ESG Report
2022

MOBRUK

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MOBRUK

Dear Stakeholders,

We are happy to present to you our Group's second ESG report, in which we share share comprehensive information on our business activities, with a particular focus on sustainability.

Waste management continues to be a major challenge, especially as we move towards a circular economy. As the Mo-BRUK Group, we are a leader in the processing of industrial, mainly hazardous, waste, which allows us to offer considerable support to other entities in this respect.

In 2022, we focused mainly on implementing modern technologies in our plants and minimizing the volume of landfilled waste. We recover energy from waste and create valuable products such as alternative fuels and artificial aggregates. In this way, we reduce environmental pollution. In recent years, we have become a leader in the industrial waste processing industry in Poland, and we have contributed to bringing the Polish economy closer to the circular economy model, especially in respect to hazardous waste.

Mo-BRUK is constantly striving to achieve the highest standards of sustainability at each level of the Group. The safety of our employees remains a priority, and we are committed to developing health and safety activities and improving communication about these issues within our organization. A notable achievement in 2022 was the absence of work-related injuries and health impairments at all five of our plants.

The Group faces important challenges, both in terms of its own development and in terms of regulatory changes that may affect our business significantly. We are monitoring the trends and directions of the European Union in the implementation of the European Green Deal program. Our Group is ready to adapt to regulatory changes, including changes to Polish law. We are developing technology and processing capacity. In 2022, we collaborated with a university to develop another patent for an invention that minimizes environmental pollution.

In the ESG area we are not limited to sustainability reporting: we are taking deliberate steps to increase our positive impact on the environment. We have calculated the organization's Scope 1 and Scope 2 carbon footprint for 2022, which will allow us to set targets and take action to reduce our emissions in the coming years. In 2023, we plan to publish an ESG strategy that will systematize our approach to developing this part of our business.

I would like to invite you to read this ESG Report, which presents our Group's environmental, social and governance activities in 2022.

Henryk Siodmok
President of the Management Board

Management and corporate governance

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Responsible and effective management is the foundation of the Group’s sustainable development

Activity of the Mo-BRUK Group

Business model

GRI: 2-1 | 2-2 | 2-6

Mo-BRUK Group:

- Manages approx. 90% of waste specified in the catalog of all waste
- Has implemented an investment program with total expenditures of approx. PLN 200 million
- Has its own Research & Development (R&D) Center
- Has a unique waste solidification technology: the Group's plants are the only facilities in the CEE region with the technology to convert almost any type of hazardous waste into cement granulate.

The Mo-BRUK Group (hereinafter also: the Group, Mo-BRUK) is comprised of two companies: Mo-BRUK S.A. and Raf Ekologia Sp. z o.o.[1]

Mo-BRUK S.A. is the parent company in the Mo-BRUK Group. It was established in 1985 and has its registered office in Niecew. It manages the waste management operations, which include incineration and neutralization of waste, sales of process steam and sales of alternative fuels (RDF - Refuse Derived Fuel), as well as stabilization and solidification (cementation) of inorganic waste and production of cement granulate.

Its five plants are considered to be among the most modern in the waste management sector in Poland.

Raf-Ekologia Sp. z o.o. is a subsidiary. Raf-Ekologia with its registered office in Jedlicze, has been in operation since 1999. It specializes in waste management with a focus on thermal neutralization of hazardous waste. It deals mainly with industrial, medical and veterinary waste. The plant has modern equipment and uses automatic control.

Raf-Ekologia Sp. z o.o., along with Mo-BRUK S.A., is an integral part of the Mo-BRUK Group, which focuses on developing modern technologies and innovative solutions for waste management, respecting the principles of sustainable development and environmental protection.

[1] In this report, Mo-BRUK or the Group means the Mo-BRUK Group. If details of a specific company are provided then such company is specified by name.

The Mo-BRUK Group operates primarily in three complementary areas of waste management, with particular specialization in waste recovery:

Incineration of industrial and medical waste

- Production of energy in the form of steam, which is sold or used to dry RDF.
- Production of electricity

Waste solidification and stabilization

- Production of artificial aggregate that saves natural resources

Production of alternative fuel (RDF)

- Production of a substitute for coal and other fossil fuels for industry

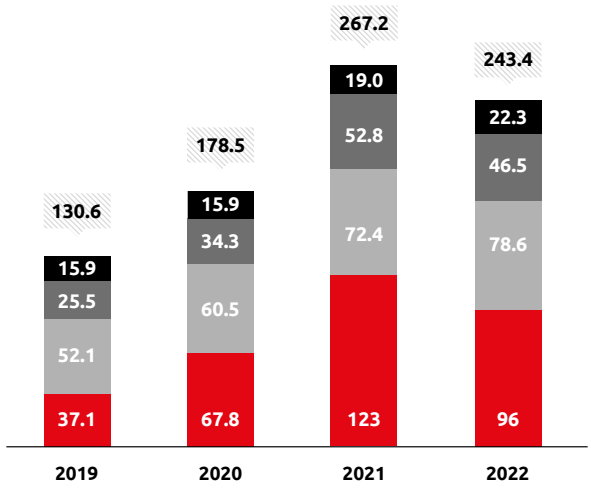
The operation of three technologically diversified and complementary business segments makes it possible to provide services to customers from all important sectors of economy. Important customers include municipalities, especially in the area of defusing "ecological bombs", and industrial plants, such as ORLEN Eko, PKP Polskie Linie Kolejowe, Grupa Azoty, MPO in Warsaw On a smaller scale, the Group also recovers coal sludge and sells liquid fuels through its own service stations.
The operation of key business segments enables cooperation to be established with various entities, both from the business sector, and those representing public administration, including local governments.

Description of processes

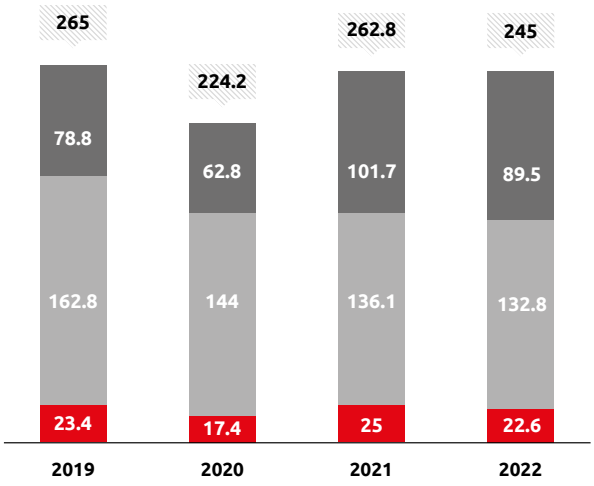
GRI: 3-3 Organization's value chain – cooperation with suppliers, supplier policies

The solidification and stabilization segment and cement granulate production are currently the most profitable part of Mo-BRUK's business.

Revenues by segment (PLN million)



Volume of accepted waste (thousand tonnes)



Incineration | Solidification and stabilization | RDF | Other | TOTAL

In 2022, the Group disposed of nearly **245 thousand tons of waste** – 132.8 thousand tons within the solidification and stabilization segment, 89.5 thousand tons in the RDF segment and 22.6 thousand tons in incineration.

Incineration of industrial and medical waste

39.4 %
of our business (in terms of revenue)

22.6 thous. tons
of waste managed

96 million PLN
of revenue

In thermal waste transformation installations we accept hazardous waste such as paint, thinners or refinery waste. The incineration plant in Jedlicze also accepts medical waste from public and private health care centers, hospitals and from drug manufacturers.

The steam recovered from the incineration process is a product that may be used by the Group in the future to generate electricity. Preparatory activities in this direction were undertaken in 2022. This is an important step towards the Group's energy independence.

In the thermal waste transformation process, it is possible to:

- reduce the volume of waste
- dispose of waste that is not suitable for other recovery methods
- convert thermal energy into process steam or electricity

Waste solidification and stabilization

32.3 %
of our business (in terms of revenue)

132.8 thous. tons
of waste managed

78.6 million PLN
of revenue

The waste solidification and stabilization process is used to treat inorganic waste, such as slag, filter dust (e.g. from the incineration plant), waste from metal electroplating processes, acids. Through chemical reactions, hazardous substances contained in these types of waste are stabilized. The end result of the process is a cement granulate that is a substitute for aggregate. It is no longer classified as waste, but becomes a readily reusable material.

Production of alternative fuel (RDF)

19.1 %
of our business (in terms of revenue)

89.5 thous. tons
of waste managed

46.5 million PLN
of revenue

The production of alternative fuels is an important element that allows us to fully benefit from the waste management and treatment process. The fuel production process uses waste supplied by recycling companies, companies collecting municipal and industrial waste, e.g. from regional municipal waste processing facilities, vehicle scrap yards and companies processing electrical and electronic equipment.

Currently, the fuels are purchased exclusively by cement plants and, to a small extent, by cogeneration plants. In the future, refuse-derived fuel will be widely used in power and heating plants.

RDF can be produced from: plastics, wood scraps, large items, composite materials – anything that cannot be recycled by other methods. Machines on the processing line sort and select what is suitable for incineration and has the highest calorific value. From these materials, a shredder prepares a 30 mm diameter fraction and this material is sent to customers - cement plants.

GRI: 2-6

The Mo-BRUK Group cooperates with foreign partners in the field of waste management, sale of artificial aggregates and alternative fuels.

Area	Main suppliers of waste	Main customers
Incineration of industrial and medical waste	• Public and private health care centers • Drug manufacturers • Refineries • Waste collection companies • Paint manufacturing plants	• Refineries
Waste solidification and stabilization	• Incineration plants, chemical water treatment plants • Heating plants and power plants • Foundries • Chemical and manufacturing companies • Cement plants • Car parts manufacturers	• Roadbuilding companies • Land reclamation companies • Coal mines • Aggregate trading companies
Production of alternative fuel (RDF)	• Recycling companies • Municipal waste collection companies • Municipal waste sorting plants • Manufacturers generating industrial waste • Car scrap yards • Companies disposing of electrical and electronic equipment	• Cement plants • Power plants (potentially)

Mo-BRUK plants

GRI: 2-6 | 203-1

OWN INDICATORS: Description of investment plans | Number of improvements and upgrades completed in 2022 | Scope of improvements and upgrades completed in 2022

The Company's plants are located in southern Poland, close to plants that generate large volumes of industrial waste. A network of modern processing plants enables Mo-BRUK to respond effectively to the growing market needs:

Skarbimierz

- **Processing: 70 thous. tons/year**
- **Inorganic waste solidification and stabilization plant**
- **Commissioned in 2014**

The activity of the Skarbimierz Plant is based on solidification and stabilization of inorganic waste. Its has the technical capacity to process 140 thousand tons of waste per year. In order to use the full processing capacity, an environmental decision and an amendment to the Integrated Permit are required (the process is pending). The Group currently holds a permit to process 70 thousand tons of waste per year.

Wałbrzych

- **Processing: 60 thous. tons/year**
- **RDF production plant**
- **In operation since 2007**

The Plant in Wałbrzych produces RDF (with a processing capacity of up to 60 thousand tons per year). The plant produces RDF from hazardous waste such as railway sleepers.

Niecew

- **Processing: 100 thous. tons/year**
- **Waste solidification and stabilization plant – since 1997**
- **Research Center and accredited laboratory**
- **The investment project was completed in 2011**

The Plant in Niecew focuses on solidification and stabilization of waste and has the capacity to process 100 thousand tons of waste annually. Modernization is planned to increase processing capacity to 140 thous. tons – this will entail expansion and reconstruction of processing and storage areas for hazardous and non-hazardous waste. The plant in Niecew also produces synthetic aggregate/cement granulate. With the investment implemented in 2022-2024, its production capacity will increase to 336,000 tons per year.

Karsy

- **Processing: 305,000 thous. tons/year**
- **Industrial waste incineration plant – since 2014**
- **RDF production plant – since 2018**

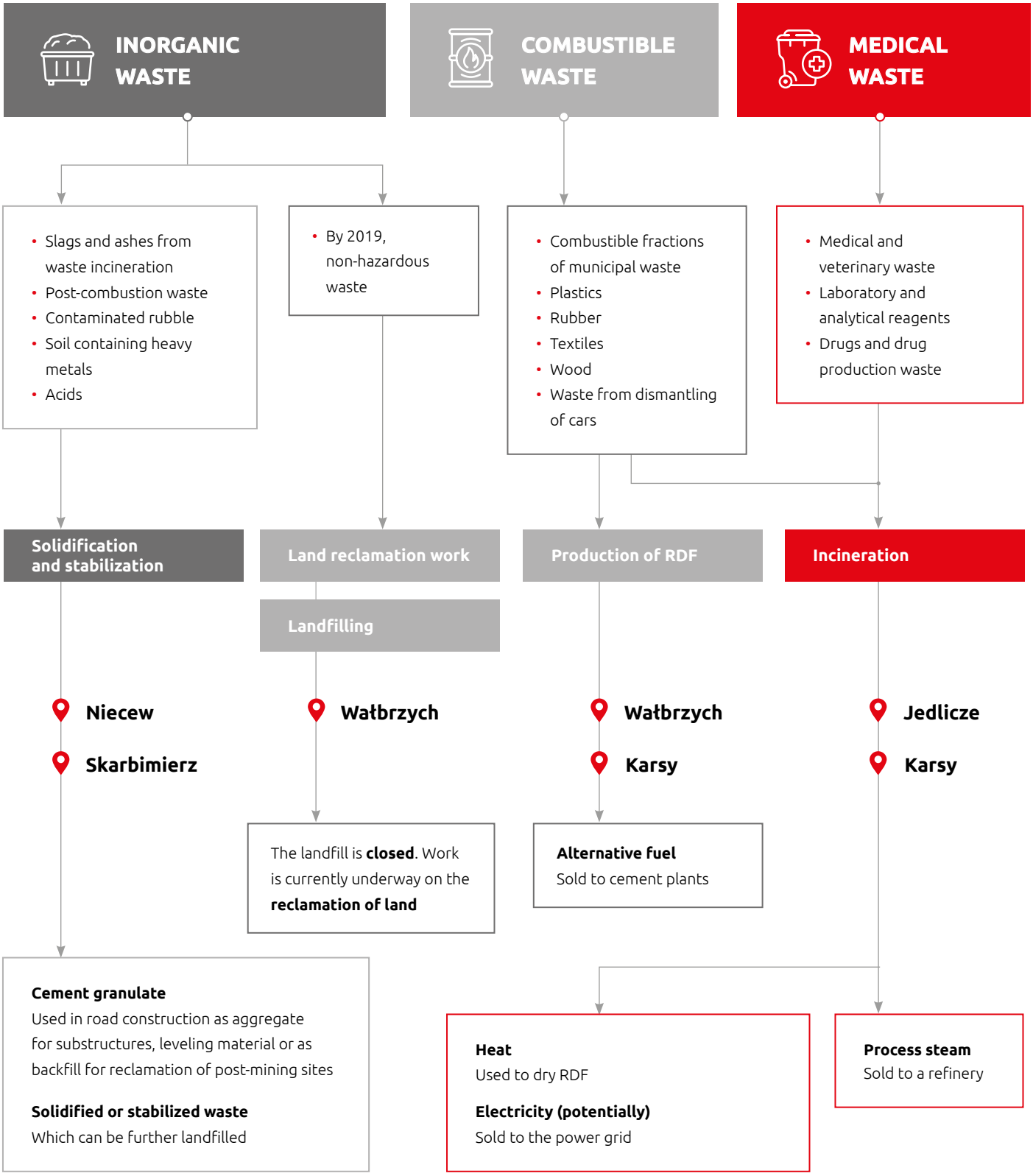
The Plant in Karsy acts as an incineration plant for industrial waste and an RDF production plant. Its has capacity to process 305 thousand tons of waste per year. An upgrade of the thermal transformation plant is planned, for which a general contractor has been selected. It is assumed that the modernization work will be completed by the end of July 2024.

