, we have identified a group of Stakeholders that we identify within our business.

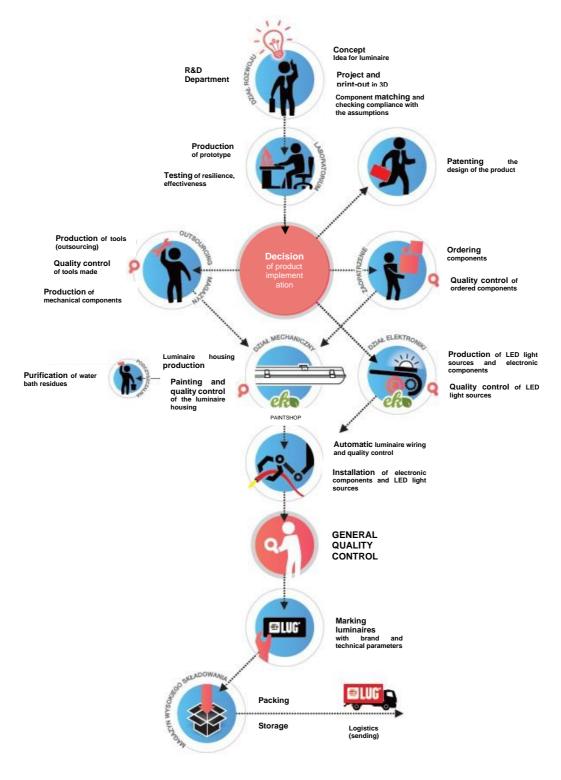




### 3.4. Value chain

#### VALUE CHAIN OF LUG GROUP **LUG GROUP UPSTREAM DOWNSTREAM DELIVERIES** PROCESSES AT LUG GROUP SALES USAGE WASTE Sales is done by Direct Customers: A Consumer is any natural person Waste management is the Components and services All entities of LUG Group running Cradle -> TIFR 2+ establishing relationships responsibility of the user of the General Contractors using the lighting provided by LUG, operational and support processes (TIER 1) and concluding contracts · Electrical wholesalers LED luminaire supplied by LUG. · Pedestrians, drivers -Most luminaires are recycled (the for the implementation Target Customers: materials from which the of individual investments infrastructure lighting Suppliers of primary raw Components Services Operational processes: Support processes: Sales channels have its · Local government and its · Persons staying luminaire is made are recyclable materials that are used in the For production used in production · R&D (luminaires, lighting Management importantrole in these property management in buildings where lighting has been and reusable). production of luminaires: of luminaires: of luminaires systems electronics) Administration provided by LUG LUG covers the costs of future processes: units • LEDs neccessary for · Designing . HP · Sales representatives · Property owners and recycling at the stage of placing Primary raw materials: · light sources functioning of LUG · Purchase · Training Designers managers the luminaire on the market. copper LED Group: · Finance, accounting, · Quality control · Showrooms • PCBs steel · media Production controlling • PR aluminium power supplies · maintenance · Sales communications An important role have as plastics · lenses • IT systems · Logistics · Investor Relations well decision-makers in •telecommunication • Luminaires service · electronic glass · Legal service sales processes, which varnishes and paints components · Light management · Internal IT support are outside the structures · semiconductors · advisory services · Marketing and advertisement of LUG: Energy sources: packaging Authorities · wires and Architects electrical energy cables Interior designers vehicle fuels In case of LaaS (Light as a Service) implementation, dismantled and LUG's fter-sales service and luminaires service: efficient luminaires, thanks to regeneration, can be reused in another · Warranty Agreement location. Efficient components of end-of-life luminaires can be reused in a · Post-warranty services new luminaire. Recovered non-reusable components can be returned to the production cycle through material recycling (e.g. metals, plastics, glass) LaaS (Light as a Service) is a formula for selling light as a service; the customer does not buy installed luminaires, but a comprehensive subscription service, under which LUG designs, manufactures, installs and operates luminaires and is responsible for their proper functioning throughout the duration of the contract Transport and logistics Transport and logistics Transport and logistics Transport of purchased components Resources transport Transport and installation of luminaires at Clients to the LUG Group

The value chain model is based on a material flow analysis. It includes operations at the stage of extraction of raw materials, creation of materials and components and their transport to the LUG Group, a set of operational processes in progress in the LUG Group and the transport of products to customers, the phase of their use and the end of life phase. This model is used in the processes for calculating greenhouse gas emissions, analysing processes in the circular economy model and analysing the mutual influences of the LUG Group and the environment. The model for the value creation process of a luminaire - the main product of the LUG Group - is as follows:

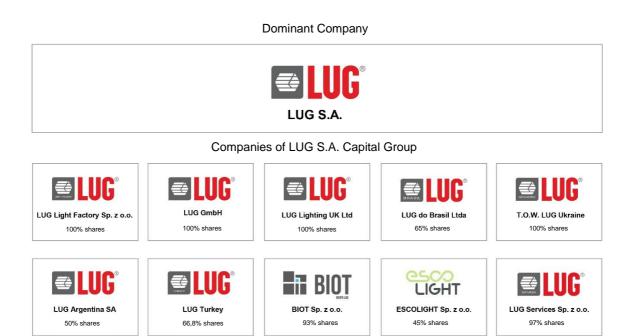




This model is used in the processes for calculating greenhouse gas emissions, analysing processes in the circular economy model and analysing the mutual influences of the LUG Group on the ESG issues and stakeholders.

# 3.5. Capital Group structure

As at 31.12.2022 and the date of publication of this report, we operated as LUG S.A. Capital Group, consisting of 10 companies operating in different areas of business activity.



\* Business activity of T.O.W. Ukraine remains suspended for an indefinite period

The LUG Capital Group is made up of the parent company LUG S.A. and its subsidiaries and related companies. The parent company acts as a holding vehicle and its activities have been focused on the area of supervision and control of subsidiaries and the implementation of the new development strategy.

#### The Capital Group includes:

LUG Light Factory Sp. z o.o. - conducts operational activities at the stages of design, implementation, production and sale of luminaires. Most of the processes taking place in the business activities of the Capital Group are located there. The Company's structure includes two key facilities for the entire enterprise: the headquarters of LUG Light Factory Sp. z o.o. located in Zielona Góra, performing production, storage and administrative functions, and the LUG Research and Production Centre located in Nowy Kisielin, in Zielona Góra.



LUG Argentina SA - handling industrial activities (including, inter alia, the production, processing, assembly and mounting of luminaires), commercial activities (including, inter alia, the sale of luminaires and accessories) and consultancy activities in the field of lighting technology, including for energy-saving projects.



BIOT Sp. z o.o. - handling the creation and development of innovative Smart City systems.



LUG Services Sp. z o.o. - providing comprehensive project services including the preparation, financing, implementation and servicing of lighting investments, as well as the integration of software components working with lighting installations. The company was established on 27 January 2020.

**escolight** 

ESCOLIGHT Sp. z o.o. - providing lighting management services: Light-as-a-Service, consisting of comprehensive project services including preparation, financing, implementation and maintenance of lighting investments. The company was established on 24 October 2019 as a related party.

LUG GmbH, LUG Lighting UK Ltd, LUG Turkey (LUG AYDINLATMA SISTEMLERI ANONİM ŞİRKETI), LUG do Brasil Ltda, T.O.W. LUG Ukraina – sells and promotes LUG products and conducts business in the field of professional lighting solutions on foreign markets such as Germany, the United Kingdom, Ireland, Turkey and other markets in the region, as well as South America. The operation of T.O.W. LUG Ukraina is suspended.

# Changes in the structure of the LUG Capital Group in 2022:

#### Purchase of shares in ESCOLIGHT Sp. z o.o.

On 13 July 2022, LUG S.A. acquired 300 shares of ESCOLIGHT with a nominal pershare value of PLN 50.00. The acquired shares constitute 15% of the company's share capital. Following the purchase transaction, the Issuer holds 900 shares with a total nominal value of PLN 45,000.00, representing 45% of the Company's share capital.

#### Increase in share capital at BIOT Sp. z o.o.

On 2 June 2022, a resolution was adopted to increase the share capital of BIOT Sp. z o.o. by PLN 300,000.00 through issuing 6,000 new shares. LUG S.A. exercised its right or pre-emption and took up 5,265 newly created shares with a nominal value of PLN 50.00. The second shareholder did not exercise their right of pre-emption. as a result of which LUG S.A. acquired further 735 shares in BIOT Sp. z o.o. with a total value of PLN 36,750.00. As a result of the transaction, LUG S.A. currently holds 13,020 shares with a value of PLN 50.00 each, with a total nominal value of PLN 651,000.00 (93% share in the share capital of BIOT sp. z o.o.).



# **LUG Group Shares**

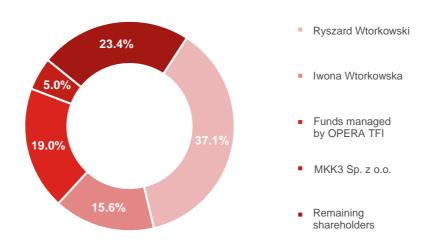
Company	LUG S.A.		
Quotation market	Alternative Trading System of the Warsaw Stock Exchange (NewConnect)		
Quotation system	Continued		
Debut date	20.07.2007		
Total number of shares	7,198,570 ordinary bearer shares, with one vote per share at the General Meeting of the Company		
Ticker	LUG		
ISIN	PLLUG0000010		
Index	NC Index		
Segment	NC Focus		

LUG S.A. has been applying the principles of "Good practices of companies listed on the NewConnect market" since 2009. 16 out of 17 recommended rules have been adopted for use, which can be downloaded from the LUG website (https://www.lug.com.pl/relacje-inwestorskie/spolka/lad-korporacyjny).

# **Shareholding structure**

The share of shareholders in the initial capital holding with at least 5% of LUG S.A. shares as at 31.12.2020 is as follows:

LUG S.A. shareholding structure by % share in the number of shares and votes



#### 3.6. Management of the LUG Capital Group S.A.

The Capital Group is headed by LUG S.A. as the parent company.

[G.2.1] The bodies of LUG S.A. are:

- Management Board:
- Supervisory Board
- General Meeting.

The principles of election and operation of the company's authorities are regulated by the Articles of Association of LUG S.A.

The corporate governance of LUG S.A. consists of the following documents:

- The Articles of Association of LUG S.A.;
- The Regulations of the Management Board of LUG S.A.;
- The Regulations of the General Meeting;
- The Regulations of the Supervisory Board;
- The statement of the Management Board of LUG S.A. on the relations of the Supervisory Board members with the shareholders.

## Management Board of LUG S.A.

There were no changes in the composition of Company's Management Board during the period covered by the report. As of 31 December 2022 and as of the day of approving this report for publication, the Management Board of LUG S.A. acted in the following composition:



Ryszard Wtorkowski President of the Management Board



Mariusz Ejsmont Vice-President of the Management Board Member of the Management Board **Technical Director** 



Małgorzata Konys Chief Financial Officer

The current term of office of the Management Board started on 29.04.2021 pursuant to the resolution of the Supervisory Board on the appointment of the existing Management Board Members for another term of office.

In 2022 and throughout the current term, 33% of the Board members were women and 66% of the Board members were men. 33% of the Board members qualified for the 30 - 50 age bracket and the remaining 66% for the over 50 age group. In 2022, the composition of the Board did not change.



# Supervisory Board of LUG S.A.

As of 31 December 2022 and as of the day of approving this report for publication, the Supervisory Board of LUG S.A. acted in the following composition:



Chairperson of the Supervisory Board



Iwona Wtorkowska Renata Baczańska Member of the Supervisory Board



Eryk Wtorkowski Member of the Supervisory Board



Zygmunt Ćwik Member of the Supervisory Member of the



Szymon Zioło Supervisory

The current term of office of the Supervisory Board of LUG S.A. began on 27 June 2022, i.e., on the day of the meeting of the General Meeting of LUG S.A. and the adoption of resolution to appoint the existing members of the Supervisory Board for the sixth term of office. The current term of the Supervisory Board of LUG S.A. is shared among its members and lasts 3 years.

In the reported period, i.e. from 01.01.2022 to 31.12.2022, 40% of the Supervisory Board members were women and 60% of the Supervisory Board members were men. 60% of the Supervisory Board members qualified for the age bracket of over 50 years, while the remaining 40% belonged to the 30-50 age group.

# The role of senior management structures in the area of sustainable development

Sustainability is an area of ongoing interest for our company's senior management structures. The measures taken are being monitored on an ongoing basis and individual sustainability projects are being addressed by established working groups. The highest level of governance for ESG issues is the President of the Management Board, who coordinates and assigns responsibilities to designated persons from the team for individual issues.

Sustainability activities are managed by senior management according to their subordinate areas:

- cooperation with industry organisations Vice-President of the Management Board;
- cooperation with local and government authorities President and Vice-President of the Management Board;
- cooperation with the local community (including support for non-profit organisations and charity work) - Holder of the Power of Attorney;
- cooperation with universities and training Global Sales and Marketing Director. Member of the Management Board of LUG Light Factory;
- environmental issues Vice-President of the Management Board.

The Management Board periodically analyses non-financial data, determines development paths related to sustainability, and participates in the creation of the non-financial report by accepting the structure and its main assumptions. The Management Board, together with the Group's senior management, also take part in workshops and discussions on sustainability (including climate change), being part of projects such as the materiality study, the analysis and assessment of climate risks, the development of a Code of Ethics, etc.

We addressed the topic of climate change for the first time in 2019 while preparing for a project to identify and analyse the climate-related risks and opportunities and its impact on the company's operations.

We have not yet separated a dedicated structure within the LUG Group responsible for climate change issues, but they are integrated into the operational and strategic activities of senior management. Part of the activities each year are carried out in cooperation with Pol-Lighting, the industry organisation.

All commenced and planned activities related to climate change in the LUG Group are described in detail in Chapter 7.1 *Climate Change Mitigation*.

# 3.7. Ethics and human rights due diligence

[G.4.1] Business ethics is one of our priority areas. Brand recognition, organisational culture and accepted values are the result of adherence to the applicable standards and the high standards of business. In line with the guidelines for companies listed on NewConnect, we regard transparency as the basis for an effective information policy.

In all our business activities, we are committed to respecting and upholding all human rights, avoiding significant negative impacts on human rights and conducting appropriate due diligence processes on those we work with.

For 2022, we planned the redevelopment and structuring of due diligence processes in the LUG Group. Following the work carried out throughout 2022 and Q1 2023, LUG's key activities in the area of ethics and human rights included:

- Development and adoption of the LUG Group Code of Ethics;
- Assigning the responsibility for and supervision over the area of ethics and human rights at the management level to the President of the Board of Directors of LUG S.A.;
- Launching of Procedure for the selection of an Ethics Officer;
- Improving the breach reporting mechanism and miscondcut reporting system in the LUG Group;
- Adoption of the Anti-Corruption Code;
- Verification of the Minimum Safeguards to the EU Taxonomy, i.e. checking the completeness of the Group's due diligence processes (process detailed in chapter 6.2).

Paying special attention to ethics and respect of human rights, the activities undertaken in this area are carried out in accordance with applicable laws and regulations. We are also committed to complying and respecting the provisions



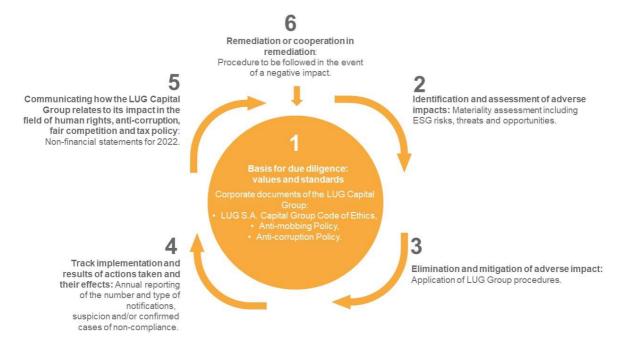
defined in the international legal standards and following the recommendations of the guidelines of:

- Universal Declaration of Human Rights,
- The Ten Principles of the United Nations Global Compact,
- International Bill of Human Rights,
- The UN Guiding Principles on Business and Human Rights,
- OECD Guidelines for Multinational Enterprises,
- ILO Convention.

We are opposed to any violation of the rights of external or internal stakeholders of the Group's companies, as well as actions against LUG's values.

# **Due diligence in the LUG Group**

When practising due diligence in the LUG Group, we follow 6 steps:



**Stage 1**: Integrate due diligence with the company's policies and management system.

[S.6.1] The basics of due diligence with regard to human rights, prevention of corruption and financial fraud and information security are addressed in the following LUG Group documents:

# Code of Ethics of the LUG Group

It is a key document that governs the LUG Group's ethical guidelines, and is in line with the regulatory environment and good ethics management practices. The structure of the Code follows directly from the Guiding Principles for Business in the Area of Ethics, including the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles on Business and Human Rights. This Code collects principles and good practices of responsible and ethical behaviour. It regulates such issues as:

compliance with the law, policies and procedures of the LUG Group.

- prohibition of any and all discrimination and mobbing,
- prohibition of forced and child labour,
- working conditions and equal opportunities,
- respect for freedom of association and dialogue with the employee' side,
- preventing corruption;
- conflict of interest,
- fair competition,
- care to respect the environment and the climate,
- conflict minerals,
- attention to product safety,
- stakeholder relations and reliable communication.

The document was prepared by a multidisciplinary project team and implemented pursuant to a resolution of the LUG S.A. Management Board in 2023. The Code is publicly available on the corporate website: <a href="https://www.lug.com.pl/relacje-inwestorskie/spolka/lad-korporacyjny">https://www.lug.com.pl/relacje-inwestorskie/spolka/lad-korporacyjny</a>

The Code of Ethics is supplemented by policies and regulations operating in specific organisational areas.

# Anti-corruption policy

Document supplementing the LUG Group's Code of Ethics in the area of anticorruption. We started working on it in 2022 and completed and implemented the policy in 2023. Its purpose is to support LUG's organisational culture, promote ethically appropriate attitudes among the Group's employees and business partners and minimise the risk of fraud. The policy is available on the corporate website: https://www.lug.com.pl/relacje-inwestorskie/spolka/lad-korporacyjny

# Anti-Bullying Policy

A document that has been in place at LUG Light Factory since 2011, regulating the prevention of bullying at LUG.

**Stage 2**: Identification and assessment of adverse impacts.

The identification and assessment of adverse impacts was carried out during a comprehensive sustainability materiality study. Once this was completed, the issues in relation to which the LUG Capital Group can exert the strongest influence were identified. A list of material issues and risks can be found in section 4.4 *Material sustainability risks and opportunities*.

#### **Stage 3**: Elimination and mitigation of adverse impact.

Along with the adoption of the Code of Ethics the LUG Group launched a procedure for the appointment of an Ethics Officer, who will be responsible for the effective implementation and operation of the principles of ethical conduct and due diligence procedures in the area of ethics. The LUG Group Code of Ethics will also be posted



on the website, in language versions adapted to the needs of employees. In addition, periodic training will be organised for staff to make sure they know it.

[G.4.6] In 2022, the LUG Group did not conduct training in the area of ethics.

**Stage 4**: Monitoring the effectiveness of the actions taken and their effects.

[S.3.4] The procedure for reporting violations is included in the LUG Group Code of Ethics. Irregularities or ethical violations within the LUG Group can be reported through one of three dedicated channels:

email address: etyka@lug.com.pl

Postal address: LUG S.A. ul. Gorzowska 11 65-127 Zielona Góra

Personal contact with the Ethics Officer

All notifications are treated confidentially and are handled by a dedicated team. The flow of information for the processing of the notification is in line the principles of privacy and anonymity. We provide the whistleblower with protection against retaliation.

The whistleblowing report should include all available information and evidence that will expedite and facilitate our internal investigation.

[S.3.4] [S.6.2] [S.6.3] [S.7.1] [S.7.2] [S.8.1] [S.8.2] [S.10.2] [S.10.3] In 2022, no complaint was filed relating to mobbing, forced labour, child labour or discrimination. There were also no claims concerning elements of the working environment. In 2022, no cases of corrupt practices or other incidents with the characteristics of human rights violations were identified in the LUG S.A. Capital Group.

[G.4.2] [G.4.3] [G.4.4] [G.4.4] [G.4.5] [G.4.7] [S.7.3] [S.7.4] [S.8.3] [S.8.4] Ongoing monitoring of the highest ethical standards is in place in LUG Group companies, but no ethical audits were conducted during the reporting period. No audits were carried out at subcontractors. No ethical clauses were included in contracts with contractors.

**Stage 5**: Communicating how the LUG Group relates to impact in terms of human rights, anti-corruption, fair competition and tax policy.

In our non-financial report, we regularly report material non-financial information on LUG's activities, including a summary of due diligence. We also carry out internal communication via our intranet, newsletter, internal regulations, internal mailings, brochures and posters.

**Stage 6**: Remediation or cooperation in remediation.

In the context of identified reports and ongoing investigations, we undertake to undertake appropriate actions ourselves or to cooperate in remedial actions for entities where a Group Company or the Group has caused or contributed to a negative impact in the area of human rights and ethics. Any external entity that does not comply with the principles in the area of human rights and ethics will be subject to analysis and appropriate remedial action.

We are also committed to cooperating with judicial or non-judicial mechanisms to ensure access to necessary remedies or corrective action.

# Counteracting corruption and bribery

[S.10.1] We are guided by the principles of transparency and respect for generally accepted standards in every aspect of our activities. LUG's approach is characterised by zero tolerance for all manifestations of abuse, including corrupt practices and financial fraud.

As a result of the materiality study, we identified the issue of counteracting corruption and bribery as an important area with specific risks and opportunities. Therefore, we have adopted documents governing the principles of counteracting corruption and financial fraud such as:

- LUG Group Code of Ethics covering anti-corruption issues;
- The LUG Group Anti-Corruption Policy introduced at the beginning of the second quarter of 2023 clarified LUG's position in this area;
- Procurement oversight procedure and procedure manual will be updated in 2023, the project team is working on revising it.

Corruption risks are regularly assessed and monitored as part of the risk management system.

## Respect for the human rights of employees

Ensuring respect for human rights is an elementary duty of a responsible business. We are committed to creating a safe, inclusive and sustainable work environment.

#### Prohibition of forced and child labour

[S.8.] Companies within the LUG Capital Group conduct their activity in accordance with the legal regulations valid on the territory of Poland and in accordance with the local law applicable to Group's companies. Their management authorities do not accept or use underage or child labour under any circumstances, nor do they tolerate forced labour at any stage of their activities.

# No tolerance of discrimination and mobbing

[S.3.4] [S.6.1] We do not accept or condone discrimination on the basis of gender, age, race, religion, nationality, sexual orientation, ethnicity or disability. Anti-mobbing measures were standardised in 2011 at LUG Light Factory in the Anti-Mobbing Policy document. It contains the procedure for the complaints process together with the accompanying functions:

 Any employee who considers that they have experienced mobbing may make a written complaint to their employer.



- The employer, within 14 working days from the date of the complaint, shall appoint an Anti-Mobbing Commission consisting of a representative of the employer, a representative of the employees, and a person appointed jointly by the employer and the employees.
- The employer conducts training in the Anti-Mobbing Policy for new employees as part of adaptation training.

In addition, LUG, as part of the implemented Code of Ethics, has an internal mechanism through which any person experiencing mobbing or discrimination can report the problem through the LUG Group's whistleblowing mechanism described above. Reports will be handled in accordance with the adopted rules by the Ethics Officer.

#### Freedom of association

The LUG Group provides full, undisturbed freedom of association and is committed to respecting the provisions of collective agreements and is open to dialogue with employee communities. Group employees can openly communicate any comments on working conditions and initiatives. The interests of the employees at LUG are represented by an elected Employee Representative.

# Information security

[S.13.1] [S.13.2] We are committed to applying due diligence in our operations in relation to the protection of confidential data, sensitive information, personal data and other relevant information in our possession. We defend against unauthorised access to confidential data, the release of which could have a negative impact or economic damage on the Group.

Confidential data is only shared with Group Employees to allow them the performance of their duties. It is the duty of LUG Group Employees to exercise due care in the handling of internal information. Detailed guidelines for due diligence in the handling of information can be found in the following documents:

- Global Security Policy for Personal Data Processing in the LUG S.A. Capital Group;
- IT security policy;
- LUG Code of Good Practice.

In addition, in order to ensure the highest level of information security, the decision was taken to start the process of implementing an information security management system. Completion of the process at BIOT is scheduled for 2023.

In 2022, there were no incidents in the LUG Group and no administrative proceedings related to data leakage or unauthorised use of personal data.

#### **Conflict minerals**

The LUG Group does not mine or process minerals commonly recognised as conflict materials. The term *conflict minerals* refers to tin, tantalum, tungsten, gold and cobalt - often mined in countries with rampant human rights abuses or armed conflict.

Minerals belonging to this group are used in trace amounts in electronic components used to manufacture the LUG Group's products, which is why the LUG Group identifies a potential but small risk of unethical practices in the supply chain involving the conflict minerals.

The regulations governing the use of these minerals do not apply to the LUG Group, but in the future, we plan to implement appropriate due diligence procedures for the supply chain to minimise the risks associated with the use of these types of minerals.

# **Cooperation with contractors**

Following the successful implementation of the LUG Group Code of Ethics, in 2023 we plan to resume work on the general terms and conditions of cooperation with contractors. This document will include the guidelines and standards set for entities working with the LUG Group.

In order to build long-term relationships with suppliers and business partners, we pay particular attention to the quality and management standards as well as legal and technical requirements they meet. The Group works with well-established European suppliers and suppliers of good repute who, in the Group's opinion, meet the requirements of socially responsible business.

In 2022, we completed two direct audits of our component suppliers, which were carried out on our behalf by a local partner.

# 3.8. Management systems

[G.2.2] Within the LUG Group, the management and control function for the other subsidiaries is performed by LUG S.A.. The operational activities, however, are concentrated in the LUG Light Factory. At the moment, the need to formally implement a unified Management System for the entire LUG S.A. Capital Group has not been identified. However, most Integrated Management System procedures (hereafter: IMS) are also used informally in other LUG Group companies.

In 2022, control audits of standards were carried out at the LUG Light Factory:

- ISO 9001:2015 (Quality Management System),
- ISO 50001:2011 (Energy Management System),
- ISO 14001:2015 (Environmental Management System),
- ISO 45001:2018 (Occupational Health and Safety Management System)

which showed no irregularities.

The IMS also includes the ISO 17025:2018 standard, which was recertified at the beginning of 2021. It certifies that the LUG laboratory has been recognised to perform photometric, thermal, leakage, colorimetric and electrical tests.

In response to customer expectations and market requirements, BIOT began taking steps to implement ISO 27001:2007 (Information Security Management System) in 2022. Completion of the implementation process and certification according to the guidelines of the ISO/IEC 27001 standard is scheduled for 2023.



Based on the Integrated Management System audits carried out at the beginning of 2023, the following areas of improvement were identified, among others:

- · documentation supervision;
- monitoring;
- process approach;
- operational activities.

At LUG Light Factory, the Integrated Management System consists of the assumptions of the existing:

- Energy Policy (ISO 50001:2018) assumes, inter alia, striving to implement production in accordance with the applicable law and the requirements of new technologies, reducing energy consumption for the manufactured product, cooperation in the field of energy with suppliers and raising employee awareness of energy management issues.
- Quality Policy (ISO 9001:2015), aiming to meet all its requirements, assuming the improvement of the company's infrastructure, the development of the organisational culture and the building of an image among contractors.
- Environmental Policy assumes continuous improvement and development in order to meet the requirements of PN EN ISO 14001:2015, operating activities in accordance with environmental law, placing requirements on subcontractors, paying attention to the Life Cycle Assessment (LCA), the overall impact of the product on the environment from the initial production phases.
- Occupational Health and Safety Policy (ISO 45001:2008), which sets out the
  objectives for the prevention of occupational accidents, occupational diseases
  and near misses, as well as for continuous improvement in reducing employee
  exposure to harmful agents in the working environment.

The above-mentioned policies form the basis of the Integrated Management System Policy, which, by integrating their content, has replaced them. The Integrated Management System Policy is available on the LUG website at: <a href="https://www.lug.com.pl/firma/polityka-firmy">https://www.lug.com.pl/firma/polityka-firmy</a>

Diagram of the	management	structure	responsible	for	the	Integrated	Quality
Management Sy	stem						

Management level	Position	Number of persons per position	Responsibilities
Management level:	President of the Management Board of LUG Light Factory Sp. z o.o.	1	The ISO Quality Management System Representative is responsible for the proper implementation and operation of the ISO IMS. The work
Director level:	Strategic Finance and Risk Director	1	of the Representative is supervised by the Strategic Finance and Risk Director
Employee level:	Representative for ISO Quality Management Systems	1	from the level of the Division Director and finally by the President of the Management Board of LUG Light Factory.

During the reported period, the LUG Argentina SA plant in Posadas was subject to ISO 9001:2015, which was audited in the first quarter of 2023. The current ISO 9001:2015 certificate has been issued until 29 January 2024.

# **LEAN Management**

Since August 2016, a Kaizen project has been implemented at LUG with the aim of allowing the employees to influence their workplace, processes within the company and to identify areas that can be improved. Particular attention is paid to improving quality, increasing safety, improving ergonomics and optimising costs. The implementation of the 5S programme, which initially covered the production areas, began in 2018. The Kaizen project has given employees an impact on their direct workplaces and the 5S programme has developed this methodology to standardise activities in the entire Production area. Under the Programme, the necessary training and workshops were carried out for all employees from given areas, both directly and indirectly in production.

The implemented changes have improved quality, efficiency and increased workplace safety. Zone signage has been standardised, responsibility areas (area ownership) and material flow have been introduced. Thanks to the standardisation that follows the 5S Methodology, changes made in one area have also been implemented in others. Adherence to the 5S principles is verified during periodic audits.

Development plans for the next few years include increasing employee inclusion, supporting an organisational culture of change and continuous process improvement. Through the planned training, space will be revamped, programmes will be systematised and improved, and work safety will be further enhanced.

# **Inspection and Internal Audit**

[G.2.1] [G.2.3] Our internal audits are coordinated by the ISO Quality Management Systems Supervisor, working with internal auditors who have received their certification by completing certified training. The internal auditors prepare an audit report with conclusions and recommendations. The ISO Quality Management System Representative is responsible for the implementation and proper functioning of the ISO



procedures in the company, while also maintaining inspection powers regarding the completeness of documents, as well as supervision over the implementation and proper functioning of new ISO procedures.

The frequency and scope of the audits are set out in the annual Audit Schedule. Audits are based on the competence of the individual internal auditors and their experience and working knowledge of the internal processes within the organisation. Each internal unit is audited according to internal ISO procedures.

As part of internal inspections, we monitor compliance with the requirements of ISO 14001. In the environmental area, we commission the implementation of regulatory obligations, controls the completeness, timeliness and correctness of documentation through cooperation with the Oś Eko consulting company. The competences of the external company focus on areas such as LUG's internal audit, representing LUG outside in strictly defined environmental areas and performing an advisory function in the field of environmental protection.

# 3.9 Risk management and material managerial risks

Risk management is an important element of our organisation's operations, therefore higher management structures and those responsible for individual areas of the unit are involved in the identification, monitoring and assessment of risks. The highest level that manages risk and coordinates the work of individual units is the Management Board of the Company, and its work in the field of risk management is coordinated by the President of the Management Board.

We have not yet formalised a risk management system in the LUG Group, but risks and risk-related measures are identified by the Process Owners and recorded in the Risk Analysis Sheets for the Process. As part of the system, individual areas affected by risks are assessed during meetings and in the communication mode of teams responsible for these areas. The management of area-related risks is carried out by the individual organisational units. In all cases, the responsibility for risk management in a given area lies with the manager of a given organisational unit. In the case of risks related to the occurrence of emergency situations and in the case of detection of new risk factors, the management of a given type of risk is subject to the assessment of the Management Board which assigns responsibility to persons appointed to particular areas.

### Material managerial risks

Risk or opportunity and its description	Risk or opportunity management method
Risks related to the risk management system The risks could result in high costs associated with inadequate management of the identified risks, with consequent reputational damage to the Group and a threat to our continued operations.	As the LUG Group, we review risks annually as part of the Management System Review.

#### Opportunity related to the risk management system

Opportunities related to the issue include the increased resilience of the Group's activities to risks, staying ahead of the competition, becoming a leader and being highly responsive and flexible to risks.

We seize the opportunity by reviewing the Management System on an annual basis and updating it where necessary. This area is included in the Strategy 2023-2026 in terms of the Sustainable Development and Quality of Life Innovation objectives.

#### Risk related to the business conduct/ ethics

The risk may result in loss of the Group's reputation in the market, administrative proceedings against the Group and high associated costs.

We minimise the risks by, among other things, applying ethical behaviour in the course of our business, in particular through the Code of Ethics in place and the Anti-Corruption Policy implemented, as well as improving due diligence processes.

#### Opportunity related to the business conduct / ethics

The opportunity in this area may lie in building an image as a trustworthy, responsible, transparent and credible company. We are seizing the opportunity by establishing an ethical framework (including through the implementation of the LUG Code of Ethics and Anti-Corruption Policy) and implementing the highest standards of due diligence.

#### Risks related to prevention of corruption and bribery

These risks may relate to the misconduct of salespeople cooperating with LUG in the commission system. This can have a significant impact on the Group's reputation even in the case of isolated incidents.

We minimise risk by:

- implementing the Anti-Corruption Policy,
- implementing the Code of Ethics and improving the whistleblowing system,
- monitoring reports of suspected corruption against both employees and contractors,
- implement anti-corruption training.

# Opportunity related to prevention of corruption and bribery

The opportunity is related to creating a reliable and responsible business environment for LUG, which can have a positive impact on the perception of the Group

We seize the opportunity by:

- assigning responsibility for overseeing this issue at Board and Director level in the Sales Division,
- implementing of the Code of Ethics,
- introducing an Anti-Corruption Policy and staff training in this area.

#### Risks related to payment practices

These risks relate to activities for suppliers and business partners, which can result in disruptions to supply chains, loss of liquidity, loss of the Group's credibility and additional costs to be incurred due to late payments and loss of business partners.

We undertake the following risk management measures:

- monitoring of risks through compliance with the Policy on Settlement of Liabilities,
- process improvements and close cooperation between the Finance and Controlling Division and the Supply Chain Department area to reduce the risk

#### Opportunities related to payment practices

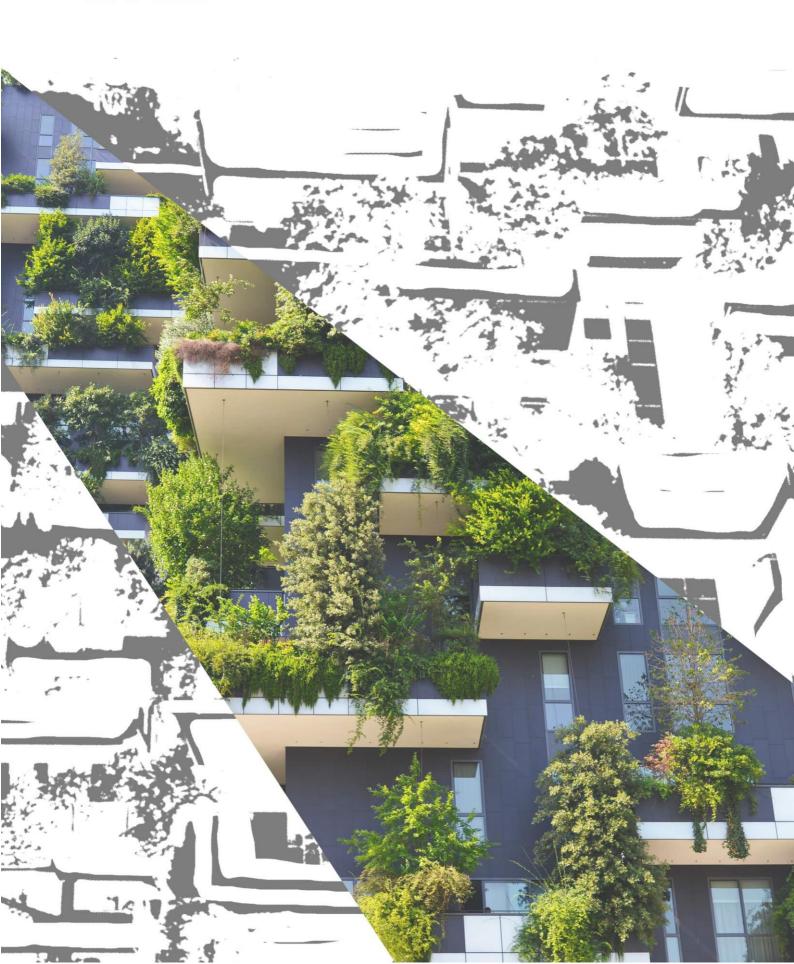
These opportunities relate to supplier and business partner activities, which can result in partnerships with the best industry suppliers, access to the best quality components, attractive payment terms, and a flexible supply chain.

We seize the opportunity by:

- applying the Policy on Settlement of Liabilities,
- introducing process improvements and close cooperation between the Finance and Controlling Division and the Supply Chain Department.



# INFORMATION MATERIALITY AND RISK MANAGEMENT



# 4 Information materiality and risk management

# 4.1 Information materiality in the report

[G.3.1] While preparing to draw up this report, we conducted a material assessment to identify the stakeholder groups material to LUG S.A. and the Group as a whole, the sustainability issues and risks associated with the material areas of sustainability throughout the value chain.

The material assessment has been aligned with the requirements of the CSRD directive and the uniform European Sustainability Reporting Standards (ESRS). The assessment took into account the principle of double materiality, which means that during the assessment we considered the perspective of impact materiality, i.e. what impact the LUG Group has on sustainability issues, and from the perspective of financial materiality, i.e. the impact of a sustainability issue on our financial performance in the future. These parameters were studied for the five stages of the value chain i.e:

- earlier upstream stages, from the acquisition of primary raw materials through to their processing;
- tier 1 of the supply chain;
- operational activities of the LUG Group;
- customers/ consumers/ end users;
- further downstream stages, up to the end of the product/ service life cycle and the waste generated.

The survey was conducted between October 2022 and January 2023 in accordance with the MAX® - MATERIALITY ASSESSMENT MATRIX version 3.0 methodology.

The following research tools were used in the study:

- source data analysis;
- a comparative analysis of 17 companies in the industry;
- a comprehensive questionnaire survey conducted on a group of 25 representatives of the Management Board and senior management of LUG Group companies and 6 MATERIALITY experts;
- questionnaires and structured interviews with 11 representatives of external stakeholders from our Group's environment representing groups such as financial institutions, suppliers and subcontractors, customers, association organisations, industry organisations, higher education, the local community;
- matrix analysis of the obtained results.

The study helped select the following:

- 10 material stakeholder groups,
- 27 material sustainability issues,
- 14 material sustainability risks.

During the survey, representatives of material stakeholder groups were given the opportunity to anonymously report and assess the materiality of issues and risks



arising in relation to our business, which were used to develop follow-up recommendations.

The conducted material assessment is valid for three years and expires in January 2026. During this period, it will form the basis of the LUG S.A. Group's non-financial report.

### 4.2 Material stakeholders and communication channels

As a result of the material assessment, 10 material stakeholder groups were identified:

As a result of the ma	aterial assessment, 10 material stakel	holder groups were identified:
Material stakeholders	Method of engagement	Topics and purpose addressed
Employees	<ul> <li>Internal intranet.</li> <li>Newsletter.</li> <li>Information mailings.</li> <li>Training and workshops.</li> <li>Non-financial report.</li> <li>Participation in the materiality study.</li> <li>Posters and forms of traditional (paper) communication.</li> <li>Face-to-face meetings.</li> <li>Meetings of an inclusive nature.</li> <li>Web page.</li> </ul>	<ul> <li>Communicating about the strategy, mission, objectives undertaken and actions in the ESG area.</li> <li>Building awareness of sustainability.</li> <li>Training and professional development.</li> <li>Increasing employee engagement.</li> <li>Building team spirit and refreshing LUG's shared values.</li> </ul>
Transactional clients (e.g. contractors, specialist distributors, wholesalers)	<ul> <li>Ongoing collaborative contact throughout the year.</li> <li>Information mailings.</li> <li>Face-to-face meetings.</li> <li>Product range training.</li> <li>Press materials.</li> <li>Web page.</li> </ul>	<ul> <li>Product quality and technical parameters.</li> <li>New product launches.</li> <li>New certificates.</li> </ul>
Non-transactional clients (including authorities, architects, town planners, auditors, technical advisors, lighting designers (decision-makers))	<ul> <li>Ongoing collaborative contact throughout the year.</li> <li>Meetings</li> <li>Workshops and conferences.</li> <li>Other forms of direct communication.</li> <li>Congresses, trade fairs, speeches.</li> <li>Participation in the materiality study.</li> <li>Press materials.</li> <li>Web page.</li> </ul>	<ul> <li>Product quality and technical parameters.</li> <li>New product launches.</li> <li>New certificates.</li> <li>Education on increasing energy efficiency and promotion of energy-efficient lighting solutions.</li> <li>Knowledge sharing, training.</li> <li>Maintaining relationships and commitment.</li> </ul>
End users	<ul><li>Social media.</li><li>Newsletter.</li><li>Press materials.</li><li>Web page.</li></ul>	<ul> <li>Communicating about the strategy, objectives undertaken and actions in the ESG area.</li> <li>Presentation of LUG products.</li> <li>Building awareness of energy-efficient lighting solutions.</li> </ul>
Suppliers (including suppliers of raw materials, materials, components, goods, service providers)	<ul> <li>Ongoing collaborative contact throughout the year.</li> <li>Meetings and other forms of direct communication.</li> <li>Contractual provisions.</li> </ul>	<ul> <li>Active and direct communication</li> <li>Building long-term business relationships based on mutual trust and fair business relations.</li> </ul>

Subcontractors and fitters	<ul> <li>Participation in the materiality study.</li> <li>Regular collaborative communication.</li> <li>Meetings and other forms of direct communication.</li> <li>Newsletter.</li> <li>Web page.</li> </ul>	<ul> <li>Communication of strategy and conducted activities.</li> <li>Supplier evaluation system.</li> <li>Sharing knowledge and good practice.</li> <li>Favourable conditions for cooperation.</li> <li>Developing long-term relationships.</li> <li>Transparent and fair rules of cooperation.</li> </ul>
Shareholders and investors	<ul> <li>Investor relations and communications on <a href="https://www.luglightfactory.com/en/investor-relations">https://www.luglightfactory.com/en/investor-relations</a> and via <a href="relacje@lug.com.pl">relacje@lug.com.pl</a></li> <li>Summary conferences and investor chats.</li> <li>General Meeting of Shareholders.</li> <li>Current and periodic reports.</li> <li>Non-financial reports.</li> <li>Economic media.</li> <li>Face-to-face meetings.</li> </ul>	<ul> <li>Communicating about the strategy, objectives undertaken and actions in the ESG area.</li> <li>Company performance.</li> <li>Active and transparent communication.</li> </ul>
Financial institutions	<ul> <li>Communication on the corporate website.</li> <li>Direct meetings.</li> <li>Summary conferences.</li> <li>Current and periodic reports.</li> <li>Non-financial reports.</li> <li>Participation in the materiality study.</li> <li>Press materials.</li> <li>Web page.</li> <li>Face-to-face meetings.</li> </ul>	<ul> <li>Communicating about the strategy, objectives undertaken and actions in the ESG area.</li> <li>Building confidence in LUG S.A. to acquire new business financing opportunities.</li> </ul>
Supervisory authorities and regulators	Contact by email, telephone or post as required.	<ul> <li>Reporting as required.</li> <li>Dialogue and consultation in relation to proposed regulatory changes.</li> </ul>
Social environment and local communities	<ul> <li>Cooperation and ongoing contact throughout the year and during the implementation of community programmes.</li> <li>Participation in the materiality study.</li> <li>Press materials.</li> <li>Local conferences.</li> <li>Meetings and other forms of direct communication.</li> </ul>	<ul> <li>Maintaining relationships and engagement with organisations.</li> <li>Conducting educational activities and promoting energy-efficient solutions.</li> <li>Offering jobs.</li> </ul>

We determined the relevance of each stakeholder by examining the strength of influence in a two-way dimension, that is:

- the strength of the LUG Group's impact on the stakeholder,
- the strength of the stakeholder's influence on the LUG Group.

In the process of identifying material stakeholder groups, we took into account the results of a benchmarking exercise of companies in the industry.

### 4.3 Material sustainability issues

The material assessment returned 27 issues on which we have a material impact (impact materiality) or which materially affect our Group's operations (financial



### materiality).

In order to determine the level of materiality and intensity of action and to allocate appropriate resources, the identified sustainability issues were divided into 3 groups with different management priorities.

Sustainability issues were analysed in terms of four parameters within the impact materiality framework:

- scale of impact,
- · scope of impact,
- · likelihood of impact,
- remediability of impact.

In the case of financial materiality, the impact of the ESG issue on the development, performance and business situation of the LUG Group was examined.

### List of material sustainability issues in the LUG Group:

#### **27 MATERIAL ESG ISSUES**

with different management priorities\*

### Material issues with top management priority:

- Energy efficiency.
- Fuel and energy mix.
- Greenhouse gas emissions.
- Acquisition and use of raw materials and other materials.
- Waste generation and management.
- Circular business models.
- Business conduct.

### Material issues with medium management priority:

- Adaptation to climate change.
- Substances of concern and risk.
- Space.
- Employees' rights throughout the value chain.
- Consumer/user rights.
- Air, water and land pollution.
- Biodiversity and ecosystems.
- Equal opportunities.
- Rights of community members.
- Risk management system.
- Payment practices.

### Material issues with normal management priority:

- Water intake and consumption.
- Sewage disposal.

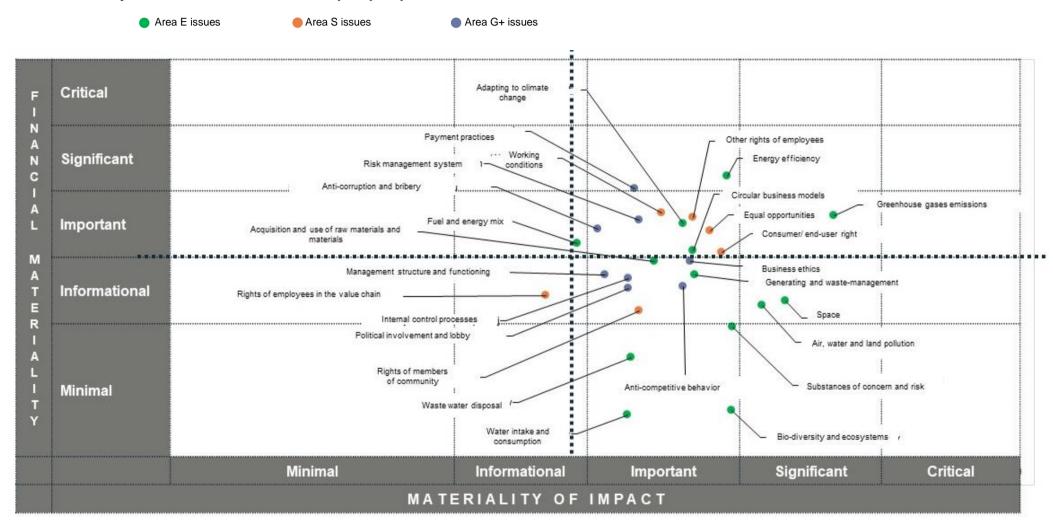
- Working conditions.
- Other employee rights.
- Structure and functioning of the company's authorities.
- Internal audit.
- Counteracting corruption and bribery.
- Anti-competitive behaviour.
- Political engagement and lobbying.

#### \*) Management priority groups:

- Top management priority means that the issue should be managed first and that appropriate resources should be allocated to it.
- Medium management priority suggests managing the issue and increasing organisational resources.
- The normal management priority specifies that the issue should be managed with the same intensity and with similar resources as at present.



### Materiality matrix from an insider and expert perspective:



### 4.4 Material sustainability risks and opportunities

The 2022 materiality assessment identified a number of sustainability risks and opportunities belonging to specific areas.

ESG area	Material risks and opportunities	Persons/units managing the risk	Details			
Management area	Risk management system	President of the Management Board, Vice President of the Management Board of LUG S.A, Strategic Finance and Risk Director, Global Director of the Sales and Marketing Division, Production Director	Description in chapter 3.8			
	2. Business conduct	President of the Management Board, Legal Department, Head of the Management and Communications Office				
	Counteracting corruption and bribery	President of the Management Board, Legal Department				
	4. Payment practices	Sales Department, Accounting Division, Management Board, Finance Director	-			
Labour and social issues	5. Working conditions	LUG Management Board, HR Department / Proxy	Description in chapter			
area	6. Equal opportunities	LUG Management Board, HR Department / Proxy	9.5			
	7. Other employment rights	LUG Management Board, HR Department/ Proxy, Legal Department	Description			
	8. Consumer/end-user rights	Production Director, Sales and Marketing Division Director, Legal Department	Description in chapter 8.6			
Environmental issues area	9. Energy efficiency	Vice-President of the Management Board of LUG S.A., Research and Development Division Director	Description in chapter 7.7			
	10. GHG emissions	Vice-President of the Management Board of LUG S.A., Production Director				
	11. Fuel and energy mix	Vice-President of the Management Board of LUG S.A., Production Director				
	12. Adaptation to climate change	Production Director, Research and Development Division Director, Health, Safety and Fire specialist.				
	13. Acquisition and use of raw materials and other materials	Production Director, Purchasing Director				
	14. Circular business models	Vice-President of the Management Board of LUG S.A., Production Director, Research and Development Division Director, Global Sales and Marketing Division Director				

The above-mentioned material sustainability risks and opportunities have been described along with their management in individual chapters of the report.



# SUSTAINABLE LIGHTING SOLUTIONS FROM THE LUG GROUP



### 5. Sustainable lighting solutions from the LUG Group



We recognised the need for the transformation to energy-efficient light sources decades ago when we joined the lighting industry as one of the manufacturers based in Zielona Góra. The potential of LED solutions has grown over the years proving that this is the right business path to follow. Today, LUG luminaires illuminate streets as well as architectural and industrial buildings all over the world and, in the face of turbulent economic conditions and farreaching climate change, support an idea that everyone already recognises - the idea of sustainable development.

Sustainability is a characteristic quality of the activities of our organisation, which each year invests in innovative, energy-efficient solutions that form a coherent whole in combination with an intelligent lighting management system. They are close to nature, friendly to the environment, as well as people and other living organisms. We support the reduction of greenhouse gas emissions, we offer technology to generate significant savings to our partners, we influence the reduction of light pollution by creating good light for people and for the animals that live right next to us.

We are striving to reduce the carbon footprint embedded in LUG products by developing the production area and looking for alternatives to carbon-intensive energy sources. In 2022, the idea of investing in photovoltaics emerged, which we aim to have in place by the end of 2023.

#### 5.1 Sales structure

In 2022, our products illuminated facilities and streets in more than 76 countries around the world. The share of LED in the structure of luminaire sales in the LUG Group in 2022 was 100%.

	2022 [PLN million]	2021 [PLN million]	2020 [PLN million]
Poland	106.87	81.38	69.33
Other countries in total, including:	133.08	122.53	113.40
Europe	92.29	91.02	79.41
Middle East and Africa	34.26	9.70	12.40
Other	6.54	21.82	21.58

Our export revenues in 2022 accounted for 55.5% of total revenues. The most important export destination is the European countries, which accounted for 38.5% of total sales revenue in 2022.

We work globally and regionally. In 2022, we operated from eight offices located in major Polish cities (Warsaw, Gdynia, Szczecin, Katowice, Wrocław and Łódź



offices). Foreign business relationships were established through the Group's companies located in Berlin, London, Sao Paulo, Posadas and Istanbul, as well as sales representative offices in Dubai and Morocco.

### 5.2 LED technology

No one is surprised any more that LED technology is the most popular among modern lighting solutions, responding to the needs and requirements of modern societies and local authorities. Europe, where we are rooted, is the most informed market as regards LED lighting, with the European industry alone accounting for around 20% of the global lighting market.



The main drivers of the market for high-performance products are:

- increasing use of energy-efficient lighting solutions,
- the falling cost of light-emitting diodes,
- intensive infrastructure development activities and increasing urbanisation,
- increasing consumer awareness of the durability of light sources,
- · government regulations on energy efficiency,
- climate change.

LED technology is also being used worldwide as the basis for implemented solutions in the area of intelligent lighting to collect information about pollution, humidity, noise and the environment. Experts suggest that smart lighting is the future of LED lighting, realising its full potential.

100% of our luminaires range are LED luminaires, which reduce energy consumption and greenhouse gas emissions into the atmosphere. We produce state-of-the-art LED modules with a wide range of applications. Depending on the functional requirements, LED modules can be distinguished by particular parameters:

- high efficacy of up to 200 lm/W
- high flux up to 30,000 lumens,
- high colour rendering index up to CRI>90,
- colour control available by mixing the light from the green, red and blue LEDs, any intermediate colour can be obtained,
- colour temperature controllability when diodes with different colour temperatures are used, there is the possibility of infinite adjustment within the range of intermediate values,
- increased resistance to certain chemical compounds thanks to the use of diodes made with special technology, the modules can be characterised by increased resistance to, among others, sulphur compounds and ammonia,
- shape a single module can take any shape,
- improved heat dissipation the use of aluminium-substrate laminates reduces the temperature of the diode junction, thereby extending the module's lifespan.

### Association of Lighting Equipment Manufacturers "Pol-Lighting"

We are an active member of the Association of Lighting Equipment Manufacturers "Pol-Lighting". The organisation brings together leading manufacturers of light sources and professional lighting equipment, works to improve the innovation and competitiveness of the lighting sector, and cooperates with government authorities, sectoral research institutes and other industry organisations. It also serves to exchange experience, expertise and solutions that allow all members to develop their own know-how. As a member of Pol-Lighting, using our many years of experience in the lighting industry, we influence and participate in the initiatives implemented by the Association.

Pol-Lighting promotes LED technology and cooperates with market surveillance authorities regarding the compliance of products allowed for sale in Poland with EU standards and Polish legislation. It takes action to eliminate unfair practices, supporting the development of free competition and the development of the Polish lighting industry.

In 2022, initiatives of Pol-Lighting included:

- 1. Renovation Wave Initiative, aimed at doubling the rate of replacement of sodium lighting with LED lighting in public buildings, private buildings and those of local government units. The initiative aims to reduce CO<sub>2</sub> emissions by 55% across the EU by 2030 and includes:
  - measures to promote energy-efficient lighting solutions;
  - · educational webinars for local government units;
  - cooperation with the Future Industry Platform Foundation;
  - cooperation in the training provided by the Union Development Committee for local government units (continued in 2023).
- 2. Press publications and online meetings with the Ministry of Development and Technology to prepare the Digital Lighting+ programme. This programme would allow for the replacement of street lighting by municipalities in the Republic of Poland. The minimum energy savings to be met are 55% per year. In 2023, the renovations will also include interior lighting.
- 3. Participation in the Energy Labelling project in cooperation with Lighting Europe, co-developing requirements for the energy labelling of light sources in order to adapt energy labelling classes to technological developments and support the uptake of newer lighting technologies.
- 4. Running a *Quality Monitoring Programme* for lighting products through a Programme Board made up of lighting experts selected from Pol-Lighting member companies. It cooperates with market surveillance authorities, i.e. UOKIK/UKE, in order to eliminate from the market lighting products that do not meet the requirements of regulations and standards, the introduction of which to the Polish and European markets distorts free competition.



Pol-Lighting experts also share knowledge during conferences and press meetings, increasing awareness of lighting products, their technical, legal, functional and information requirements.

### 5.2. LUG URBAN lighting management system

The proprietary URBAN control system, developed by BIOT, our subsidiary, provides intelligent lighting control by allowing the status of each luminaire to be monitored, electricity consumed to be measured, scheduling to be carried out and lighting to be automatically adapted to prevailing conditions such as weather or traffic levels. The URBAN system organises wireless communication and power supply for other smart city verticals, owing to which it is the foundation for the development of smart cities.

It can be used successfully in both compact urban structures and dispersed rural areas. The speed and dynamics of the system also allow it to be used where the demands are greatest, namely on motorways and motorways.

The URBAN system can contribute to:

- improving safety;
- increasing people's comfort
- limiting light pollution;
- reduction in electricity consumption and savings in local government unit budgets;
- reduction in the carbon footprint.

In addition, it makes it possible to better use the full potential of LED technology, extend the life of the infrastructure and improve its safety and reliability.

The Open Programme Interface (API) used to integrate URBAN and its proven readiness to work with other subsystems and third-party luminaires mean that URBAN creates a flexible ecosystem to prepare cities and towns for the future.

The use of innovative technologies and top-of-the-range lighting solutions are also preparing cities for the next challenges in the implementation of *Smart City* technology in the future. The BIOT company is constantly developing the system with new areas.

### 5.3. Quality and safety of LUG products

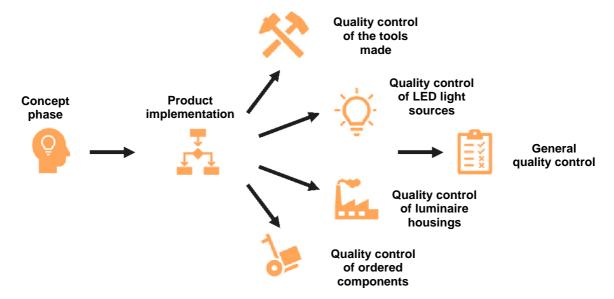
### **Consumer safety**

When designing and manufacturing luminaires, our experts pay particular attention to the comfort and safety of their use for our customers, who include:

- local government units upgrading street lighting infrastructure,
- general contractors for office, retail, educational or medical buildings.

The consumers/end-users of our products are all people who are in the space illuminated by LUG luminaires, e.g. people moving around in public spaces or staying in buildings.

The process of delivering the highest quality goods to the customer consists of both care for the safety of product installation and its use at each stage of the life of the supplied equipment.



The luminaires produced by LUG meet all European requirements and standards which is a key condition for admitting products to the market and the basis for placing them on the EU market. The authorisation of products for sale is also regulated by two directives:

- Directive 2014/35/EU of the European Parliament and of the Council
  of 26 February 2014 on the harmonisation of the laws of the Member States
  relating to the making available on the market of electrical equipment designed
  for use within certain voltage limits (the so-called Low Voltage Directive LVD);
- Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery (so-called Machinery Directive).

Moreover, LUG luminaires are also manufactured in accordance with the provisions of Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing general principles for setting ecodesign requirements for energy-related products (the so-called Ecodesign Directive), which concerns energy and emission requirements and talks about levels of energy consumption so that products become increasingly environmentally friendly.

The safety of our products is confirmed by:

- EU Declaration of Conformity (CE);
- MA Declaration of Conformity;
- Compliance with Ukrainian standards;
- HACCP certificate;
- ENEC certificate:
- EAC Certification and Declarations;
- Compliance with ISO 9001 Quality Management System, ISO 50001 Energy Management System and ISO 17025:2018 laboratory recognition to perform photometric, thermal, leakage, colorimetric, electrical tests.



An additional proof of safety of LUG products are numerous other tests carried out in the LUG Group laboratory: corrosion, UV, ball impact, vibration and 3G tests, CNBOP, electromagnetic compatibility, PZH, IK, IP, GWT, ROHS, ZHaga-D4 certificates and others.

Selected LUG luminaires also have certificates issued by certifying institutions on individual markets on which the company operates. As user comfort and safety are such an important part of our luminaires' DNA, safety testing and certification are treated with the utmost care and the highest priority in compliance with regulatory requirements.

### Compliance of products with RoHS Directive

LUG Light Factory employees do their due diligence by collecting RoHS compliance declarations from our suppliers. Furthermore, the declared quality of the luminaires and components is verified during independent tests commissioned to an external accredited laboratory.

We comply with the provisions of Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment, hereinafter the "RoHS II Directive" introduces restrictions on the use of certain substances in electrical and electronic products. The provisions of RoHS II Directive have been in force since 3 January 2013 and are intended to improve the protection of human health and the environment at all stages of product life, including recovery and disposal of waste electrical and electronic equipment, hereinafter referred to as "EEE".

### Compliance of products with the WEEE Directive

As a manufacturer of luminaires, we are required to have a permit for the generation of waste from the operation of the plant and we must comply with requirements regarding, among other things, the disposal of electronic equipment.

Each declaration of conformity attached to a luminaire includes information that the LUG products are compliant with:

- Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (OJ of the EU L 174, 01.07.2011, p.88, as amended);
- Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (OJ of the EU L 285, 31.10.2009, p. as amended)

Our products are marked with a crossed-out wheeled bin symbol, which means that waste from used equipment should not be disposed with other waste. Waste electrical and electronic equipment, on the other hand, must be handed over to a company that is authorised (by administrative decision) to collect this type of waste.

We document all waste management processes and report on the equipment produced and packaging introduced in the BDO electronic waste database.

In our operations, we use the services of the electronic and electrical equipment recovery organisation Elektroeko, which takes over the statutory obligations of the producer of electrical equipment. In 2022, the weight of luminaires entering the domestic market was 1,035,192 kg and 976,317 kg for export markets.

[S.11.1] In 2022, there were no violations of procedures regarding the safety of products and services in the LUG S.A. Group.

[S.11.2] In 2022, no proceedings were initiated, completed, or pending against companies from the LUG S.A. Group conducted by the Office of Competition and Consumer Protection or similar offices in other countries. There are also no penalties for non-compliance with laws and regulations.

[S.12.1] [S.12.2] In 2022, there were no cases of non-compliance with regulations and voluntary codes concerning marketing communication at LUG. There were no administrative cases pending against LUG for non-compliance with the law and regulations on issues related to the reliability and ethics of marketing communication.

[S.14.1] [S.14.2] In 2022, there were no cases of non-compliance with the labelling of LUG products, and no administrative proceedings were conducted against LUG due to incorrect labelling.

### **EPREL database and Environmental Product Declarations (EPD)**

As a manufacturer of light sources, LUG Light Factory is subject to the requirements of the following regulations:

- 2019/2015 Commission Delegated Regulation (EU) 2019/2015 of 11 March 2019 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to the energy labelling of light sources and repealing Commission Delegated Regulation (EU) No 874/2012 (Text with EEA relevance).
- 2019/2020 Commission Regulation (EU) 2019/2020 of 1 October 2019 establishing ecodesign requirements for light sources and separate control gear pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulations (EC) No 244/2009, (EC) No 245/2009 and (EU) No 1194/2012 (Text with EEA relevance).

Our luminaires are classified according to the definition as an equipped product<sup>1</sup>, and we have therefore included information on the energy efficiency class of the light source that is part of the luminaire in the Installation Manual. We have also created luminaire dismantling manual available on our website which, in addition to providing information on how to dismantle the luminaire, explain how to further deal with the waste.

The LED modules were classified as light sources, for which the corresponding efficiency classes were assigned, and registered in the EPREL database.

<sup>&</sup>lt;sup>1</sup> The equipped product has at least one light source or at least one separate control fixture, or both.



Having recognised the needs and requirements of the market, at LUG Light Factory we launched a project to implement Environmental Product Declarations (EPDs) for luminaires. This document contains an analysis of the environmental impact of the product throughout its life cycle.

### **Product labelling**

Our responsibilities as a manufacturer include the correct labelling of the product. Luminaires are marked with rating labels which must comply with the PN-EN 60598-1 standard and additionally with the guidelines of European Union directives.