Jedlicze

- **Incineration: 10 thous. tons/year**
- **Incineration plant for hazardous and non-hazardous waste, including medical waste**
- **The plant has been in operation since 1997 and it was purchased by the Group in 2008**

Jedlicze is home to an incineration plant for hazardous and non-hazardous waste, including medical waste, with the processing capacity of 10 thous. tons per year. An expansion of the plant is planned, which will increase the annual production capacity to 16,000 tons. The company is in the process of obtaining the necessary administrative approvals.

Technological processes enabling waste-free production



Governance structure

GRI: 2-9 | 2-10 | 2-11 | 2-16 WSE: G-P1

The Management Board of the Mo-BRUK Group has many years of experience in the industry. The 2022 achievements and the company's history confirm its ability to adapt to the changing market environment and successfully grow its business.

Strengthening of Management Board's powers:

- In June 2022, Henryk Siodmok became the new President of the Management Board.
- In March 2023, the Supervisory Board of Mo-BRUK appointed new members of the Company's Management Board: Rafał Michalczuk, previously working as the financial director to the position of the Chief Financial Officer (CFO) and Andrzej Rytka, who was the operating director, to the position of the Chief Operating Officer (COO).
- The appointment of the new Management Board members continues the organizational changes that began in 2022, when Józef Mokrzycki, the company's founder, stepped down after several decades years of leading the company.
- The process is aimed at strengthening the powers of the management board.
- Additionally, Elżbieta Mokrzycka stepped down as the Vice-President for Administrative and Financial Matters.

Description of the governance structure

Management Board

The Management Board of Mo-BRUK S.A. plays a key role in the management of the business activities of the Mo-BRUK Group. It is headed by the President of the Management Board, who is also the top executive of the organization. The Management Board operates in accordance with the applicable laws and on the basis of the provisions of the Mo-BRUK S.A. Articles of Association and the Mo-BRUK S.A. Management Board Bylaws.

The duties of the Management Board include:

- Managing the Mo-BRUK Group - the Management Board is responsible for making decisions on the strategic direction of the Group. Defining the goals, strategies and policies of the Group and ensuring that the intended results are achieved.
- Fulfilling legal obligations – acting in compliance with the law, including corporate law, labor law and other applicable regulations. The Management Board represents the Company in its dealings with regulators, supervisory authorities and other external entities.
- Adopting the Management Board Bylaws, which set out the rules of procedure for the Management Board. The bylaws must be adopted by the Management Board and approved by a Supervisory Board resolution. They regulate, among other things, the decision-making procedures, the scope of powers of the individual Management Board members and the representation of the company.
- Overseeing daily operations - the Management Board oversees the day-to-day operations of the Mo-BRUK Group, including finance, operations, human resources, risk management and other key areas. The Management Board takes measures to ensure that the company operates effectively and achieves its goals.
- Reporting to supervisory bodies: the Management Board prepares and submits relevant reports and information to supervisory bodies, such as the Supervisory Board. These reports contain information on the financial standing, performance, development plans and other relevant issues related to the Mo-BRUK Group.

In 2022, the Management Board was composed of four members According to the Bylaws, the Management Board is composed of one to five members appointed and dismissed by the Supervisory Board.

The members of the Management Board serve for a joint term of 5 years.

Composition and powers of the Management Board

Henryk Siodmok | President of the Management Board since July 2022.

Henryk Siodmok is a doctor of economics, a graduate of the Cracow University of Economics in the field of Economics and Organization of Foreign Trade and MBA studies at INSEAD in Fontainebleau. He defended his doctoral thesis on customer relationship management in network organizations at the Warsaw School of Economics in 2004. Henryk Siodmok is an expert at the Adam Smith Research Center, co-author and author of economic publications, in particular in the field of entrepreneurship, tax reform issues and common currency areas.

Professional experience:

2019–2022	President of the Management Board of Dobrowolski Sp. z o.o.
2007–2019	President of the ATLAS Group
2005–2007	Deputy Chairman of the Supervisory Board of Grupa LOTOS S.A.
2003–2004	Vice-President for Sales, Finance, Human Resources, IT, Development and Administration at US Pharmacia sp. z o.o.
2000–2003	President of the Management Board of Carman Polska sp. z o.o.
1997–2000	President of the Management Board of FLiD Drumet S.A.
1996–1997	Development Director for Eastern Europe and President of Tenneco Automotive Polska
1991–1995	consultant at the Bain & Co. consulting company
1989–1990	operational analyst at Pasco Company

Józef Mokrzycki | President of the Management Board till the end of June 2022

Józef Mokrzycki has completed secondary education. He graduated from the Agricultural Technical School in Nawojowa and in 2001 from the Postgraduate School of Management and Waste Management at the Warsaw University of Life Sciences.

Professional experience:

2020 – now	Ginger Capital Sp. z o.o. – Management Board Member
2020 – now	Sunjacht Sp. z o.o. – President of the Management Board
2010–2022	Mo-BRUK S.A. – President of the Management Board
2008–2010	Mo-BRUK J. Mokrzycki Sp.k. – General Partner
1985–2008	sole proprietorship operating under the name of Mo-BRUK Józef Mokrzycki
1990–1997	Korzenna Municipality Office – head of the municipality
1982–1985	Farmer
1979–1982	Animal Breeding Station – animal husbandry technician
1979	Korzenna Municipality Office – Commerce & service clerk

Wiktor Mokrzycki | Vice-President of the Management Board for Sales

Wiktor Mokrzycki holds a university degree. In 2009, he graduated from the Higher School of Entrepreneurship in Nowy Sącz, majoring in Environmental Engineering. Wiktor Mokrzycki also graduated in 2011 from Management and Production Engineering – Institute of Environmental Engineering of the AGH University of Science and Technology in Krakow.

Professional experience:

2022 – now Association of Employers of Thermal Waste Transformation Plants – Chairman of the Main Council
2021 – now Purigi Sp. z o. o. – Management Board Member
2020 – now Ginger Capital Sp. z o.o. – Management Board Member
2010 – now the Company – Vice-President of the Management Board for Sales
2009–2013 Raf-Ekologia Sp. z o.o. – Supervisory Board Member
2008–2010 Mo-BRUK J. Mokrzycki Sp.k. – – Limited Partner, commercial proxy
2006–2008 Mo-BRUK Józef Mokrzycki – office worker

Tobiasz Mokrzycki | Vice-President of the Management Board

Tobiasz Mokrzycki holds a university degree. In 2012, he graduated from the Cracow University of Technology in the field of Civil Engineering, specialization: Roads, streets and highways. In 2016, Tobiasz Mokrzycki also obtained a construction license to manage construction works, while in 2017 he obtained a design license in the road engineering specialty.

Professional experience:

2020 – now Ginger Capital Sp. z o.o. – Management Board Member
2010 – now the Company – Vice-President of the Management Board
2008–2010 Mo-BRUK J. Mokrzycki Sp.k. – – Limited Partner, commercial proxy

Rafał Michalczuk | Vice-President of the Management Board since March 2023

Rafał Michalczuk holds a university degree. He is a graduate of international trade at the Faculty of International Economic and Political Relations at the Poznań University of Economics and Business. He has held an ACCA member status since 2022.
He has more than 15 years of experience in corporate and group finance.

Andrzej Rytka | **Vice-President of the Management Board since March 2023**

Andrzej Rytka holds a university degree. He is a graduate of the Faculty of Electrical Engineering at the Warsaw University of Technology, specializing in Industrial Power Engineering, and the Executive MBA program at the Kozminski University. He has 21 years of experience in top management positions in international manufacturing and service companies with established market positions.

Powers of the Management Board in respect to economic, environmental and social impacts of the organization

GRI: 2-12 | 2-13

Sustainability and ESG (E - environment, S - society and G - governance) issues play a key role in the activity of the Mo-BRUK Group. The Management Board of Mo-BRUK S.A. sets the directions, goals and strategies in the area of sustainable development and ESG for the entire Group.

In 2022, the Management Board of the Mo-BRUK Group accounted for sustainability and ESG matters in its operating plans. It was the Group's priority to develop internal regulations to enable efficient management of projects and processes with economic, environmental and social impacts. The sustainability (ESG) strategy for the Group is to be developed in 2023.

Powers of the President of the Management Board:

- Ensuring that ESG issues are duly addressed in Management Board meetings and discussions, thereby creating a culture of environmental responsibility within the Company's highest governance body,
- Responsibility for incorporating environmental issues in the organization's strategies, activities and processes,
- Directly supervising the work of those in positions related to environmental issues: the Integrated Management System specialist/ISO and the Legal Director, who oversees the Environmental Protection Department,
- Representing the organization before external stakeholders, including shareholders, regulators, customers and the community, and engaging with these stakeholders with respect to sustainability issues, communicating the organization's commitment to environmental and social responsibility, and responding to inquiries about the organization's performance and impacts,
- Overseeing the organization's reporting on environmental and sustainability performance and ensuring that accurate and relevant information is disclosed to stakeholders, including annual reports, sustainability reports and other public communications. ESG reports and emissions calculations are available on the Group's website.

Supervisory Board

The Supervisory Board is responsible for overseeing the activities of the Mo-BRUK S.A. Management Board and looking after the interests of the Company and its stakeholders. Its duties and powers are defined both by law and by the Company's governing documents, such as its Articles of Association.

The Supervisory Board of Mo-BRUK S.A. consists of:

- **Kazimierz Janik** – Chairman
- **Piotr Pietrzak** – Member
- **Konrad Turzański** – Member
- **Piotr Skrzyński** – Member
- **Arkadiusz Semczak** – Member

The Supervisory Board shall be responsible for selecting the President of the Management Board and the Vice Presidents, if any, from among the Management Board Members, based on the skills, experience and competence of the candidates. It the right to suspend a Management Board Member for important reasons, such as violation of laws, mismanagement or actions contrary to the Company's interests. It may delegate a Supervisory Board Member or Members to temporarily perform the Management Board's duties if there is a need to suspend or dismiss the entire Management Board or if the Management Board cannot operate for other reasons. The Supervisory Board may also dismiss a Management Board Member or the entire Management Board before the end of the term of office. A dismissal decision is made on the basis of the pre-requisites specified in the law and may be due to misconduct or mismanagement.

The mandates of Management Board Members expire on the date of the shareholder meeting approving the financial statements for the last full financial year in office as a Management Board Member.Management Board Members may be appointed to the Management Board again for subsequent terms of office.

Audit Committee

The Audit Committee has an important role in monitoring the effectiveness of internal control systems, managing risk and conducting internal audit. It consists of three people from the Supervisory Board: Piotr Skrzyński, Piotr Pietrzak, Kazimierz Janik.

Main tasks of the Audit Committee:

- Monitoring the effectiveness of internal control systems - ongoing monitoring of the effectiveness of the Company's internal control systems in order to ensure an adequate level of protection against risks and identify any weaknesses in internal control systems.
- Risk management – monitoring the process of identifying, assessing and managing risks to ensure that appropriate measures are taken to minimize risks to the Company.
- Internal audits – Conducting internal audits to evaluate and verify the effectiveness of internal control systems and compliance with laws and regulations. These audits help identify irregularities and risks and evaluate the measures taken by the management in order to eliminate or mitigate them.
- Supporting the Supervisory Board – providing support to the Supervisory Board in monitoring the financial reporting process, the effectiveness of the internal control system and the performance of financial audit activities. Issuing opinions on Management Board resolutions related to the internal control system and presenting recommendations for amendments to internal regulations.

- Providing information to the Management Board about reports prepared by auditors, which contain information on material irregularities and threats, as well as the measures taken by the management in order to eliminate or mitigate them. Also, reporting all critical incidents to the Management Board in writing or verbally[2].

Key results

243.4 million PLN
Sales revenue in 2022

117.3 million PLN
EBITDA in 2022

92.2 million PLN
Net profit in 2022

53 %
EBITDA margin in 2022 core business

245 thous. tons
Waste accepted for treatment in 2022

210 million PLN
Earmarked for investment in the coming years

ESG Report
Published in 2022 for the second time in the Group's history

249 million PLN
Distributions to shareholders

[2] No critical incidents occurred in 2022.

Thanks to its effective business model, Mo-BRUK is the leading industrial waste management company in Poland. Investments in waste neutralization lines have enabled the Group to treat the vast majority of waste types generated in Poland.

Mo-BRUK, a leader of the industrial waste treatment industry in Poland, generated sales revenue of PLN 243.4 million in 2022. In the period in question, EBITDA was PLN 117.3 million, while net profit amounted to PLN 92.2 million. The year-on-year decrease in revenues of PLN 29.4 million from the processing of so-called "ecological bombs" affected consolidated revenues and profitability. Despite this, Mo-BRUK maintained high profitability ratios – the EBITDA margin for 2022 was 48.2 percent, or 53 percent excluding the Group's other operations.

2022 was a landmark year for the Group in many respects. We started an investment program worth about PLN 210 million, which will be completed in 2024 and which will result in a 78% increase in capacity in the incineration segment and a 65% increase in the waste solidification and stabilization segment. We were also included in the mWIG40 stock market index, which means that we are among the elite of 60 largest companies listed on the Warsaw Stock Exchange. We should also highlight the continuation of changes in Mo-BRUK's governance structure. In 2023, our goal will be to further increase the scale of operations while retaining attractive profitability ratios. In spite of all the investment projects, we intend to remain a dividend company.

Wiktor Mokrzycki
Vice-President of the Management Board

Pending and planned investments, improvements and modernizations

GRI: 3-3 Pending and planned investments, improvements and modernizations

Over the past decade, Mo-BRUK has invested nearly PLN 200 million in business development, building waste processing lines and developing proprietary technologies that have improved efficiency and increased the available capacity. As a result, the company is able to increase the volume of waste processed and respond to the growing market needs without additional significant capital expenditures.

In the coming years, we intend to increase our production capacity through organic growth and M&A (mergers and acquisitions). Our plans include investing in capacity expansion in the incineration and stabilization segments, entering new segments of the waste management market, and investing in new innovative technologies.