The labels of our luminaires contain, among other things, the following data:

- name of the luminaire/ component;
- index;
- power, voltage;
- manufacturer data;
- production date;
- order number;
- certificates;
- EAN Code;
- quality control confirmation.

### **Component quality**

Standards, which should be met by semi-finished products and components delivered to LUG, should be based on guidelines adopted and approved by the PKN national standardisation body for a given group of components, be compliant with EU directives (CE marking) and meet the declaration of material conformity with the RoHS directive. Components should be based on dimensional standards with an indicated degree of tolerance e.g. PN-EN 22768-1.

#### **Luminaire installation**

In most cases the luminaires we supply are installed by third parties with whom the Group does not maintain a contractual relationship. In such cases, the responsibility for the installation of the luminaires lies with the client/ordering party. In some cases, as a result of, inter alia, public procurement processes, the responsibility for the installation of the luminaires rests with LUG, if the company has been specified in the order as the General Contractor and a party to the contract. The contractor is selected in such a procedure on the basis of the criteria indicated in the Terms of Reference - these are most often the price, declared guarantee period, order completion date and achieved power of the luminaire installed as a result of the project. In this type of case, we do not act directly as a subcontractor-installer, employ installation. assembly, companies but etc. for the duration of the implementation period under a subcontracting agreement and commission them with this type of work. Within the LUG S.A. Capital Group, the function of an installation and assembly company may be entrusted to LUG Services, or this company may act directly as a General Contractor.

The LUG Group is supervised directly by the Ordering Party, which can carry out the supervision on its own, or commission the Investor's Supervision Inspector (such an obligation is specified in the building permit, but there are no obstacles to using such a function at will). The care for OHS standards is regulated by law, and the subcontractor's responsibility for the subcontractor's employees rests with the subcontractor. This obligation is governed by the Contractor-Subcontractor agreement.

### 5.4. Responsible marketing communication

Over the years, the communication structure in the marketing sphere has evolved providing responsible content through various communication channels to raise awareness among our target groups and the public.

As a manufacturer of LED lighting supplied to countries around the world, we know the responsibility that such an activity brings. We make every effort to share our knowledge of energy-efficient lighting and the financial and environmental savings it generates, through training, lectures and industry events.

### Educating architects and designers in the field of lighting design

Architects have a special role in the conceptual processes involving our luminaires. It is they who, at the design stage of a building or public space, make the first decisions to permit their use in the design. It is up to the skill and competence of the architects and their collaboration with the lighting designers to ensure that the lighting system designed is effective and responds accurately to the future needs of the users.

We appreciate the direct influence that architects and designers have in shaping our product range. In order to further develop and fine-tune the framework for collaboration, we have created the *Architect Support Programme*. With an in-house design team, we provide support to architects and designers interested in working with us in terms of training and technical support. In addition, for several years, we have been cooperating with reputable companies providing tool palettes for architects, designers and graphic designers. The result of the joint activity is comprehensive support for the above-mentioned professional groups in the field of all kinds of architectural models.

Cooperation within the *Architect Support Programme* allows us to adjust and optimise solutions to individual needs. The end results of the cooperation are:

- savings in the design phase;
- ROI analysis;
- · cost and energy optimisation.

In 2022, as part of the improvement and training process of the *Architect Support Programme*, we dedicated approximately 8 training hours per person during the following events:

 a series of CPD (Continuing Professional Development) training courses -Utilising BIM Enabling Tools to get your light right - prepared by academic



centres to provide valuable educational content to improve skills, knowledge and understanding of the latest trends. The content presented by our team is each time evaluated and accredited (by centres such as RIBA, CIBSE). The training participants include architects, consultants and engineers who want to improve their qualifications and apply the knowledge they have gained in their daily work;

- ARCHIFEST 2022 as part of a multi-year collaboration with the Maison de l'Architecture, our staff hosted an ArchiFest evening which, for architects in the Grand Est region, provides a summary of the year and a presentation of projects to be implemented for the coming year. We had the pleasure of presenting completed lighting designs, the way we work, our product range with particular emphasis on design support with a short panel discussion. Approximately 70 people from the region's largest design offices attended. The meeting confirmed the quality of our lighting solutions and allowed LUG to be included in the 'reference list' kept by architects from the region who are implementing projects throughout France;
- Journees de l'architecture 2022 from 23.09 31.10.2022 we exhibited the LUG stand presenting our lighting designs. Approximately 3,500 people, mainly from the world of architecture and numerous design studios, attended the conference and its behind-the-scenes discussions, which provided a space for the exchange of experiences and the presentation of innovative lighting solutions;
- SARPFR 2022 Award The Association of Polish Architects in France has awarded its annual PRIX SARP FR 2022 award for the most interesting engineering diploma design of 2021. LUG was a patron of the event and the founder of the main prize.



# PERFORMANCE INDICATORS AND COMPLIANCE WITH THE TAXONOMY





### 6. Performance indicators and compliance with the Taxonomy

### 6.1. Non-financial key performance indicators

	Unit	2019	2020	2021	2022	Change YOY	Goal
Work area							
Average number of training hours per employee	h	18.0	9.3	9.8	18.0	+83.5%	30
Rotation rate of employees employed for an indefinite period of time	%	11.7%	16.9%	17.1%	14.8%	-2.3%	4.0%
Gender Pay Gap Ratio	%	41.2%	26.9%	27.0%	28.5%	+1.5pp	0%
Glass Ceiling Ratio	%	13.3%	13.0%	13.8%	11.7%	-2.1pp	0%
Social area							
Number of complaints reported by local communities	pcs.	0	0	0	0	-	0
Number of architects and designers attending training courses and lectures on lighting	pcs.	1,377	456	1,623	3,699	+227.9%	1,000
Environmental area							
Energy consumption per luminaire produced	kWh/ pcs.	15.0	11.1	10.8	11.0	+2.2%	12.3
Mass of greenhouse gases emitted to the atmosphere under Scope 1 and 2 location-based per luminaire sold	kg CO <sub>2</sub> e/ pcs.	4.85	3.76	3.87	3.89	+0.7%	4.30
Mass of greenhouse gases emitted to the atmosphere under Scope 1 + 2 market-based + 3 per luminaire sold	kg CO <sub>2</sub> e/ pcs.	n.d.	n.d.	1,264.1	1,353.2	+7.0%	_***)
Weight of waste per luminaire produced	kg/ pcs.	0.919	0.920	0.881	0.778	-7.9%	0.63
Compliance with the EU Taxonomy	y for sustain	able eco	nomic act	ivities			
Percentage of turnover in line with the Taxonomy	%	n.d. *)	91.40%	90.06%	77.27%	-12.79pp	_**)
Percentage of capital expenditure (CapEx) compliant with the Taxonomy	%	n.d. *)	n.d. *)	4.38%	89.05%	+84.67pp	_**)
Percentage of operational expenditure (OpEx) in line with the Taxonomy	%	n.d. *)	n.d. *)	62.40%	75.58%	+13.18pp	_**)

- \*) We calculate, assess and report the degree of compliance with the EU taxonomy for sustainable economic activities starting with the 2019 report. In the first two years, the calculations were based directly on the content of Regulation 2020/852 or on the draft acts delegated to it. The issuance of final delegated acts by the regulator in 2021 and the issuance of interpretations by the European Commission in 2022 on reporting compliance with the Taxonomy have improved the methodology for calculating the percentage of turnover (from 2020) and CapEx and OpEx (from 2021), so that these items for previous years are not fully comparable.
- \*\*) The provisions of the Taxonomy came into force during the period of the Strategic Development Directions and therefore the decision was taken not to set targets

in relation to them. The strategic objectives in relation to these three indicators will be defined in the LUG Group's sustainability strategy.

\*\*\*) With the development and adoption of the LUG Group Sustainability Strategy, reduction targets will be developed. Work on the strategy is planned to start in 2023. The calculation of GHG emissions in scope 3 was carried out for the first time in 2022.

### 6.2. Compliance with the EU Taxonomy for sustainable activities

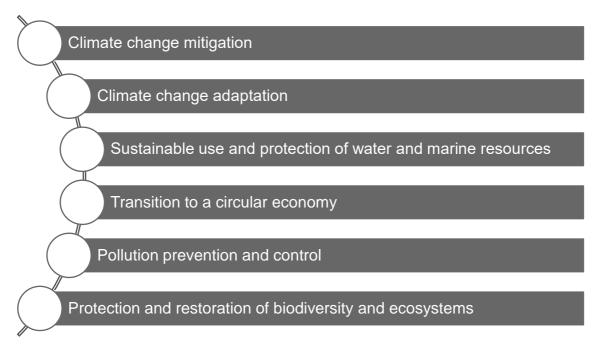
It is for the fourth time that we disclose in this report, this time for 2022, information regarding the *EU Taxonomy of environmentally sustainable activities*. The EU Taxonomy (hereinafter referred to as: Taxonomy) transposes the European Union's climate and environmental objectives into technical criteria for assessing whether an activity can be considered sustainable in relation to the 6 environmental objectives.

The EU taxonomy is therefore a classification system that shows what proportion (% share) of our business, analysed based on turnover, capital expenditure (CapEx) and operating expenditure (OpEx), is environmentally sustainable.

According to the taxonomy, an environmentally sustainable activity is one that simultaneously:

- Makes a substantial contribution to at least one environmental objective;
- Does not do serious harm to any environmental objective;
- Is carried out in accordance with Minimum Safeguards;
- Meets technical screening criteria.

The systematisation is structured around 6 environmental objectives:



The Technical Screening Criteria (TSC) clarify the notion of 'Substantial contribution criteria' and 'Does Not Significantly Harm'. These are set out in Annexes I and II



of Commission Delegated Regulation (EU) 2021/2139<sup>2</sup>, as extended by Commission Delegated Regulation (EU) 2022/1214<sup>3</sup>.

The European Commission has so far only issued delegated acts specifying the criteria for a substantial contribution for the first two objectives:

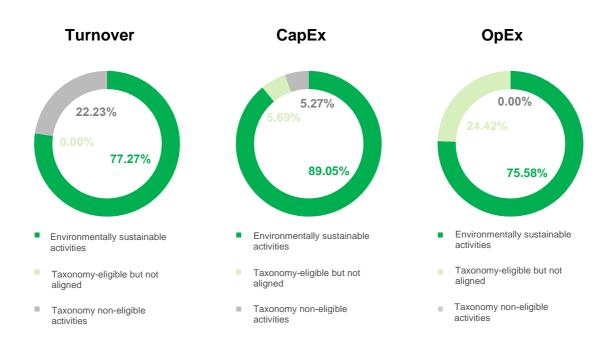
- climate change mitigation,
- climate change adaptation.

In future, the criteria will be extended and will also include the conditions that an activity should meet in order to make a substantial contribution to the other four environmental objectives.

As the LUG Capital Group, in this report we disclose for the third time the share of activities that are taxonomy-aligned and for the fourth time the share of activities that qualify for the taxonomy. The disclosure in this report relates to the most recent financial year, i.e. the period 01.01.2022.-31.12.2022.

## Compliance of the activities carried out by the LUG Capital Group with the EU Taxonomy

As a result of our analyses, we determined the following percentage of turnover, capital expenditure (CapEx) and operating expenditure (OpEx) in line with the systematic:



<sup>&</sup>lt;sup>2</sup> Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and whether that economic activity does not cause significantly harm to any other environmental objectives.

<sup>3</sup> Commission Delegated Regulation (EU) 2022/1214 of 9 March 2022 amending Delegated Regulation (EU) 2021/2139 as regards economic activities in certain energy sectors and Delegated Regulation (EU) 2021/2178 as regards specific public disclosures for those economic activities.

Our ongoing examination of the compliance of the activity with the EU Taxonomy showed that:

- The environmentally sustainable activities in 2022 yielded: 77.27% of turnover, 89.05% of capital expenditure and 75.58% of operating expenditure.
- Eligible but non-systematically compliant (environmentally unsustainable) activities in 2022 were from: 0.00% of turnover, 5.69% of capital expenditure and 24.42% of Group operating expenditure.
- In 2022 non-taxonomy-eligible activity yielded: 22.73% of turnover, 5.27% of capital expenditure and 0.00% of Group operating expenditure.

	Turnover	СарЕх	OpEx
Value in 2022 [million PLN]	240.0	11.1	4.1
Environmentally sustainable activities (Taxonomy-aligned)	77.27%	89.05%	75.58%
Not environmentally sustainable activities (Taxonomy-eligible but not aligned)	0.00%	5.69%	24.42%
Taxonomy non-eligible activities	22.73%	5.27%	0.00%

Due to the change in the Taxonomy legislation and its gradual entry into force in recent years, the data reported for 2022 are not comparable to those presented in previous reports.

In the remainder of this chapter, we describe the process of examining alignment with the taxonomy, the accounting principles used and a detailed discussion of the three performance indicators with tables prepared in accordance with the so-called Article 8 Delegated Act, Commission Delegated Regulation (EU) 2021/2178<sup>4</sup>.

### Steps in the examination of taxonomy-alignment

We carried out the process of Taxonomy-alignment assessment with the participation of:

- our accounting team, including the Director of Finance and the Chief Accounting Officer,
- our Investor Relations and ESG team, including the Head of the Management and Communications Office and the Investor Relations and ESG Specialist,

with the support of MATERIALITY, an external advisory company.

4 Commission Delegated Regulation (EU) 2021/2178 of 6 July 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by specifying the content and presentation of information to be disclosed by undertakings subject to Article 19a or 29a of Directive 2013/34/EU concerning environmentally sustainable economic activities and specifying the methodology to comply with that disclosure obligation.



We carried out the process in the following four stages:

### Stage 1: Identification

Guided by the activity descriptions in the annexes to Commission Delegated Regulation (EU) 2021/2139, we have reviewed our activities - in terms of revenue, capital expenditure (CapEx) and operating expenditure (OpEx) in 2022 and identified those activities that are taxonomy-eligible.

### Stage 2: Allocation

We then assigned the corresponding turnover, capital expenditure and operating expenditure realised by the LUG Group in 2022 to each activity identified as Taxonomy-eligible. The details of the allocation methods used are described in the "Accounting policies" paragraph in this chapter.

### Stage 3: Verification

We verified alignment with the Taxonomy using 2 types of tests:

- For all identified activities, we carried out an assessment of the "Substantial contribution criteria" and "Does Not Significantly Harm" criteria using the TSCs set out in the annexes to Commission Delegated Regulation (EU) 2021/2139. Details of the assessment are set out in the Verification of compliance with the Technical Screening Criteria section.
- We have also carried out an assessment of whether the Minimum Safeguards are met. Details of the assessment are set out in the Minimum Safeguards section.

#### Stage 4: Calculation

The calculation stage consisted of using the information resulting from stages two and three to draw up tables containing the required information and preparing this supplementary information, as required by Annexes I and II of Commission Delegated Regulation (EU) 2021/2178.

### Minimum Safeguards

We examined compliance with the requirements of the *Minimum Safeguards* using the recommendations in the *Final Report on Minimum Safeguards* by the Platform on Sustainable Finance. The Minimum Safeguards are set out in Article 18 of Regulation 2020/852 and are based in large part on conducting due diligence processes as defined in the *UN Guiding Principles on Business and Human Rights* and *The OECD Guidelines for Multinational Enterprises*. Although the Platform on Sustainable Finance report is not a piece of legislation, it is the only currently available source of interpretation on the Minimum Safeguards, issued by a body functioning under the European Commission and established under Regulation 2020/852.

The Platform on Sustainable Finance identified 4 premises and concluded that meeting at least one of them meant non-compliance with the requirements of the Minimum Safeguards.

The four conditions and the assessment method are described in the table below:

	Conditions	How did we assess this?								
1	Inadequate or non-existent due diligence processes on human rights, bribery and corruption, unfair competition and taxation.	As part of our due diligence process verification, we completed an extensive questionnaire as part of our self-assessment - based on the methodology proposed by the Platform on Sustainable Finance (World Benchmark Alliance Core UNGP Indicators) and commissioned an external consulting company to analyse corporate documents and processes in our LUG Group. The analysis helped conclude that due diligence processes are in place within the LUG Capital Group.								
2	The company is ultimately held liable or found to have violated labour or human rights law in certain types of labour or human rights litigation.	In order to verify this, we have reviewed - in cooperation with representatives of the Legal and HR Department, the Management Office and Communications - whether there are any final convictions against the Company in the areas of human rights, corruption, fair competition behaviour and taxation. As a result of such verification, we found that there was no information on such final judgments.								
3	Lack of cooperation with the OECD National Contact Point (OECD NCP)	We have verified the OECD NCP reporting database, which showed no reports against the LUG Group for the period from 01.01.2022 to 31.12.2022.								
4	The Business and Human Rights Resource Centre (BHRRC) took up the allegation against the company and the company did not respond within three months.	We have verified the Business and Human Rights Resources Centre's (BHRRC) reporting database, which showed no reports against the LUG Capital Group for the period from 01.01.2022 to 31.12.2022.								

As a result of the analysis, we determined that the LUG Capital Group's operations in 2022 were conducted in accordance with the Minimum Safeguards.

### Verification of compliance with the Technical Screening Criteria (TSC)

We carried out the verification of compliance with the Technical Screening Criteria for all taxonomy-eligible activities and consisted of an analysis of the individual criteria of Substantial Contribution and Does Not Significantly Harm, and a check of the extent to which the activity complies with the TSC as set out in Annexes I and II of Commission Delegated Regulation (EU) 2021/2139<sup>5</sup>, as extended by Commission Delegated Regulation (EU) 2022/1214<sup>6</sup>.

The following table presents the activities carried out within the framework of the TSC assessment for the two most relevant activities for our Group, namely:

for activity 3.5. Manufacture of energy efficiency equipment for buildings,

5 Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and whether that economic activity causes no significantly harm to any other environmental objectives.

<sup>6</sup> Commission Delegated Regulation (EU) 2022/1214 of 9 March 2022 amending Delegated Regulation (EU) 2021/2139 as regards economic activities in certain energy sectors and Delegated Regulation (EU) 2021/2178 as regards specific public disclosures for those economic activities.



for activity 3.6. Manufacture of other low carbon technologies.

Together, these activities accounted for more than three quarters of our Group's turnover and nearly 90% of the LUG Group's capital expenditure in 2022. Due to the volume of the report, we have decided not to include detailed descriptions of the TSC assessment for each activity, and the table below is intended to present the approach and detail of the analysis; it was carried out in an analogous manner for each of the Taxonomy-eligible activities.

"Substantial Contribution" criterion	
Climate change mitigation	The luminaires we manufacture are energy-efficient products, thus contributing to improving the energy efficiency of customers' operations and therefore reducing energy consumption and greenhouse gas emissions. Laboratory test reports were used to determine whether the premise was met.
Criteria for "Does Not Significantly Har	m"
Climate change adaptation	The climate risk analysis did not identify the presence of any of the risks listed in the table in relation to LED modules.
Sustainable use and protection of water and marine resources	The analysis determined that the production and the operation of LED luminaires, throughout the product life cycle, does not have a significant impact on water and marine resources.
Transition to a circular economy	The luminaires manufactured are registered in the EPREL database, and their compliance with the ROHS and REACH directives has also been confirmed.
Pollution prevention and control	The verification of production components used in terms of the content of hazardous substances and compounds was carried out in accordance with the EU ROHS and REACH directives. In the analysis, declarations from component manufacturers or laboratory test documents were used.
Protection and restoration of biodiversity and ecosystems	A full set of environmental impact assessment documents is in place for one of the LUG Group's production sites. For the second production facility, an environmental impact assessment document approved by an external health and safety expert for the plant expansion is in place.

### **Accounting Policy**

In order to calculate the proportion of Taxonomy-eligible and Taxonomy-aligned turnover, capital expenditure (CapEx) and operating expenditure (OpEx), we applied the following rules:

#### Turnover

With regard to turnover, the basis was the total consolidated revenue of the LUG Capital Group in 2022, as disclosed in the 2022 Consolidated Financial Statements under the heading Consolidated Statement of Comprehensive Income, described in Note 1. The numerator consisted of turnover related to Taxonomy-eligible and Taxonomy-aligned activities.

### Capital expenditure (CapEx)

With regard to capital expenditure (CapEx), the basis was the capital expenditure accounted for at the individual LUG Capital Group companies. The total amount of capital expenditure is presented in Notes 13 and 15 to the 2022 Consolidated Financial Statements. The numerator consisted of CapEx relating to Taxonomy-eligible and Taxonomy-aligned activities.

### Operating expenditure (OpEx)

With regard to operating expenditure (OpEx), the basis was all costs used to operate the LUG Capital Group's assets on an ongoing basis and keep them in proper working order. This includes costs such as those related to maintaining the proper functioning of buildings, equipment and production lines used by the LUG Group. The numerator consisted of OpEx relating to Taxonomy-eligible and Taxonomy-aligned activities.

For operating expenditure, which are defined in the Commission Delegated Regulation (EU) 2021/2178 in a way that does not refer to international financial reporting standards, all accounts in the LUG Group's financial and accounting system were reviewed, and the identified items meeting the OpEx definition are then assigned on a case-by-case basis to a particular Taxonomy-eligible activity or to a set of other operating expenditure (not Taxonomy-eligible).

### Other information

The data used for the calculations came from the financial and accounting system of LUG S.A. and from the financial and accounting systems of the individual subsidiaries comprising the Group.

The Group has avoided double counting when allocating turnover and capital expenditure through consolidation exclusions in accordance with the applicable accounting regulations. For operating expenditure, which are defined in the Commission Delegated Regulation (EU) 2021/2178 in a way that does not refer to international financial reporting standards, all accounts in the LUG Group's financial and accounting system were reviewed, and the identified items meeting the OpEx definition are then assigned on a case-by-case basis to a particular Taxonomy-eligible activity or to a set of other operating expenditure (not Taxonomy-eligible).

No activities contributing to more than one environmental objective were identified during the analysis. There was therefore no need for special procedures to avoid double counting.

The analysis showed that there was no need for a detailed disaggregation of the key performance indicators between the Group's individual operating units in accordance with section 1.2.2.3. Annex I of Commission Delegated Regulation (EU) 2021/2178. For more information, see the comments on the individual key performance indicators.

As the LUG Capital Group, we do not carry out, finance or have exposure to the activities referred to in sections 4.26 - 4.31 of Annexes I and II of the Commission



Delegated Regulation (EU) 2021/2139 (activities related to the generation of energy through nuclear processes and the production of energy from gaseous fossil fuels).

### Proportion of the Taxonomy-aligned turnover of LUG Group in 2022

																i				
					Substantial contribution criteria ("Does Not Significantly Harm")															
Economic activities	Code(s)	Absolute turnover	Proportio n of turnover	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Minimum safeguards	Taxonomy -aligned proportion of turnover, year 2022	Taxonomy -aligned proportion of turnover, year 2021	Categor y (enablin g activity or)	Category (transitiona I activity)
		PLN million	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y N	%	%	E	Т
A. TAXONOMY-ELIGIBLE ACTIVITIES  A.1 Environmentally sustainable activities (	T-v	alian ad)																	_	
Manufacture of energy efficiency equipment for buildings	3.5.	55.1	22.95%	100.00	0.00%	0.00	0.00	0.00	0.00		Y	Υ	Y	Y	Y	Y	22.95%	n/a	E	
Manufacture of other low carbon technologies	3.6.	127.3	53.07%	100.00	0.00%	0.00	0.00	0.00	0.00		Υ	Υ	Υ	Υ	Y	Υ	53.07%	n/a	E	
Data-driven solutions for GHG emissions reduction	8.2	0.3	0.13%	100.00 %	0.00%	0.00 %	0.00 %	0.00	0.00		Y	Υ	Y	Υ	Y	Υ	0.13%	n/a	E	
Computer programming, consultancy and related activities	8.2.	2.7	1.11%	0.00%	100.00	0.00 %	0.00	0.00	0.00	Y		Y	Υ	Y	Υ	Υ	1.11%	n/a		
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)		185.4	77.27%	76.15%	1.11%	0.00 %	0.00	0.00	0.00								77.27%	n/a		
A.2. Taxonomy-eligible but not environmen	tally sustai	nable activities	(not Taxonon	ny-aligned	activities)	•				•										
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		0.0	0.00%														0.00%	n/a		
Total (A.1.+A.2.)		185.4	77.27%														77.27%	n/a		
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																				
Turnover of Taxonomy-non-eligible activities (B)		54.6	22.73%																	
Total (A+B)		240.0																		



Within the LUG Group, turnover is generated primarily from the manufacture and sale of energy-efficient LED luminaires. The Group's consolidated turnover amounted to PLN 239.97 million in 2022, of which PLN 185.4m is Taxonomy-eligible under the following activities:

- 3.6. Manufacture of energy efficiency equipment for buildings in Annex I;
- 3.5. Manufacture of energy efficiency equipment for buildings in Annex I;
- 8.2. Computer programming, consultancy and related activities in Annex II;
- 8.2 Data-driven solutions for GHG emissions reduction in Annex I.

For all of the aforementioned activities, compliance with the Technical Screening Criteria was confirmed and the associated turnover was deemed to be Taxonomy-aligned.

In addition, in 2022 the Group received PLN 54.6 million in revenue from Taxonomy-non-eligible activity. This turnover came mainly from the sale of goods and materials PLN 5m, construction services PLN 5m and products using LED modules with lower energy classes.

The propotion of turnover from environmentally sustainable activity (Taxonomy-aligned) in total turnover was 77.27% in 2022, and the proportion of turnover from Taxonomy-eligible but not aligned activity was 0.00%. Overall, the proportion of turnover from Taxonomy-eligible activity was 77.27%. The remaining 22.73% of turnover is attributable to turnover from Taxonomy-non-eligible activity, i.e. for which the regulator has not established Technical Screening Criteria in the annexes to the delegated act.

### Proportion of the Taxonomy-aligned capital expenditure (CapEx) of LUG Group in 2022

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				5	Substantial contribution criteria ("Does Not Significantly Harm")															
Economic activiies	Code(s	Absolute CapEx	Proportion of CapEx	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Minimum safeguards	Taxonomy- aligned proportion of CapEx, year 2022	Taxonomy- aligned proportion of CapEx, year 2021	Category (enabling activity or)	Category (transitiona activity)
		PLN million	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	%	E	т
A. TAXONOMY-ELIGIBLE	ACTIVITIE	ES																		
A.1 Environmentally sus	tainable ac	tivities (Taxonom	y-aligned)																	
Manufacture of energy efficiency equipment for buildings	3.5.	3.0	26.88%	100.00	0.00	0.00	0.00	0.00	0.00		Y	Y	Y	Υ	Y	Υ	26.88%	n/a	Е	
Manufacture of other low carbon technologies	3.6.	6.9	62.16%	100.00 %	0.00	0.00	0.00	0.00	0.00		Υ	Υ	Υ	Υ	Υ	Υ	62.16%	n/a	Е	
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		9.9	89.05%	89.05%	0.00 %	0.00 %	0.00 %	0.00 %	0.00 %								89.05%	n/a		
A.2. Taxonomy-eligible b	ut not envi	ironmentally sust	ainable activities	(not Taxon	omy-ali	gned acti	ivities)								1		•	4	l	
Construction of new buildings	7.1.	0.6	5.69%	100.00	0.00	0.00	0.00	0.00	0.00		N	N	N	N	Y	Υ				
CapEx of Taxonomy- eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		0.6	5.69%														5.69%	n/a		
Total (A.1.+A.2.)		10.5	94.73%														94.73%	n/a		
B. TAXONOMY-NON-ELIG	GIBLE ACT	TIVITIES															1			
CapEx of Taxonomy- non-eligible activities (B)		0.6	5.27%																	
Total (A+B)		11.1																		



Taxonomy-eligible capital expenditure (CapEx) is related to the implementation of the investment plans adopted by the LUG Group Management Board during the process of preparing the 2022 budget and the Group's 2022 action plan. The Group's CapEx amounted to PLN 11.1 million in 2022. Taxonomy-eligible CapEx was primarily spent on:

- activity related to the manufacture of energy-efficient LED luminaires. These expenditures were allocated to the two predominant
  activities carried out in the LUG Group, i.e. activity 3.6. Manufacture of other low carbon technologies and 3.5. Manufacture
  of energy efficiency equipment of buildings in Annex I (according to the proportion of turnover generated by these two activities).
  For these two activities, fulfilment of the Technical Screening Criteria was confirmed, and the associated capital expenditure was
  considered to be Taxonomy-aligned.
- on the expansion of the Research and Production Centre in Nowy Kisielin, which was the final phase of an investment mainly carried out in 2021. These expenditures are Taxonomy-eligible under activity 7.1. Construction of new buildings in Annex I.
   For this activity, it was confirmed that the TSC of making a substantial contribution to climate change mitigation were met, but not all criteria of Does Not Significantly Harm were met, and therefore the capital expenditure was considered Taxonomy-eligible but not Taxonomy-aligned.

In 2022 the Group incurred PLN 0.6m of CapEx on Taxonomy-non-eligible activities. These outlays mainly related to expenditure incurred on equipment.

The proportion of CapEx related to environmentally sustainable activities (Taxonomy-aligned) in total CapEx was 89.05% in 2022, and the share of capital expenditure related to Taxonomy-eligible but not aligned activity was 5.69%. In total, the proportion of CapEx related to Taxonomy-eligible activity was 94.73%. The remaining 5.27% of CapEx was in Taxonomy-non-eligible activity, i.e. for which the regulator has not established Technical Screening Criteria in the annexes to the delegated act.

### Proportion of Taxonomy-aligned operating expenditure (OpEx) in of LUG Group 2022

																1				
					Substan	ntial con	tribution	criteria		(		DNSH cr ot Signif		Harm'	')					
Economic activities	Code() s	Absolute OpEx	Proportion of OpEx	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Minimum safeguards	Taxonomy- aligned proportion of OpEx, year 2022	Taxonomy- aligned proportion of OpEx, year 2021	Category (enabling activity or)	Category (transitional activity)
		PLN million	%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/ N	Y/N	Y/N	%	%	E	Y
A. TAXONOMY-ELIGIBLE ACTIVITIES																				
A.1. Environmentally sustainable activ	ities (Taxo	nomy-aligned)																		
Manufacture of energy efficiency equipment for buildings	3.5.	0.3	6.93%	100.00	0.00%	0.00	0.00	0.00	0.00		Υ	Y	Y	Υ	Y	Y	6.93%	n/a	Е	
Manufacture of other low carbon technologies	3.6.	0.6	16.02%	100.00	0.00%	0.00 %	0.00 %	0.00 %	0.00 %		Y	Y	Υ	Υ	Y	Y	16.02%	n/a	Е	
Data-driven solutions for GHG emissions reduction	8.2.	0.1	2.63%	100.00	0.00%	0.00 %	0.00 %	0.00	0.00 %		Y	Y	Y	Υ	Y	Y	2.63%	n/a	E	
Computer programming, consultancy and related activities	8.2.	2.0	50.00%	0.00%	100.00	0.00 %	0.00 %	0.00 %	0.00 %	Y		Y	Y	Y	Y	Y	50.00%	n/a		
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		3.1	75.58%	25.58 %	50.00 %	0.00 %	0.00 %	0.00 %	0.00 %								75.58%	n/a		
A.2. Taxonomy-eligible but not enviror	mentally :	sustainable activi	 ties (not Taxonomy-align	ed activiti	es)												<u> </u>	<u> </u>		
Renovation of existing buildings	7.2.	0.3	8.07%	0.00%	0.00%	0.00	0.00	0.00	0.00	N	N	N	N	N	Υ	Y				
Data processing, hosting and related activities	8.1.	0.7	16.35%	0.00%	0.00%	0.00	0.00	0.00	0.00	N	N	N	N	N	N	Y	-			
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		1.0	24.42%	0.00%	0.00%	0.00 %	0.00 %	0.00	0.00								24.42%	n/a		
Total (A.1.+A.2.)		4.1	100.00%					•			•						100.00%	n/a	1	
B. TAXONOMY-NON-ELIGIBLE ACTIVI	TIES		I														<u> </u>	<u> </u>	<u> </u>	
OpEx of Taxonomy-non-eligible activities (B)		0.0	0.00%	1																
Total (A+B)		4.1																		
	I.		l	_																



Taxonomy-eligible operating expenditure (OpEx) are related to maintaining the Group's assets used to carry out Taxonomy-eligible activity in proper condition. The Group's OpEx amounted to PLN 4.1 million in 2022. OpEx was made primarily on:

- Maintenance of the IT infrastructure and systems necessary for the production and sale of products and services created by the LUG Group. Expenditure on this activity is Taxonomy-eligible under activity 8.2. Computer programming, consultancy and related activities in Annex II.
- Assuring the proper operation of the assets required to produce energy-efficient LED luminaires. These expenses were allocated
  to the two predominant activities carried out in the LUG Group, i.e. activity 3.6. Manufacture of other low carbon technologies and
  3.5. Manufacture of energy efficiency equipment for buildings in Annex I (according to the proportion of turnover generated by
  these two activities).

OpEx related to the infrastructure required to collect and analyse data that enables customers to reduce GHG emissions. These revenues are Taxonomy-eligible under activity 8.2. *Data-driven solutions for GHG emissions* reduction in Annex I.

For all of the above activities, compliance with the Technical Screening Criteria was confirmed and the related operational expenditure was considered to be Taxonomy-aligned.

The Group also incurred OpEx in 2022 for the maintenance of other IT infrastructure (Taxonomy-eligible activity under activity 8.1. *Data processing, hosting and related activities* in Annex I) and for building renovation (Taxonomy-eligible activity under activity 7.2. *Renovation of existing buildings* in Annex I). For these activities, fulfilment of the Technical Screening Criteria was not confirmed and the related OpEx was considered Taxonomy-eligible but not aligned.

There was no OpEx related to Taxonomy-non-eligible activity.

In 2022 the proportion of OpEx related to environmentally sustainable activities (Taxonomy-aligned) in total OpEx was 75.58%, and the proportion of OpEx related to Taxonomy-eligible but not aligned activity was 24.42%. In total, the share of OpEx related to Taxonomy-eligible was 100.00%.



# THE LUG GROUP'S IMPACT ON THE ENVIRONMENT





### 7. The LUG Group's impact on the environment

In order to regulate our environmental impact with full responsibility, we optimise designs by introducing further innovations. Thus, we have a real influence on reducing the negative environmental impact resulting from our own operational and production activities, as well as that resulting from the use of LUG products.

LED luminaires contribute to reducing the environmental impact of all their users. This is primarily due to their high energy efficiency compared to traditional light sources, which in turn reduces indirect greenhouse gas emissions to the atmosphere. Fitting LED luminaires is the most cost-effective way for virtually any company or institution to reduce its environmental impact by upgrading conventional lighting to LED.

In the conducted materiality assessment, 6 material environmental issues were identified, which can be grouped into 2 thematic blocks:

- 1. energy efficiency,
- 2. GHG emissions,
- 3. fuel and energy mix;
- 4. acquisition and use of raw materials and other materials,
- 5. waste generation and management.
- 6. circular business models

tackling climate change

circular economy

[G.2.2] The LUG Group does not have a uniform policy in the environmental area, which results from the characteristics of the Group's structure and the location of operating activities related to the production of luminaires at LUG Light Factory Sp. z o.o. and LUG Argentina SA. In order to mitigate potential risks that may arise in the area of environmental issues, at LUG Light Factory Sp. z o.o. we have adopted *The Integrated Management System Policy* (ISO9001 Quality System Management, ISO14001 Environmental System Management, ISO5001 Energy Management, ISO45001 Occupational Health and Safety Management) described in chapter 3.7. *Management systems*. The Policy determined environmental objectives and expresses a continuous pursuit of improvement of processes taking place within the environmental area in accordance with the PN EN ISO 14001:2015 standard.

### Objective set out in the Integrated Management Systems Policy

LUG's activities are aimed at providing a high-quality product, made with due care for the appropriate use of energy resources, with environmental sustainability and high occupational health and safety.

## The objective of the 2022 Integrated Management Systems Policy was achieved through:

- continuous improvement and optimisation of production processes;
- implementation of products rich in modern technological solutions;
- supervision of legal requirements and regulations that apply to the operation of the company and which require us to comply with energy safety, quality, environmental protection and health and safety requirements;
- reduction of energy consumption and the continuous upgrade of process lines;
- defining places of significant energy consumption and making efforts to reduce their energy-intensive impact;
- prevention of occupational accidents, occupational diseases and near misses, and continuous improvement in reducing employee exposure to harmful factors in the working environment;
- reducing emissions of harmful substances into the environment as much as possible, carrying out selective waste collection and recycling our products as much as possible;
- making business decisions taking into account the principles of sustainable development as formulated in the 2030 Agenda for Sustainable Development;
- improvement of the Integrated Management System and regular training and knowledge development for employees.

## The objectives included in the Integrated Management Systems Policy are implemented through the following activities:

- 1. Building awareness of our employees in 2022 by means of:
  - Surveillance audits carried out by the certification body for ISO 50001, 14001, 9001 and an ISO 45001 recertification audit, which identified areas of improvement for area owners.
  - A series of theoretical and practical training sessions as part of the Safety things that matter first project on fire safety rules and practical training in the
    use of AED defibrillators, with which our two plants in Zielona Góra have been
    equipped. A total of 59 employees have been trained and qualified in first aid,
    fire fighting and evacuation. This training will continue into 2023.
  - Training on ESD for assembly workers, continuing into 2023.

In addition, in Q2 2023, we will release a training film on *LUG Light Factory's Integrated Management System* at individual stages of the luminaire development process.

2. Planning, documenting and supervising processes taking place at LUG.

The action was put into practice through the investment and renovation plan and the environmental action programme for 2022. In addition, we carried out the tasks set out in the Energy Programme for the year under review. The Integrated



Management System Improvement Plan involved the continued implementation of tasks started in previous years, directed at, among other things, upgrading the lighting at our sites and increasing the number of motion sensors. The lighting replacement project utilized a remote control system so that the lighting would draw power at the exact location where work is currently taking place. Ongoing activities include optimising the punching process to make efficient use of raw materials and further replacement of lighting. We have carried out further measures to minimise the amount of waste generated during the production process through structured, conscious waste management and optimisation of the waste collection process in relation to the amount of waste generated. We have introduced monitoring of the amount of municipal waste generated and awareness-raising activities regarding waste separation.

#### Objectives of activities:

- reducing the consumption of mains water and using water in a closed cycle in the paint shop department - through the use of filters and separators;
- introduction of additional effluent controls after neutralisation in a sample industrial effluent neutraliser - in accordance with the water permit;
- continuation of activities aimed at reducing waste in the form of paint powder optimisation of the colour planning and painting process.

We are pursuing the measures set out in the investment and renovation plan and the improvement programme as a matter of priority. They are the key and one of the most important factors ensuring that product quality and labour standards are met. The degree of completion of individual tasks is reported annually during the Management Review.

In addition, in 2022 the extension of the production and warehouse hall with office and social facilities at the Research and Development Centre in Nowy Kisielin was completed. The planned investment will be a contribution to sustainable development through the application of solutions reducing energy consumption, increasing energy efficiency and the possibility to produce own energy from renewable sources.

3. Continuous development of the technical and machinery base and upgrading of inspection, measurement and testing equipment.

The optimisation of production processes is directly linked to the maintenance of workstations, machinery and equipment at the right level and in proper working order.

In 2022, we carried out major servicing, maintenance of machinery and equipment, which enables us to maintain the production flow and the quality of the manufactured products at the current or higher level. Regular servicing ensures that the equipment purchased will operate reliably and trouble-free throughout its planned lifetime. Service diagnostics are also important. Routine replacement of wear parts keeps repair costs down and helps eliminate costly production downtime. Production maintenance is also essential for the safe operation and use of machinery.

Production process optimisation activities for 2022 include:

- Completion of new warehouse in Nowy Kisielin to increase storage space.
   Material throughput has been improved, thereby increasing production capacity. Logistics tasks have been better organised, as the existing warehouse has been relieved, which is also a convenience for staff.
- Continued operation of the Andon ("traffic light") system implemented in previous years at the LUG plant in Zielona Góra. It is a solution that optimises the production process. The Andon system, part of the "Lean Production" concept, allows for increased control over the production process, improved quality and the recording and analysis of events.
- Replacement of ESD antistatic mats at assembly workstations at the LUG plant (with the aim of extending the measures to a second plant in Nowy Kisielin), which prevent electrostatic discharges. Discharges can be hazardous to the life and health of employees, but can also cause equipment failure. The mats are made of rubber, which reduces or completely neutralises electrostatic charges. Measures have been implemented to increase staff awareness of ESD, standards have been clarified and infrastructure related to the maintenance of ESD rules has been improved.
- Continued launch of the Kanban method at the Assembly Department improvement of the order preparation process, elimination of unnecessary operations in the Warehouse and during the handling of shortages in orders.
- Continued implementation of the 5S philosophy in the LUG plant in Nowy Kisielin – improvement of the working environment, implementation of a single ordered standard throughout the plant.
- Continued increase in the productivity of production lines of the Electronics Production Department by optimising the changeover process and optimising product unit times.
- Continued improvement of assembly processes according to the PDCA principle – a continuous process consisting in time optimisation, determining bottlenecks in the process after time changes and re-verification.
- Continued process organisation of the semi-finished products department:
  - time optimisation;
  - process changes that increase productivity.
- Continued implementation of optimal production batches at the Mechanical Department – elimination of unnecessary changeovers, increasing the productivity of the entire department, reducing interoperational buffers.
- Continued optimisation of the painting process:
  - elimination of unnecessary work during preparation of components for painting;
  - elimination of unnecessary transport between stations elimination of unnecessary activities (MUDA);



- boosting the productivity of the painting process through organisational changes to the painting process itself.
- Continued organisational changes in the process of implementing new products – elimination of problems occurring when launching new projects which shortens implementation time and lowers implementation costs.
- 4. Direct involvement of company's Management Board, supervising the Integrated Management System and supporting the activities of persons responsible for individual tasks:

Management level	Position	Number of persons per position	Responsibilities
Management level:	President of the Management Board of LUG Light Factory Sp. z o.o.	1	The IMS Supervisor is responsible for the proper implementation and
Director level:	Director of Strategic Finance and Risk	1	functioning of the IMS. The work of the Representative is supervised by the Director of Strategic Finance and Risk from the level of the director and finally by the President
Employee level:	Commissioner for Integrated Management System	1	of the Management Board of LUG Light Factory Sp. z o.o.

- 5. Appropriate reviews and monitoring of improvement processes and activities are conducted in accordance with the procedures adopted in the Integrated Management System and those resulting from the implemented S5 (Lean Management) system.
- 6. Performing services in a manner that ensures respect for the principles of environmental protection and appropriate management of materials and waste. LUG conducts its activities in accordance with the applicable environmental protection regulations. On an ongoing basis, in accordance with applicable regulations, administrative decisions and permits related to the production and storage of waste, the emission of industrial wastewater, dust, and the use of hazardous materials are obtained. Depending on the type of waste, the entities collecting waste from LUG further mediate in the supply of waste to the entities carrying out recovery or recycling or they themselves subject this waste to recovery, recycling or neutralisation.
- 7. Striving to reduce costs by preventing and eliminating non-conformities. The fulfilment of this aspiration is constantly being realised through:
  - implementation and supervision of processes with implemented measures that prevent errors;
  - implementing effective remedial measures in the event of non-compliance;
  - continuous improvement of the company based on the analysis of current processes (PDCA).
- 8. Developing friendly, partnership-based principles of cooperation with both investors and all employees of the company. At LUG, we use a system of management by values. Activities developing relationships with stakeholders include:

- mailing and poster campaigns for LUG employees;
- competitions for employees' children and Christmas campaigns;
- meetings with employees;
- the LUGpress internal company newspaper.

Cooperation with external stakeholders in the implementation of the Environmental Policy takes place mainly through the corporate website of LUG, which contains information on the environment and periodic information provided in LUG's financial reports.

9. Continuous improvement and meeting the requirements of PN EN ISO 14001:2015 Environmental management systems.

In 2022, the LUG Light Factory underwent ISO certification renewal audits. As part of the ISO Integrated Management System, the factory in Posadas is in the process of introducing the PN EN ISO 9001:2015 standard. The renewal audit did not reveal any non-conformities, but only identified potentials for improvement. The vast majority of comments positively assessed our activities as exemplary.

Detailed indicator data on the achievement of the environmental objectives can be found in further parts of this chapter.

#### 7.1. Tackling climate change

[E.4.4.] LUG Group's activities are of public interest due to the challenges related to climate change and the need to quickly reduce greenhouse gas emissions to the atmosphere throughout the world and with adaptation to climate change. Our luminaires, which are designed to minimise energy consumption when in use, and the intelligent lighting management systems that are being developed, support the efforts of local authorities, industry and the real estate and construction industries. They make an impact on increasing energy efficiency and reducing greenhouse gas emissions associated with the operation of buildings and public spaces.

We are aware of our impact on climate change and the impact of climate change on the Group's operations, and identify the arising opportunities and risks.

Over the last few years, phenomena and processes occurred in the public space that contribute to the dynamic increase in the impact of climate change on Group's operations. The most important of these are:

- The European Green Deal, the European Union's new growth strategy, will be based on accelerated decarbonisation to mitigate climate change and achieve climate neutrality for the European Union;
- Fit for 55 a package of legislation to ensure the implementation of EU climate policy;
- The EU Taxonomy on Sustainable Finance which will shape the European Union's financial system by significantly increasing the importance of sustainable investment;

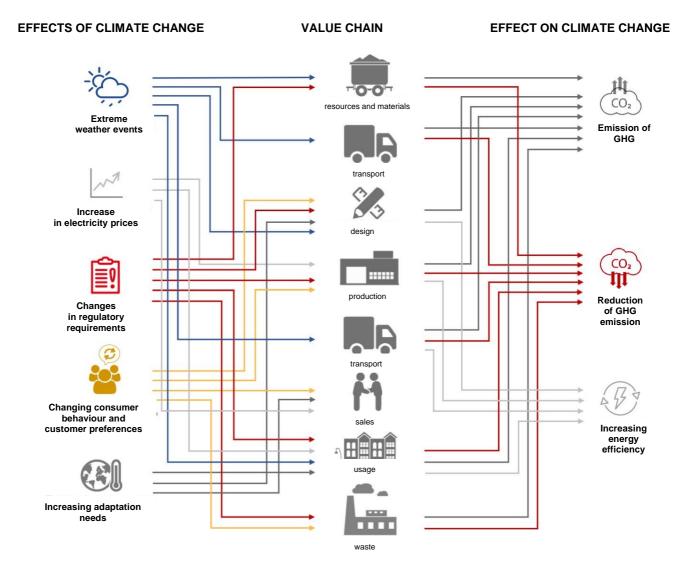


- a new action plan for recycling and reusing products in the EU (Circular Economy Action Plan) which aims to accelerate the implementation of circular economy principles in the European Union;
- intensification of public discussion around the concept of introducing a carbon tax and carbon border tax;
- resuming and intensifying the work of the European Commission on developing
  a coherent methodology for calculating the carbon footprint of products
  throughout their life cycle (*Life Cycle Assessment*) which, once introduced, may
  become a required standard also in the construction and engineering industries.

Although the impact of climate change on the LUG Group's operations is currently of a relatively limited intensity, it is expected to increase in the future. We carry out activities related to analysis, planning and the interplay between the Group and climate change, such as:

Project	State of implementation
Reporting greenhouse gas emissions in line with the GHG Protocol Corporate Accounting and Reporting Standard within scope 1 and scope 2;	Ongoing since 2018.
Reporting in line with the TCFD Recommendations ( <i>Task Force on Climate-related Financial Disclosures</i> ).	Ongoing from 2020;
Identification of short, medium and long-term risks, threats and opportunities related to climate change;	Completed in 2020.
Calculation and reporting of greenhouse gas emissions in accordance with GHG Protocol Corporate Accounting and Reporting Standard scope 3	Started in 2021.
Climate Change reporting to CDP (Carbon Disclosure Project)	Ongoing since 2021.
Climate policy of the LUG Group within the framework of the Sustainable Development Strategy	Work is scheduled to begin in 2023.
Scenario analysis of the resilience of Group's business model and strategy to climate change assuming an increase in average global temperatures by less than 2°C and more than 2°C compared to the pre-industrial period	Work is scheduled to begin in 2023.

Impact of climate change on the functioning of the LUG Group and impact of the LUG Group on climate change



# The current impact of climate change on the functioning of the LUG Group takes place mainly in the following areas:

- Extreme weather events can cause limitations in the availability of raw materials, other materials and components, disruptions in the supply chain and in logistics processes.
- Rising electricity prices in Poland, where the main part of our production activities are carried out, caused by a very high share of non-renewable energy sources in electricity generation, contribute to an increase in production costs.
   As a result of the expected increase in prices of CO<sub>2</sub> emission allowances this impact may be even stronger in the future.
- The change of regulatory requirements and legal provisions related to mitigation and adaptation to climate change affects many areas of the our operations, from running operational processes, through reporting, supply chain management, waste management and access to financing. Regulatory changes also affect our suppliers, contractors and customers, which determines to the greatest extent the portfolio of products and services we offer.



- Changing consumer behaviour and preferences of customers who strive to increase energy efficiency, reduce their impact on climate change and reduce greenhouse gas emissions affect the process of designing and developing new products and services, as well as the production of luminaires and their sale. The processes of changes in consumer behaviour and customer preferences influence the increase in demand for effective light sources, i.e. the category dominating in the our offer. In many cases, the criterion of energy efficiency is increasingly important for potential customers when choosing lighting solutions.
- Adaptation to climate change manifests itself in the development processes
  of Smart Cities. In their case, lighting management is not just about selecting
  energy-efficient light sources, but about introducing lighting management
  systems related to other public space functions. This increases the demand for
  smart light management systems developed by our company, which are
  comprehensive projects, often developed in cooperation with leading IT
  partners.

# Currently, the influence of the LUG Group on climate change takes place mainly in the following areas:

- The extraction of raw materials and the manufacture of materials and components necessary for the production of luminaires involves the emission of greenhouse gases. Our influence on the level of these emissions is indirect and takes place through its efforts to reduce the carbon footprint of its products by selecting such raw materials, materials and components that have the lowest possible built-in emissions. greenhouse gas For some materials such as aluminium, steel and glass, these processes are energy-intensive and require the combustion of fossil fuels or the use of electricity, most of which is produced in high-carbon processes. The production of plastics is also related to the inevitable use of fossil fuels in today's technologies. For some raw materials, extraction may to deforestation of the land where the extraction takes place.
- The transport of raw materials, materials and components from suppliers to the LUG plants and finished products to customers is carried out by various means of transport. Depending on the mode of transport, it may contribute to higher or lower greenhouse gas emissions. Emissions reductions in this area will be possible as we decarbonise the operational activities of our logistics partners.
- The consumption of fuels and energy in production processes and the consumption of heat and electricity in real estate used in our operating activities results in greenhouse gas emissions. Our influence in this respect will be gradually limited as the energy efficiency increases and the share of energy from low- and zero-emission sources increases.
- The ways in which we manage the waste generated during our operational activities determines the amount of greenhouse gases produced in these processes. Emissions will be reduced over time as we move towards a circular

economy model. It should be noted, however, that the pace of these changes depends not only on us, but on the degree of adjustment of the entire economy. Climate change is also influenced by the management of waste generated after the life cycle of luminaires. It is possible to reduce this impact by designing luminaires in such a way that they are as repairable and upgradable as possible and by using recyclable or reusable materials.

Designing, manufacturing and selling luminaires based on LED light sources contributes to increasing energy efficiency and reducing indirect greenhouse gas emissions by our customers. The reduction of emissions results both from the higher efficiency of LED light sources (which is described in more detail in chapter 7.2 Fuel and energy consumption), and the use of smart lighting systems which allow you to adjust the light intensity to the current environmental conditions and the needs of users of the illuminated space.

#### Climate risks in the LUG Group

In 2020, we conducted an identification and analysis of climate risks and the resulting threats and opportunities. We carried out the analysis according to the AXIS® methodology (Amplification, Seizure, eXclusion, Intensification) in cooperation with the external consulting company, MATERIALITY, in a four-stage process including: comparative, questionnaire, quantitative and qualitative analysis.

Thirty-two physical and transformational risks were examined, comprising a total of 27 opportunities and 39 threats. We examined threats and opportunities in terms of three parameters, i.e.:

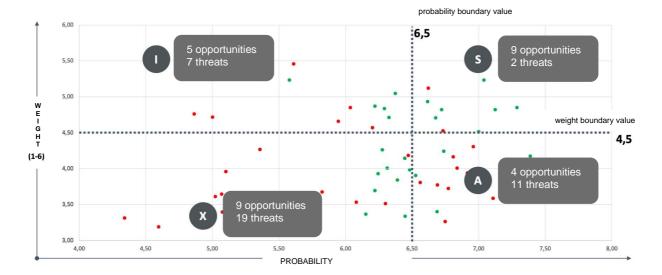
- the likelihood of their occurrence,
- weight,
- time horizon.

In accordance with the applied methodology, those risks, threats and opportunities whose probability or severity exceeded the specified boundary values were considered material.

All threats and opportunities were classified into four categories depending on whether their assessment exceeds the probability and severity boundary values, respectively. As a result of the analysis, the following have been classified:

- 4 opportunities and 11 threats to Category A (Amplification);
- 9 opportunities and 19 threats to Category X (eXclusion);
- 5 opportunities and 7 threats to Category I (Intensification);
- 9 opportunities and 2 threats to category S (Seizure).





In accordance with the methodology used, we have classified 9 opportunities and 2 threats into category S, i.e. considered material for the LUG Group and subject to active management. Threats and opportunities belonging to categories I and A are monitored and, in selected cases, managed. Most of the threats and opportunities in category X are only subject to monitoring. Conclusions from the conducted research have been taken into consideration in the risk management system functioning in the LUG Group. Monitoring and identification of possible new risks, threats and opportunities associated with climate change will be conducted periodically as part of risk reviews.

# Material risks, threats and opportunities associated with climate change and how to manage them:

Risks	Threat/Opportunity	Time horizon	Management
Long-term physica	ıl risks	1 11011	
Risk of increased variability in precipitation patterns and weather patterns	Opportunity to increase demand for LED lighting used in agricultural crops under controlled conditions	Medium- long	We analyse the market expansion possibilities in the segment so far not utilised by the LUG Group. Should a decision be made to engage in this segment, appropriate R&D expenditure will be required to develop luminaires for the agricultural segment under controlled conditions and appropriate lighting management systems, as well as marketing and sales expenditure for the new market segment
Policy and regulate		01 1	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Risk of new taxes, duties or other carbon levies	Opportunity to capitalise on demand for products that help customers reduce their greenhouse gas emissions and carbon footprint	Short- medium	We are seizing the opportunity within the LUG Group's business. In communication with potential customers, the argumentation concerning the use of products and solutions we offer to reduce the greenhouse gas emission and carbon footprint is being expanded.
Risks of public energy efficiency improvement programmes	Opportunity to meet demand from customers using public energy efficiency improvement programs	Short- medium	We monitor public programmes that support the financing of energy efficiency improvements for private companies and local authorities in order to meet customers' needs and specific energy efficiency criteria. We are also investing in the development of innovations and technologies to ensure high energy efficiency in luminaires and the development of intelligent lighting management systems
Risks of new regulations concerning a circular economy	Threat of legislation forcing products to be repaired or replaced	Short- medium	Our R&D activities include research on materials and components with improved durability and reusability. This allows luminaires to be designed for easy disassembly, repair and replacement of parts. The new strategy introduces ecodesign-compliant product design into our standards. Further work will also be carried out to introduce the principles of the circular economy in the LUG Group: mapping of material cycles, identification of points of value loss, identification of business models that strengthen value creation in terms of extending the product life cycle, creation of a GOZ implementation plan.
Risks of new regulations concerning a circular economy	Threat of legislation regulating raw material standards for products	Short- medium	We monitor legislative works in the scope of regulations concerning the circular economy, as well as adapt the company's activities to new regulations in the scope of raw material standards of products in advance of the introduced regulations. We are also working to introduce the principles of a circular economy.
Technological risk	S		
Risks associated with a circular economy	A chance to implement business models based on delivering a product in a service model (LaaS - Light-as-a-Service)	Short- medium	In order to take advantage of the opportunity, development of a model based on providing luminaires with a control system and electricity as a comprehensive service is being considered.



Energy efficiency risk	Opportunity to provide products that serve customers to improve energy efficiency	Short- medium	We are conducting research and development activities aimed at the development of products in LED technology and smart lighting management systems.
Risk of changing customer preferences	Opportunity to attract customers interested in products that help counter the climate crisis	Short- medium	We are seizing the opportunity within the LUG Group's business. Products with a reduced (ultimately zero) carbon footprint and an extended life cycle are being introduced into our portfolio.
Market risks	l	I	
Risk of changing customer preferences	Opportunity to expand into new market segments, products and services driven by pro-climate customer preferences	Short- medium- long	The opportunity is used within the LUG Group's activity through gradual extension of its offer with products and services of low carbon footprint, extended product life cycle and high energy efficiency. We are also constantly monitoring the changes in customer preferences and expectations.)
Risk of making access to finance contingent on addressing the climate crisis	Opportunity for easier access to or cheaper financing provided for meeting climate crisis criteria	Medium	We are pursuing an opportunity primarily by maintaining a high level of revenue generated from environmentally sustainable activities (in line with the criteria of the EU Taxonomy). We are also working to meet the expectations of financial institutions in terms of reporting on climate change issues (TCFD Recommendations, reporting to CDP), improving the ratings obtained in ESG ratings, and implementing actions that affect other parameters expected by financial institutions.
Reputational risks			
Risk of changes in consumer preferences	Opportunity to strengthen company's reputation for addressing the climate crisis	Short- medium	We are seizing the opportunity by highlighting in our corporate communications the aspects of climate responsibility and those features of products and services that contribute to combating climate change.

#### 7.2. Fuel and energy consumption

Fuel and energy mix, and energy efficiency are among the significant areas identified in the materiality study we conducted. In our activity we make a direct impact on the consumption of fuels and energy through their use in production processes, transport and the operation of office, commercial and production facilities. However, the specific nature of our products functioning through the use of electricity means that we have a huge indirect impact on energy consumption as a result of using LUG luminaires.

#### **Indirect impact**

[E.8.2] 100% of our sales revenue comes from products or services, developed taking into account environmental criteria. Through consistent implementation and final production, we take into account environmental criteria as early as at the design level. Our all products are characterised by parameters that refer to reduced energy consumption, and our specialists carry out product optimisation work, working with trusted suppliers offering the highest quality components.

The solutions used in our luminaires contribute to the reduction of energy consumption. Since 2014, we have been conducting research and development works

and implementation of new products based on LED technology, which has an increased energy efficiency of 50-70% compared to conventional technology. However, new LED products always have an increased energy efficiency of 7-20% compared to the previous generation of LED solutions. When switched on, the LED luminaire does not need time to warm up, as is the case with traditional fluorescent lamps, which consume more energy during this time. The LED luminaire, which is in frequent use, consumes less energy than these older generation sources, making it ideal for both interior lighting and buildings and road infrastructure.

Daylight control technology has been introduced in LUG products, which enables the adjustment of the intensity of internal lighting to the prevailing external conditions, which allows for energy consumption only in the amount necessary for proper lighting of rooms. This technology is compatible with LUG luminaires and can be used in all our products, depending on the customer's needs.

#### **Direct impact**

The direct energy consumption consists of fuel and energy consumption in production processes, acquisition and consumption of heat and electricity in facilities belonging to LUG, and consumption of liquid fuels for business activities.

Electricity is used for heat treatment, plastic working as well as subtractive processes. We put great emphasis on reducing electricity consumption and have therefore introduced cyclical monitoring of meter readings. In addition, we optimise processes at the planning stage to minimise energy requirements.

Heat is generated for the purposes of production processes, which is used to heat rooms and assembly halls. Through continuous monitoring of the consumption of raw materials (e.g. technical gas), the amount of heat generated is monitored, with the intention of implementing systems for its reuse, thus minimising its loss. At each stage of production, attention is paid to optimal thermal management, with an emphasis on minimising its use at a level that does not adversely affect the process and, most importantly, does not adversely affect those directly involved in working in production areas. At LUG Light Factory thermal energy is obtained from gas boilers (natural gas).

The goal of LUG's continuous Improvement Plan for the coming months and years is to achieve 100% renewable energy in LUG's energy mix. This is most likely to be partly achieved as early as 2023 with the installation of its own photovoltaic farm. A photovoltaic plant will be installed on the roofs at the Research and Development Centre in Nowy Kisielin, which will meet more than 40% of the electricity demand. The time horizon for this project has been set until the end of 2023.

The company's liquid fuels are used by the company car fleet.

The Integrated Management System Improvement Plan 2022 included the continued implementation of tasks started in the previous years, including replacing lighting with energy-efficient lighting and increasing the number of motion detectors. In addition to the tasks set out in the 2022 Programme, we also analysed the use of photovoltaic solutions and the possibility of using other utilities for the paint shop. Ongoing activities include optimising the punching process to make efficient use of raw materials and further replacement of lighting to energy saving solutions.



The Improvement Programme with targets for 2022 includes the improvement of the waste separation process and the introduction of municipal waste monitoring, with the aim of reducing waste by around 5%. At the LUG Light Factory alone, the weight of municipal waste generated in 2022 decreased by 4.64% year-on-year. In addition, in 2022 we analysed components for recycled plastic content and compliance with the REACH regulation. During the design and procurement phase, we established rules for the identification of components with SVHC exceedances and the subsequent handling thereof. In 2023, we plan to launch a new radiator cleaning process in the Electronics Department to reduce the use of chemicals, and we have also planned measures to increase employee awareness of energy-saving topics and optimise the operation of compressed air systems.

#### Total energy consumption by main energy sources

	Unit	2018	2019	2020	2021	2022	Change YOY
Fuels consumed in buildi	ngs and installa	tions					
Natural gas	MWh	3,043.5	3,169.1	2,682.7	2,938.9	2,624.3	-10.7%
Total fuels consumed in buildings and installations	MWh	3,043.5	3,169.1	2,682.7	2,938.9	2,624.3	-10.7%
Fuels used in transport w	vith own vehicles	3					
Petrol	MWh	130.1	121.1	84.8	36.1	56.9	+57.3%
Diesel	MWh	1,611.5	1,652.3	1,239.2	1,070.0	1,125.1	+5.1%%
Total fuel used in transport with own vehicles	MWh	1,741.6	1,773.4	1,324.0	1,106.2	1182.0	+6.9%
Purchased energy							
Electricity	MWh	1,481.7	1,544.0	1,485.6	1,531.0	1,481.8	-3.2%
Total energy consumption	MWh	6,266.8	6,486.5	5,492.4	5,576.1	5,288.1	-5.2%

#### **Energy from renewable and non-renewable sources**

	Unit	2018	2019	2020	2021	2022	Change YOY
Energy from all renewable sources (from fuel and purchased energy)	MWh	261.2	186.8	293.2	354.9	343.6	-3.2%
Percentage of energy from renewable sources	%	4.2%	2.9%	5.3%	6.4%	6.5%	+0.1%
Energy from all non- renewable sources (from fuel and purchased energy)	MWh	6,005.6	6,299.6	5,199.2	5,221.2	4,944.5	-5.3%
Percentage of energy from non-renewable sources	%	95.8%	97.1%	94.7%	93.6%	93.5%	-0.1%
Total energy from all sources	MWh	6,266.8	6,486.5	5,492.4	5,576.1	5,288.1	-5.2%

<b>Energy</b>	inter	sity	indic	ators
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	Unit	2018	2019	2020	2021	2022	Change YOY
Renewable energy per luminaire	kWh/pcs.	0.5	0.4	0.6	0.7	0.7	+4.4%
Energy from renewable sources for PLN 1 million of revenue	MWh/1mln PLN	1.5	1.1	1.6	1.7	1.4	-17.7%
Energy from non-renewable sources per luminaire	kWh/pc.	11.7	14.6	10.5	10.1	10.3	+2.1%
Energy from non-renewable sources for PLN 1 million of revenue	MWh/1mln PLN	35.2	36.9	28.5	25.6	20.6	-19.5%
Energy from all sources per luminaire	kWh/pcs.	12.2	15.0	11.1	10.8	11.0	+2.2%
Energy from all sources per PLN 1 million in revenue	MWh/1min PLN	36.7	38.0	30.1	27.3	22.0	-19.4%

[E.2.1] Nearly half (49,6%) of the energy consumed in the activity of the Group is the thermal energy used for the functioning of buildings and plants. The source of thermal energy is natural gas, of which we consumed 257.99 thousand m³ in 2022 (-10.7% year-on-year). Energy for transport by fleet vehicles accounts for 22.35% of our total energy consumption, of which we used a total of 1,182 MWh in 2022, and the vast majority of which came from diesel consumption and the remainder from petrol. The consumption of liquid fuels for transport by our own vehicles increased by 6.9% year-on-year in the year under review. For the purposes of the Group's operations in 2022, 1,481.8 MWh of electricity was purchased (-3.27% year-on-year), which accounted for 28.02% of the total energy consumption.