We have prepared an organic growth plan for 2023-2024. We want to expand our capacity in the industrial waste incineration segment by 78% and in the inorganic waste solidification and stabilization segment by 65%. The total value of the investment program is approx. PLN 210 million. The program has already been launched; design and preparatory works are underway, and we are confident that we will complete all the investment projects in 2024.

Andrzej Rytka
Vice-President of the Management Board

Plans to expand production capacity by the end of 2024:

+10 thous. tons

in the industrial waste incineration segment (Karsy plant)

+110 thous. tons

in the inorganic waste solidification and stabilization segment

+40 thousand tons in the Niecew plant,
+70 thousand tons in the Skarbimierz plant

Increasing the processing capacity of waste incineration plants and inorganic waste solidification and stabilization plants could provide massive environmental benefits. The activities of the Mo-BRUK Group will help manage waste sustainably and protect the environment.

Environmental benefits of increasing the volume of waste treatment:

Smaller volumes of landfilled waste means lower emissions of greenhouse gases and pollutants

Energy recovery provides an alternative energy source to replace fossil fuels.

Inorganic waste treatment means the solidification of toxic metals into forms that are safe for ecosystems

More efficient waste management means reducing the consumption of natural raw materials and energy needed for production

Innovation and research and development activities

GRI: 3-3 Innovation and research and development activities
OWN INDICATOR: Waste processing innovations implemented in 2022 | Cooperation with universities and research centers in 2022 | Patents owned and pending

One of Mo-BRUK's main values is innovation. The company is committed to seeking innovation in all areas, is open to new solutions and strives to turn any difficulties it encounters into opportunities for development. This approach is reflected in our research and development activities, resulting in pending patents and innovative technologies that make production processes more efficient. The company operates its own Research and Development Center but also engages in partnerships and cooperation with the academic community.

Patented inventions enhance the reputation of the Mo-BRUK Group as an innovative and technologically advanced entity, which helps to increase the confidence of customers, investors and business partners and has a positive impact on its market position, supporting the circular economy.

> Mo-BRUK holds 7 patents and has 1 patent application pending at the European Patent Office (EPO).

Mo-BRUK's cooperation with the AGH University of Science and Technology in Kraków resulted in the development of a joint patent, which was granted in 2022 – Patent no. 241732 for an invention called: "Method of reducing the leaching of chlorides from mineral mixtures containing wastes characterized by high concentrations of soluble chlorides." Owing to this patent, Mo-BRUK will reduce the pollution of water with chlorine compounds, and consequently the risk to human health. The invention is also the subject matter of patent application no EP18460059.1 in the European Patent Office (EPO). As at the publication date of this report, the application was being processed.

Due to earlier cooperation between Mo-BRUK and AGH, shared patents were developed for mineral binder, the method of preparation of mortar based on mineral binder and mix for making cellular concrete.

Innovation in waste processing is a key to building sustainable future. By exploiting new technologies and creative approaches, we may transform waste into valuable raw materials, minimize the environmental footprint and create new business opportunities.

Wiktor Mokrzycki
Vice-President of the Management Board

Within cooperation with the Technical University of Kraków, shared patents were developed for processing residues from incineration plants through synthesis of zeolites, processing of secondary waste from incineration plants and a system for processing of secondary waste from incineration plants. Due to these patents, the company will be able to contribute in a positive way to the environment by more effective absorption and neutralization of harmful chemical compounds in waste treatment processes.

In 2022, the Group continued work on practical application and implementation of all the inventions patented before which were developed in cooperation with selected higher education institutions in the GEKON program – Generator of Ecological Concepts[3].

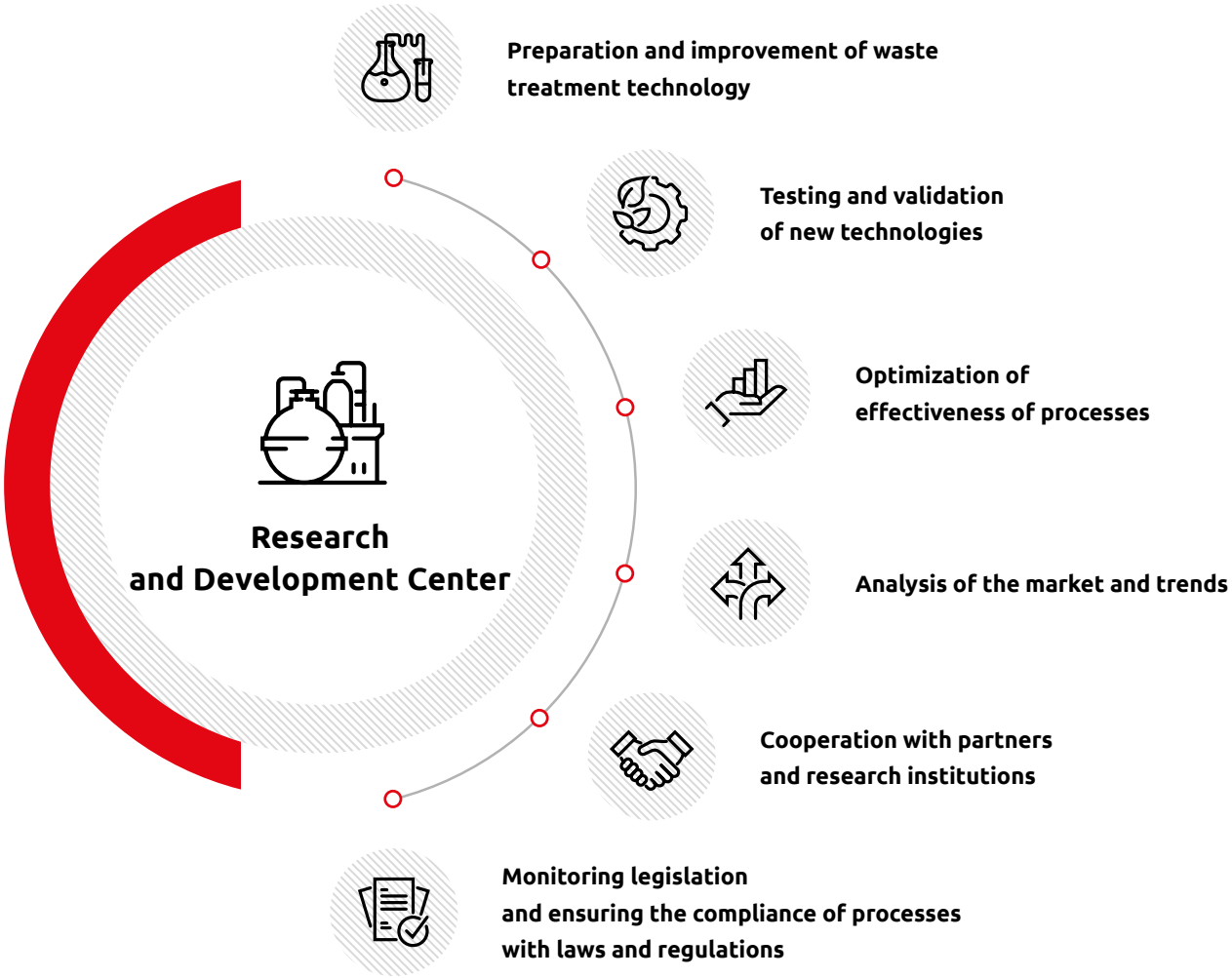
Research and Development Center (R&D)

The Mo-BRUK Group develops its own Research and Development (R&D) Center. It is an accredited laboratory with highly qualified team of technologists, which makes it possible for the Mo-BRUK Group to do research and conduct tests necessary to prepare and assess the effectiveness of new waste treatment technologies. This allows for accelerating innovations, improving effectiveness of treatment processes and introducing solutions with higher ecological potential. Since 2010, the Center has not only supported the Group in work on innovations but also supervised production safety and quality.

[3] More in the ESG Report 2021 (https://mobruk.pl/wp-content/uploads/2023/01/RaportESGGrupyMoBRUK221.pdf)

Due to the laboratory, the Company has acquired a patent for generation of synthetic aggregate and developing its own waste treatment technology, which allows for generating cement granulate from ash and slags after incineration processes. This technology is an example of closing the waste cycle, as the generated material is reused as artificial aggregate in road construction, but also makes a useful material for the reclamation of degraded areas, which are often created, for example, after the removal of ecological bombs.

Goals of the Research and Development Center:



Approach to sustainable development

GRI: 2-12 | 2-13 | 2-18

The management body of Mo-BRUK plays a key role in the organization's pursuit of sustainable development. The Management Board sets strategic directions, objectives and strategy for the Group.

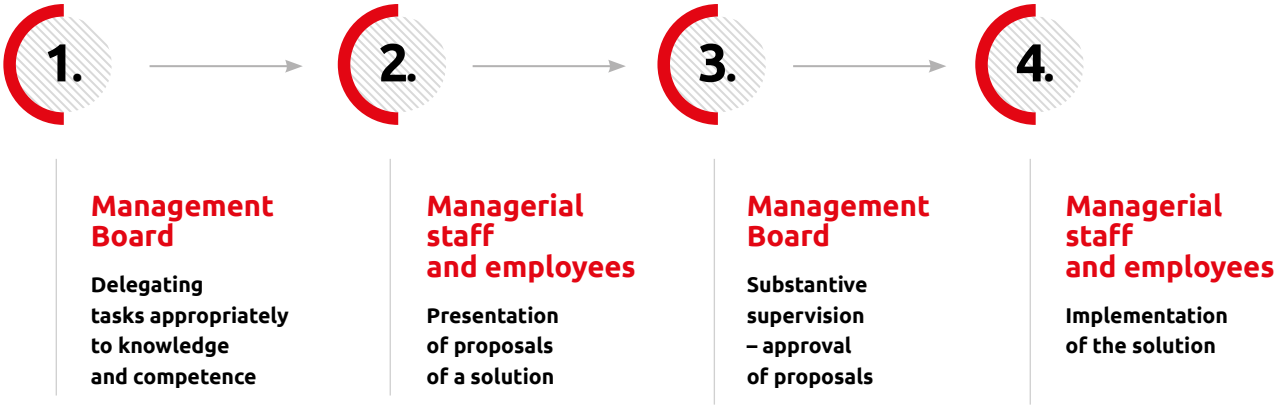
In connection with the economic, environmental and social impact of the Group's activities, measures have been taken to make this impact as positive as possible. In 2021, we decided to integrate sustainable development into the Group's action plan, resulting in the publication of our first ESG report. This report is a continuation of the direction taken by the Management Board.

2023 will bring the next step on the Group's sustainability path – the development of an ESG strategy. A comprehensive presentation of objectives in the area of environmental impact, the society and corporate governance will make it possible for stakeholders to understand better the motivation and direction of action of the Mo-BRUK Group defined by the managing body.

Key projects started in 2022 concern preparation of internal ESG regulations and policies. The major tasks of the Management Board in the area are substantive supervision and approval of the Group's activities which have an impact on the environment. The Management Board delegates tasks to the managerial staff and employees who are responsible for their implementation. The basic criterion for choosing a person appropriate for a given project is his or her knowledge and competences. The employee's proposal for the manner of doing a given task is then approved by the management body. The approval may be in two forms: without reservations with the instruction to implement a given regulation or – alternatively – the Management Board may order to introduce changes appropriate to achieve a definite objective. A similar process has been implemented in Raf-Ekologia, a subsidiary.

> **Our decisions are always made while respecting the principles of environmental protection and corporate social responsibility, which are inextricably linked to our core business – waste processing. We are proud of our organization's positive impact, in accordance with the concept of circular economy.**
>
> **Attorney at law, Doctor Lech Dubiński**
> Legal Director

The Management Board's supervision of the organization's environmental impact



GRI: 2-12

In the process of supervising the organization's impact, an important role is played by the assessment of actions taken by the management body. The Group plans to include this aspect in its forthcoming ESG strategy. In addition, consideration is being given to updating the organizational structure to include a person in an appropriate position to manage responsibility in areas of sustainable development.

GRI: 2-14 | 2-17

The Management Board supports the work on a sustainability report by participating in the identification of topics to be described in the report from an internal perspective. The Management Board's participation in this process is extremely important to the organization because of the criterion of materiality in the selection of topics. The Management Board's perspective is broad and complements the internal perspective of the Group's employees with a strategic approach to managing the organization.

Through the participation of the Management Board's representatives in training courses and workshops accompanying internal ESG activities (e.g. theoretical training, carbon footprint or stakeholder mapping workshops), they have the opportunity to enhance their knowledge and competence in understanding and identifying the organization's impact on the issues of sustainable development, as well as learning about ESG-related good market practices in the waste industry.

> **We believe that cooperation with stakeholders will strengthen our position as a leader in the waste treatment industry, operating in a responsible and sustainable manner.**
>
> **Wiktor Mokrzycki**
> Vice-President of the Management Board

GRI: 2-22

The activity of the Mo-BRUK Group involves the treatment of industrial and hazardous waste, which is directly in line with the concept of the circular economy and has a significant positive impact on the environment.

Positive impact of the Mo-BRUK Group:

Effective use of resources

Promotion of sustainable consumption and production

Creating new jobs and contributing to economic growth

Environmental protection

Support for environmental regulations and policy

Technological innovations

In the context of a circular economy model, the Group minimizes waste while maximizing the value of waste treatment products. Industrial and hazardous waste is transformed into new raw materials that can be reused in production. This ensures that the waste is not dumped or destroyed.

The Group encourages sustainable production, helping companies and consumers to close the resource cycle. Furthermore, by reducing the amount of waste going to landfills and into the ecosystem, the Group reduces greenhouse gas emissions. The recovery of raw materials from industrial waste also helps reduce the exploitation of natural resources.

The Group's activities help companies generating industrial and medical waste comply with increasingly stringent regulations on waste management and

sustainable production. In doing so, the Group is developing new technologies and processes that improve the efficiency of raw material recovery and open up new opportunities for circular economy[4].

The business model of the Mo-BRUK Group contributes to supporting an economy that is more sustainable, efficient and resilient and, above all, consistent with the Group's sustainability goals. Their implementation is ensured by three business segments: waste incineration, RDF production and waste solidification and stabilization. In view of the chosen direction of development, the carbon footprint calculation in 2023 and the planned announcement of the ESG strategy in Q4 2023, in 2022, the organization began to be clear about priorities for the coming years, which are being promoted among the managerial staff and employees.