The LUG Group's total energy consumption in 2022 decreased by 5.2% year-on-year. This is linked to a decrease in fuel consumption in buildings and plants and in the consumption of purchased electricity.

[E.2.3.] The primary energy efficiency indicator was 11 kWh/unit of product (luminaire manufactured) in 2022, 2.2% higher than the previous year. The increase results from a change in the sales structure, as a result of which the LUG Group sold fewer luminaires in terms of volume, while the value of sales increased.

[E.2.2.] The energy used by the LUG Group mainly came from non-renewable sources in 2022. Renewable sources accounted for 6.5% of energy consumed (+0.1 p.p. y-o-y).

#### Energy performance indicators for buildings and roads lighting

To illustrate the positive impact of our products on reducing global greenhouse gas emissions, at the beginning of 2022 we decided to present the LENI<sup>7</sup>

7 LENI (Lighting Energy Numerical Indicator) is an indicator that allows the energy performance of a building's lighting to be calculated. The LENI method calculates actual energy consumption in kWh per square metre per year. In order to obtain the most accurate results, irrespective of one of the two available methods, LENI calculations are carried out separately for different types of rooms, as each type of room has different requirements in terms of both technical performance and design, and therefore different lighting solutions are used in each room.



indicator for premises and the De<sup>8</sup> and Dp<sup>9</sup> indicators for roads in our non-financial reports on an annual basis.

To this end, we have selected standard rooms and 3 types of roads, for which we will draw up a model lighting project each year using the optimum lighting solutions available from the LUG portfolio, and will then calculate these indicators. It should be emphasised that the lighting solutions adopted for the calculation of the ratios are not the best available LUG solutions, but the optimum reference solutions used as a standard in this type of space.

#### **LENI, De and Dp indicators**

#### Indoor indicators

LENI indoor index [kWh/m²/year]						
Types of spaces	2021	2022	Change YOY			
Office premises	12.0	12.0	0.0%			
Gymnasium	12.0	11.3	-5.8%			
Salesroom	53.0	50.6	-4.5%			
Production and warehouse hall	5.0	4.47	-10.6%			

#### Indicators for roads

	The value of annual rate of energy consumption per 1km of road: De [kWh/m2]			The value of	of the power der Dp [W/lxm2]	nsity index:
Type of road	2021	2022	Change YOY	2021	2022	Change YOY
Highway	1.28	1.27	-0.7%	0.012	0.012	0.0%
Main road	1.30	1.10	-15.3%	0.016	0.012	-25.0%
City road	0.85	0.67	-21.1%	0.02	0.015	-25.0%

#### **Energy efficiency index of the LUG Group luminaires**

The luminaire Emission Efficiency Index $^{10}$  is our proprietary indicator showing the environmental impact of luminaires. As luminaire life and luminous efficacy increase, the value of the index increases. Its calculation includes all our luminaires assigned to one of the 3 metagroups: INDUSTRIAL, INFRASTRUCTURAL and OTHER. What is important is not the value of the indicator itself, but its y/y comparison across metagroups. Higher index values mean that luminaires included in a particular metagroup will emit less  $CO_2$  over their lifetime.

<sup>8</sup> De - annual energy consumption rate

<sup>9</sup> Dp - power density index

The De and Dp indicators offer the best choice to be made in terms of energy efficiency. They should be used together, with the aim to minimise their values - while ensuring that the requirements of EN 13201 are met. In simple terms, this means that a reduction in luminaire power must not cause the minimum level of road safety to be exceeded. 10 Luminaire emission efficiency index - is the product of the luminaire's light output [lm] and luminaire life [h] divided by the luminaire power [W]. For presentation purposes, the total is still divided by a fixed value of 10000.

Luminaire energy efficiency in	ıdex
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Luminaire group	2020	2021	2022	Change YOY
Industrial	1,051	1,123	1,212	+7.9%
Infrastructural	1,243	1,282	1,345	+4.9%
Other	582	664	707	+6.5%
All	890	978	1,057	+8.1%

#### 7.3. Greenhouse gas emissions

Greenhouse gas emissions from our operational activities have been monitored in LUG Group companies since 2018. The GHG emission rate per luminaire sold at Group level and the GHG emission rate per 1 million revenue at Group level are used to assess the level of emission intensity.

Reported greenhouse gas emissions have been calculated according to *The Greenhouse Gas Protocol Corporate Accounting and Reporting Standard* in the revised version.

Reported emission limits (*organisational boundaries*) include the parent company and all units of the LUG Capital Group according to operational and financial inspection (100% of the emissions of each unit). Consolidation covers all levels of the LUG Group.

Scope of reported emissions (operational boundaries):

- Reported emissions cover scope 1 (direct emissions) and scope 2 (indirect emissions resulting from the generation of energy purchased by the LUG Group units) as well scope 3 (indirect emissions). Scope 2 emissions were calculated using the location-based and the market-based methods.
- Regarding scope 1, the sources of greenhouse gas emissions were the combustion of natural gas in LUG's buildings and installations and the use of fuels (petrol and diesel) in vehicles.

Base year and emission trends over time:

- We considered 2018 as the *base year* for emissions reporting for the LUG Group for scopes 1 and 2 (location-based). For Scope 2 emissions using the location-based method, we considered 2020 as the base year, and 2021 for Scope 3. In the last reporting cycle we recalculated the base year emissions in scope 3. The recalculation was related to the extension of Scope 3 with additional categories (1 and 12). As a result of the recalculation, the Scope 3 base year emissions were set at 630,570.4 Mg CO<sub>2</sub>e (before recalculation they were 538,961.8 Mg CO<sub>2</sub>e). Emissions reported in Scope 1 are fully comparable to the base year. Scope 2 emissions are comparable to a base year set at 2018 for the location-based method, and 2020 set as the base year for the market-based method.
- In this report, it is for the fifth time that we report Scope 1 and 2 emissions in accordance with the GHG Protocol Corporate Accounting and Reporting Standard. In contrast, we are reporting Scope 3 emissions for the second time, with calculations made in accordance with the Greenhouse Gas Protocol Value Chain (Scope 3) Accounting and Reporting Standard.



 A detailed analysis of changes in emissions over time is presented later in this chapter.

In 2022, no biogenic emissions were recorded.

Methodology and calculations:

- The emissions were calculated using the tools provided by the GHG Protocol (https://ghgprotocol.org/calculation-tools).
- For 2 location-based emissions, we made calculations using the average emission intensity factors published by the National Balancing and Emissions Management Centre (for Poland, they refer to 2021) and the International Energy Agency (for energy purchased by subsidiaries outside Poland, they refer to IEA projections for 2021).
- For heat energy, we have adopted heat generation intensity rates according to the data reported for Poland by the Energy Regulatory Office (2022).
- For Scope 2 market-based emissions, the emission intensity factors of the electricity suppliers to the LUG Group were used. The GWP (*Global Warming Potential*) factors used in the calculations are in line with the AR5, *The Fifth Assessment Report of the IPCC*.

For Scope 3 emissions, emissions were calculated using indicators from the WIOD (2009), DEFRA (2021, 2022), IEA (2022) and ecoquery version 3.9 (2022) databases.

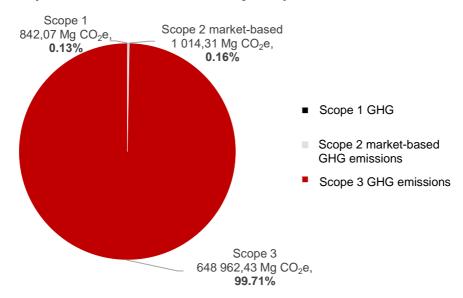
### Greenhouse gas emissions of the LUG Group

	Unit	2018	2019	2020	2021	2022	Change YOY
Scope 1							
Emissions from fuel consumption in buildings and installations	Mg CO₂e	604.8	587.8	497.6	584.0	521.5	-10.7%
Emissions from fuel consumption in transport	Mg CO₂e	465.9	474.6	354.5	300.3	320.6	+6.7%
Total GHG Scope 1 emissions	Mg CO₂e	1,070.6	1,062.4	852.1	884.3	842.1	-4.8%
Scope 2 location-based							
Total GHG Scope 2 location-based emissions	Mg CO₂e	1,037.2	1,028.2	976.9	1,049.8	1,030.8	-1.8%
Scope 2 market-based							
Total GHG Scope 2 market-based emissions	Mg CO₂e	-	-	1,085.1	1,047.6	1,014.3	-3.2%
Scope 1+2 location-based							-
Total GHG Scope 1+2 location-based emissions	Mg CO₂e	2,107.9	2,090.6	1,828.9	1,934.2	1,872.9	-3.2%
Scope 1+2 market-based						0.0	-
Total GHG Scope 1+2 market-based emissions	Mg CO₂e	-	-	1,937.2	1,932.0	1,856.4	-3.9%
Scope 3							
Total GHG Scope 3 emissions	Mg CO₂e	-	-	-	630,570.4	648,962.4	+2.9%
Total GHG Scope 1 + 2 + 3 emissions, including:							
Total GHG Scope 1 + 2 location-	Mg CO₂e	-	-	-	632,504.5	650,835.3	+2.9%
based emissions + 3							
Scope GHG emissions Scope 1+ 2 location-based + 3 per luminaire sold	kg CO₂e/pcs.	-	-	-	1,264.1	1,353.2	+7.1%
Scope GHG Scope 1+ 2 location-based + 3 per PLN 1m revenue	Mg CO₂e/PLN 1 mln	-	-	-	3,101.7	2,712.2	-12.6%
Total GHG Scope 1 + 2 market-	Mg CO₂e	-	-	-	632,502.3	650,818.9	+2.9%
based emissions + 3							
Scope GHG emissions Scope 1+ 2 market- based + 3 per luminaire sold	kg CO₂e/pcs.	-	-	-	1,264.1	1,353.2	+7.0%
Scope GHG Scope 1+ 2 market-based + 3 issues for PLN 1m revenue	Mg CO₂e/PLN 1 mln	-	-	-	3,101.7	2,712.1	-12.6%

[E.5.1] [E.5.3] As a result of our operational activities, the LUG Group emitted 1,856.4 thousand Mg CO<sub>2</sub>e (carbon dioxide equivalent) into the atmosphere from direct (scope 1) and indirect emissions resulting from purchased power generation (scope 2 market-based), accounting for just 0.3% of the LUG Group's total greenhouse gas emissions.



#### LUG Group GHG emissions in 2022 by scope

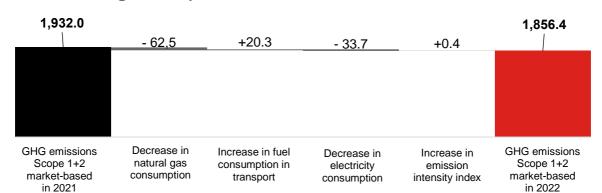


Scope 1 emissions, i.e. direct emissions resulting from fuel consumption in buildings and fuel use in transport, in 2022 in the LUG Group amounted to 842.1 Mg CO<sub>2</sub>e, which accounted for 45.4% of the greenhouse gas emissions generated by operations (Scope 1+2 market-based) and at the same time 0.13% of the LUG Group's total greenhouse gas emissions (Scope 1+2 market-based+3). Total Scope 1 emissions in 2022 were 1.8 kg CO<sub>2</sub>e per unit of product sold, 2.7% higher than last year.

In contrast, Scope 2 emissions (when calculated using the market-based method), i.e. indirect emissions that were entirely due to the generation of purchased electricity, amounted to 1014.3 Mg CO<sub>2</sub>e. They were responsible for 54.64% of Scope 1+2 market-based greenhouse gas emissions and for 0.16% of all greenhouse gas emissions (Scope 1+2 market-based+3).

The vast majority of emissions, as much as 99.7% of all LUG Group emissions in 2022, are attributable to Scope 3 emissions, i.e. all indirect emissions along the value chain. Total Scope 3 emissions in 2022 were approximately 649,000 Mg CO<sub>2</sub>e and increased by 2.9% against the previous year.

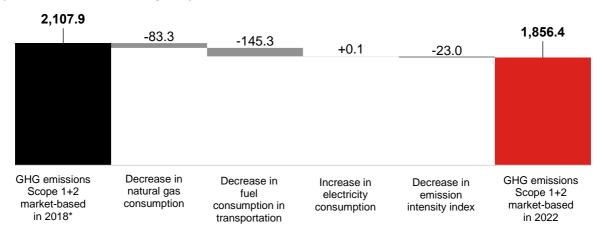
Due to an increase in the average emission intensity of electricity in the individual countries to which LUG luminaires were sold and as a result of a change in the sales structure of the LUG Group and a decrease in the number of luminaires sold y/y, Scope GHG Scope 1+2 location-based +3 emissions per luminaire sold in 2022 increased by 7.1% y/y (Scope GHG Scope 1+2 market-based +3 emissions: +7,0% y/y). In contrast, it should be noted that our Scope GHG Scope 1+2 location-based +3 emissions per 1 million revenue decreased by 12.6% y/y in 2022.



Drivers of change in Scope 1+2 market-based GHG emissions in 2022/2021

In total, the LUG Group's Scope 1+2 market-based emissions in 2022 dropped to 1,856.46 Mg CO<sub>2</sub>e (-3.9% y/y), i.e. by 75.6 Mg CO<sub>2</sub>e against 2021. The decrease was mainly due to a reduction in natural gas consumption and the purchase of less electricity in 2022. Scope 2 emissions calculated using the market-based method decreased by 3.2% y/y and scope 1 emissions decreased by 4.8%.

Drivers of change in Scope 1+2 market-based GHG emissions in 2022/2018 (relative to the base year)



\*In 2018, Scope 2 emissions were calculated using the location-based method.

Analysing the changes in LUG Group's Scope 1+2 market-based emissions in 2022 relative to the base year (2018), total emissions decreased by 11.9%, with Scope 1 emissions decreasing by 21.35% and Scope 2 emissions decreasing by 2.2%. The biggest impact on the reduction in emissions in 2022 compared to the base year was a reduction in the consumption of transport fuels of around 30%, which reduced greenhouse gas emissions by 145.3 Mg  $CO_2e$ . Other factors such as a reduction in electricity consumption, a decrease in the emission intensity factor and a decrease in natural gas consumption contributed to a reduction in emissions from the base year of 106.2 Mg  $CO_2e$ .

Analysing our emissions within the LUG Group, 2022 shows a decrease in emissions relative to the base year and at the same time a decrease in emissions relative to 2021.



#### Greenhouse gas emissions in the LUG Group in scope 3

Scope 3 category	Unit	2021	2022	Change YOY
Scope 3 upstream				
Purchased goods and services	Mg CO <sub>2</sub> e	82,905.51	70,304.59	-15.20%
Capital goods	Mg CO <sub>2</sub> e	501.21	2,709.61	+440.61%
3. Fuel- and energy- related emissions not included in scope 1 or scope 2	Mg CO₂e	499.82	482.31	-3.50%
4. Upstream transportation and distribution	Mg CO₂e	n.d.	968.07	-
5. Waste generated in operations	Mg CO₂e	38.53	7.74	-79.92%
6. Business travel	Mg CO <sub>2</sub> e	152.47	220.98	+44.93%
7. Employee commuting	Mg CO₂e	390.01	390.01	0.00%
8. Upstream leased assets	Mg CO₂e	Category considered irrelevant.	Category considered irrelevant	-
Scope 3 downstream				
9. Downstream transportation and distribution	Mg CO₂e	n.d.	Emissions included in category 4 "Upstream transport and distribution"	-
10. Processing of sold products	Mg CO₂e	Category considered irrelevant.	Category considered irrelevant	-
11. Use of sold products	Mg CO₂e	537,379.78	566,043.24	+5.33%
12. End-of-life treatment of sold products	Mg CO₂e	8,703.05	7,835.88	-9.96%
13. Downstream leased assets	Mg CO₂e	The category has been included in Scope 1+2 emissions and in emissions from the use of sold products.	The category has been included in Scope 1+2 emissions and in emissions from the use of sold products	-
14. Franchises	Mg CO <sub>2</sub> e	Emissions do not occur.	Emissions do not occur.	-
15. Investments	Mg CO₂e	Category considered irrelevant.	Category considered irrelevant	-
Total	Mg CO <sub>2</sub> e	630,570.38	648,962.43	+2.92%

In 2022, we counted and reported Scope 3 emissions for the second time, i.e. all indirect emissions along the value chain. In the reporting period, we have expanded the calculation of Scope 3 emissions to include additional categories (1 and 12), which we have counted for both 2022 and 2021. After recalculation, Scope 3 emissions for the base year (2021) were 630,570, 38 Mg CO<sub>2</sub>e (previously: 538,961.82 Mg CO<sub>2</sub>e).

In 2022, we calculated emissions for the following categories: 1, 2, 3, 4, 5, 6, 7, 11 and 12. For several categories (8, 10, 13, 14, 15), emissions are either not present or the estimation showed that their value is negligible. Scope 3 emissions in 2022 amounted to 648,962.43 Mg  $CO_{2}e$ , which is 2.92% more than last year.

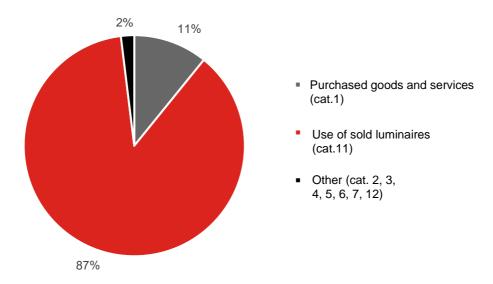
#### The following assumptions were used in the calculation of Scope 3 emissions:

 Category 1 - calculations based on data on the most relevant raw materials and other materials used in production processes in the LUG Group in 2022;

- calculations based on LCA IPCC GWP100 indicators from ecoquery database version 3.9. (2022) and from the DEFRA base (2022). We used the method of average indicators.
- Category 2 calculations based on the full list of fixed assets acquired in 2022, subsequently assigned to sector categories from the WIOD 2009 database; calculations using the GHG Scope 3 Evaluator tool provided by GHG Protocol. We adopted the indicator method.
- Category 3 calculations based on LUG Group fuel and energy consumption data and indicators from DEFRA (2021, 2022) and IEA (2022) databases.
   The average indicator method was used.
- Category 4 calculations based on data provided by the 10 largest freight forwarders providing transport services to us, whose transports accounted for approximately 90% of LUG's total transport expenditure in 2022. For 3 suppliers we used a method based on fuel consumption, and for the remaining 7 we used a distance method based on data on cargo weight, distance travelled and mode of transport, using coefficients from the DEFRA (2022) database. As it is not possible to separate the part of the transports whose costs are covered by the customer, the category also includes emissions from category 9.
- Category 5 calculations based on Group waste data and indicators from DEFRA (2022) databases. We adopted the indicator method.
- Category 6 calculations based on business travel data from an external supplier. Transport-related emissions were calculated using coefficients from the DEFRA (2022) database and accommodation-related emissions were calculated using indicators from the Hotel Footprinting Tool taking into account hotel class.
- Category 7 due to the low materiality of the category in the total GHG emissions in scope 3, the lack of significant changes in the work organisation at our plants and the small change in the number of people employed y/y, we decided to consider the GHG emissions calculated in 2021 as corresponding to the GHG emissions in 2022. The calculations were made using data collected from employee surveys completed by our 2021 employees and emission factors from the DEFRA (2021) database.
- Category 11 calculations based on source data from a summary of products sold, taking into account the type of luminaires and their parameters including, but not limited to, estimated expected product life and luminaire wattage, and electricity emission intensity factors from the IEA (2022) database for the country.
- Category 12 calculations based on source data for the most relevant raw
  materials and materials used in production processes in the LUG Group in 2022
  (analogous to category 1). The average index method was used, using emission
  factors that take into account how the waste is managed, taken from ecoquery
  version 3.9. (2022) and DEFRA (2022) databases. We determined the method
  of waste management based on the information we received from an external
  electrical and electronic waste management company we work with.

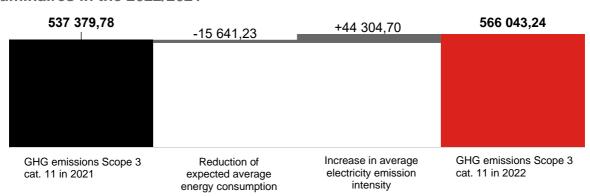






Scope 3 emissions, which are the largest, and therefore most significant, from our Group's perspective, include the emissions in category 11, i.e. emissions related to the use of LUG luminaires over their entire life cycle. In 2022, category 11 emissions amounted to 566,043.24 Mg CO<sub>2</sub>e and accounted for 87.2% of total scope 3 emissions (and at the same time 87.0% of total Scope 1 + 2 market-based +3 GHG emissions). At the same time, this is the category least prone to management from the company's perspective, because issues in this category are primarily related to the volume and structure of sales, the geographical location of customers and their purchasing preferences, over which we have no direct influence. At the same time, we are continuously improving the energy efficiency of our luminaires, which is an indirect positive influence on the reduction of category 11 emissions.

Our representative luminaire sold in 2022 will emit an average of 1,353 Mg CO<sub>2</sub>e over its lifetime, of which only 176.3 kg CO<sub>2</sub>e are emissions embedded in the luminaire.



Drivers of change in the GHG emissions associated with the use of LUG luminaires in the 2022/2021

In 2022, category 11 emissions increased by 5.3% y/y. The main driver of the change was an increase in the average emissions intensity of electricity, related to the emissions intensity of the energy suppliers in the countries to which the luminaires were sold, which contributed to an increase of 44.3 thousand emissions. Mg CO<sub>2</sub>e. The second factor was a decrease in the expected average energy demand per luminaire, which is directly related to the characteristics and quality of the luminaires sold, and contributed to a 15.6k reduction in emissions of Mg CO<sub>2</sub>e.

[E.5.2] [E.5.4] Information on the emission of other substances into the atmosphere can be found in Annex 2.

#### 7.4. The circular economy at LUG

#### Consumption of resources and materials

For the production of lighting fittings, we use raw materials and semi-finished products supplied by verified suppliers. Information on suppliers of individual key raw materials and components:

- deliveries of the main components come mainly from Europe, the minority are suppliers from Asian countries;
- steel and aluminium are purchased in Europe (including Poland);
- PCBs are partly supplied by manufacturers in Poland and partly imported from Asia;
- semiconductor elements are purchased in Europe and the United States;
- glass is supplied by several local (Polish) manufacturers;
- plastics plastic details are supplied by European manufacturers of this type of material;
- light sources, lenses, power supplies supplied by European manufacturers.
   These are large companies operating all over the world. Some of these components are also produced by LUG itself;
- fasteners and wires supplied by manufacturers in Poland;
- paints and varnishes are imported from Europe, a significant part of which comes from Poland.



Most raw materials and semi-finished products have at least two alternative suppliers.

We are building long-standing relationships with trusted suppliers who meet the requirements for the highest quality of components and services provided. New suppliers are selected on the basis of a tender where one of the selection criteria is the location of the potential supplier's facilities. Whenever possible, cooperation with local entrepreneurs is preferable. In most cases, before starting cooperation with a given company, an audit is carried out at the supplier. Pre-cooperation audits are conducted by the Quality Department and Supplier Supervisors. All purchased components are verified in terms of the required documentation and certification (CE, RoHS). In addition, each delivery of critical raw materials and semi-finished products is verified in terms of quality.

Main categories of materials and raw materials [E.1.1] [E.1.2]

	Unit	2019	2020	2021	2022	Change YOY
Steel	Mg	733	556	683	465	-31.8%
Aluminium and aluminium housing	Mg	626	532	1,030	1,003	-2.6%
Plastics	Mg	139	87	102	73	-28.2%
LED light sources	thousand units	47	57	66	54	-17.5%
PCBs	thousand units	1,147	1,121	1,026	783	-23.7%
Semiconductors	thousand units	40,962	50,456	54,867	45,900	-16.3%
Glass	Mg	68	74	142	159	+11.9%
Paints, varnishes	Mg	43	47	82	65	-20.8%
Power Supplies	thousand units	217	499	503	490	-2.6%
Lenses	thousand units	535	1,610	1,672	1,721	+2.9%
Cardboard	Mg	280	240	277	198	-28.7%
Wires	km	-	-	1,819	1,538	-15.4%

<sup>\*</sup> Wire consumption data have been collected from 2021 onwards and is therefore not incomparable with data for earlier years.

The changes in the use of materials and raw materials seen in the above breakdown are the result of a change in the product range structure of sales and a 7.2% reduction in the number of luminaires produced in 2022 in the LUG Group on a year-on-year basis.

#### Waste

In the LUG S.A. Group, municipal waste is collected selectively, according to local regulations. The generated waste is transferred to authorised recipients for recovery or disposal.

On the premises of the company, waste generated as a result of the production of luminaires and LED modules and the operation of auxiliary installations necessary for business operations, before being transferred to the recipient, is stored in separate places. Waste storage sites are located on the premises of the enterprise, and the storage of waste is secured in a way that prevents its negative impact on the environment and human health.

The organisational unit responsible for the waste management area regularly inspects the waste disposal sites.

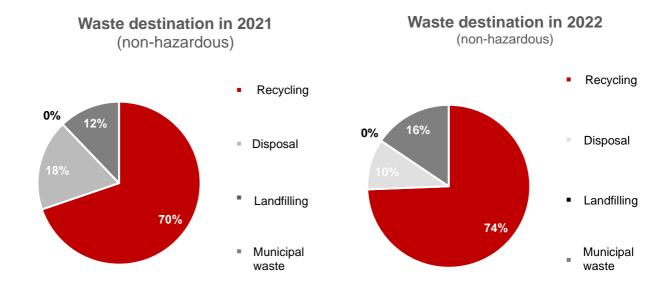
On behalf of LUG, the luminaires are disposed of by the Electrical Equipment Recovery Organisation, which provides LUG with the following services: collection of waste electrical and electronic equipment, processing, recovery – including recycling and disposal of waste equipment, reporting to the Chief Inspector of Environmental Protection.

Hazardous and non-hazardous waste by the management method and waste emission per product or revenue unit

	Unit	2019	2020	2021	2022	change YOY
Hazardous waste		1		1	1	
Recycling	Mg	0.0	0.0	0.3	0.0	-100.0%
Landfill storage	m3	0.0	0.0	0.9	0.0	-
Disposal	Mg	12.0	10.9	18.3	22.37	+22.5%
Reuse	Mg	0.0	0.0	0.0	0.0	-
Permanent on-site storage	Mg	0.0	0.0	0.0	0.0	-
Total hazardous waste	Mg	12.0	10.9	18.8	22.37	+18.8%
Hazardous waste per product unit	kg/pc.	27.8	22.0	37.7	46.51	+28.1%
Hazardous waste per PLN 1 million in revenue	kg/1 mln PLN	70.3	59.7	92.3	93.2	+1.0%
Non-hazardous waste						
Recycling	Mg	347.79	395.79	347.56	278.23	-19.9%
Landfill storage	m3	0.00	0.00	0.00	0.00	-
Municipal waste	Mg	n.d.	n.d.	60.50	58.23	-3.8%
Disposal	Mg	36.56	49.26	90.07	37.55	-58.3%
Reuse	Mg	0.00	0.00	0.00	0.00	-
Permanent on-site storage	Mg	0.00	0.00	0.00	0.00	-
Total non-hazardous waste	Mg	384.35	445.06	437.63	374.01	-14.5%
Non-hazardous waste per product unit	kg/pc.	0.89	0.90	0.84	0.78	-7.9%
Waste other than hazardous per PLN 1 million in revenue	kg/1 mln PLN	2,252.25	2,435.45	2,146.10	1,558.58	-27.4%
Total all waste	Mg	396.34	455.97	456.46	396.37	-13.2%
Total all waste per product unit	kg/pc.	0.9193	0.92	0.88	0.82	-6.4%
Total all waste per PLN 1 million in revenue	kg/1 mln PLN	2,322.51	2,495.20	2,238.41	1,651.78	-26.2%

[E.6.1] [E.6.2] [E.6.4] Within the Group, we recycled 74.4% of non-hazardous waste and 0% of hazardous waste in 2022. 100% of hazardous waste and 10% of non-hazardous waste was sent for disposal. In 2022, we did not send waste to landfills.





In 2022, the LUG Group generated:

- 46.51 kg of hazardous waste and 0.78 kg of non-hazardous waste per 1 luminaire produced, and
- 93.2 kg of hazardous waste and 1,558.58 kg of non-hazardous waste per PLN 1 million revenue.

Overall, all waste in our Group decreased by 13.2% year-on-year, while:

- the volume of waste per luminaire dropped by 6.4%,
- while the volume of waste per 1 million revenue decreased by 26.2%.

#### 7.5. Limiting light pollution

With the development of urbanised areas, the brightness of the sky increases from year to year, the urban glow is visible from a distance of many kilometres, the light "spills out" of urbanised areas, which is not without its impact on the environment. Excessive lighting has a negative impact not only on human functioning, but also on the living conditions of plants and animals.

Light pollution can be classified into two categories:

- urban glow a large-scale form of pollution present in an urbanised area, causing e.g. excessive illumination of the night sky, disturbances in the daily cycle of flora and fauna;
- unwanted light this is light pollution that excessively illuminates surfaces not intended for this purpose. It is most often the result of a faulty design of a lighting device or errors and omissions in the spatial development plan.

When designing lighting for interiors as well as infrastructure and architectural objects, LUG has a wide impact on reducing light pollution. With our own design team, the company places particular emphasis on creating precise lighting systems and limiting uncontrolled light distribution.

By engaging in the development of *Smart City* technology, we offer solutions reducing excessive lighting in urban areas, including, for example, LMS (*Lighting Management System*). Thanks to these solutions, light is supplied and illuminates urban spaces only when it is needed, while at times when it is unnecessary and compliant with standards (e.g. in the middle of the night), the light intensity is reduced to a minimum. As a result, light pollution is reduced while also reducing the negative impact on the environment.

#### 7.6. Other environmental issues

[E.7.2] [E.7.3] [E.7.4] During the reporting period there were no breakdowns resulting in contamination or other environmental damage. In 2022, no administrative proceedings were pending against LUG for violations of environmental regulations.

In our operations, we attach great importance to respecting the environment and limiting our possible negative impact on it. Issues of how to deal with an accident that has an environmental impact are described in the procedure: *Preparedness and response to environmental accidents*. The purpose of the procedure is to ensure proper management of and response to environmental accidents, unforeseen situations and unusual events.

#### Water and waste water

	Unit	2019	2020	2021	2022	change YOY
Water consumption						
Purchased water	m <sup>3</sup>	4,996.0	8,969.7	12,308.2	8,306.6	-32.5%
Water from own intakes	m <sup>3</sup>	93.2	93.2	90.7	0.0	-100.0%
Total water used	m <sup>3</sup>	5,089.2	9,062.9	12,398.9	8,306.6	-33.0%
Water consumption per luminaire produced	1/unit	11.8	18.3	23.9	17.3	-27.8%
Water consumption per PLN 1 million in revenue	m³/PLN 1mln	29.8	49.6	60.8	34.6	-43.1%
Waste water						
Waste water discharged into the municipal network	m <sup>3</sup>	5,066.0	9,039.7	12,375.2	8,372.2	-32.3%
Waste water per luminaire produced	1/unit	11.8	18.2	23.9	17.4	-27.1%
Waste water discharged per PLN 1 million in revenue	m³/PLN 1mln	29.7	49.5	60.7	34.9	-42.5%

[E.3.1] [E.3.2] [E.3.3] [E.6.3] [E.6.5] In 2022, 8,306.6 m³ of water was used within the LUG Group, representing an average of 17.3 litres of water per luminaire produced and 34.6 m³ per PLN 1 million of revenue. In 2022, we only used purchased water. We do not reclaim or reuse water. Total water consumption in 2022 dropped by 32.5% year-on-year. During the same period, 8,372.2 m³ of waste water was produced, which is 17.4 I per product unit and 34.9 m³ per PLN 1 million in revenue. The amount of discharged waste water increased by 32.3% compared to the previous year.



#### **Pollution reduction**

We make every effort to have as little negative impact on the environment as possible. We implement appropriate procedures and apply a number of measures to reduce the pollution generated during the production of LUG luminaires:

- automatic wiring of luminaires reduces the emission of chemical substances evaporated during soldering, and also reduces the exposure of employees to air pollution with these substances;
- LED component production line reduces the production of emissions and waste, and enables the minimisation of the amount of chemicals (glue) used in the production of electronic components.

In addition, LUG is involved in the development of a smart lighting management system and Smart Cities technology and thus it contributes to the reduction of light pollution (more in chapter 7.5 *Limiting light pollution*).

#### Impact of the LUG Group on the environment

[E.4.1] [E.4.2] [E.4.4] LUG does not constantly monitor the impact of production facilities on the immediate environment. Instead, we have carried out an analysis of conflicts with protected areas. As a result of the analysis, LUG Light Factory Sp. z o.o. in Zielona Góra and the LUG Research and Production Centre in Nowy Kisielin, reserves, protected landscape areas and special protection areas of the NATURA 2000 programme were distinguished. It is worth mentioning that the operational activity of LUG has no negative impact on the areas identified in the analysis.

In 2022, LUG Light Factory was inspected by the Provincial Environmental Inspectorate for compliance with waste management and recycling regulations.

[E.4.3] There was no environmental loss in 2022 as a result of our activities.

## 7.7. Material environmental risks

Risk or opportunity and its description	Risk or opportunity management method
Risk related to energy efficiency This risk is related to rising electricity costs and the need to comply with legislative requirements.	We monitor risks by, among other things, complying with the ISO 50001 standard (Energy Management System). We implement procedures and carry out measures to reduce electricity consumption. Related objectives are also included in the Integrated Management System Improvement Plan.
Opportunity related energy efficiency manifests itself through a shift in customer purchasing patterns towards the selection of lighting solutions on the basis of energy efficiency criteria.	We seek to capitalise on this opportunity by: - monitoring public programmes that support the financing of energy efficiency improvements for private companies and local authorities in order to meet customers' needs and specific energy efficiency criteria monitoring of customers' purchasing patterns and tender requirements, - designing products in the highest energy classes, - investing in the development of innovations and technologies to ensure high energy efficiency in luminaires and the development of intelligent lighting management systems
Risk related to fuel and energy mix  This risk is related to the threat of rising energy prices as a result of the low-carbon electricity mix in Poland and other countries.	We monitor risks through the implemented ISO 50001 Energy Management System. We plan to invest in order to meet future energy needs from our own renewable energy sources.
Opportunity related to the fuel and energy mix This opportunity is related to increasing the share of energy coming from RES.	We manage the opportunity through: - targets set in the Group's new strategy for the years 2023-2026, - taking measures to increase the share of renewable energy in the energy mix used.
Risks related to GHG emissions This risk may consist of the loss of potential customers/markets due to the LUG Group's failure to meet strict requirements with regard to the organisation's/product's emission performance and the slow adaptation of internal processes to reduce emissions.	We are managing risk through the objectives embedded in the new Strategy 2023-2026. In addition, we are monitoring the legislative processes relating to product decarbonisation requirements.
Opportunities related to GHG emissions Opportunity in implementing a GHG emissions calculation system more efficiently than the competition and achieving decarbonisation targets faster, including the production of low-carbon luminaires translating into GHG reductions for LUG and its customers.	Since 2018, we have been calculating GHG emissions and conducting annual monitoring of Scope 1, Scope 2 and Scope 3 emission factors. This makes it possible to control emissions at Group level and take action to reduce them. In addition, we are working on the implementation of the Sustainable Development Strategy, which will also address greenhouse gas emissions.
Risks related to climate change adaptation These risks may relate to the need to comply with legislative requirements in this area, disruptions to production and logistics processes, and insufficient pace of action resulting in non-compliance with climate change adaptation.	We manage risk by: - including a sustainability objective in the new strategy, - working on the development and implementation of the Sustainable Development Strategy, - adapting, upgrading and automating production processes, - using measures to diversify logistic processes.
Opportunity related to climate change adaptation The opportunity lies in designing energy-efficient products that take into account additional protection against adverse environmental factors (e.g. increased operating temperature, increased mechanical strength against damage, high degree of moisture and water tightness).	We seize the opportunity by: - conducting laboratory tests, - an open, flexible NPD process - New Product Development, - achieving the strategic objectives. Moreover, in communication with potential customers, the argumentation concerning the use of products



	and solutions offered by the LUG Group to reduce the greenhouse gas emission and carbon footprint is being expanded.
Risk related to sourcing and using raw materials and other materials  This risk is related to the geopolitical aspect of territoriality, which may involve a risk of on-time delivery. In addition, this risk is related to the non-availability of raw materials and materials and the high cost of purchasing or transporting them.	In order to reduce risk: - we are taking steps to increase supplier diversification, - we carry out comprehensive management of the Supply Chain area, - we address this issue in the strategic objectives 2023-2026.
Opportunity related to sourcing and using raw materials and other materials  This opportunity is related to the design of products using recycled raw materials and other materials, which will translate into increased demand for energy-efficient luminaires that realise the demands of the circular economy.	We seize the opportunity by: - the targets set in the Group's new strategy for 2023- 2026 relating to GOZ, - carrying out R&D activities, - application of Ecodesign principles.
Risks related to circular business models This risk could be the loss of potential customers/markets by not meeting their restrictive circularity requirements. Risks are also associated with the tightening of regulations on the circular economy.	We monitor risk by, among other things: - objectives set in the Group's new strategy for 2023-2026, - observing and analysing legislative processes related to regulations on circular economy and acting as an expert in legislative processes, - rational design of products taking into account the concept of ecodesign and the idea of extending the life cycle of LUG luminaires, - close cooperation with industry organisations such as Pol-Lighting.
Opportunity related to circular business models Opportunities relate to LUG entering new markets, reducing operating costs and increasing competitiveness.	We manage the opportunity through:  - the targets set in the Group's new 2023-2026 sustainability strategy,  - reasonable product design taking into account the principles of ecodesign and the idea of extending the life cycle of LUG luminaires.  - monitoring legislative processes and acting as an expert in these processes.



# SOCIAL RESPONSIBILITY OF THE LUG GROUP





## 8. Social responsibility of the LUG Group

There is no uniform policy on social issues in the LUG Group. Individual social issues are subject to management processes carried out by several organisational units according to their competences:

- charity activity: in the LUG Capital Group there is a procedure to be followed in relation to charity activities; the decisions are made by the Proxy of LUG Light Factory Sp. z o.o. and the employees of the Management and Communication Office participate in them;
- relations with local, national and economic media: Management Board and Communications Office;
- relations with potential employees, so-called Employer Branding: HR Department;
- cooperation with organisations aimed at improving the broadly understood quality of life, including cooperation within the World Economic Forum: Marketing Department.

#### 8.1. Savings in local government budgets

One of the important groups of stakeholders and main groups of LUG customers are local government units which the LUG product offer is also addressed to. Among our products there are a number of solutions related to public space and infrastructure lighting or *Smart City* technology which can significantly translate into budget savings for local governments.

Budget savings for local governments are particularly important due to the current situation in the Polish energy sector related to the obligation resulting from the Energy Efficiency Directive 2012/27/EU which mobilises EU countries to reduce electricity consumption by its consumers by 1.5% every year between 2014-2020. A negative factor affecting the cost of electricity is the war in Ukraine, which will have a long-term impact on the economic situation of countries around the world. Europe is facing its most serious energy crisis since 1973. Natural gas, the fuel that was supposed to facilitate the transition to a RES-based economy, is becoming the European Union's biggest problem in the face of restrictions being imposed by successive sanctions packages on Russia.

Both the use of our lighting products and innovative smart lighting systems can improve energy efficiency and reduce electricity consumption. This is due to the LED technology applied in all LUG lighting products, which is the most energy-efficient, and innovative smart lighting systems allow for automation of lighting control, e.g. in terms of matching the power of street lighting to traffic and conditions. This makes it possible to generate savings on electricity consumption of up to approx. 70% compared to the cost of lighting before modernisation.

Dynamic changes in public spaces that are currently underway and are expected in the future are one of the main areas of our interest. In order to be able to actively contribute to the strategies of the cities of the future and participate in the upgrade of urban lighting, based on the best smart lighting solutions, BIOT, our subsidiary

is developing proprietary *Smart City* solutions. The developed system is the neural basis of the smart city of the future. This is a natural first step towards *Smart City* solutions and the basis for the further development of smart functions that will be made available gradually within a single platform.

An exemplary example of a lighting modernisation investment resulting in savings of around PLN 23 million a year is the replacement of nearly 40,000 luminaires in Warsaw, which was completed in April 2023. New lighting fixtures, designed from scratch by our designers, will make the streets of Warsaw brighter, safer and more ecological, because electricity costs as a result of the upgrade will be reduced threefold which will generate annual savings of about 27.8 GWh. The reduction in electricity costs will allow the investment to be paid back in just over two years. Replacement of luminaires will reduce carbon dioxide emissions by 30,000 tons per year. The amount of sulphur and nitrogen oxides and dust emitted will also be reduced. Moreover, each energy saving investment is connected with obtaining a certificate from the Energy Regulatory Office which can be traded on the Polish Power Exchange. That's where the coal-fired power companies buy them. By replacing the luminaires with LEDs Warsaw will gain a certificate which is estimated at around PLN 4.7 million. The capital city of Warsaw plans to replace 43,000 luminaires altogether - it will be the biggest project of this kind in Poland and one of the biggest in Europe.

In addition, on 21 April 2023, we signed a contract for the delivery of another batch of modern energy-efficient luminaires designed specifically for Warsaw by LUG. This time, the contract is for 35,400 luminaires that will illuminate more than two thousand of the capital's smaller streets, reducing electricity consumption to the benefit of the city budget and the environment. After their installation, Warsaw will almost entirely become a city lit by energy-efficient LEDs. According to estimates, the replacement of nearly 36,000 old luminaires will provide the city with more than PLN 32 million in savings each year, meaning that the purchase costs will be paid back after just 1.5 years. It is estimated that replacing one luminaire results in an annual savings in CO<sub>2</sub>emissions, which will not enter the atmosphere due to the lower power consumption, comparable to the CO<sub>2</sub> that 40 trees absorb in a year.



#### 8.2. LUG in member organisations

List of organisations of which LUG is a member:

- Lighting Equipment Employers' Association "Pol-Lighting";
- Polish Association of Listed Companies;
- Western Chamber of Industry and Commerce;
- Lubuskie Region Employers' Organisation
- Chamber of Industry and Commerce Poland Asia;
- Chamber of Construction of the Lubuskie Voivodeship;
- Polish Chamber of Commerce for Electricity;
- Greater Poland Chamber of Construction;
- Association for Energy Development in the Lubuskie Region;
- Polish Council of Shopping Centres;
- Polish-Brazilian Chamber of Commerce:
- World Economic Forum;
- OVLNL Stichting Openbare Netherlands.
- Polish Federation of Hospitals;
- National Association of Private Hospitals.

LUG cooperates with many institutions representing areas important in the Group's operations:

- Zielona Góra City Hall: in 2022, cooperation with the Zielona Góra City Hall and the Department of Investments and Road Management of the Office was continued. In October 2022, we carried out another demonstration and experimentation project on Nowa St. – Kisielin in Zielona Góra, enabling lighting control and testing tracking lighting - a new functionality of the LUG URBAN platform.
  - In April 2022, we started working with the Rzeszów City Hall and the Rzeszów City Road Administration. As part of this cooperation, a demonstration installation of an innovative solution called "SLP safe lighting point" was installed, illuminating what is considered one of the dangerous pedestrian crossings in Rzeszów.
- Zielona Góra Marshal's Office: cooperation with the Department of Regional Programmes in the field of conducting and accounting for projects co-financed by the European Union (Lubuskie Regional Operational Programme 2020) and with the Department of Innovation and Entrepreneurship. We have become a member of the Lubuskie Innovation Forum (LFI) and actively participate in meetings and work on the Lubuskie Region Innovation Development Programme. The LFI is an advisory and consulting body operating at the Marshal of the Lubuskie voivodeship, whose mission is to support the voivodeship local government and institutions involved in the creation and implementation of innovations. In 2022, as part of the Lubuskie Innovation Forum the second stage of the competition for the selection of key areas of Lubuskie Smart Specialisations, organised by the Lubuskie Voivodeship Executive Board, it was decided that the Voivodeship Executive Board would support and develop the partnership entitled "Lubuskie Smart Specialisations".

- "Smart City and IoT smart resource management in the economy", of which BIOT is the Leader and LUG Light Factory is a partner.
- University of Zielona Góra: we jointly prepared and submitted for publication in the Electrical Review an academic paper called "Communication standards used in Smart Lighting systems" written by the President of the Management Board of BIOT and employees of the University of Zielona Góra. The article underwent a positive review and was printed in March this year. Together with the University, we prepared and submitted a project for the competition to select key areas within Lubuskie Smart Specialisations, organised by the Lubuskie Voivodeship Executive Board. The leader of the project entitled "Smart City and IoT smart resource management in the economy" is BIOT, with the partnership of LUG Light Factory and the University of Zielona Góra. The project received a positive evaluation and a recommendation from the competition committee to conclude an agreement with the Marshal's Office for the development of the established partnership within the selected key area.

As part of the research and development project called "Industrial research and experimental development work on the development of lighting solutions for the personalisation of lighting, taking into account chronobiology, with possible implications in innovative luminaires", we submitted a joint research topic with the University of Zielona Góra as part of "new research topics undertaken by research centres on the initiative of enterprises in the areas of smart specialisations of the region". The research problem addressed concerns smart lighting solutions.

We regularly collaborate with the University of Zielona Góra (with the Institute of Automation, Electronics and Electrical Engineering) in the area of electromagnetic compatibility, conducting EMC tests on luminaires in the Electrical Engineering Laboratory. Most recently - MODENA RGB was tested in October 2022. For the past year and a half, we have been working together with the University of Zielona Góra on a scientific research project entitled "The use of UV-C technology to reduce the transmission of the SARS-CoV-2 virus and the transmission of infections in hospitals". The university researched UV-C luminaires, while we participated in the research process and provided feedback on the research results achieved. Researchers at the University also tested a prototype of a mobile UV-C flow - the PURELIGHT STATION. The project was completed in September 2022. By the end of the year, the final research report and the report on the implementation of the research results were in progress.

#### 8.3. Local communities of the LUG Group

By operating in Zielona Góra, we have been influencing the community of the entire region for many years and at the same time is influenced by the phenomena taking place in the community of the Lubuskie Voivodeship. By operating on many levels, we have a wide area of influence on the local community. This consists of:

 A multidirectional business offering a variety of job opportunities and career paths in a company with international reach and high labour standards.



- A unique environment for local authorities to work together, due to the location of our operational activities.
- The unique experience in the field of architecture and lighting, which our specialists have, is invaluable capital, which can be used by local scientific institutions, such as the University of Zielona Góra.

[S.9.3] There was no uniform policy in the social area in the LUG S.A. Capital Group in the reporting period. Activities in the social area of the companies of the Capital Group are regulated by the adopted LUG Code of Good Practices and the strategic development directions of the Capital Group. Within the Group's operating companies, LUG Light Factory and LUG Argentina, we conduct monitoring and dialogue with local communities. The principles adopted in the social area of LUG Argentina SA are regulated by the provisions of local Argentinian law.

[S.9.1] [S.9.2] In 2022, no negative impact of the company's operating activities on the local community was shown, and no complaints were received against the activities of the companies of the LUG S.A. Capital Group from the local community.

The activities carried out by LUG, described in chapter 3.8. *Management Systems* also bring effects within the cooperation with entrepreneurs operating in the local community.

In 2022, we took on five apprentices from an electronics high school in Zielona Góra for a vocational training.

As part of fulfilling the statutory obligation related to the management of packaging and packaging waste, educational campaigns were conducted in 2022 on our behalf by an external companies, Biosystem and Elektroeko, which carried out the following activities:

#### In 2022, Biosystem:

- prepared posters and brochures on the correct handling of packaging waste;
- conducted conferences and webinars;
- organised the "Mr Cleaner" Education Programme for schools and kindergartens;
- prepared educational information about the correct handling of packaging waste displayed on the containers;
- organised Recycling Days in Nowy Targ and Nowy Sącz;
- has developed and maintains an application for municipalities on selective waste collection;
- organised educational activities for residents, schools and kindergartens in the municipalities;
- runs and maintains the educational website 'Eco Imagination'.

In 2022, Elektroeko company created a digital comic book for children and adults which was promoted through multiple communication channels. The comic strip is intended to raise awareness of worn-out luminaires and how to deal with worn-out lighting correctly.

#### Charitable activities

One of the elements of building relations with the local community is the charity activity conducted by LUG. It takes the form of earmarked donations for purposes carried out by NGOs and support in kind.

[S.9.4] [S.9.5] In 2022, the LUG S.A. Capital Group made donations for social purposes in the total amount of PLN 57.2 thousand PLN (compared to PLN 13.5 thousand in 2021). Among the recipient organisations and institutions were:

- Siepomaga Foundation: collection for Ukraine;
- Ludzie dla Ludzi (People for People) Association: Mecenat Złotego Serca (Patronage of the Golden Heart);
- Teatr za jeden uśmiech (Theatre for a Smile);
- St Joseph Parish.

In addition, in 2022 we have supported various individual benefits and provided in-kind support, which has so far taken various forms, such as the funding of protective masks for the volunteers of the Great Orchestra of Christmas Charity. Opening up to the needs of Ukrainian citizens fleeing the war, we organised a collection of food, hygiene products and clothing, which was then donated to those in need.

[S.9.6] In 2022, our staff devoted a total of nearly 400 volunteer hours to helping people fleeing war in various ways: organising collections of food, hygiene products and clothing, sorting donations, coordinating and implementing transports, organising places to stay, organising psychological support.

### Industry events and sponsorship

We focus our marketing activities on undertaking diverse and cutting-edge activities that allow us to carry out effective communication aimed at strengthening global technological awareness and brand recognition. We create in-depth experience by participating in discussions within key communication platforms such as: ecology; energy efficiency; laying the foundations of Smart Cities; creating friendly and inclusive urban spaces - for each of our strategic personas.

Due to the turbulent VUCA environment and events in our near and distant surroundings, we have extended the existing strategic outlook to 2022. We have used this time to develop actions to be taken in the new strategic perspective for the years 2023 - 2026.

[S.9.5] In 2022, we spent around PLN 250k on industry events. We had the opportunity to participate in the following undertakings:

- Light &Building 2022 Fair in Germany
- CONCRETA Porto, Portugal
- Belelektro Berlin
- Architect @ work Poland
- Architecture Days in France



- Archifest in France
- IX Krakow Road Safety Days
- VII European Congress of Local Governments
- RoadVIP 2022 Polanica-Zdrój
- Salon de L'Innovation Venoy
- Vakbeurs Ruimte & Licht Houten in the Netherlands
- Helso Electricity Vilnus

### 8.4. Other social issues

### **Awards and distinctions**

In 2022, we received the following awards and distinctions for the high standards of our business:

Award	Description
The Best Annual Report 2021	For the seventh time, we were awarded the Grand Prize of "The Best Annual Report" in the category of NewConnect companies. The event organised by the Institute of Accounting and Taxes for the 17th time aims to distinguish the best annual reports prepared for shareholders and investors to be a reliable source of information about the company.
Economic Award of the Marshal of the Lubuskie Voivodeship 2022	We ranked second in the "large companies" category. The Lubuskie Marshal's Award is a tribute to our more than 33 years of activity in our home region, where we are constantly developing in respect of the needs of the local community.
Lubuskie Innovation Leader	On 12 September 2022, the Lubuskie Voivodeship Business Leader Gala was held at the Gorzów Philharmonic. It was organised by the Western Chamber of Commerce and Industry (Zachodnia Izba Przemysłowo-Handlowa). LUG was once again among the winners as Lubuskie Innovation Leader. The aim of the competition was to select and reward the best enterprises in the region.
iF Design Award 2022	The Artera LED and FRAME innovative luminaire systems have been recognized in the iF Design Award 2022 competition. The double win in this prestigious competition rewarding the best industrial design is a great pride and joy for the entire LUG design team.
Climate Aware Company	For the fourth time, LUG S.A. found itself among the companies awarded the title of Climate Aware Company, obtaining 7.83 points out of a possible 10 in the fourth edition of the Crisis Climate Awareness Survey organised by the Reporting Standards Foundation, the Association of Listed Companies and Bureau Veritas Polska.

#### Polish pavilion at EXPO Dubai awarded

In the WorldExpoAwards competition, which has been organised by EXHIBITOR Magazine for 30 years, Poland won the large pavilion category. LUG is a coauthor of this success as a lighting supplier. Among others, we supplied CALIBRO LED, MODENA LED and RUNA luminaires, as well as 25 PURELIGHT LUG FLOW UV-C air disinfection units.

### LUG Group support in the face of war in Ukraine

The situation of the civilian population in the areas attacked by Russia was critical from the start. We were not indifferent to the needs of Ukrainian citizens fleeing the war, and the assistance organised in 2022 was two-pronged - the first aimed at employees and co-operators of Ukrainian origin and their families, and the second dedicated to those who need help regardless of their lack of connection with our organisation. In 2022, we have taken the following measures:

- we organised the LUG Money Box as a sub-collection for the Siepomaga Foundation and donated funds worth 10,000 euros for this purpose, also inviting our employees and business partners to join in;
- a team of Ukrainian-speaking employees was built to coordinate communication between employees of Ukrainian nationality and the crisis team coordinating relief efforts on behalf of LUG;
- cooperation was established with the OFF-LINE Holistic Family Center, co-founded by Ukrainian nationals, and an offer of free psychological assistance and an opportunity to integrate with the Ukrainian community in the Lubuskie region was organized;
- online psychological assistance was organized for a Polish-speaking group of employees, conducted by specialist psychologists from the Transmission Organisation Clinic;
- free legal consultations were made possible for those in need of support in legalizing their stay in Poland and other current affairs as a consequence of the hostilities taking place in Ukraine;
- a number of transports of refugees from the Polish border to the Lubuskie region were organised, together with the organisation of a place of residence;
- an in-kind collection was coordinated among LUG employees, in which bandages and first-aid supplies, cosmetics and hygiene products, baby items, high-energy and long-life food, trekking boots, knee pads, sleeping bags and sleeping pad, etc. were collected;
- combat and medical equipment for the territorial defence battalion of Ukraine was co-organised;
- we purchased school supplies for the children;
- an information campaign was also organised to encourage LUG Group employees to provide volunteer assistance or provide a place of residence for visiting citizens from Ukraine.

#### Financial support from public authorities

[S.1.1] In 2022, we received PLN 4.38 million from the State in public assistance (in 2021, the value was PLN 1.37 million).



In 2020, LUG Light Factory continued its activity in the field of intellectual and industrial property protection as a result of conducted research and development work and implementation. In 2022, it filed 3 industrial registered Community designs with the European Union Intellectual Property Office (EUIPO) and applied for patents for 2 inventions with the Polish Patent Office:

- Invention P.440349 Lighting fixture (switch);
- Invention P.440601 Luminaire cover (bumper).

Both inventions were developed as part of a project co-financed by national funds from the National Centre for Research and Development, under Action 4.1. Scientific research and development work of the Operational Program Smart Development 2014-2020 entitled "Industrial research and experimental development work on the development of a safe lighting point" was continued.

In 2022, we started the implementation work of the 'safe point of light' (BPO), which was also created as a result of the above project. The project which has a total value of PLN 5,249,832.36 and the amount of funding: PLN 3,827,141.04 was implemented within a consortium and assumed close scientific cooperation with research units, popularisation of research results and 4 patent applications. Its aim was to develop an innovative, safe lighting pole integrated with a luminaire. The product was presented as a product innovation at the IX Krakow Road Safety Days conference in May 2022.

We have also continued to implement the project entitled Industrial research and experimental development work on the development of lighting solutions for the personalization of lighting, taking into account chronobiology - possible implications in innovative luminaires", co-financed by the European Union from the European Regional Development Fund under the Lubuskie 2020 Regional Operational Program in the amount of PLN 2,324,289.99 million, with a total value of: PLN 4,315,418.76. The project involves the development of innovative luminaires in the field of HCL (*Human Centric Lighting*) and the introduction of new functionalities of luminaires aimed at HCL lighting technology. In the analysed year, development work involving laboratory testing and validation of solution prototypes developed during industrial research were under way. The project created new jobs, product innovations, continued cooperation with scientific bodies and the diffusion of innovations to SMEs, and will prepare patent applications and design claims in 2023.

In the year under review, we also continued to carry out research work commissioned by the General Voivodship Hospital in Gorzów Wielkopolski as a subcontracting service in the research and development project entitled "Research and development in the field of health care". "Utilization of UV-C technology to reduce transmission of SARS-CoV-2 virus and limit transmission of infections in hospitals" in connection with the receipt by the Multispecialist Regional Hospital in Gorzów Wielkopolski of a grant for the project "Support of single-name hospitals in the fight against the spread of SARS-CoV-2 virus infections and COVID-19 treatment", funded by the National Research and Development Center. Our task in this project was to carry out part of the substantive research on a system for surface and air disinfection, using UV-C devices, with the aim of reducing the transmission of the SARS-CoV-2 virus and reducing the transmission of infections in hospitals.

As part of the ongoing project, a prototype of an innovative mobile flow device using UV-C technology was also developed and submitted for testing at the Gorzów Hospital and for research at the University of Zielona Góra and the Częstochowa University of Technology. We also joined in the preparation of a new medical procedure related to disinfection of hospital rooms and reduction of infection transmission in hospitals. The research work started in July 2021 and lasted until the end of the first quarter of 2022. The value of the research order amounted to PLN 937,260 gross. In October 2022, we drew up the Research Report for the Project and thus completed the design process, in which we were the contractor for part of the substantive research.

In late 2022, the second stage of the competition organised by the Lubuskie Voivodeship Executive Board for the selection of key areas to be a part of the Lubuskie Smart Specialisations was resolved. Project entitled "Smart City and IoT - smart resource management in the economy", of which BIOT is the Leader and LUG Light Factory is a partner, has been recommended to conclude an agreement with the Marshal's Office for the development of a partnership within the selected key area. The conclusion of the contract is scheduled for the turn of Q1/Q2 2023. The main objective of the planned Project is to create SmartCity and IOT solutions for smart resource management in the economy by: building business partnerships in areas of specialisation - networking, building interdisciplinary cooperation, preparing research and development projects and promoting SmartCity and the Internet of Things.

[S.15.1] The actual liabilities rotation period in the LUG Group in 2022 was 65.32 days (in 2021 it was 87.45 days). The shortening of the payables turnover period in 2022 is a result of instability in supply chains, which resulted in stiffening of suppliers and shortening of payment terms.

[S.15.2] The actual receivables rotation period in the LUG Group in 2022 was 72.36 days (in 2021 it was 80.68 days). The shortening of the receivables turnover period is due to the tightening of the LUG Group's receivables collection policy, as a result of which delays in payment from customers have decreased.

[S.15.3] The LUG Group does not use standardised payment periods in contracts with suppliers, they are negotiated each time between the parties.

[S.15.4] In 2022, 95% of budgetary and financial obligations were paid on the contractual date. Trade and other payables were met on time at a level of 5.83%.

[S.15.5] In 2022, no proceedings related to anti-competition and anti-market behaviour were pending against LUG.

#### 8.5. Material risks related to social issues

Risk or opportunity and its description	Risk or opportunity management method
Risks concerning the rights of consumers/end-	We manage risk by being concerned about the quality of
users	the products reaching consumers. In addition, the issue
The risks are related to the possibility of product	of consumer and end-user rights is included in the new
recalls, loss of reputation, administrative proceedings	Strategic Perspective 2023-2026 under the objectives:
against the Group and their high costs, and the	Sustainability and Quality of Life Innovations.



consequences from possible penalties imposed on LUG.	
Opportunity related to consumer/end-user rights The opportunity lies in building the image of the LUG brand as products of the highest quality.	This opportunity is linked to the measures we take to ensure the highest quality products. External communication reaching our potential customers is important in managing this area. This area is included in the Strategic Perspective 2023-2026 under the objectives: Sustainability and Quality of Life Innovations.



# LUG GROUP EMPLOYEES





### 9. LUG Group employees

Faced with dynamic changes in the area of employment and HR standards, as LUG we measure ourselves against changes and developments in the area of human resources. Increasingly, the attractiveness of a company is seen not only from the financial perspective, but also through values relating to respect for human rights, work-life balance, environmental protection or actions undertaken to reduce climate change. As one of the largest employers in the Lubuskie Voivodeship, we recognise both the need to develop and reach out to young people entering the labour market, as well as to activate older workers, changing our approach to human resources management. It is the company's mission, responsibility, and transparent communication that become the foundations of a well-structured recruitment process, often determining the final choice of employer.

In addition to the value of the fresh perspective of new employees, we also see the invaluable importance of the relationships and experiences developed together with long-standing LUG employees. It is they who, having long worked towards common goals, form the pillars of LUG's organisational culture. We value their extensive knowledge, years of work, knowledge of the organisation and the experience behind it.

Thanks to increasing internationalisation, we also have the opportunity to work with valuable people regardless of the region of the world they inhabit, supporting the free flow of human capital.

### Policies and regulations

Due to the heterogeneous structure of the LUG S.A. Capital Group, there is no uniform personnel policy, common for all entities in the Group. The LUG Light Factory, which is the largest employer in the LUG Group responsible for the Group's operations, has a policy regulating the personnel area, based on which we also carry out recruitment for the Group's other subsidiaries.

A unified perspective in the personnel area of LUG Light Factory is provided by the following regulations, procedures and instructions:

- Work Regulations;
- Employee Remuneration Regulations
- Regulations of the Company Social Benefits Fund;
- Training procedure;
- Recruitment instructions;
- Occupational Health and Safety Policy;
- Onboarding procedure.

In 2022, all the companies of the Capital Group adhered to the adopted LUG Code of Good Practices, which provides employees with information on internal cooperation standards and ethical principles in force at LUG.

Due to the differences in the legal systems, there are no Work Regulations in force that regulate the issues of employment conditions for employees at LUG Argentina SA.