> **We create new jobs in the circular economy sector and contribute to economic growth by creating new sales channels for the secondary raw materials we generate.**

Wiktor Mokrzycki
Vice-President of the Management Board

Priorities of the Mo-BRUK Group connected with sustainable development:

Short-term:

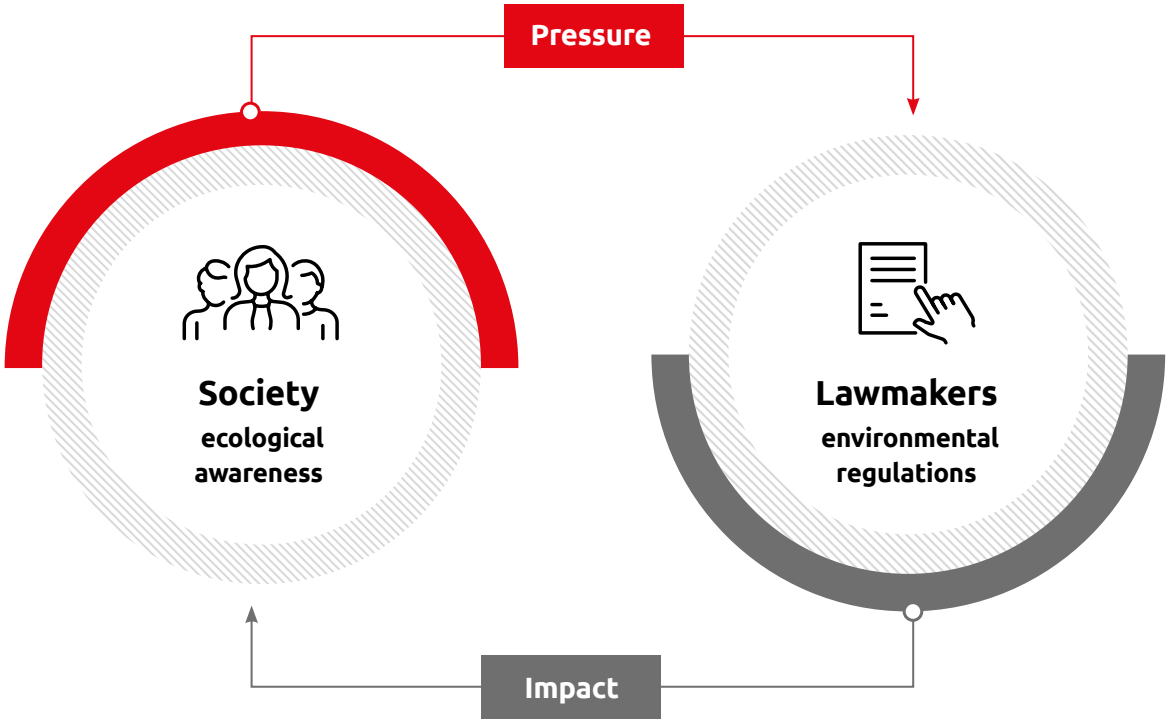
1. **Education and awareness – training of employees on the principles of sustainable development, promotion of broadly-conceived environmentally sound waste management**
2. **Waste management – increasing thermal waste treatment capacity by 18 thousand tons per year and waste recovery capacity by 110 thousand tons per year**
3. **Cooperation – selecting suppliers and partners who share the same sustainable development values**

Medium-term:

1. **Optimization of processes – improvement of energy efficiency and reduction of emissions**
2. **Development of RDF products – expansion of the RDF production capacity, focus on developing markets for RDF and exploration of other potential uses for this fuel.**
3. **Sources of energy – installation of a photovoltaic system with the capacity of 22.5 MW by the first half of 2024.**
4. **Development of new technologies – treatment of a wider range of wastes**

[4] More on this topic in Chapter 3.

The Mo-BRUK Group's business model is supported by current social and political trends. These are manifested in society's growing environmental awareness and the ever-increasing number of environmental regulations. These areas are interconnected. Society's environmental and sustainability awareness is leading to a greater emphasis on responsible waste management, which in turn is driving the introduction of stricter regulations for landfilling and disposal of waste. Regulations affect the activities of businesses, through which they spill over into the rest of society. As a result, demand for waste treatment and disposal services is increasing.



An example of a new regulation is the Large Degraded Land Areas Act, which was drafted in 2022 and promulgated by the government in April 2023. Such regulations may potentially have a very significant impact on Mo-BRUK's business of providing ecological bomb disposal services to local municipalities. The bill focuses on the elimination and reduction of negative impacts on the environment and public health resulting from the degradation of vast areas by the activities of industrial plants. The main problem is the waste that has been accumulated in the past on the sites of state-owned establishments when there was no specific legislation regulating proper waste management to ensure adequate environmental protection. The Group anticipates that the number of such regulations will increase, providing a direct opportunity not only to improve financial performance, but also to meet sustainability goals.

GRI: 2-25

In its business activity, the Mo-BRUK Group pays special attention to the quality of its processes and products, acting on the basis of respect for the environment and surroundings. In order to effectively address any adverse impacts of the activity, mechanisms have been put in place to respond to possible complaints and grievances. Two key documents in that area are Instructions I10.1 and IO-04. Their aim is to handle complaints and grievances filed by the Group's stakeholders, especially customers, quickly and effectively.

Instruction I10.1 for the Waste Recovery Plant in Niecew

1. → **2.** → **3.**

Stakeholder

Scope of complaint or grievance:

- product quality or quantity
- construction work
- environment

Manager of the Waste Recovery Plant

- handles the complaint or grievance
- decides on the complaint

Management Board Member

- accepts the decision on the complaint

Instruction IO-04 for the accredited research laboratory

1. → **2.** → **3.**

Stakeholder

Scope of complaint or grievance:

- product quality or quantity

Manager of the Waste Recovery Plant

- keeps a register of complaints and grievances
- reviews the complaint within 30 days
- decides on the complaint
- decision on internal audit

Management Board Member

- accepts the decision on the complaint
- approves the internal audit report

In January 2022, the customer satisfaction survey with Mo-BRUK S.A.'s Research Laboratory was updated. An analysis of the results, opinions and suggestions makes it possible to identify areas for improvement
as well as those that are already of a high quality.

This knowledge is crucial for the Laboratory to better tailor its services to the needs and expectations of its customers. As a result, stakeholders are involved in the design, review, operation and improvement of mechanisms to prevent potential negative impacts to which Mo-BRUK may contribute.

Ethics in activity

GRI: 2-26 | 205-3 | 205-3 WSE: G-P4

Mo-BRUK recognizes the importance of implementing ethical principles in its business activities. This requires not only the development of appropriate policies and codes of conduct, but also the promotion of a values-based organizational culture. This, in turn, involves building ethical awareness and providing mechanisms for reporting ethical violations or concerns. It is the Company's Management Board that sets the tone for these activities, striving every day to make decisions in accordance with the adopted principles.

The purpose of developing and implementing the "Code of Values" was to create an organizational culture based on shared values, to integrate employees around common goals, and to build trust with stakeholders. By applying these values in their daily work, employees help build lasting relationships with customers, business partners and the community, and contribute to the long-term success of the company.

Izabela Hals
Legal Assistant

Mo-BRUK's values

Mo-BRUK's Code of Values[5]:

- is a collection of principles which define the fundamental values on which Mo-BRUK's activity is based. It is an expression of an internal compass which directs employees' conduct and shapes the organizational culture,
- providing employees with guidelines about the right way to act in various situations. It helps avoid moral dilemmas and make decisions in accordance with the values adopted by the organization,
- it helps build trust both inside the organization and outside, among clients, business partners and communities.

[5] Every employee of the Mo-BRUK Group undertakes in writing to act in accordance with the values described in the Code.

Mo-BRUK's principles and values

Innovation

It means seeking innovation in each area of the business, being open to new solutions, pursuing the implementation of novel solutions and an innovative approach to solving encountered problems.

Professionalism

Professionalism is observed in providing products and services of the highest quality, representing the Company with dignity and caring about its image in external contacts. Acting with care and properly performing each assigned task. Simplifying procedures and communicating effectively. Promoting direct communication, timeliness and a systematic approach to the performance of difficult and complex tasks.

Responsibility

It means complying with the law, caring for the environment and respecting the surroundings. It also means being alert and responding to irregularities.

Cooperation

It is understood as sharing knowledge and experience and being open to accept them from others. Getting to know and understand different opinions and pursuing a joint objective – the development of the company. Being part of a team and being guided by respect and kindness and best practices.

Prevention of corruption and conflicts of interest

GRI: 2-15 | 2-16

The company has Anti-Corruption Policy, which is an important tool in building an organizational culture based on integrity, ethical conduct and compliance with laws. The implementation and observance of the Policy contribute to building trust, inside and outside, and minimizing the reputation risk connected with corruptive behaviors.

The most important elements taken into account in the Anti-Corruption Policy:

- Definition of corruption: The Policy clarifies what is meant by corruption, including any action that violates the principles of integrity, such as bribery, illegal gifts or actions to obtain unlawful benefits, i.e. what from the company's perspective is a suspicious situation.

- Rules of conduct: the Anti-Corruption Policy sets out the principles that should guide employees in their actions. These include prohibitions on accepting and giving bribes, avoiding conflicts of interest, abusing power or using confidential information for personal gain.
- Procedures and controls: the Anti-Corruption Policy defines procedures and controls to prevent, detect and resolve potential cases of corruption. This includes the obligation to report suspicious behavior.
- Accountability and sanctions: the Policy specifies the consequences of violating the anti-corruption rules and defines the responsibility of employees for complying with the policy. It includes sanctions such as disciplinary measures, financial penalties and even termination of employment.

GRI: 205-3 | 2-27

In 2022, Mo-BRUK recorded no reports of breaches of the anti-corruption policy.

There have been no breaches, either, of any regulations governing the Group's activities.

GRI: 205-2 WSE: G-P3

All the Management Board Members and employees have been informed about anti-corruption policies and procedures. The organization does not conduct regular training courses on the anti-corruption policy for employees and business partners. The Policy is available on Mo-BRUK S.A.'s website.[6]

Preventing a conflict of interest is an important element of our activity as a listed company. We believe in integrity, transparency and responsibility as foundations of our success. Therefore, as the Supervisory Board Chairman, I promise to take any actions necessary to minimize and manage conflicts of interest in our organization. We will strive to develop and implement effective policies, procedures and controls and promote fair business practices that ensure integrity, independence and loyalty in our operations. Our aim is to maintain the trust of our shareholders, investors, employees and other stakeholders and to build long-term and sustainable value for our Company and the community in which we operate.

Kazimierz Janik
Chairman of the Supervisory Board

The company adheres to the principles of corporate governance contained in the guidelines entitled "Best Practice for Listed Companies 2021" with regard to, among other things, the prevention of conflicts of interest and related party transactions.

Vice Presidents of Mo-BRUK S.A. are Management Board Members of Ginger Capital Sp. z o.o., which is the largest shareholder of Mo-BRUK S.A. Ginger Capital Sp. z o.o. does not conduct activity which would be competitive to Mo-BRUK, as a result of which there is no conflict of interest.

Mo-BRUK S.A. is the parent entity in the Mo-BRUK Group (the highest-level entity), holding 100% of shares in Raf-Ekologia Sp. z o.o. – incineration plant for industrial, medical and veterinary waste.

[6] https://mobruk.pl/wp-content/uploads/2023/08/POLITYKAANTYKORUPCYJNAMOBRUKSA2191127.pdf

Whistleblowing

An employee who has witnessed a situation that is potentially a breach of the anti-corruption policy, procedures or rules of law, including those relating to the obligations of a public company listed on the Stock Exchange, shall report it to a Mo-BRUK Management Board Member immediately, no later than within 48 hours. They can do in a way that allows them to remain anonymous.

A whistleblower may send to the President of the Management Board:

- an email from an external address, e.g. set up only to send a report and handle further correspondence,
- usunąć "by sending" a traditional letter to the address of the registered office of Mo-BRUK S.A.

After getting information from a whistleblower, the President shall start a procedure of assessing the validity of the report, including:

- hearing of persons who may have information on the reported irregularity, including alleged participants in the irregularity,
- technical and discovery activities (including review of existing documentation, e-mail correspondence, telephone calls) in order to secure evidence.

After the process of evaluating the legitimacy of the notification, the President prepares a proposal for action, which may include:

- involving public authorities,
- drawing consequences against employees if the notification is deemed justified,
- protecting the Company's interests,
- eliminating the risk of similar cases in the future.

The President submits the proposed action to the Management Board for approval and implementation. If the irregularities are related to acts or omissions by Management Board Members, anonymous notifications should be sent to the address of the Supervisory Board.

The Management Board undertakes to ensure anonymity and safety of the whistleblower to prevent retaliation by the employer.

Cooperation with stakeholders

Stakeholders and stakeholder engagement

GRI: 2-6 | 2-29

In 2022, in the course of workshops with representatives from various departments, the Mo-BRUK Group identified key stakeholder groups on which it has particular impact. The Group communicates regularly with each of these groups.

The Group continuously monitors the reported needs and expectations, which the Management Board and employees analyze and take into account when making decisions.

Map of Mo-BRUK Group's stakeholders

- Customers: RDF and process steam buyers
- Customers: waste-generating entities
- Public administration (local and state government)
- Employees
- Investors and shareholders
- Transportation companies
- Intermediaries
- Suppliers
- Consulting and advisory services
- Contractors in investment projects
- External laboratories
- Stock exchange
- Regulators in Poland
- Regulators outside of Poland (EU)
- Financial institutions and insurers
- National and local media
- Law firms
- Analysts
- Universities
- Rating agencies
- Local associations
- Industry organizations
- Natural environment
- Brokerage houses

Key stakeholders include two groups of customers: RDF fuel and process steam offtakers and waste generators, as well as public administration (local and national), employees, investors and shareholders.

Customers

- RDF and process steam off-takers
- Waste-generating entities

An important element in building relationships with customers is to listen to their expectations, but also to highlight the challenges faced by environmentally responsible companies. The Mo-BRUK Group's customers are mainly waste producers, waste brokers, municipal companies, local authorities and cement plants.

Building direct and lasting relations with its customers is a key aspect of the Group's activities. Regular contact, such as phone calls, direct meetings and e-mail correspondence, is an effective method for maintaining communication with clients. The sales department plays an important role in maintaining these contacts. The participation of the Mo-BRUK Group's representatives in conferences and trade fairs provides an opportunity to present the company's range of products and services to customers. This allows customers to learn about the products, make contacts and deepen their awareness of the activities of the Mo-BRUK Group. Dialog with key stakeholders, including customers, is also conducted via social media and the corporate LinkedIn account.

Public administration (local and state government)

Mo-BRUK Group employees maintain ongoing contacts with public administration officials. The most common communication channels used for this purpose are: phone and e-mail, as well as letters. Regular contact facilitates better understanding of the topics discussed with officials. Mo-BRUK supports local governments and municipalities in solving important issues such as the removal of illegal waste dumps and ecological bombs. Working with local government officials, Mo-BRUK contacts local communities to be aware of the issues that the company should pay particular attention to.

Employees

Employees are one the key stakeholder groups. They are the foundation of the Group's success and growth. This is mainly due to shared values such as: commitment, integrity and innovation, which form the foundation of Mo-BRUK's corporate culture. The two-way exchange of information and regular dialogue enable the Group to better understand the needs and expectations of all team members. Through participation in decision-making processes, employees are involved in the organization's development. They are supported with various training and development programs. The Group strives to create an inspiring and motivating work environment that does not exclude anyone. We promote diversity and equal opportunity. Common success is guaranteed by safety, both in physical and mental dimension. We ensure safe working conditions by complying with the highest standards of health and safety.