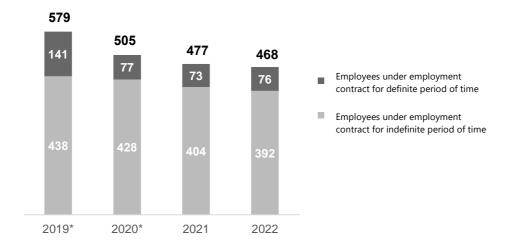
[S.3.1] [S.3.2] In 2022, there were no trade unions in the companies of the LUG S.A. Capital Group and no employee councils were established. In the case of LUG Argentina SA, local law stipulates that production workers automatically become members of the metalworkers' union when hired for an indefinite period of time. As of 31 December 2022, this situation concerned four production employees.

[S.3.3] [S.3.5] Within our company LUG Light Factory, which is the largest employer in the Group, in the analysed year, the position of crew representative was held by an employee who had held this position for almost three years. In 2022, there were no strikes in the LUG Group companies.

We are giving our employees the opportunity to working flexible hours, which has been particularly evident in 2019 - 2022, where the majority of administration staff have been moved into remote working mode in the wake of the COVID-19 pandemic. Each case and request for remote working is considered individually depending on the needs of the employees and the capabilities of the employer. As of 2023, the LUG Group will have Remote Working Regulations in place.

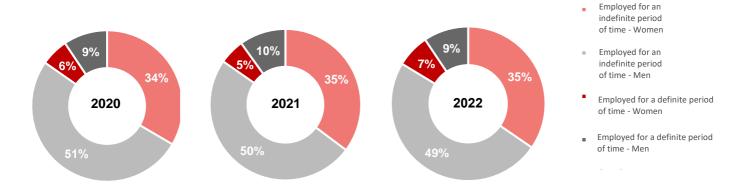
### 9.1. Employment and remuneration

[S.2.1] [S.2.3] After conversion to full-time equivalents, as of 31.12.2022, the LUG S.A. Group employed 468 people (-1.8% y/y). Among all employees, 392 were on permanent contracts (-3.0% y/y) and 76 on fixed-term contracts (+3.4% y/y). The change in the number of employees in the year under review is, among other things, a result of the evolution of the LUG Group's employment structure and naturally occurring employee turnover. At present, we outsource some of the processes in the LUG S.A. Group to subcontractors with whom we have long-term cooperation and whom we can trust in terms of the quality and efficiency of their work. In this way, we achieve an optimisation effect while being able to focus internally on investing in the most highly qualified employees, whose acquisition and competence development requires the greatest time and commitment.





#### **Employment structure by gender**



The employment structure of the LUG Group by gender was dominated by men, of whom there were 274 at the end of 2022, which constituted 58.5% of all employees. Compared to the same period last year, the proportion of men among the total workforce dropped by 0.9 percentage point.

#### Ratio of employed women to men by grade

In the LUG Group's employment structure, we have separated three grade levels:

- Senior management,
- Managers,
- Other employees.

At the end of 2022, among those classified as senior management, the proportion of women was 16.7%, (-3.3 p.p. y/y). Among managers, the percentage of women was 33.3% (+5.1 p.p. y/y), while among other employees, women accounted for 43.2% (+0.7 p.p. y/y).

### Age structure of employees

		under 30 years ■ 30-40 year	ars ■ 40-50 years ■ ove	r 50 years
2022	15,4%	35,7%	33,5%	15,5%
	-1.2pp	-0.2pp	-0.7pp	-0.7рр
2021		35,9%	32,8%	14,8%
	-3.4pp	-2.7pp	+7.4pp	-1.1pp
2020		38,6%	25,4%	15,9%
	-1.4pp	-5.3pp	+4.5pp	+2.1pp
2019		43,9%	20,9%	13,8%

The employment structure by age was dominated by people aged 30-40 and constituted 35.7% of all employees. People aged 40-50 years accounted for 33.5% of the total workforce, and 15.5% of the total were under 50 years of age. The least numerous age group (15.4% of the total) were people under 30.

Considering the location of the LUG plants, the employment structure at the end of 2022 was distributed as follows:

- 60.7% of the workforce worked at the head office and main production plant at ul. Gorzowska 11 in Zielona Góra;
- 20.5% of employees worked at the Research and Development Centre in Nowy Kisielin, Zielona Góra;
- 18.8% were employees in other sites.

[S.2.6.] Employees with disabilities accounted for 7.26% of the total workforce (-0.08 p.p. y-o-y). The buildings in which our operations are carried out are adapted to the needs of people with disabilities.

[S.2.4] [S.2.5] As at 31.12.2022 in the LUG Group:

- 5 people worked under civil law contracts (no change y/y),
- 26 people worked under cooperation agreements (-46.9% y/y),
- 8 people worked under appointment letters (n.a. y/y),
- 13 people provided outsourced work for the LUG Group (-7.1% y/y).

[S.2.3] The employee turnover rate (number of employees who left in a given year relative to the number of employees as at the end of the year) in 2022 was 22.2% for all employees (+0.6 p.p. y/y). With regard to permanent employees, the rate was 14.8%, which translates into a 3.3 p.p. decrease.

We have provided details of the following in Annex 1 to this non-financial report:

- the number of employees employed by the LUG Group,
- new recruits and those who have left the company,
- employees with disabilities,
- persons working under civil law contracts and in the form of outsourcing.

#### Recruitment and equal opportunities

The recruitments we carry out are based on the requirements and characteristics of the position in question against the candidate's qualifications and work experience. The stages of the recruitment process are set out in the current Recruitment Manual. The company does not charge recruitment fees.

We employ representatives of many nationalities ensuring that everyone has equal support, opportunities and development opportunities. We do not disqualify anyone because they are different. Everyone is guaranteed respect and access to work, taking into account predispositions, qualifications and desired professional skills according to generally applicable criteria. The stable and permanent development of the company enables the creation of new jobs for the local community, as well as for people from all over Poland in LUG regional offices.

We have described the area of equal opportunities in more detail in the LUG Group Code of Conduct.



### **Remuneration system**

In order to ensure fair and competitive working conditions, we ensure that our employees' remuneration is adequate to their position, the scope of their tasks and their competence and experience.

There is no single formalised remuneration policy in the LUG Group companies. At the operating company LUG Light Factory, the remuneration policy is based on the Employee Remuneration Regulations, as well as the Labour Regulations. In other companies, the remuneration policy is regulated each time in individually signed employment contracts, in the case of LUG Argentina SA it is based on arrangements in accordance with the arrangement of employees from the industry or directly between the employer and employee.

Average gross monthly remuneration of employees under employment contracts

PLN		2021			2022	change YOY			
	F	М	F+M F M F+M			F	M	F+M	
Senior management	22,730.39	38,856.29	35,631.11	24,536.32	34,816.01	33,102.73	+7.9%	-10.4%	-7.1%
Managers	12,607.84	14,423.99	13,910.73	13,547.67	16,467.15	15,493.99	+7.5%	+14.2%	+11.4%
Other employees	5,733.61	6,958.35	6,438.22	6,276.04	7,907.51	7,203.43	+9.5%	+13.6%	+11.9%
All employees	6,370.30	8,729.67	7,771.13	7,024.60	9,828.16	8,663.75	+10.3%	+12.6%	+11.5%

<sup>\*</sup>Figures for the average gross monthly salaries of employees working under employment contracts in 2019-2020 can be found in Chapter 12 in Annex 1.

[S.2.7] The average gross monthly salary of employees working under employment contracts in 2022 was as follows:

- among senior management: PLN 33,102.73 (-7.1% y/y);
- among managers: PLN 15,494 (+11.4%);
- among other employees, PLN 7,203.43 (+11.9% y/y).

Among all LUG Group employees working under employment contract, the average gross salary in 2022 was PLN 8,663.75, an increase of 11.5% compared to the previous year.

[S.2.9] Ratio of the average gross salary of women to the average gross salary of men in each grade:

%	2019	2020	2021	2022	change YOY
Senior management	113.3%	80.6%	58.5%	70.5%	+12.0pp
Managers	88.9%	109.0%	87.4%	82.3%	-5.1pp
Other employees	59.4%	76.3%	82.4%	79.4%	-3.0pp
All employees	58.8%	73.1%	73.0%	71.5%	-1.5pp

The ratio of the average gross salary of women to the average gross salary of men in 2022 at the LUG Group was 71.5% (-1.5 p.p. y/y).

[S.2.10] The ratio of the average remuneration of Management Board members to the average remuneration of employees under employment contracts was 4.6x in 2022, i.e. 0.9x less than in 2021, when it was 5.5x.

### **Gender Pay Gap Ratio for the LUG Group**

The Gender Pay Gap Ratio (GPGR) is an indicator calculated as an absolute value from the difference between the ratio of the average pay of one gender to the other gender and a value of 100%. The GPGR is a gender-neutral indicator, presenting the differences between the remuneration of women and men. A level of 0% of this indicator indicates equal pay. In the particular pay grade categories, the ratio of female to male employees in the LUG Group based on the employment contract is as follows:

%	2019	2020	2021	2022	change YOY
GPGR Senior management	13.3%	19.4%	41.5%	29.5%	-12.0pp
GPGR Managers	11.1%	9.0%	12.6%	17.7%	+5.1pp
GPGR Other employees	40.6%	23.7%	17.6%	20.6%	+3.0pp
GPGR All employees	41.2%	26.9%	27.0%	28.5%	+1.5pp

In 2022, the GPGR for all our employees reached 28.5% (+1.5 p.p. y/y). The GPGR for Senior management dropped to 29.5% (-12.0 p.p. y/y) and for Managers increased to 17.7% (+ 5.1 p.p. y/y). Among other employees, the GPGR increased to 20.6%, up 3.0 p.p. y/y.

### **Glass Ceiling Ratio for the LUG Group**

Glass Ceiling Ratio (GCR) illustrates the equality of promotion opportunities for each gender in an organisation. A level of 0% on this indicator means that women and men are equally likely to be promoted to middle and senior positions. In our organisation, this indicator is as follows:

%	2019	2020	2021	2022	change YOY
GCR2 (senior management)	23.8%	24.0%	20.6%	24.9%	+4.2pp
GCR1 (managers)	10.3%	9.8%	12.4%	8.2%	-4.2pp
GCR (senior executives, managers)	13.3%	13.0%	13.8%	11.7%	-2.1pp

In 2022, the LUG Group's analysed ratio for Senior management increased by 4.2 p.p. to 24.9%. The GCR1 for the Managers group was 8.2% (-4.2 p.p. y/y) and for all management positions it was 11.7% (-2.1 p.p. y/y).

### 9.2. Employee development and education

### **Training and education**

As part of our extensive training programme, we pay particular attention to the development of our employees by providing the right tools to develop their skills and qualifications. To meet the training needs, in 2022 we have launched long-term development programmes.



In 2022, we operated on the basis of the Onboarding Procedure, developed and implemented by the Training Section and the cooperating units involved in the induction of new employees from the moment of employment.

### Average number of training hours

number of hours per	2019		2020			2021		2022		change YOY					
employee in a given period	F	M	F+M	F	M	F+M	F	M	F+M	F	М	F+M	F	M	F+M
Senior management	107.5	20.8	34.2	39.0	8.5	13.2	23.5	11.9	14.2	90.8	41.9	50.0	+286.2%	+252.4%	+252.1%
Managers	37.7	43.6	41.9	34.2	17.9	22.7	21.7	13.9	16.1	52.2	56.5	55.0	+140.2%	+307.2%	+242.1%
Other employees	17.1	14.4	15.5	8.4	7.4	7.8	8.7	8.1	8.4	12.3	13.7	13.1	+41.5%	+68.3%	+56.4%
All employees	19.1	17.3	18.0	10.4	8.5	9.3	10.7	9.2	9.8	16.2	19.4	18.0	+51.1%	+109.7%	+83.5%

[S.5.1] In 2022, the average number of training hours per person:

- in the senior management group: increased by 252.1% y/y to 50 hours,
- in the managers group: increased by 242.1% y/y to 55 hours,
- among other employees: increased by 56.4% to 13.1 hours.

Overall, the average number of training hours in 2022 increased by 83.5% among all employees.

The main topic areas for training in 2022 were:

- onboarding training;
- training to improve professional skills;
- external training to improve job competences;
- in-house training to improve job skills.

In the year under review, we carried out training and development programmes aimed primarily at developing competences such as:

- negotiation competences targeted at employees in the Sales Department;
- managerial competences targeted at representatives of the Management Board, Divisional and Departmental Directors and leaders;
- linguistic competences, supporting the development of potential in international markets.

In addition, in 2022, within the LUG Group, we carried out a number of training activities in line with the requirements of the Integrated Management System for the sake of the health, safety, comfort of our employees, as well as many other training activities to improve job qualifications and professional skills.

As part of external training, our staff participated in:

- technical and lighting control training provided by business partners;
- management systems training;
- corporate trainings of the Polish Association of Listed Companies and the Warsaw Stock Exchange;
- energy training;

- sales negotiation training;
- language training.

Number of employees improving their professional qualifications<sup>11</sup>

number of persons		2019		2020		2021		2022		change YOY					
	F	M	F+M	F	M	F+M	F	M	F+M	F	M	F+M	F	M	F+M
Senior management	0	0	0	1	0	1	0	0	0	0	0	0	-	-	-
Managers	1	1	2	8	12	20	0	0	0	0	1	1	-	-	-
Other employees	2	3	5	19	55	74	3	6	9	0	20	20	-100.0%	+233.3%	+122.2%
All employees	3	4	7	28	67	95	3	6	9	0	21	21	-100.0%	+250.0%	+133.3%

[S.5.2] The training provided during working time is complemented by external education for employees gaining new qualifications and competences.

In 2022, 21 employees took part in external upskilling, 133.3% more than in the previous year.

[S.2.15] We clearly emphasise and support healthy lifestyles. Employees can take advantage of non-salary benefits, such as a Multisport card or participation in sports groups organised by LUG. As part of the sports patronage, LUG also supports the activity of employees from the LUG TEAM runners team and LUG MTB TEAM mountain bikers. In addition, each of our employees has access to fresh fruit at the LUG Light Factory canteens in various locations.

### **Communication with employees**

One of the priorities of the LUG Management Board within the area of organisational culture is to develop and support internal communication. This was an extremely important aspect, especially during the pandemic, which reinforced previously undervalued forms of remote communication. During this exceptional period, we provided our staff with state-of-the-art software and other solutions that ensured smooth communication. The tools made available have become a permanent part of our reality, creating an additional pillar of communication.

Internal communication to employees takes place both through the internal intranet and through mailing campaigns, posters and information displayed on public screens in canteens and reception areas. Messages are translated into foreign languages spoken by our employees. In addition, we communicate with our employees via LUGpress, the company newspaper, information boards and in face-to-face meetings.

[S.3.6] The flow of information between our employees and the members of the Management Board most often involves their direct superiors, who are the first line of contact. Direct contact is possible when it proves necessary or advisable in a given situation.

<sup>11</sup> The table shows only training courses funded or partly funded by LUG.



### 9.3. Occupational Health and Safety

We treat health and safety issues with the highest priority. This was also confirmed by the materiality study carried out, which indicated a high level of materiality of health and safety issues.

There was no uniform health and safety policy in the LUG Group in the reporting period. Due to the characteristic structure of the Capital Group, in which operating activities are carried out in the companies LUG Light Factory and LUG Argentina SA, most of the data from the area of health and safety concern these two companies. In the Argentine company, health and safety issues are dealt with by a dedicated employee. In the case of the other companies and representative offices, compliance with health and safety rules is supervised by the management of local structures. The offices operate in accordance with the guidelines and laws of the country in question.

We regularly monitor and evaluate existing mechanisms in the area of health and safety within the Group and, on the basis of these, make the necessary changes leading to improvements in existing solutions. The Group companies apply in practice the instructions and procedures in the area of safety and hygiene at work that regulate the use and allocation of personal protective measures, machine safety, emergency procedures, incident and accident management, workplace ergonomics, handling of chemicals and fire protection.

At LUG Light Factory, a unit reporting directly to the Management Board is responsible for health and safety. In 2022, there was a change in staffing for the position of OHS and Fire Protection Specialist; as at the date of publication of this report, the position has not changed. Within the LUG Light Factory company, there are:

- Occupational Health and Safety Committee:
- Post-accident team:
- Team to develop occupational risks for newly created jobs.

Occupational health and safety processes are covered by an Integrated Management System in line with the requirements of ISO 9001:2015. The ISO 9001:2015 (Quality Management System), ISO 50001:2011 (Energy Management System), ISO 14001:2015 (Environmental Management System) and ISO 45001:2018 (Occupational Health and Safety Management System) certificates were renewed during audits in early 2022.

The provisions concerning the area of Occupational Health, Safety and Fire Protection are contained in the LUG Light Factory Work Regulations. Moreover, the topic of occupational health and safety is a very important module within the onboarding training for new employees in the whole LUG Group.

Understanding the complexity of health and safety issues, we make every effort to provide its employees with appropriate conditions for performing tasks, which has a direct impact on safety standards. As part of the LUG Light Factory Work Regulations and the related annexes, the issue of equipping employees with protective work clothes tailored to the workplace was regulated.

In order to increase the safety of our employees at the two LUG sites in Zielona Góra, we have carried out initiatives in 2022 as part of *Safety - Things That Matter First* action, covering:

- a series of in-house training courses on basic safety rules, including those related to fire protection and evacuation in a fire emergency;
- supplying LUG Light Factory with AED defibrillators. As part of the campaign, a group of a few dozens of employees from different areas of the organisation were trained in their use during cardiopulmonary resuscitation (CPR).

In 2022, an inspection by the State District Sanitary Inspector took place at LUG Light Factory and it was a standard, cyclical inspection related to verification of compliance with regulations defining hygienic and health requirements for working environment conditions.

### Occupational health and safety activities related to the COVID-19 epidemic

Our priority is to ensure business continuity and guarantee safe working conditions for our employees. To this end, we have adopted procedures and preventive measures in 2020-2021 to minimise the risk of the spread and infection of the SARS-CoV-2 virus. As a result of the reduction in the number of cases and the nationwide lifting of restrictions, enforcement of previous procedures has been waived in 2022, leaving access to protective masks, disinfection diffusers and thermal imaging monitoring for those willing to do so.

Our staff and LUG colleagues are kept informed of changes to pandemic guidelines or procedures.

[S.4.10] [S.4.11] In 2022, LUG did not conduct health and safety audits at its suppliers and subcontractors. Agreements with suppliers and subcontractors did not include health and safety clauses, although this issue is considered in the category of potential for improvement. A document is currently being developed that will regulate the multifaceted terms and conditions of cooperation with our suppliers and contractors. The first step for the company was to introduce questions to supplier's assessment sheet whether the supplier has implemented the ISO 50001/ISO 9001/ISO 14001/ISO 45001 systems and whether it employs a health and safety inspector.

In the process of selecting suppliers and subcontractors, we are guided by an impeccable opinion in the industry environment, paying particular attention to meeting the ISO standards and management systems mentioned, which is the criterion for meeting the relevant standards of activity.

#### Indicators on health and safety issues

	2020	2021	2022	change YOY
Employee accidents				
Number of accidents, including:	6	6	5	-16.7%
- minor accidents	5	6	5	-16.7%
- serious accidents	1	0	0	-
- fatal accidents	0	0	0	-



- collective accidents	0	0	0	-
Accidents among employees of subcontract	tors working or	n site		
Number of accidents, including:	0	0	0	-
- minor accidents	0	0	0	-
- serious accidents	0	0	0	-
- fatal accidents	0	0	0	-
- collective accidents	0	0	0	-
Accident rates				
Accident frequency rate (accidents at work per 1,000 employees)	11.9	12.6	11	-15.1%
Number of days of incapacity for work due to accidents	150	113	29	-74.3%
Accident severity rate (number of days of incapacity for work per accident)	25.0	18.8	6	-69.2%
Occupational diseases				
Number of occupational diseases diagnosed in a given year	0	0	0	-
Working in excess of standards				
Number of workers working in a given year under conditions maximum allowable concentrations (MPC) or maximum allowable exposure limit (PEL)	10	10	10	0.0%

[S.4.1] [S.4.2] [S.4.3] [S.4.4] [S.4.5] [S.4.6] [S.4.8] In 2022, 5 accidents at work were recorded in the LUG Group. All were classified as light accidents (cuts, hand wounds, etc.). Analysing accident incidents, no gross violations of health and safety regulations were found. Most accidental incidents occurred due to insufficient focus of the injured person's attention while performing their duties.

The analysis of the occupational accident rates shows an increase in the frequency of accidents at work by 15.1% y/y to 11 in 2022 and an increase in the severity of accidents by 69.2% y/y to 6. Total sickness absence due to occupational accidents in 2022 was 29 days.

In 2022, there were no fatal accidents and no occupational diseases in the LUG Group.

[S.4.7.] In the LUG S.A. Group, we supervise the working environment every year. We monitor factors, i.e.: noise, vibration, dust, chemical agents, electromagnetic fields. Measurements of the working environment are carried out by accredited laboratories. The results of the measurements are documented in the relevant records, as well as discussed with the departmental supervisors and with our employees. In 2022, exceedances of the noise standard occurred at 5 workplaces within the LUG Group. An increase in noise levels was observed with machine operators:

- during the operation of turret presses, when processing thick plates over 1.5 mm, where the hygiene standard is exceeded once. With standard sheet thicknesses of approx. 0.3 - 0.75, the hygiene standard is not exceeded;
- when operating a single-head profile cutting-off machine where the hygiene standard is exceeded three times;
- during the operation of an engraving and milling machine, in the case of machining workpieces of atypical dimensions (long), where the hygiene standard was observed to be exceeded seven times;

- during operation of the gantry plotter when other noise-generating machinery is also in operation in the room, as no exceedance of the hygiene standard was observed when the plotter itself was in operation;
- during grinding operations, there was a slight decrease in noise levels depending on the type and intensity of the process.

Accordingly, as permanent measures, we are implementing the provisions of the action programme to reduce workers' exposure to noise by:

- indicating the appropriate type of personal protective equipment to be used when working in exceeded hygiene standards;
- marking the noise exposure zone with pictographs and the absolute use of hearing protectors;
- introducing rotation at workstations through appropriate work organisation so as to reduce exposure time.
- it is recommended to organise the production in such a way that sheets of different thicknesses are processed alternately in order to reduce noise below 85 dB and not to allow all presses in the hall to process sheets of the same thickness, i.e. 1.5 mm and above, at the same time.
- upgrade of the protective cover for the milling and engraving machine.

Exceedances of the standards were observed during measurements of chemical agents in the form of vapours, fumes or gases at workplaces. The exceedances relate to the welder's station, where the manganese concentration level has risen, as well as in the paint shop at the baths (no direct exposure), the sodium hydroxide concentration level has risen. In both cases, we reviewed the on-site ventilation and commissioned recontrol tests of the working environment from two different accredited laboratories.

Measurements carried out in 2022 by the Lędziny Underground Mining Research and Supervision Centre, Accredited Laboratory AB 418, did not show any exceedances of the standards for sodium hydroxides in the paint shop or manganese present at the welder's workstations in the form of fumes, vapours or gases. Working conditions should be considered safe. However, all our employees have access to personal protective equipment at all times.

The remaining examined workplaces did not exceed permissible standards which means that the tested harmfulnesses occur in trace amounts, and work at these workplaces is safe in terms of the tested factors.

In 2022, one inspection was carried out in the LUG Group regarding compliance with the regulations defining the hygiene and health requirements of the working environment.

[S.4.9] As there were no trade unions at LUG, they were not involved in the area of health and safety. A Social Labour Inspector has also not been appointed.



# 9.4. Material risks related to employee issues

Risk or opportunity and its description	Risk or opportunity management method
Risk related to working conditions Risks related to remuneration pressures, staff shortages and the loss of key staff.	We minimise risk by, among other things:  development of organisational culture;  programme for the development of social spaces at LUG sites,  monitoring of the labour market and remuneration trends to keep wages competitive in the local labour market,  employee development programme through internal recruitment,  implementation of planned recruitment processes in advance;  Employer Branding activities,  use of outsourcing companies;  in-house training system,  objectives specified in the LUG Group's new 2023-2026 strategy for Sustainability and Quality of Life Innovation.
Opportunity related to working conditions The opportunities lie in attracting a valuable workforce, lowering staff turnover and a gaining positive reputation among local communities as a reliable employer.	We seize the opportunity by: - objectives specified in the LUG Group's new 2023- 2026 strategy for Sustainability and Quality of Life Innovation programme for the development of social spaces at LUG sites, - development of organisational culture; - ensuring the possibility of continuous development for Group's employees;
Risk related to equal opportunities Risk of losing employees due to unequal opportunities, problems in recruiting and attracting new employees, unfavourable reputation of the employer.	The LUG Group manages risk through the objectives embedded in the new Strategic Perspective 2023-2026 on Sustainability and Quality of Life Innovation,
Opportunity related to equal opportunities This opportunity may involve attracting a valuable workforce, lowering staff turnover, generating a positive reputation among local communities as an employer.	The LUG Group manages the opportunity through the objectives enshrined in the new Strategic Perspective 2023-2026 on Sustainability and Quality of Life Innovation,
Risks related to other work-related rights This risk is related to the loss of employees due to non-compliance with employment rights and an unfavourable employer reputation.	We minimise risk by nurturing good employee relations, respecting employee rights. The area has been included in the new Strategic Perspective 2023-2026 for the Sustainable Development and Quality of Life Innovation objectives.
Opportunity related to other work-related rights This opportunity is linked to improvements in the standards and regulations applied to workers.	We seize the opportunity by raising workplace standards, following and complying with legislative changes affecting employees. This area is included in the Strategic Perspective 2023-2026 in terms of the Sustainable Development and Quality of Life Innovation objectives.



# ABOUT THE REPORT





### 10. About the report

### 10.1. Scope and process of reporting

This report covers the non-financial information of the LUG S.A. Capital Group for the period from 1 January 2022 to 31 December 2022 and has been prepared in accordance with Article 55, paragraphs 2b-2c of the Accounting Act of 29 September 1994. In addition, the report has been prepared in accordance with the Standard for Non-Financial Information (SIN). In section 10.2 *Compliance tables* we have included a detailed list of SIN indicators with reference to the content of this document.

The report has not been externally verified. All information, data and statements in this report concern the LUG S.A. Capital Group and the parent company LUG SA, unless it is clearly indicated otherwise.

The wording used in the report: In the report, the words "LUG", "LUG Group", "Capital Group", "LUG Capital Group", "LUG S.A. Capital Group" refer to the LUG S.A. Capital Group.

In 2022, we recalculated the base year GHG emissions in scope 3 by counting emissions from categories 1 and 12. The recalculation increased Scope 3 GHG emissions by 91,608.6 Mg CO<sub>2</sub>e in 2021. Scope 3 emissions for 2021 before recalculation were: 538,961.8 Mg CO<sub>2</sub>e, and after recalculation: 630,570.4 Mg CO<sub>2</sub>e. We have also made minor corrections to the 2021 data for waste, raw material consumption, employment and salaries of non-contracted workers due to a misclassification of data.

The non-financial report of the LUG Capital Group is prepared on an annual basis.

### 10.2. Compliance tables

### Table of compliance with the requirements of the Accounting Act

Requirement of the Accounting Act	Chapter number
Business model (Article 49b(2)(1))	3, 3.1
Key non-financial performance indicators (Article 49b(2)(2))	6.1
Policies in non-financial areas and their results (Article 49b(2)(3)):	
- Policy in the environmental area	7
- Policy in the social area	8, 8.3
- Policy in the field of human rights	3.7
- Policy in the area of counteracting corruption	3.7
- Employee policy	9, 9.3
Due diligence procedures (Article 49b(2)(4))	3.7
Material non-financial risks and how to manage them (Article 49b(2)(5))	3.9, 4.4, 7.7, 8.5, 9.4

# **Table of compliance with the TCFD Recommendations**

TCFD recommendations	Chapter number
Governance	
Description of the board's oversight of climate-related risk and opportunities	3.6
Description of the management's role in assessing and managing climate-related risks and opportunities	3.6
Strategy	
Description of the climate-related risks and opportunities the organization has identified over the short, medium and long term.	7.1
Description of the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning	7.1
Description of the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	-
Risk management	
Description of the organization's processes for identifying and assessing climate-related risks.	7.1
Description of the organization's processes for managing climate-related risks.	7.1
Description of how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	7.1, 3.9
Metrics and targets	
Disclosure of the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	7.2, 7.3
Disclosure of Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse has (GHG) emissions, and the related risks.	7.3
Description of the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	-

# SIN compliance table

Indicator	Description	Chapter number	Notes
G: Manag	gement area		
G.1.	Description of the business model and strategic development	opment direction	)S
G.1.1.	Description of the adopted development strategy, taking into account social and environmental aspects	1.2	
G.1.2.	Characteristics of the adopted business model, including the description of the supply chain, with particular emphasis on the description of social and environmental impact	1.2	
G.2.	Governance		
G.2.1.	Description of the management structure, including information on whether and how the approach to managing non-financial (social, environmental) aspects has been taken into account, what the risk management and internal audit system looks like,	1.5, 1.7	
G.2.2.	List of certified management systems (e.g. ISO 9001, ISO 14001, OHSAS 18001, etc.)	1.7, 7	
G.2.3.	Description of the internal control system, indicating the monitoring of social and environmental aspects of the activities.	1.7	



G.3.	Social and environmental risk management		
G.3.1.	Description of the approach to risk management and	4.1	
G.3.1.	its inclusion in social and environmental aspects	4.1	
G.3.2.	List of identified social or environmental risks with their		
	brief description		
G.4.	Ethics management		
G.4.1.	Indication whether the organisation has a formal Code of Conduct or an equivalent document corresponding to the needs of the organisation.	1.6	
G.4.2.	Number of ethical audits performed at suppliers, number of audits completed with the identification of	3.7	
G.4.3.	irregularities.  Number of ethical audits carried out in the organisation at the request of its customers, number	3.7	
	of audits completed with the identification of irregularities.  Number of suppliers that have signed a Charter of		
G.4.4.	Conduct / a commitment to comply with the organisation's ethical standards.	3.7	
G.4.5.	Number of reported complaints of potential breaches of ethical standards (if possible broken down into reports from inside / outside the organisation).	3.7	
G.4.6.	Number of training courses in the ethical area, number of people participating in them.	3.7	
G.4.7.	Percentage (%) of contracts with contractors that include an conduct clause (in terms of value).	3.7	
G.4.8.	Integrating conduct into bank lending policy [applies to the financial sector].	-	not applicable
	onmental area		
E.1.	Direct and indirect impact: resources and materials		
E.1.1.	Type and quantity (e.g. by weight, volume) of the resource/material used (possibly including those from renewable sources / recycled / certified for sustainable development).	7.4	
E.1.2.	Consumption of a key resource/material per unit of product or revenue (for individual categories of resources/materials)	7.4	
E.2.	Direct and indirect impact: fuels and energy		
E.2.1.	Total energy consumption in GJ by main energy sources	7.2	Reported in MWh.
E.2.2.	% of energy from renewable energy sources (RES) (hydro, biomass, wind, photovoltaic, geothermal)	7.2	
E.2.3.	Energy consumption per unit of product or revenue.	7.2	
E.3.	Direct and indirect impact: water		
E.3.1.	Total water consumption in m <sup>3</sup> (where appropriate, by source).	7.6	
E.3.2.	Recovered and reused water volume.	7.6	
E.3.3.	Water consumption per unit of product or revenue.	7.6	
<i>E.4.</i> E.4.1.	Direct and indirect impact: biodiversity  List and short description of valuable natural areas in the vicinity / sphere of influence of the enterprise (indicating the nature of the enterprise's influence on	7.6	
E.4.2.	these areas and habitats of valuable flora and fauna) Indication of the type and frequency of environmental monitoring conducted.	7.6	
E.4.3.	Description of any confirmed environmental losses resulting from the company's operations.	7.6	
E.4.4.	Description of possible measures to monitor the state of the environment and prevent/limit/compensate the natural environment for the negative effects of the company's impact	7.1, 7.6	
E.5.	Direct and indirect impact: emissions to the atmosphe		
E.5.1.	Mass of greenhouse gases emitted to the atmosphere	7.3	
E.5.2.	Mass of other substances emitted to the atmosphere, by type (e.g. SOx, NOx, PM10, PM2.5)	7.3, annex 1.	

E.5.3.	Greenhouse gas emissions per unit of product or revenue.	7.3	
E.5.4.	Emissions of other substances per unit of product or revenue	7.3. Annex 1	
E.6.	Direct and indirect impact: waste and sewage		
E.6.1.	Total mass of waste broken down by hazardous and non-hazardous, specifying the relevant categories thereof.	7.4	
E.6.2.	Total weight of waste, broken down by management method.	7.4	
E.6.3.	Total volume of discharged sewage with an indication of the breakdown by treatment method.	7.6	
E.6.4.	Emission of waste per unit of product or revenue.	7.4	
E.6.5.	Emission of waste water per unit of product or revenue	7.6	
E.7.	Other aspects of direct and indirect environmental imp	act	
E.7.1.	Description of other significant types of environmental pollutants emitted by the company's operations (including measurable measures, if possible).	-	do not occur
E.7.2.	List of accidents with environmental effects and possible contamination that occurred during the reporting period (with a description of their nature).	7.6	
E.7.3.	List of potential violations of environmental protection regulations in relation to which administrative proceedings have been initiated.	7.6	
E.7.4.	Total amount of final and binding penalties imposed for breach of environmental protection regulations.	7.6	
E.7.5	Percentage (%) of contracts with contractors in which a clause relating to respect for the natural environment (in terms of value) was included.	-	do not occur
E.7.6	Number of audits of subcontractors in terms of compliance with environmental protection regulations.	-	do not occur
E.8.	Extended environmental responsibility: products and s	ervices	
E.8.1	Including environmental protection in the credit/loan and investment policy [applies to the financial sector].	-	not applicable
E.8.2.	Revenue from products or services developed with respect to environmental criteria as % of total revenue. [applies to sectors: industry; services].	7.2	
E.8.3.	Value of loans granted with earlier environmental risk assessment / value of insurance portfolio with earlier environmental risk assessment [applies to sector: finance].	-	not applicable
S: Social	and employee area		
S.1.	Use of public aid and public procurement		
S.1.1.	Value of public aid obtained from the state (financial support and grant equivalents).	8.5	
S.1.2.	Value of revenue from public procurement and % share in total revenue.	-	unreported indicator due to the dynamic internationalisation of the LUG Group associated with an increase in the share of foreign revenue, which causes a decrease in the share of domestic revenue and, as a result, a relative reduction in the importance of revenue from public procurement
S.2.	Employment and wages  Number of full-time employees by type of employment		
S.2.1.	contract (by age and gender) at the end of the reporting period.	9.1, Annex 1	
S.2.2.	Number of newly hired employees by type of employment contract (by age and gender).	Annex 1	
S.2.3.	Number of full-time employees who left their jobs in the reporting period (by age and gender).	9.1, Annex 1	
S.2.4.	Number of people employed under civil law contracts by type of employment contract (by age and gender) at the end of the reporting period, number of civil law	9.1, Annex 1	



	contracts concluded with natural persons in the reporting period, number of completed civil law contracts with natural persons in the reporting period.		
S.2.5.	Number of employees employed in outsourcing.	9.1, Annex 1	
S.2.6.	Number of disabled workers and their % share in total employment.	9.1, Annex 1	
S.2.7.	Average salary of employees working under employment contracts.	9.1	
S.2.8.	Number and average remuneration of foreigners working for the enterprise and under its supervision (regardless of whether they are own employees or third parties to whom work is commissioned), coming from countries in a worse economic situation than Poland or countries where human rights violations are likely to occur by the country of origin.	-	do not occur
S.2.9.	Ratio of the average gross salary of women to the average gross salary of men by grade / group (e.g. directors, managers, other employees).	9.1	
S.2.10.	Ratio of the average remuneration of management board members to the lowest salary in the enterprise (full-time equivalent).	9.1	
S.2.11.	Average remuneration of persons cooperating on the basis of civil-law contracts and providing services within company's premises.	Annex 1	
S.2.12.	Average remuneration of employees working in outsourcing and working on the company's premises.	-	indicator unreported due to differences in remuneration conditions depending on economic conditions in different locations
S.2.13.	The total amount of annual contributions to the State Fund for Rehabilitation of People with Disabilities.	-	did not occur
S.2.14.	Percentage of women who, after giving birth to a child and returning to work, resigned from work within 12 months of returning to work.	Annex 1	
S.2.15.	Information on additional non-wage benefits available to employees (e.g. additional insurance, medical packages, employee pension programme, employee shareholding, cards authorising the use of sports facilities, housing loans).	9.2	
S.3.	Relationship with employees and freedom of associati	on	
S.3.1.	Total number of trade unions operating in the company (representative and other)	9	
S.3.2.	Percentage (%) of employees belonging to trade unions (so-called unionisation rate).	9	
S.3.3.	The number of strikes in the last year and the estimated impact on the company's results associated with it (if there have been strikes, please describe their cause, form, duration and arrangements made).	9	
S.3.4.	Information on whether the facility has a hot-line procedure for reporting complaints and irregularities and on what basis (e.g. an appropriate policy). If so, what is the number of complaints related to the area of employment practices that have been reported, investigated and resolved (how many complaints were reported and how many were resolved during this period).	3.7	
S.3.5.	Information on whether a workers' council has been established in the workplace – and in the case of representatives other than a workers' council and trade unions, whether such workers' representatives have been appointed by means of elections in which all workers could participate.	9	
S.3.6.	Information on whether, and if so, how and with what results, the company conducts a documented dialogue in the form of regular, formalised meetings to discuss mutual expectations, the nature of the most	9.2	

	frequently raised issues and how the company's authorities respond to them		
S.4.	Occupational health and safety (OHS)		
S.4.1.	Number of accidents at work among employees / among employees of subcontractors working on site.	9.3	
S.4.2.	Accident frequency rate (accidents at work per 1,000 employees).	9.3	
S.4.3.	Number of fatalities among employees / employees of subcontractors working on site.	9.3	
S.4.4.	Total number of days of incapacity for work among employees due to accidents.	9.3	
S.4.5.	Accident severity rate (number of days of incapacity/1 accident).	9.3	
S.4.6.	Number of confirmed cases of occupational diseases.	9.3	
S.4.7.	Number of workers working under conditions exceeding the threshold limit value (TLV) or permissible exposure limit (PEL)	9.3	
S.4.8.	List of the most common causes of accidents at work, categories of work / activities performed by the injured person at the time of the accident, types of injuries.	9.3	
S.4.9.	Description of the degree of involvement of trade unions (if they exist) in the OHS area (e.g. whether a Social Labour Inspector has been appointed, how they control compliance with OHS regulations).	9.3	
S.4.10.	Percentage (%) of contracts with contractors that include an OHS clause (in terms of value).	9.3	
S.4.11.	Number of audits of subcontractors for compliance with health and safety rules.	9.3	
S.5.	Development and education		
S.5.1.	Average number of training hours (or training days) per employee (by gender and employee category) – refers to training organised by the employer.	9.2	
S.5.2.	Number of employees improving their professional qualifications, who are entitled to specific rights in this respect in relation to the employer (e.g. training leaves), with an indication of the number of employees co-financed or financed by the employer to improve professional qualifications	9.2	
S.6.	Diversity management		
S.6.1.	Information whether the employer has implemented an anti-mobbing and anti-discrimination policy.	3.6	
S.6.2.	Number of reported cases of discrimination, mobbing, sexual harassment, etc.	3.6	
S.6.3.	Number of confirmed cases of discrimination, mobbing, sexual harassment, etc.	3.6	
S.6.4.	Number of anti-discrimination audits of subcontractors.	-	do not occur
S.7.	Human rights		
S.7.1.	Number of reported human rights violations, including at subcontractors.	3.6	
S.7.2.	Number of confirmed human rights violations, including at subcontractors.	3.6	
S.7.3.	Percentage (%) of contracts with contractors that include a human rights clause (in terms of value).	3.7	
S.7.4.	Number of human rights audits of subcontractors.	3.7	
S.7.5.	Integrating human rights into bank lending policy [applies to the financial sector].	-	not applicable
S.7.6.	Description of threats to human rights and human rights violations outside the supply chain (e.g. use of products or services provided by a company by persons or entities in a way that threatens to violate the human rights of others).	-	not applicable
S.8.	Child labour and forced labour		
S.8.1.	Number of reported cases of child labour or forced labour (including at subcontractors).	3.6	



	Number of confirmed cases of child labour or forced		
S.8.2.	labour (including at subcontractors).	3.6	
	Percentage (%) of contracts with contractors that		
S.8.3.	include a clause relating to human rights, including the	3.7	
0.0.0.	prohibition of child labour or forced labour (in terms of	0.7	
	value).		
S.8.4.	Number of human rights audits of subcontractors on the prevention of child labour and forced labour.	3.7	
S.9.	Local communities and social engagement		
0.0.	Description of any nuisances that may be experienced		
S.9.1.	by the local community in connection with the	8.4	
	company's operating activities		
	Number of complaints submitted by the local		
S.9.2.	community, their subject matter and the actions of the	8.4	
	company in response to them.  Description of the company's policy and directions of		
	social involvement and implemented pro-social		
S.9.3.	activities, including those for the local community in	8.4	
	which the activity is conducted.		
S.9.4.	Total amount of donations for social causes in the	8.4	
3.9.4.	reporting period (with the largest recipients indicated).	0.4	
S.9.5.	Total amount spent on sponsorship (indicating the	8.4	
	largest sponsored partners).		
S.9.6.	Total number of hours worked by volunteer workers and number of volunteers under a volunteering	8.4	
0.3.0.	programme (if any)	0.4	
S.10.	Preventing corruption		
S.10.1.	Business areas potentially exposed to corrupt	1.6	
	behaviour.		
S.10.2.	Number of reported cases of corrupt behaviour.	3.6	
S.10.3.	Number of confirmed cases of corruption.	3.6	
S.11.	Product and consumer safety  Number of cases of violations of procedures regarding		
S.11.1.	the safety of products and services.	5.3	
	Administrative proceedings against the company (e.g.		
	by the Office of Competition and Consumer		
S.11.2.	Protection) and the financial value of penalties for	5.3	
	non-compliance with law and regulations in matters		
C 12	related to customer safety.		
S.12.	Marketing communication  Number of cases of non-compliance with regulations		
	and voluntary codes concerning marketing		
S.12.1.	communication (including advertising, promotion,	5.3	
	sponsorship).		
	Administrative proceedings conducted against the		
0.400	company by the Office of Competition and Consumer	- 0	
S.12.2.	Protection and the financial value of penalties for non-	5.3	
	compliance with the law and regulations in relation to the integrity and ethics of marketing communication.		
S.13.	Privacy protection		
	Number of events related to leakage or unauthorised	4.0	
S.13.1.	use of personal data (customers, employees).	1.6	
	Administrative proceedings against the company (e.g.		
0.40.0	by the Inspector General for the Protection of	4.0	
S.13.2.	Personal Data) and the financial value of penalties for	1.6	
	non-compliance with the law and regulations in matters related to the protection of personal data.		
S.14.	Product labelling		
	Number of incidents of non-compliance related to	<b>5</b> 2	
S.14.1.	improper product labelling.	5.3	
	Administrative proceedings against the company, e.g.		
S.14.2.	by the Office of Competition and Consumer	5.3	
	Protection, and the financial value of penalties related to improper product labelling.		
S.15.	Other social and market issues		
S.15.1.	Actual liability rotation period.	8.5	

S.15.2.	Actual receivable rotation period.	8.5	
S.15.3.	The period of payment of liabilities is normally recorded in contracts with suppliers.	8.5	
S.15.4.	Percentage (%) of liabilities paid on the contractual date (in terms of value).	8.5	
S.15.5.	Administrative proceedings conducted against the company by the Office for Competition and Consumer Protection and the financial value of penalties related to anti-competitive and anti-market behaviour.	8.5	



# 11. Approval for publication

This report on the non-financial information of the LUG S.A. Capital Group for 2022 was approved by the LUG S.A. Management Board.

Ryszard Wtorkowski
President of the Management Board
Mariusz Ejsmont
Vice President of the Management Board
Małgorzata Konys
Member of the Management Board

Zielona Góra, 12 May 2023.

# 12. Annexes

### Annex 1: Data on employees

Employees working under employment contracts (jointly for an indefinite and definite period of time) [S.2.1]

full-time equivalent	2019			2020				2021		2022			change YOY		
ruii-tiine equivalent	F	М	F+M	F M	М	F+M	+M F	M	F+M	F	M	F+M	F	М	F+M
Senior management, including:	2.0	11.0	13.0	2.0	11.0	13.0	2.0	8.0	10.0	2.0	10.0	12.0	0.0%	+25.0%	+20.0%
over 50	0.0	4.0	4.0	0.0	4.0	4.0	0.0	2.0	2.0	1.0	3.0	4.0	-	+50.0%	+100.0%
40-50 years of age	1.0	2.0	3.0	1.0	3.0	4.0	1.0	3.0	4.0	1.0	4.0	5.0	0.0%	+33.3%	+25.0%
30-40 years of age	1.0	4.0	5.0	1.0	3.0	4.0	1.0	2.0	3.0	0.0	2.0	2.0	-100.0%	0.0%	-33.3%
below 30 years of age	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	-	0.0%	0.0%
Managers, including:	13.0	32.0	45.0	13.0	31.0	44.0	13.0	33.0	46.0	15.0	30.0	45.0	+15.4%	-9.1%	-2.2%
over 50	0.0	3.0	3.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	3.0	3.0	-	+50.0%	+50.0%
40-50 years of age	6.0	9.0	15.0	2.0	13.0	15.0	7.0	15.0	22.0	8.0	14.0	22.0	+14.3%	-6.7%	0.0%
30-40 years of age	7.0	19.0	26.0	9.0	12.0	21.0	4.0	13.0	17.0	6.0	13.0	19.0	+50.0%	0.0%	+11.8%
below 30 years	0.0	1.0	1.0	2.0	4.0	6.0	2.0	3.0	5.0	1.0	0.0	1.0	-50.0%	-100.0%	-80.0%
Other employees, including:	212.0	309.0	521.0	183.8	264.5	448.2	178.8	242.2	420.9	177.5	233.8	411.3	-0.7%	-3.4%	-2.3%
over 50	37.0	36.0	73.0	42.0	32.5	74.5	39.0	27.5	66.5	38.0	27.6	65.6	-2.6%	+0.5%	-1.3%
40-50 years of age	58.0	45.0	103.0	56.5	53.0	109.5	58.5	71.7	130.2	55.5	74.2	129.7	-5.1%	+3.5%	-0.4%
30-40 years of age	78.0	145.0	223.0	56.3	114.0	170.3	54.3	97.0	151.3	54.0	92.0	146.0	-0.5%	-5.2%	-3.5%
below 30 years of age	39.0	83.0	122.0	29.0	65.0	94.0	27.0	46.0	73.0	30.0	40.0	70.0	+11.1%	-13.0%	-4.1%
Employees at all levels of the structure															
over 50	37.0	43.0	80.0	42.0	38.5	80.5	39.0	31.5	70.5	39.0	33.6	72.6	0.0%	+6.8%	+3.1%
40-50 years of age	65.0	56.0	121.0	59.5	69.0	128.5	66.5	89.7	156.2	64.5	92.2	156.7	-3.0%	+2.8%	+0.3%
30-40 years of age	86.0	168.0	254.0	66.3	129.0	195.3	59.3	112.0	171.3	60.0	107.0	167.0	+1.3%	-4.5%	-2.5%
below 30 years of age	39.0	85.0	124.0	31.0	70.0	101.0	29.0	50.0	79.0	31.0	41.0	72.0	+6.9%	-18.0%	-8.9%
Total for all levels of the structure	227.0	352.0	579.0	198.8	306.5	505.2	193.8	283.2	476.9	194.5	273.8	468.3	+0.4%	-3.3%	-1.8%



- including employed full time	n.d.	n.d.	n.d.	199.0	305.0	504.0	192.0	282.0	474.0	194.0	273.0	467.0	+1.0%	-3.2%	-1.5%	
- including part-time employees	n.d.	n.d.	n.d.	2.0	2.0	4.0	2.0	4.0	6.0	2.0	2.0	4.0	0.0%	-50.0%	-33.3%	

# Employees working under employment contracts for an indefinite period of time [S.2.1]

		2019			2020			2021			2022		(	change YOY	
full-time equivalent	F	М	F+M	F	М	F+M									
Senior management, including:	2.0	10.0	12.0	2.0	11.0	13.0	2.0	8.0	10.0	2.0	10.0	12.0	0.0%	+25.0%	+20.0%
over 50	0.0	3.0	3.0	0.0	4.0	4.0	0.0	2.0	2.0	1.0	3.0	4.0	-	+50.0%	+100.0%
40-50 years of age	1.0	2.0	3.0	1.0	3.0	4.0	1.0	3.0	4.0	1.0	4.0	5.0	0.0%	+33.3%	+25.0%
30-40 years of age	1.0	4.0	5.0	1.0	3.0	4.0	1.0	2.0	3.0	0.0	2.0	2.0	-100.0%	0.0%	-33.3%
below 30 years of age	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	-	0.0%	0.0%
Managers, including:	11.0	32.0	43.0	13.0	31.0	44.0	13.0	33.0	46.0	14.0	30.0	44.0	+7.7%	-9.1%	-4.3%
over 50	0.0	3.0	3.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	3.0	3.0	-	+50.0%	+50.0%
40-50 years of age	4.0	9.0	13.0	2.0	13.0	15.0	7.0	15.0	22.0	8.0	14.0	22.0	+14.3%	-6.7%	0.0%
30-40 years of age	7.0	19.0	26.0	9.0	12.0	21.0	4.0	13.0	17.0	5.0	13.0	18.0	+25.0%	0.0%	+5.9%
below 30 years of age	0.0	1.0	1.0	2.0	4.0	6.0	2.0	3.0	5.0	1.0	0.0	1.0	-50.0%	-100.0%	-80.0%
Other employees, including:	161.0	222.0	383.0	154.0	217.0	371.0	153.0	194.9	347.9	146.0	189.8	335.8	-4.6%	-2.6%	-3.5%
over 50	32.0	28.0	60.0	39.0	28.0	67.0	37.0	23.2	60.2	37.0	26.6	63.6	0.0%	+14.7%	+5.6%
40-50 years of age	50.0	34.0	84.0	54.0	48.0	102.0	54.0	64.7	118.7	52.0	67.2	119.2	-3.7%	+3.9%	+0.4%
30-40 years of age	61.0	112.0	173.0	45.0	101.0	146.0	48.0	80.0	128.0	42.0	77.0	119.0	-12.5%	-3.8%	-7.0%
below 30 years of age	18.0	48.0	66.0	16.0	40.0	56.0	14.0	27.0	41.0	15.0	19.0	34.0	+7.1%	-29.6%	-17.1%
Employees at all levels of the structure															
over 50	32.0	34.0	66.0	39.0	34.0	73.0	37.0	27.2	64.2	38.0	32.6	70.6	+2.7%	+19.9%	+10.0%
40-50 years of age	55.0	45.0	100.0	57.0	64.0	121.0	62.0	82.7	144.7	61.0	85.2	146.2	-1.6%	+3.0%	+1.0%
30-40 years of age	69.0	135.0	204.0	55.0	116.0	171.0	53.0	95.0	148.0	47.0	92.0	139.0	-11.3%	-3.2%	-6.1%
below 30 years of age	18.0	50.0	68.0	18.0	45.0	63.0	16.0	31.0	47.0	16.0	20.0	36.0	0.0%	-35.5%	-23.4%
Total for all levels of the structure	174.0	264.0	438.0	169.0	259.0	428.0	168.0	235.9	403.9	162.0	229.8	391.8	-3.6%	-2.6%	-3.0%

- including employed full time	n.d.	n.d.	n.d.	169.0	254.0	423.0	168.0	235.0	403.0	162.0	229.0	391.0	-2.6%	-3.0%	-	
- including part-time employees	n.d.	n.d.	n.d.	0.0	0.0	0.0	0.0	3.0	3.0	1.0	2.0	3.0	-33.3%	0.0%	-	

### Employees working under employment contracts for a definite period of time [S.2.1]

		2019			2020			2021			2022		c	hange YOY	<i>f</i>
full-time equivalent	F	М	F+M	F	М	F+M	F	М	F+M	F	М	F+M	F	М	F+M
Senior management, including:	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-
over 50	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-
40-50 years of age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-
30-40 years of age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-
below 30 years of age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-
Managers, including:	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	-	-	-
over 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-
40-50 years of age	2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-
30-40 years of age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	1.0	-	-	-
below 30 years of age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-
Other employees, including:	51.0	87.0	138.0	29.8	47.5	77.2	25.8	47.3	73.0	31.5	44.0	75.5	+22.3%	-6.9%	+3.4%
over 50	5.0	8.0	13.0	3.0	4.5	7.5	2.0	4.3	6.3	1.0	1.0	2.0	-50.0%	-76.5%	-68.0%
40-50 years of age	8.0	11.0	19.0	2.5	5.0	7.5	4.5	7.0	11.5	3.5	7.0	10.5	-22.2%	0.0%	-8.7%
30-40 years of age	17.0	33.0	50.0	11.3	13.0	24.3	6.3	17.0	23.3	12.0	15.0	27.0	+92.0%	-11.8%	16.1%
below 30 years of age	21.0	35.0	56.0	13.0	25.0	38.0	13.0	19.0	32.0	15.0	21.0	36.0	+15.4%	+10.5%	+12.5%
Employees at all levels of the structure															
over 50	5.0	9.0	14.0	3.0	4.5	7.5	2.0	4.3	6.3	1.0	1.0	2.0	-50.0%	-76.5%	-68.0%
40-50 years of age	10.0	11.0	21.0	2.5	5.0	7.5	4.5	7.0	11.5	3.5	7.0	10.5	-22.2%	0.0%	-8.7%
30-40 years of age	17.0	33.0	50.0	11.3	13.0	24.3	6.3	17.0	23.3	13.0	15.0	28.0	+108.0%	-11.8%	+20.4%
below 30 years of age	21.0	35.0	56.0	13.0	25.0	38.0	13.0	19.0	32.0	15.0	21.0	36.0	+15.4%	+10.5%	+12.5%
Total for all levels of the structure	53.0	88.0	141.0	29.8	47.5	77.2	25.8	47.3	73.0	32.5	44.0	76.5	+26.2%	-6.9%	+4.8%



- including employed full time	n.d.	n.d.	n.d.	30.0	51.0	81.0	24.0	47.0	71.0	32.0	44.0	76.0	+33.3%	-6.4%	+7.0%
- including part-time employees	n.d.	n.d.	n.d.	2.0	2.0	4.0	2.0	1.0	3.0	1.0	0.0	1.0	-50.0%	-	-66.7%

# Employees employed at each site in 2022

full time a minute and	for an in	definite period	d of time	for a d	efinite period	of time		total	
full-time equivalent	F	М	F+M	F	М	F+M	F	М	F+M
Senior management, including:	2	10	12	0	0	0	2	10	12
ul. Gorzowska 11	1	5	6	0	0	0	1	5	6
Nowy Kisielin	1	2	3	0	0	0	1	2	3
other locations	0	3	3	0	0	0	0	3	3
Managers, including:	14	30	44	1	0	1	15	30	45
ul. Gorzowska 11	10	13	23	1	0	1	11	13	24
Nowy Kisielin	1	5	6	0	0	0	1	5	6
other locations	3	12	15	0	0	0	3	12	15
Other employees, including:	146	190	336	32	44	76	178	234	411
ul. Gorzowska 11	113	94	207	24	24	48	137	118	254
Nowy Kisielin	24	47	71	4	12	16	28	59	87
other locations	9	49	58	4	8	12	13	57	70
Employees at all levels of the structure	162	230	392	33	44	77	195	274	468
ul. Gorzowska 11	124	112	236	25	24	49	149	136	284
Nowy Kisielin	26	54	80	4	12	16	30	66	96
other locations	12	64	76	4	8	12	16	72	88
Total for all levels of the structure	162	230	392	33	44	77	195	274	468



# Newly employed on employment contracts in 2022 [S.2.2]

	for an ir	ndefinite perio	d of time	for a d	efinite period	of time		total	
in number of persons	F	М	F+M	F	М	F+M	F	М	F+M
Senior management, including:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
over 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40-50 years of age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-40 years of age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
below 30 years of age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Managers, including:	0.0	2.0	2.0	1.0	0.0	1.0	1.0	2.0	3.0
over 50	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0
40-50 years of age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-40 years of age	0.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0	2.0
below 30 years of age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other employees, including:	2.0	11.0	13.0	26.0	48.0	74.0	28.0	59.0	87.0
over 50	0.0	2.0	2.0	1.0	1.0	2.0	1.0	3.0	4.0
40-50 years of age	2.0	3.0	5.0	2.0	8.0	10.0	4.0	11.0	15.0
30-40 years of age	0.0	6.0	6.0	13.0	18.0	31.0	13.0	24.0	37.0
below 30 years of age	0.0	0.0	0.0	10.0	21.0	31.0	10.0	21.0	31.0
Employees at all levels of the structure									
over 50	0.0	3.0	3.0	1.0	1.0	2.0	1.0	4.0	5.0
40-50 years of age	2.0	3.0	5.0	2.0	8.0	10.0	4.0	11.0	15.0
30-40 years of age	0.0	7.0	7.0	14.0	18.0	32.0	14.0	25.0	39.0
below 30 years of age	0.0	0.0	0.0	10.0	21.0	31.0	10.0	21.0	31.0
Total for all levels of the structure	2.0	13.0	15.0	27.0	48.0	75.0	29.0	61.0	90.0

# Employees who left their jobs in 2022 [S.2.3]

	for an in	definite period	of time	for a de	efinite period	of time		total	
in number of persons	F	М	F+M	F	М	F+M	F	М	F+M
Senior management, including:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
over 50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40-50 years of age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-40 years of age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
below 30 years of age	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Managers, including:	0.0	4.0	4.0	0.0	0.0	0.0	0.0	4.0	4.0
over 50	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0
40-50 years of age	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0
30-40 years of age	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0
below 30 years of age	0.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0
Other employees, including:	15.0	39.0	54.0	13.0	33.0	46.0	28.0	72.0	100.0
over 50	3.0	4.0	7.0	0.0	2.0	2.0	3.0	6.0	9.0
40-50 years of age	5.0	14.0	19.0	4.0	5.0	9.0	9.0	19.0	28.0
30-40 years of age	6.0	15.0	21.0	4.0	14.0	18.0	10.0	29.0	39.0
below 30 years of age	1.0	6.0	7.0	5.0	12.0	17.0	6.0	18.0	24.0
Employees at all levels of the structure									
over 50	3.0	5.0	8.0	0.0	2.0	2.0	3.0	7.0	10.0
40-50 years of age	5.0	15.0	20.0	4.0	5.0	9.0	9.0	20.0	29.0
30-40 years of age	6.0	16.0	22.0	4.0	14.0	18.0	10.0	30.0	40.0
below 30 years of age	1.0	7.0	8.0	5.0	12.0	17.0	6.0	19.0	25.0
Total for all levels of the structure	15.0	43.0	58.0	13.0	33.0	46.0	28.0	76.0	104.0



### Other persons providing work to the LUG Group [S.2.4, S.2.5]

:		2019			2020			2021			2022		d	change YOY	,
in number of persons	F	М	F+M	F	F	М	F+M	М	F+M	F	М	F+M	F	М	F+M
Number of persons cooperating on the basis of civil law contracts (mandates and contracts for specific work)	5	24	29	3	5	8	2	3	5	0	5	5	-100.0%	+66.7%	0.0%
Number of persons cooperating on the basis of a cooperation agreement (B2B)	n.d.	n.d.	n.d.	2	23	25	2	46	48	1	25	26	-50.0%	-46.8%	-46.9%
Number of persons cooperating under contracts of appointment	n.d.	n.d.	n.d.	1	7	8	1	7	8	1	7	8	0.0%	0.0%	0.0%
Number of persons cooperating under outsourcing	3	10	13	7	7	14	7	7	14	7	6	13	0.0%	-14.3%	-7.1%

### Employees with disabilities [S.2.6]

in number of persons, thousand		2019			2020			2021			2022			change YOY	,
PLN	F	М	F+M	F	F	М	F+M	М	F+M	F	М	F+M	F	М	F+M
Number of disabled workers	20	22	42	19	19	38	15	20	35	16	18	34	+6.7%	-10.0%	-2.9%

# Women who, after giving birth to a child and returning to work, resigned from work within 12 months of returning to work [S.2.14]

	2019	2020	2021	2022	change YOY
Percentage of women who, after giving birth to a child and returning to work, resigned from work within 12 months of returning to work	20.00%	33.33%	16.67%	0.00%	-100.0%

### Average monthly gross salary of employees with employment contracts [S.2.7]

PLN		2019			2020			2021			2022		(	change YOY	
FLIN	F	М	F+M	F	М	F+M	F	M	F+M	F	М	F+M	F	М	F+M
Senior management	27,898.85	24,631.24	25,133.95	20,750.68	25,738.57	24,971.20	22,730.39	38,856.29	35,631.11	24,536.32	34,816.01	33,102.73	+7.9%	-10.4%	-7.1%

Managers	9,524.30	10,707.70	10,365.83	13,566.48	12,444.98	12,776.33	12,607.84	14,423.99	13,910.73	13,547.67	16,467.15	15,493.99	+7.5%	+14.2%	+11.4%
Other employees	3,578.73	6,027.70	5,031.19	5,117.14	6,707.83	6,055.69	5,733.61	6,958.35	6,438.22	6,276.04	7,907.51	7,203.43	+9.5%	+13.6%	+11.9%
All employees	4,133.50	7,034.51	5,897.16	5,827.11	7,971.30	7,127.76	6,370.30	8,729.67	7,771.13	7,024.60	9,828.16	8,663.75	+10.3%	+12.6%	+11.5%

### Average monthly gross salary for other persons performing work [S.2.11]

PLN	2019			2020			2021			2022			change YOY		
	F	М	F+M	F	М	F+M	F	М	F+M	F	М	F+M	F	M	F+M
Remuneration of persons cooperating on the basis of civil law contracts (mandates and contracts for specific work)*	2,222	11,909	10,239	2,222	11,909	10,239	2,222	11,909	10,239	-	-	-	-	-	-
Remuneration of persons cooperating on the basis of a cooperation agreement (B2B)	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	31,078	20,410	20,820	+161.5%	+126.2%	+127.8%
Remuneration of persons working under contracts of appointment	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	4,000	8,692	8,105	0.0%	+12.8%	+11.9%
Remuneration of outsourced collaborators	784	957	917	784	957	917	784	957	917	n.d	n.d	n.d.	-	-	

<sup>\*</sup> In 2022, there was a one-off civil contract in one of the subsidiaries, so the data is not reliable.

### Annex 2: Environmental data

### Emissions of other substances to the atmosphere by type [E.5.2] [E.5.4]

	Unit	2019	2020	2021	2022	change YOY
SOx	kg	24.76	3.85	0.00	0.00	-
SOx per luminaire manufactured	g/unit	0.06	0.01	0.00	0.00	-
SOx per PLN 1 million in revenue	kg/1 mln PLN	0.15	0.02	0.00	0.00	-
NOx	kg	541.55	482.00	370.00	380.00	+2.7%
NOx per luminaire produced	g/unit	1.26	0.97	0.74	0.79	+10.7%
NOx per PLN 1 million in revenue	kg/1 mln PLN	3.17	2.64	2.02	1.58	-12.7%

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