Investors and shareholders

To satisfy the needs of individual and institutional investors, the Mo-BRUK Group takes a number of steps to ensure transparent and reliable communication. The main areas of dialogue are the regular publication of financial results and ESG topics.

The communication methods include: quarterly summary reports, annual reports and the ESG report, which was published for the first time in 2021. The time of publication of periodic results is a period of particularly intensive contacts – this is when special on-line events are organized. In 2022, about 20 such meetings were organized, which were attended among others by Polish and international investors and journalists. A Q&A session is an important element of dialogue. All meetings are held to the highest standards of the Warsaw Stock Exchange. Chats with investors are organized regularly.

The dialogue with investors is supported by the Stock Exchange tab on the Mo-BRUK Group's website, which contains current reports, information on events and contact details for the person in charge of investor relations.

The dialogue with investors is supported by the Stock Exchange tab on the Mo-BRUK Group's website, which contains current reports, information on events and contact details for the person in charge of investor relations.

GRI: 2-28

Membership in organizations

During the reporting period, the Mo-BRUK Group participated in the work of two organizations: Association of Employers of Industrial and Medical Waste Thermal Transformation Plants for Health Care and the Environment (joined on 31 December 2021) and the Polish Economic Society (joined on 8 June 2022). Participation in industry organizations has enabled the Group to share experiences, best practices and knowledge associated with the sustainable development of its operations.

Association of Employers of Industrial and Medical Waste Thermal Transformation Plants for Health Care and the Environment

(joined on 31 December 2021)

The aim of the Association is to promote the management of industrial and hazardous waste, including medical waste, ensuring that the life cycle of the waste is closed in a single cycle with maximum utilization of its energy value. The Association brings together companies that meet the strictest ethical and professional requirements, are leaders in the waste management industry, apply the best available technologies and environmentally-friendly waste treatment processes.

Polish Economic Society

(joined on 8 June 2022)

Mo-BRUK supports the Polish Economic Society, which aims, among other things, to represent the interests of its members and take action to improve the business environment. Its members include, for the most part, owners, presidents and managers of large, medium and small companies, many from the manufacturing sector, who are professionally and socially active and support values such as trust, respect for people, diligence and thrift. The activity of the organization includes, among others, meetings and business conferences aimed at sharing knowledge and experience. Henryk Siodmok, President of Mo-BRUK, was the main guest at one of these conferences.

Questions and answers

This part of the report contains the most common questions from stakeholders. We answer these questions at the end of each chapter to help all stakeholders gain a better understanding of the Mo-BRUK Group's approach to sustainability.

Q: Does the Group have plans and procedures in place in the event of incidents that could lead to a crisis?

A: Yes, the Group has an "Emergency Management Plan" in place, which identifies 11 basic incidents that may lead to a crisis and anticipates their consequences. Given the nature of the Group's operations, these primarily concern the possibility of environmental pollution and contamination. An example is a fire at a waste treatment plant that can potentially pollute the atmosphere and surface water.

The Group adheres to the plan and takes preventive measures, which have largely eliminated emergencies during the reporting period. The plan contains a detailed description of the techniques used to monitor and maintain the technical infrastructure and keep it in good condition. The emergency plan provides for the implementation of specified measures aimed mainly at reducing emissions. Reaction to certain incidents is regulated by more detailed instructions, which are the subject of employee OHS training. These relate, for example, to the storage and transportation of waste or the discharge of effluents.

Q: What are the key risks related to the Group's activity that could lead to a crisis? How are they monitored and managed?

A: At the general level, the organization has in place a risk and opportunity management process. It specifies in detail how to deal with risks in the course of operations within an integrated quality, environment and OHS management system.

The Group updated its risk and opportunity analysis in 2022, identifying 115 different risks inherent in its operations, related to three areas: waste control, laboratory testing and various environmental aspects.

For each risk, it specified, on a numerical scale, the probability of its occurrence, the significance of its impact (also based on the impact on the Group's finances) and its materiality for the Group's activities. In addition, it identified the potential cause of the emergency and described its expected impact. Based on this data, appropriate threat monitoring measures were defined to enable management and prevention of this risk.

Q: How is the Management Board involved in managing emergencies and what are the responsibilities of the Management Board members in this respect?

A: The members of the Management Board are involved in most processes related to emergencies. The Management Board of Mo-BRUK S.A. is responsible for ensuring that the Group has the necessary resources to implement actions in respect to the risk that may potentially cause an emergency. The Management Board members also cooperate with the Integrated Management System Representative in developing the risk analysis. In addition, the President of the Mo-BRUK S.A. Management Board approves all documents, including procedures and instructions, applicable to emergency management.

2 Employees

”

We are united by a responsible attitude – together we create a sustainable future

Employment and working conditions in the Mo-BRUK Group

The development of the Mo-BRUK Group reflects a long-term strategy that combines economic growth with environmental protection and social responsibility.

The Group believes that its employees and their commitment are the key to its success. It is also committed to building an organizational culture that puts employee relations first.

The understanding and respect shown to each team member contribute to the efficiency of the entire organization. The high quality of cooperation at all levels is invaluable, and the effects of this approach can be seen in all aspects of the Mo-BRUK Group's activities.

Employment structure

GRI: 2-7

Number of employees

	Women	Men
Mo-BRUK	28	147
Raf-Ekologia	3	35
Total	**31**	**182**

175 **Mo-BRUK** employees

38 **Raf-Ekologia** employees

TOTAL **213**

Number of permanent employees

	Women	Men
Mo-BRUK	24	129
Raf-Ekologia	2	33
Total	**26**	**162**

153 **Mo-BRUK** employees

35 **Raf-Ekologia** employees

TOTAL **188**

Number of temporary employees in 2022

	Women	Men
Mo-BRUK	4	18
Raf-Ekologia	1	2
Total	**5**	**20**

22 **Mo-BRUK** employees

3 **Raf-Ekologia** employees

TOTAL **25**

Number of full-time employees in 2022

	Women	Men
Mo-BRUK	25	146
Raf-Ekologia	3	35
Total	**28**	**181**

171 **Mo-BRUK** employees

38 **Raf-Ekologia** employees

TOTAL **209**

Number of part-time employees in 2022

	Women	Men
Mo-BRUK	3	1
Raf-Ekologia	0	0
Total	**3**	**1**

4 **Mo-BRUK** employees

0 **Raf-Ekologia** employees

TOTAL **4**

The data was collected using HR and payroll software.

The Group does not employ any non-guaranteed hours employees ("on-demand employees").

The figures reflect the situation at the end of the reporting period, i.e. 31 December 2022.

There were no significant fluctuations in employment numbers during the period.

GRI: 2-8

In addition to salaried employees, the Group also collaborates with individuals who are not employees and whose work is controlled by Mo-BRUK. According to the GRI standards, they are classified as "workers who are not employees" for the purposes of this disclosure and their number is shown in the table below.

Type of work	Number of workers who are not employees	Type of contract
Advisory	1	Mandate Agreement
White-collar	2	Traineeship
White-collar	2	Mandate Agreement
Intermediation	7	B2B
Service	8	Mandate Agreement
Total	**20**	

The figures reflect the situation at the end of the reporting period, i.e. 31 December 2022. None of the collaboration types are seasonal.

Approach to employee remuneration

GRI: 2-19 | 2-20

The Mo-BRUK Group's remuneration policy is focused on building employee loyalty. It also rewards employees for their commitment to professional development. In 2022, the organization hired one person as part of a bonus system for recommending new employees.

The Group includes a non-compete clause in the employment contracts of technologists and sales department employees. Employees undertake not to accept employment with other companies in the waste industry that compete with Mo-BRUK S.A. within 12 months of termination of their employment. A failure to comply with the contract will require the former employee to make specified payments. Mo-BRUK did not invoke the non-compete clause in 2022.

In the case of contracts to raise professional qualification, the organization has implemented a mechanism that provides for the deduction of costs related to the financing of education (such as courses, training or studies) if the employee decides to terminate the employment relationship before the end of the term of the loyalty contract. Mo-BRUK did not apply this solution in 2022.

During the reporting period, the Mo-BRUK Group did not operate any pension plans of its own. Mo-BRUK fully complies with its obligations under labor law, including the payment of retirement severance pay and the implementation of Employee Capital Schemes. In 2022, the retirement severance pay was paid to two people.

In the context of ESG, the approach to compensation of the company's top governance bodies is of great importance to us. Through an appropriate remuneration structure, we promote long-term thinking, innovation and accountability for our environmental impact on the environment. We believe that adequate compensation is an important part of sustainability. We make efforts to ensure that our approach to remuneration is balanced and reflects both financial and non-financial measures of success. Fair pay motivates our leaders to make decisions that are in the long-term interests of all our stakeholders, including employees, customers, suppliers, local communities and the environment.

Paweł Rosiek
HR and Finance Specialist

At the Mo-BRUK Group, the remuneration of the top governance bodies and senior managers is set transparently in accordance with the provisions of the "Remuneration Policy for the Management Board and Supervisory Board". According to this document, part of the compensation is dependent on the fulfillment of certain criteria related to the achievement of targets set for the period. These targets may refer to various areas of the Group's activity, including sustainability. The same applies to bonuses, which also depend on the achievement of the intended effects of the commitments made, such as those related to the health and safety of employees, the adaptation of operations to legal requirements, the development of the organization, or the building of a strong brand with a positive impact on the environment. The payment of part of the salary in the form of performance-related bonuses is part of creating an organizational culture that promotes innovation and a sense of responsibility, which are the foundation of sustainable development activities.

Assumptions of the compensation policy for members of top governance bodies and senior management in 2022:

Management Board

- the remuneration amount is determined by a Supervisory Board resolution
- fixed monthly remuneration and a performance bonus

Supervisory Board

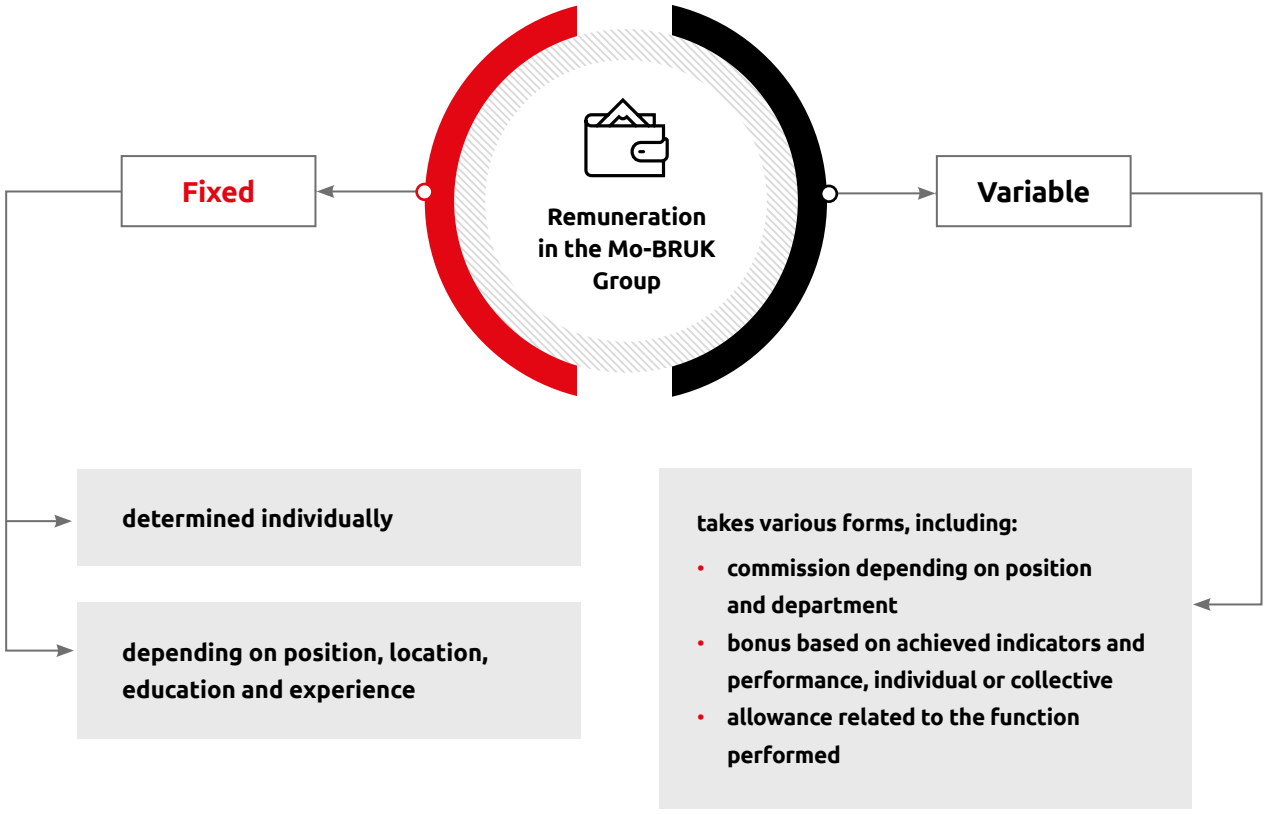
- the remuneration amount is determined by resolutions of the General Meeting, which are adopted by a majority of 65% of the votes present at the General Meeting, as stipulated in Mo-BRUK's Articles of Association.
- fixed monthly remuneration depending on the function performed

Audit Committee

- the remuneration amount is determined by resolutions of the General Meeting, which are adopted by a majority of 65% of the votes present at the General Meeting, as stipulated in Mo-BRUK's Articles of Association.
- fixed monthly remuneration depending on the function performed

Senior management

- the remuneration amount is determined on a case-by-case basis during the recruitment process
- fixed monthly remuneration and a bonus based on indicators and performance



Members of Mo-BRUK's governance bodies actively monitor and participate in the process of determining employee remuneration. The Group's structure did not have a separate remuneration committee or other body with similar functions in 2022. Mo-BRUK did not solicit opinions from stakeholders, including shareholders, regarding the level of remuneration. The terms and conditions of employment, including remuneration amounts, are determined on a case-by-case basis for each employee by the Management Board member in charge of the unit, with the participation of the immediate supervisor. The involvement of Management Board members in the process to determine remuneration ensures direct oversight of the process by the individuals responsible for the company's strategy, including its sustainability goals.

The process to determine remuneration at Mo-BRUK is carried out internally in line with the highest standards of management and transparency. We take into account the expectations of potential employees, current labor market trends and the financial capacity of the organization. We also strive to ensure that appropriate remuneration provides incentive to ensure a positive impact on the environment.

Rafał Michalczuk
Vice-President of the Management Board – Chief Financial Officer

GRI: 2-21

Annual remuneration in Mo-BRUK S.A. in 2022

5.26

the ratio of the annual compensation for the organization's highest-paid individual to the median annual compensation for all employees (excluding the highest-paid individual)

8.28*

the ratio of the percentage increase in the annual compensation for the organization's highest-paid individual to the median percentage increase in the annual compensation for all employees (excluding the highest-paid individual)

* This means that, compared to 2021, the percentage increase in the median compensation for employees was higher than the increase in the compensation for the highest-paid individual.

Data based on the number of contracted employees as at 31 December 2021 and 31 December 2022.

GRI: 2-21

Annual compensation in Raf-Ekologia Sp. z o.o.

4.30

the ratio of the annual compensation for the organization's highest-paid individual to the median annual compensation for all employees (excluding the highest-paid individual)

The amounts of the annual compensation for the organization's highest-paid individual and the median annual compensation for all employees (excluding the highest-paid individual) remained **unchanged** as compared to 2021.

Data based on the number of contracted employees as at 31 December 2021 and 31 December 2022.

WSE: S-P2

Pay equality ratio – ratio of the average remuneration of men to women in the organization

28.63%

Mo-BRUK S.A.

-16.73%*

Raf-Ekologia Sp. z o.o.

* The negative value means that on average women's remuneration is higher than men's by this amount.

Data prepared based on the number of contracted employees as at 31 December 2022.

GRI: 2-30 WSE: S-P4

In 2022, no employee of the Mo-BRUK Group belonged to a trade union or was covered by a collective bargaining agreement. The Group as an employer respects the employees' right to associate freely and to engage in collective bargaining.

The Group does not have a formal policy regarding trade unions and collective bargaining agreements, but we are not opposed to them being established in our organization. We believe in open communication and transparency with our team, and we are willing to cooperate with various forms of employee representation if our employees decide to do so.

Attorney at law, Doctor Lech Dubiński
Legal Director

Occupational health and safety solutions

Prevention of threats in OHS area

GRI: 3-3 Occupational health and safety, protective measures and implemented solutions aimed at ensuring employee safety | 403-7

One of the material topics for the Mo-BRUK Group in 2022 was occupational health and safety, protective measures and implemented solutions aimed at ensuring employee safety. The Group is working on preventing workplace accidents and occupational diseases, while observing the requirements of law and other applicable requirements. In 2022, Mo-BRUK continued its efforts to implement a health and safety system in the organization.

To prevent potential injuries and accidents, the Group made sure – through training and issuance of detailed instructions – that the machinery, tools, vehicles and other production equipment were maintained in good condition and used properly by employees. In order to operate the equipment and perform any related activities, a worker must be trained and learn the rules for use of the equipment. The Group also provided personal protective equipment to all workstations where it was essential.

The Group systematically analyzed potentially hazardous incidents in order to draw conclusions and take appropriate preventive measures. The involvement of employees in this procedure was particularly important: they reported on issues related to their workplace health and safety, gave their opinions on material problems in this area and participated in the decision-making process on issues related to their safety.

Employees were encouraged to observe OHS rules, which further strengthened the culture of safety throughout the company.

The effectiveness of the activities was regularly monitored and progress was evaluated during the annual analysis of the health and safety status of the plants. The Group has decided to continue its efforts in this area with the aim of continuously improving and strengthening the sense of safety in the organization.

GRI: 403-1

In 2022, Mo-BRUK was in the process of voluntarily implementing a health and safety management system based on ISO 45001. It is designed to help the Group implement an effective occupational health and safety management system to minimize the risk of accidents, injuries and occupational diseases. The standard is based on a risk management model and focuses on a proactive approach to OHS management. It is also tailored to the context in which the Group operates and its interactions with employees and other stakeholders. Ultimately, the system will cover all the Group's sites and employees.

Systemic occupational health and safety solutions introduced in 2022:

creation of the position of the Management Board Representative for the Integrated Management System,

creation of the position of OHS and Fire Protection Specialist for the entire organization,

ongoing cooperation with professional service providers in the field of workwear[1],

occupational health and safety audits at plants

In 2022, Mo-BRUK S.A. created two positions with responsibilities that include occupational health and safety issues. The Management Board Representative for the Integrated Management System analyzes the impact of the quality of processes, products and services offered on the health of employees and helps prevent the occurrence of accidents and other negative consequences.
The hiring of a OHS and Fire Protection Specialist was a response to the need to unify occupational health and safety and fire protection policies in all of the company's plants. The OHS specialists employed by each plant received support and assistance in coordinating their activities from an expert operating at the Group level.

Specialists conducted scheduled and ad hoc inspections of OHS conditions, updated the occupational risk assessments for the individual workplaces and evaluated occupational risk at the workstations where

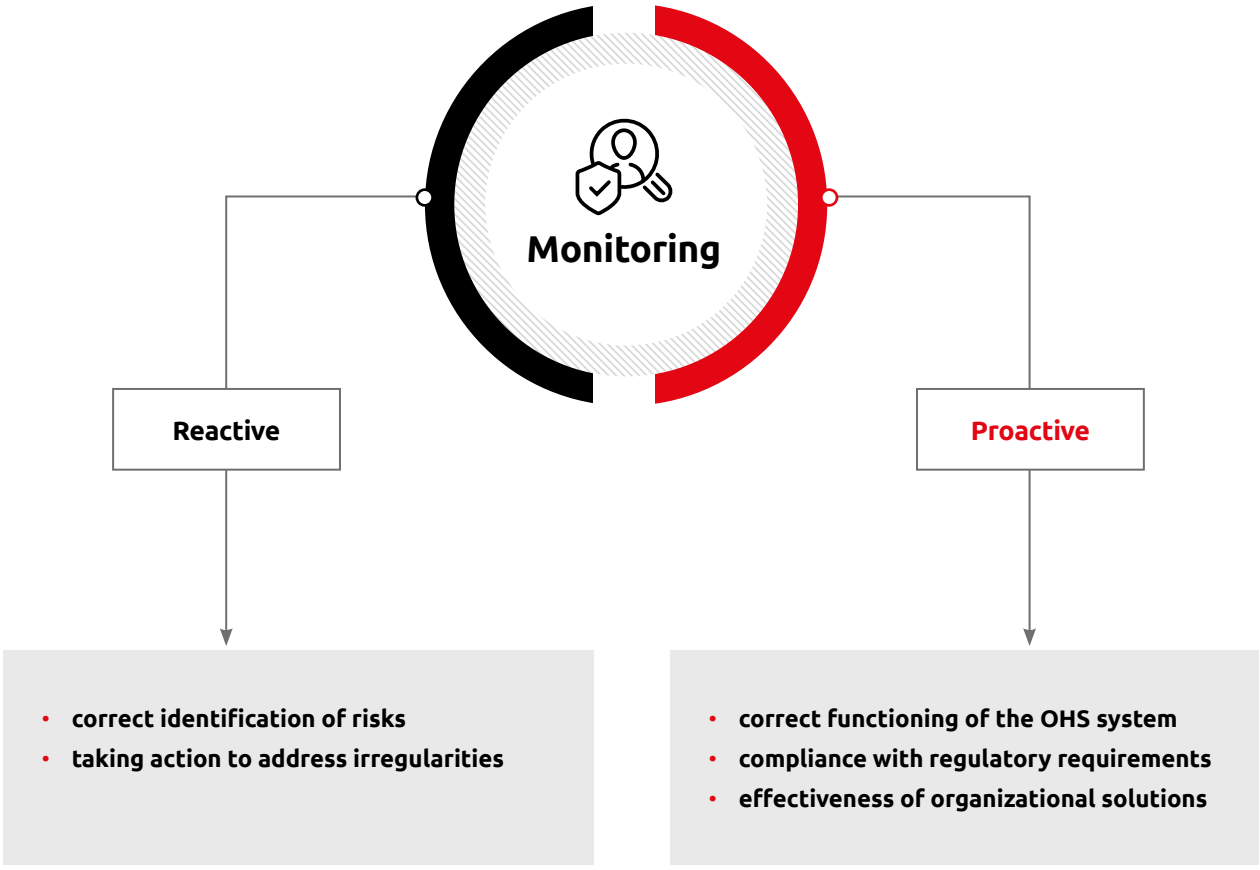
[1] Workwear (and protective clothing) is required by law for health and safety reasons, among others.

new equipment or new technologies were introduced. All these activities were regularly reported to the Management Board. During the reporting period, in connection with the implementation of ISO 45001, the Group OHS specialist carried out an OHS audit in all plants and presented the conclusions and suggestions for improvement in individual areas. As a result of this exercise, documentation and regulations have been supplemented to raise OHS standards. Among other things, fire prevention instructions and fire protection plans were updated, as they are particularly important due to safety concerns related to the collection and treatment of waste. All these activities were aimed at identifying hazards and reducing OHS risks in the Group's operations.

By working with professional workwear suppliers, the Group has ensured that employees have continuous access to clothing that meets the highest standards.

GRI: 403-2

The Mo-BRUK Group is committed to the quality of its occupational health and safety processes. To this end, the organization has adopted two types of monitoring: reactive and proactive. This approach ensures that risks are identified quickly and the Group responds appropriately.



OHS monitoring in the Mo-BRUK Group

1. **Is a source of information on the state of the OHS system.**

2. **Allows to determine the effectiveness of the OSH system.**

3. **Provides a basis for decisions regarding the OSH system.**

In the context of responsibility, especially in the area of employee health and safety, the organization attaches great importance to the identification of work-related risks. The Group implements routine processes that are carried out in line with legal regulations and include regular assessments of occupational risks at individual workplaces. The process takes into account measurements of environmental factors that may affect safety and health of the Company's employees.

By applying two methods of occupational risk assessment: regular and extraordinary, the approach to risk management is constantly updated and adapted on an ongoing basis to dynamically changing conditions.

The assessment is carried out:

- every two years (regular)
- whenever new technologies are introduced at the plants (extraordinary)
- after incidents that may affect the safety of employees (extraordinary)

In 2022, each staff member had the ability to express his or her concerns relating to occupational health and safety. This process was an integral part of the ESG risk management strategy. "Report boxes" easily accessible to all employees were located at plant sites to collect information on safety hazards, working conditions, and other health and safety concerns.

The box was in an area that was not monitored by CCTV cameras, which protected the privacy of employees. Anyone interested was able to share their own observations at any time without revealing their personal information. A team of OHS specialists regularly checked the contents of the box. Mo-BRUK encouraged all employees to use the box and share their concerns in order to build a safe workplace together.

The document "Rules of Conduct – Accidents, Incidents, Right to Refuse or Stop Work" describes the processes that existed in 2022 aimed at avoiding situations that could cause injury or health impairment to an employee. Among other things, it explains how employees are protected from the negative consequences of refusing to perform a risky task. The process is also described in the "Work Regulations". The documents are publicly available to all employees.

Grounds for refusing or stopping work based on the employee's rights:

1. **Employee concerns about injury or ill health,**

2. **Provision of an appropriate explanation* by the employee,**

GRI: 403-3

In the health care area, in 2022 the Group referred employees for initial and periodic medical tests, as required by the law. When necessary, employees were provided transportation to medical facilities and tests were performed during work hours. Health care services for employees in the context of their work were provided by the appropriate medical facility for each site with specialist occupational medicine offices. Medical, laboratory and specialist tests were performed in accordance with legal requirements.

* The employee does not suffer negative consequences even if he or she provided an explanation, but after the event was reviewed, the concern was found to be unjustified.

Employee engagement

GRI: 403-4

Each Mo-BRUK Group plant has employee representatives who are consulted on occupational health and safety issues. The representation consists of at least two persons.

OHS activities consulted with employee representatives:

Establishment of new criteria for occupational risk assessment,

changes in the organization and equipment of workplaces,

designation of persons to provide first aid,

introduction of new technological processes and substances that may pose a threat to a workers' health or life,

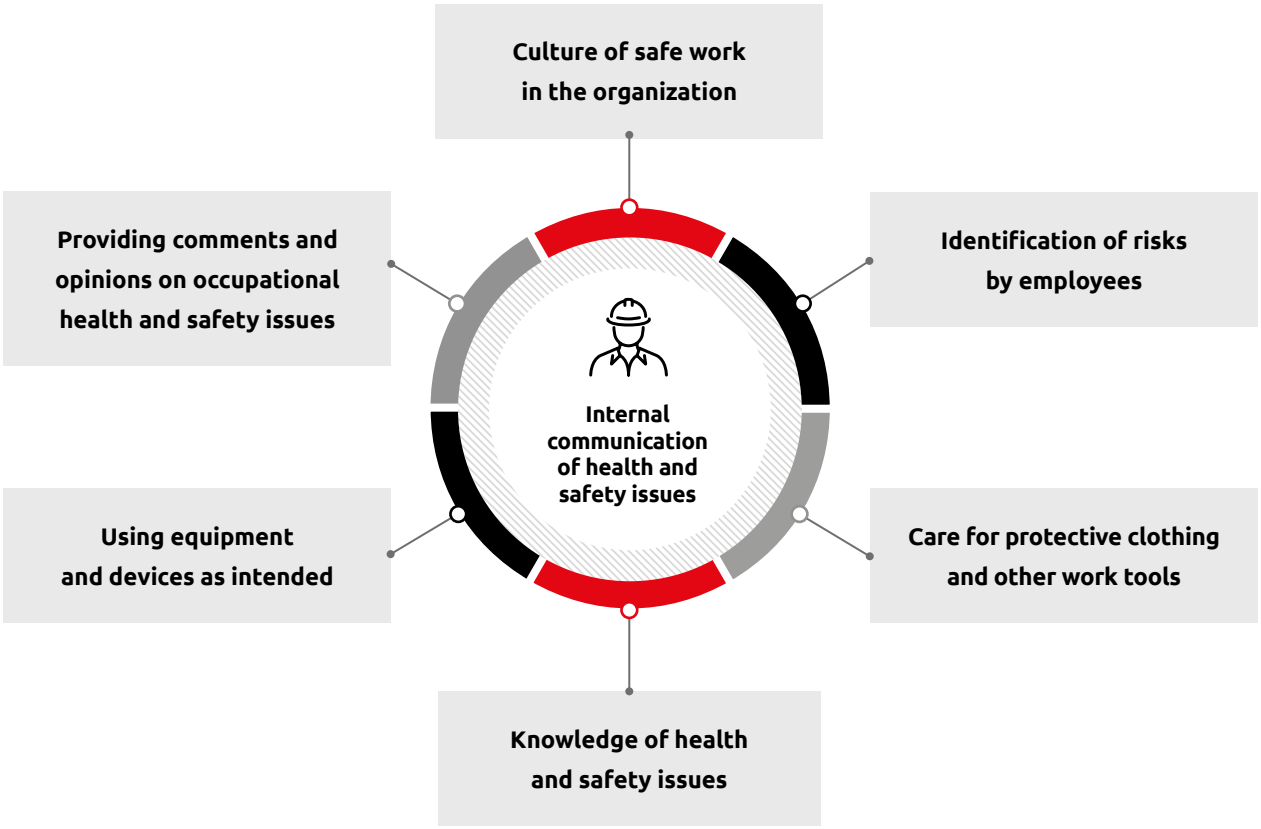
assignment of protective equipment, clothing and footwear,

method used to inform workers of risks,

delivery of OHS training.

Occupational health and safety information is communicated to workers on a regular basis by supervisors and shared on bulletin boards at the plants. Additionally, in 2022, the Mo-BRUK Group launched an Occupational Safety Day in 2022 to engage all employees in hazard identification and risk assessment. On the last Monday of each month, an intensive internal communication campaign was carried out to motivate employees to pay attention to occupational health and safety issues.

Occupational Safety Day



GRI: 403-5

In 2022, the Mo-BRUK Group conducted an intensive training program for employees, with which it emphasized its commitment to occupational health and safety. The program covered various aspects of OHS related to the specific functions and duties of employees. The training covered both the generic OHS principles as well as training on specific work-related hazards. Regular OHS training was also carried out for those in charge of employees. Special emphasis was placed on issues such as premedical first aid, fire protection and safe work at height.

The duration and content of the training was in accordance with the applicable regulations, including the Regulation of the Minister of Economy and Labor of 27 July 2004 on Occupational Health and Safety Training and the Fire Protection Act of 24 August 1991.

Name of training	Number of participants
Initial OHS training	19
Training - on-site job-specific OHS instruction	105
Periodic OHS training for blue-collar jobs	75
Periodic OHS training for white-collar (office and administration) jobs	11
Periodic OHS training for jobs that entail management of staff	3
Pre-medical first aid training for employees	8
Fire prevention training for employees	57

The trainers held the necessary professional certifications and the training was carried out during work hours. Each training session ended with an exam to test the theoretical and practical knowledge of the participants, which was further verified by supervisors during safety days.

To address the ongoing needs of the workers, directors and managers of individual plants had the opportunity to report the need for additional training to OHS specialists.

Risk of injury and health impairment

GRI: 403-9 | 403-10

The operation of equipment on industrial lines at Mo-BRUK plants can pose a risk of injury to the workers who operate it. There is also a health risk associated with exposure to harmful chemicals and biological substances that can lead to various illnesses and diseases. The effective OHS safety program is in place and appropriate measures are taken to properly identify potential hazards and eliminate them.

According to Mo-BRUK's guiding principles, safety of its employees is a priority. **The best evidence of this approach is the absence of any injury or ill health among its employees in 2022**[2]. Through proactive risk management and preventive measures, the Group is becoming an occupational health and safety leader in its sector.

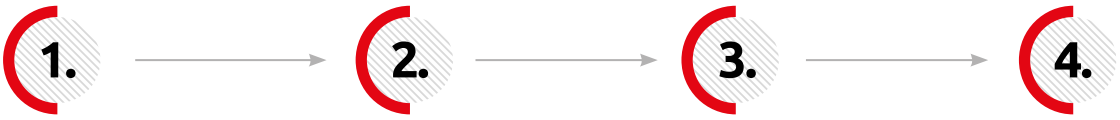
[2] There were no work-related injuries, including associated with highly harmful work, no cases of work-related ill health and no fatalities as a result of work-related injury or ill health. The data includes all employees and workers who are not employees of the Mo-BRUK Group.

Examples of work-related hazards at Mo-BRUK Group plants:

- Burns (waste may contain flammable or reactive substances),
- Mechanical injuries (working with heavy equipment and machinery, as well as working at great heights can lead to various types of injuries, including spinal injuries, crushing, cuts or fractures),
- Diseases caused by exposure to harmful chemicals,
- Infections (waste may contain harmful bacteria and viruses that cause infectious diseases),
- Strain on muscles, bones and joints (associated with work requiring repetitive, monotonous movements or carrying heavy objects),
- Dehydration, heat stroke and other problems caused by high temperatures during waste incineration.

The health and safety hazards have been identified in the process of occupational risk assessment for respective workplaces. This process was carried out in accordance with the Polish standard PN-N-18002:2011, under which occupational risk assessment must be updated regularly and constitutes an integral part of the Mo-BRUK Group's occupational health and safety management system. This method of managing risk allows the organization to identify potential problems, which helped the Group to prevent all work-related injuries and ill health in 2022.

Occupational risk assessment at Mo-BRUK



Hazard identification

Identification of potential hazards that may pose a risk to the safety and health of workers. Hazards include physical, chemical, biological and psychosocial factors.

Risk assessment

Determination of probability of occurrence of an incident and the harm that it may cause.

Definition of control measures

The measures that will help mitigate the risk include: changes in the organization of work, the use of individual protection, worker training, etc.

Documentation and review

The risk assessment process is documented and regularly updated to ensure its effectiveness.

Workplaces are continuously monitored for potentially harmful factors. Based on the results of a test conducted by an external accredited laboratory, it was concluded that the maximum allowed concentration of chemicals and intensity of other factors harmful to health were not exceeded at the workplaces tested in 2022.

It should be emphasized that the strategy for monitoring and evaluating the organization's working environment is based on current legislation and guidelines derived from the final conclusions of previous studies.

Questions and answers

Q: What measures does the company take to minimize employee exposure to harmful substances?

A: Mo-BRUK's main measures to minimize the exposure of employees to harmful substances are the use of high quality personal protective equipment, as well as work organization that eliminates hazards. It also conducts training to make employees aware of potential hazards.

Q: Is the training provided to employees tailored to the specific risks related to waste treatment?

A: Occupational health and safety specialists take into account the unique nature of the industry in which the organization operates and adapt the form and content of the training to the risks that may arise.

Q: Are the company's recruitment procedures transparent and do they offer equal opportunity for all candidates?

A: The Mo-BRUK Group chooses a professional recruitment process, which is key to our success.

In our recruitment process we promote diversity and inclusion. We make sure that our job announcements are accessible to a wide range of candidates and that our recruitment processes are designed to enable participation of people with different abilities. We regularly train our HR staff on equal opportunity and diversity to ensure that our procedures are fair and free from bias. The remuneration we offer is adequate and we treat women and men doing the same work equally. In the recruitment process, we seek qualified and ambitious people who are willing to grow.

We are aware that the success of the company depends on our workers, so we select candidates carefully at all levels of the organization. Everyone has an equal opportunity in the recruitment process, regardless of the position for which they apply. Hiring decisions are made solely on the basis of a candidate's qualifications and achievements, and not on the basis of gender, age, physical ability, race, religion or national origin. We believe strongly in the value of diversity and equality in the organization, and our hiring policies prohibit discrimination of any kind.

Q: Did any fires break out at Mo-BRUK Group facilities during the reporting period? What effect did they have on employee health and the environment?

A: In July 2022, a fire broke out in a storage and production hall at the Inorganic Waste Recovery Plant in Skarbimierz. The cause of the fire was spontaneous combustion. In accordance with OHS procedures, all employees were immediately evacuated from the site before firefighters arrived. Thanks to efficient organization, no one at the site was harmed in any way.

During the incident at the Skarbimierz plant, inspectors from the Voivodship Environmental Protection Inspectorate conducted measurements of air quality. Their results showed no immission of chemicals into the air.

Mo-BRUK Group's activities for circular economy

3

"We make the most of the potential that exists in waste

Waste as resource

The Mo-BRUK Group's development is based on the concept of a circular economy, in which products and materials should remain in the economy for as long as possible.

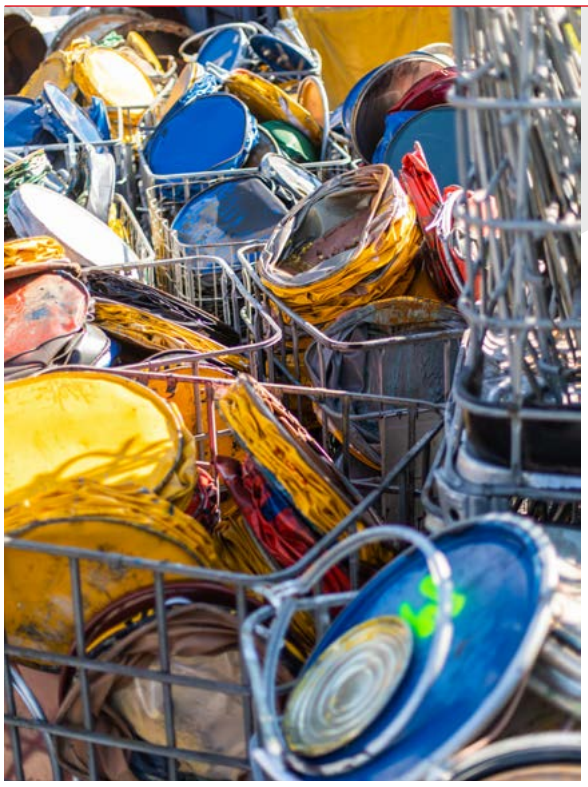
GRI: 3-3 Impact on the development of the closed-loop economy at the waste treatment stage and reduction of consumption of natural resources

The Company focuses on continuous improvement of its waste treatment and utilization processes.

Its activities are also geared towards the economical management of natural resources, such as coal.

In accordance with the circular economy concept, the Mo-BRUK Group treats waste that is often considered difficult or worthless. This includes residual municipal waste from which recyclable materials have already been separated and which the Mo-BRUK Group processes into alternative fuels. Another example is hazardous inorganic waste, such as slag, which is a by-product of thermal processes - it is used to produce aggregates that are used in the construction industry.

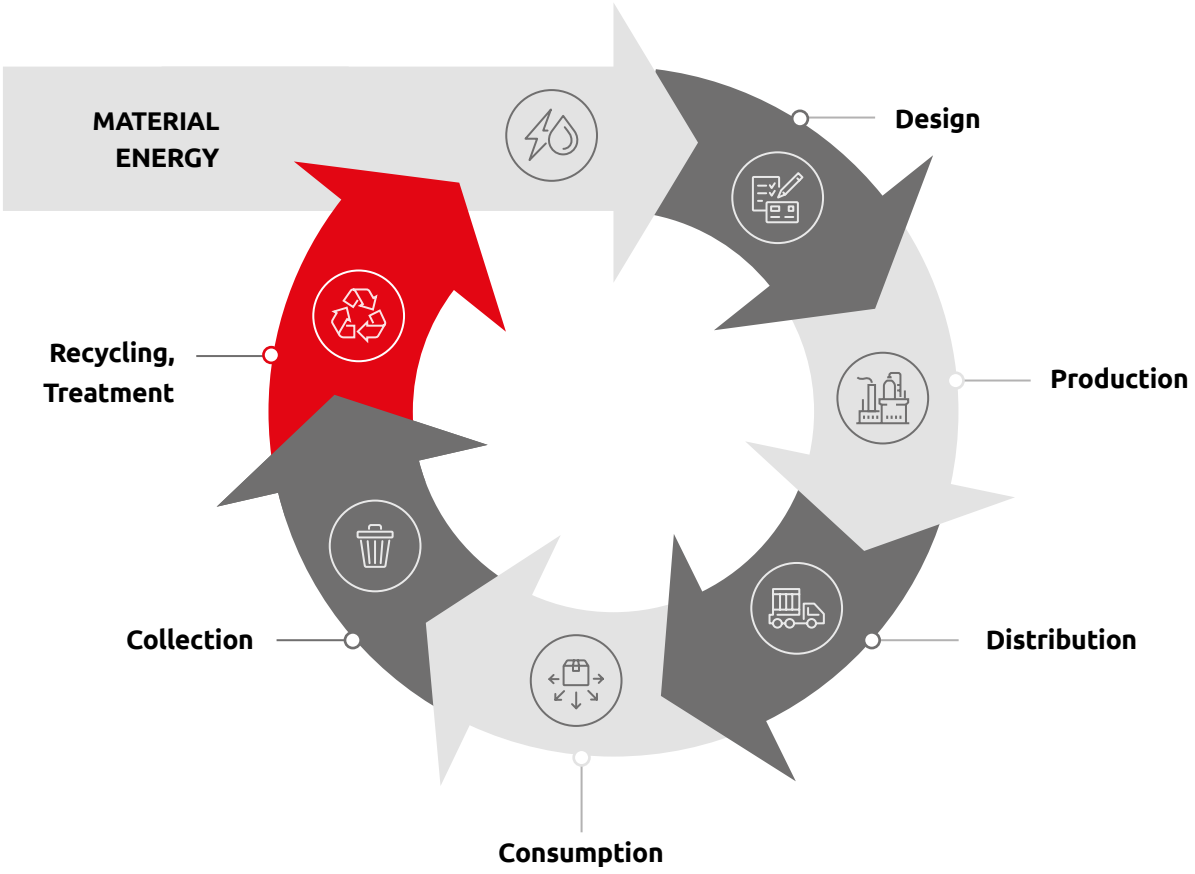
Changing regulations in the field of environmental protection, as well as waste regulations, both at the national and EU level, place considerable emphasis on undertaking hazardous waste disposal by various methods The activity of the Mo-BRUK Group fits into the system of legal obligations, which positions the company as an important partner for those entities that have to meet increasingly demanding standards of waste management in their activities.



Circular economy is becoming a necessity for all industries in the context of efforts to pursue sustainability. From the perspective of the Mo-BRUK Group, we want to support our customers by treating the waste that poses the greatest challenge for the environment and society. The above refers mainly to hazardous waste, which we subject to recovery processes and ultimately turn into high-quality products.

Wiktor Mokrzycki
Vice-President of the Management Board

Circular economy



The best possible solution for the environment is to avoid producing waste. However, every product and every object that we use will sooner or later become waste that requires further treatment. In the next step, when no reuse is possible, the most desirable scenarios are recycling (including organic recycling) and other methods of recovery, such as incineration of waste with energy recovery. Waste can also be neutralized through landfill disposal. This is the worst and most harmful option for the environment, human health and other living organisms.

Waste has significant energy potential, which is why most European Union countries believe that it should not be landfilled, but rather its potential should be used in incineration plants. There are more than 500 thermal transformation plants in Europe, with over 100 in Germany alone. In Poland, there are about 50 incineration plants, 2 of which are owned by the Mo-BRUK Group.

245 thous. tons

of waste accepted for treatment by the Mo-BRUK Group in 2022

Mo-BRUK supports customers in managing their waste in such a way that it is suitable for further treatment and closing the life cycle of materials.

Waste treatment products

GRI: 2-6 OWN INDICATOR: Description of products offered by the Mo-BRUK Group

Mo-BRUK Group offers a range of products made from waste. All of the Group's products promote the maximum use of waste treated as a resource and therefore the conservation of natural resources.

Some of the products are fully functional alternatives to fossil fuels, helping to reduce greenhouse gas emissions and mitigate negative environmental impacts. Products offered by the Mo-BRUK Group include:

Alternative fuel - RDF

is a product obtained from the mechanical and biological treatment of municipal waste. It is a specially prepared mixture of waste with standardized quality characteristics (e.g. calorific value, moisture content, content of sulfur, chlorine, mercury and other heavy metals) made from non-hazardous waste. The waste is segregated and then shredded, sorted and separated. The result is a fuel that can be used to produce energy in combined heat and power plant, industrial boilers or cement plants. The Karsy and Wałbrzych plants produce alternative fuels RDF that are sold among others to cement plants where they are used as an alternative to fine coal.

Artificial aggregate

The Karsy plant thermally transforms industrial waste that is not suitable for RDF production. This is usually liquid waste, such as used oil, solvents, sludges or chemical reagents. It is burned at temperatures above 110°C to produce thermal energy and then electricity, slag and ash. The latter two are sent to the Skarbimierz plant for further processing, to produce synthetic aggregate, which is used, among other things, as substructure for concrete slabs and road foundations. The production of synthetic aggregates is a substitute for the exploitation of natural resources.

Process steam

The thermal waste neutralization process used in the incineration plant reduces the volume of waste while enabling the recovery of thermal energy. The process designed in this way produces process steam that can be used in the future by the Mo-BRUK Group to generate electricity. The Group uses the steam in the process of drying the RDF it produces. The recovery of energy in the form of process steam saves natural resources – mainly fossil fuels.

Case study – process steam production from waste

In 2022 Raf-Ekologia Sp. z o.o. generated 56,000 GJ of energy in the form of process steam from incineration of waste
The entire output was sold to the Jedlicze Refinery (Podkarpackie voivodship), owned by PKN ORLEN. The annual capacity of the Jedlicze incinerator is currently 8,000 tons.
It should double by 2024. Steam is a product that may be used in the future by Mo-BRUK to generate electricity. The Group has started project work to this end.

Benefits associated with the use of RDF:

1.

Alternative to fossil fuels:

RDF offers an alternative to traditional fossil fuels such as coal, oil and natural gas. Its use contributes to reducing emissions of greenhouse gases and other environmentally harmful substances. Less exploitation of natural resources also leads to lower consumption of energy.

2.

Energy efficiency:

RDF can be used in combined heat and power plants to produce electricity and heat in a cogeneration system. The use of waste as a fuel to generate energy contributes to the efficient use of resources by recovering energy from waste that would otherwise be landfilled or incinerated without energy recovery.

3.

Reduction of waste volume:

The use of RDF helps to reduce the amount of waste going to landfills, which to some extent alleviates the problem of waste accumulation. Converting waste into valuable fuel is an example of an activity that is consistent with the concept of circular economy, in which waste is viewed as a resource rather than ending up in landfills.

The production of alternative fuels is an important element that allows us to fully benefit from the waste management and treatment process – our activities offer strong support to the rational waste utilization policy. When converted to energy, they can return to residents as heat.

Kamil Wójcik
Director of the Karsy Plant

RDF buyers

OWN INDICATOR: Number of alternative fuel buyers

The number of buyers has increased compared to the previously reported period: in 2021 there were 2, and in 2022 there were already 4. The Mo-BRUK Group has started cooperation with foreign companies – it supplies alternative fuel to two cogeneration plants in Germany.

The main RDF buyers in Poland are cement plants, as they need large volumes of fuel to meet their high demand for energy. The production of cement requires temperatures of 1,400 - 1,500[C], which is obtained by combustion of either hard coal or RDF. The use of alternative fuel significantly reduces the consumption of coal, which generates savings. Also, at such high temperatures, most harmful substances are reduced to basic compounds. The rate of substitution of coal with RDF in Poland is 50-60%, but there are some cement plants that have almost completely abandoned coal combustion in favor of RDF and use it 90% of the time.

Case study – investment in the Karsy and Jedlicze plants

In 2022, Mo-BRUK used the thermal energy produced in the incineration plants mainly to dry the RDF it produced. The expansion of the plant in Karsy and Jedlicze will be followed by two power generation facilities with a capacity of at least 1 MW each. 0.6 MW will suffice to cover the Group's needs, so the surplus energy will be provided to external entities. The total value of the investment program launched in 2022 and scheduled till the end of 2024, is expected to be approx. PLN 210 million. It will result in a 78% increase in capacity in the incineration segment and a 65% increase in the waste solidification and stabilization segment. A contract worth PLN 134 million has been signed for the modernization of the thermal waste transformation plant in Karsy.

Reduction in the volume of landfilled waste

Mo-BRUK Group is one of the most important waste management operators in Poland.

Investments in waste neutralization lines have gave it the capacity to effectively minimize the amount of waste sent to landfills. Also, the Group has a strong influence on the development of the waste management sector in Poland and contributes to increasing the efficiency and professionalism of the industry.

The Mo-BRUK Group treats almost 400,000 tons of various waste annually, of which about 1/3 is municipal (post-sorting) waste and 2/3 is industrial, mainly hazardous, waste. There is a bad practice in some Western European countries where most of the hazardous waste is stored in mines, on islands, transported to Third World countries or to special landfills[1]. The Group cooperates with the majority of waste incineration plants in Poland. It receives from them hazardous waste generated in thermal processes and then carries out a recovery process.

According to data from Statistics Poland[2], the total amount of waste generated in 2022 increased by approx. 6%, of which industrial waste increased by approx. 7% and municipal waste decreased by 2%.

Municipal waste

In Poland, 355 kg of municipal waste was collected per capita, 5 kg less than in the previous year.

Some of it was collected separately and then recycled (26.7%), and some was sent to landfills (38.1%). The remaining waste (post-sorting or residual waste) may be treated by the Mo-BRUK Group. In 2022, 13.4 thousand tons of such waste was collected (1.9% less than in 2021).

Industrial waste

In 2022, 115 million tons of industrial waste were generated (6.8% more than in 2021). This waste came mainly from the mining industry (61.3 million tons), industrial processing (21.3 million tons) and the production and supply of electricity, gas, steam, hot water (13.3 million tons).

[1] https://www.europarl.europa.eu/news/pl/headlines/society/20180328STO00751/zarzadzanie-odpadami-w-ue-fakty-i-liczby-infografika

[2] Statistics Poland data on environmental protection in 2022 https://stat.gov.pl/obszary-tematyczne/srodowisko-energia/srodowisko/ochrona-srodowiska-w-2022-roku,12,6.html

48.8% of industrial waste went to recovery, while 41.7% was sent to landfills. At the end of 2022, the volume of waste stored (accumulated) in the plants' own facilities was 1,829 million tons. The area of landfills (excluding municipal waste) not subject to land reclamation was 8,000 ha. The largest landfill areas are located in the voivodships where the largest amounts of waste are generated: Lower Silesia, Silesia, Małopolskie, Łódzkie:

Waste treatment capacity:

Niecew
100 thous. tons/year

Karsy
15 thous. tons/year

Skarbimierz
70 thous. tons/year

Jedlicze
8 thous. tons/year

Approximately 40% of all waste generated ends up in landfills, where it remains for years, posing a threat to the environment through contaminants that can leach into soil, surface water and the atmosphere. Landfills pose a serious threat to all living organisms. This percentage is significant compared to countries such as Germany, the Netherlands and Sweden, where about 1% of waste goes to landfills, and most of it is recycled or incinerated with energy recovery.

Most county towns in Poland have coal-fired heating plants. These plants, after modernization and installation of a gas cleaning system, can burn alternative fuels. Such a solution can be subsidized, for example, by the National Fund for Environmental Protection and Water Management, which would substantially reduce the cost of CO_2 emissions and the consumption of coal.

One such plant is already in operation in Poland - in Zabrze. Thanks to the modernization, up to half of the coal input can be replaced with RDF fuel. The Mo-BRUK Group believes there is huge development potential for alternative fuel production in this area.

We are now facing a great challenge, i.e. the proper management of waste. They must not remain in landfills in large quantities for environmental and social reasons. Especially since, according to EU guidelines, we are required to gradually reduce the amount of waste that goes to landfill – ultimately reducing this form of disposal to 10% in 2035. In this respect, the Mo-BRUK Group is benefiting from the increasing environmental awareness of the public and EU legislation geared toward supporting the waste treatment market rather than landfilling.

Wiktor Mokrzycki
Vice-President of the Management Board

Waste incineration in the context of Poland's energy policy

GRI: 3-3 Potential utilization of alternative fuels (RDF) in cogeneration plants and heat supply companies | Potential of waste incineration for Poland's power industry

OWN INDICATOR: Description of alternative fuel utilization potential

Waste incineration is an example of application of the circular economy concept, i.e. the utilization of waste as valuable raw materials for energy production. Cogeneration plants and heat supply companies using alternative fuels from waste Have enormous potential to reduce the negative impact of the power industry on the environment. The generation of heat and electricity from waste makes it possible to reduce the amount of coal, which also involves reducing emissions of pollutants and CO_2 into the atmosphere. These are actions with great potential, but in Poland these solutions are still applied quite rarely.

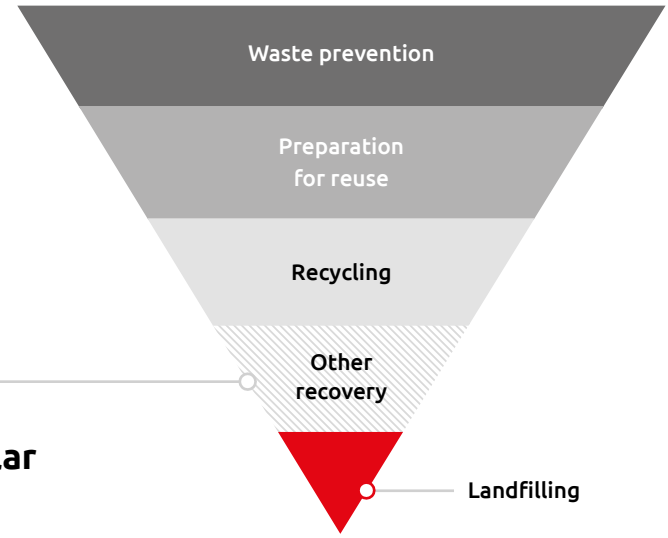
The Energy Policy of Poland until 2040 (PEP2040) is a strategic document defining the growth directions of the energy industry in Poland. It presents a clear vision of Poland's energy transition strategy. The Policy provides for an increased role for waste thermal transformation facilities in the heating industry. It highlights the state-of-the-art flue gas cleaning systems used in the incinerators and waste-free energy production.

Waste incineration contributes to diversification of energy sources.

It reduces the dependence of the power industry on traditional (fossil) fuels and foreign markets, as well as improves its flexibility in terms of fuel supplies.

PEP2040: "While adhering to the EU waste management hierarchy, thermal transformation of waste is in line with the principles of circular economy."

Mo-BRUK's actions in the area of circular economy[3]



[3] The EU waste hierarchy is one of the elements of circular economy which focuses on proper management of existing waste. The main objective is to minimize waste sent to landfills and maximize utilization of resources.

> **In the event of an energy crisis, regardless of whether it is caused by a shortage of raw materials, instability of supplies, rising energy prices, or other factors, interest in alternative energy sources, including RDF fuels, may increase. We do hope that the energy crisis will change the regulatory environment in favor of RDF. At present, alternative fuel is used in Poland only by the cement industry and only one cogeneration plant. A major development opportunity for RDF is the interest in this fuel by the thermal power industry, including small installations of the heat supply companies. First, alternative fuel can solve the problem of increasing prices of municipal waste collection, because it can be used to generate energy in a safe way, and second, it will free us from dependence on imported fuels.**
>
> **Andrzej Rytka**
> Vice-President of the Management Board

OWN INDICATOR: **Energy value of alternative fuels produced in 2022**

RDF production

2021 | **76,668.6 t**

2022 | **79,113.7 t** ↑ **3.2%**

Given the expectations of buyers of alternative fuels, Mo-BRUK strives to improve their quality. In 2022, the calorific value[4] of fuel sold was 19.7-21.4 MJ/kg, which means that it generates more energy than, by way of example, firewood (15.6 MJ/kg) and only slightly less than the carbon-intensive hard coal burned in commercial cogeneration plants (up to 21.72 MJ/kg)[5].

[4] Calorific value is a quantitative measure of the energy that can be released by combustion of a specific fuel. It quantifies the amount of energy (in the form of heat) generated by a unit of mass.

[5] Source: National Center for Emissions Balancing and Management, Calorific values (CV) and carbon intensity indicators (CII) in 2020 for 2023 reporting under the Emissions Trading Scheme, Warsaw, December 2022, https://www.kobize.pl/uploads/materialy/materialy_do_pobrania/monitorowanie_raportowanie_weryfikacja_emisji_w_eu_ets/WO_i_WE_do_monitorowania-ETS-2023.pdf.

Energy value of RDF produced by the Mo-BRUK Group in 2022

Most heat supply companies in Poland are not equipped with technology necessary to burn alternative fuels. It is worth emphasizing that the government's CHP modernization program supports the use of RDF in the power industry which could significantly enlarge the number of recipients. The National Fund for Environmental Protection and Water Management (NFOŚiGW) will allocate PLN 3 billion for the "Use of Alternative Fuels for Energy Purposes" program, thanks to which, inter alia, cogeneration plants will gain additional funds in order to adjust the existing installations to RDF.

Revenues generated by the Mo-BRUK Group on waste received for the production of alternative fuels currently originate from the Polish market in 100%. In 2023, the Group intends to start cooperating with a partner to supply fuel input from Italy. Currently, alternative fuel is sold mainly in the domestic market. Only fuel derived from railroad sleepers is exported to Germany. Ukraine is expected to potentially become an attractive outlet in the future.

> **Given the increasing energy prices, one may expect that the interest of municipal and local heat supply companies in alternative fuels will continue to grow. The cogeneration plant in Zabrze, the first in Poland to use RDF, can be an example.**
>
> **Kamil Wójcik**
> Director of the Karsy Plant

[6] Based on Statistics Poland's data.

[7] In line with the "Rational Waste Management" program, the National Environmental Protection and Water Management Fund (NFOŚiGW) offers support to entrepreneurs, specifically defined as "Use of Alternative Fuels for Energy Purposes." Applications under this program could be submitted until the end of December 2022. The initial budget financed by the EU Modernization Fund was PLN 1 billion, and it was further increased by another PLN 2 billion in 2022. Source: Call for applications for investment financing from NFOŚiGW funds accumulated in the Modernization Fund account as part of the priority program "Rational Waste Management" - Modernization Fund - Gov.pl Portal (www.gov.pl)

Case study – use of RDF by the Fortum cogeneration plant in Zabrze

Fortum Cogeneration Plant in Zabrze is an example of an entity using alternative fuel (RDF) to produce heat. It is part of a combined heat and power system between Zabrze and Bytom. It provides heat to approx. 70 thousand households. Thanks to a special boiler, it is able to burn coal and RDF at a lower temperature. Emissions of pollution, especially nitrogen oxides, are lower than in traditional coal-fired boilers.

Waste incineration and Poland's energy policy

GRI: 3-3 Ecological bomb management

The implementation by Mo-BRUK of the circular economy concept through the management of waste in the form of the so-called ecological bombs[8]:

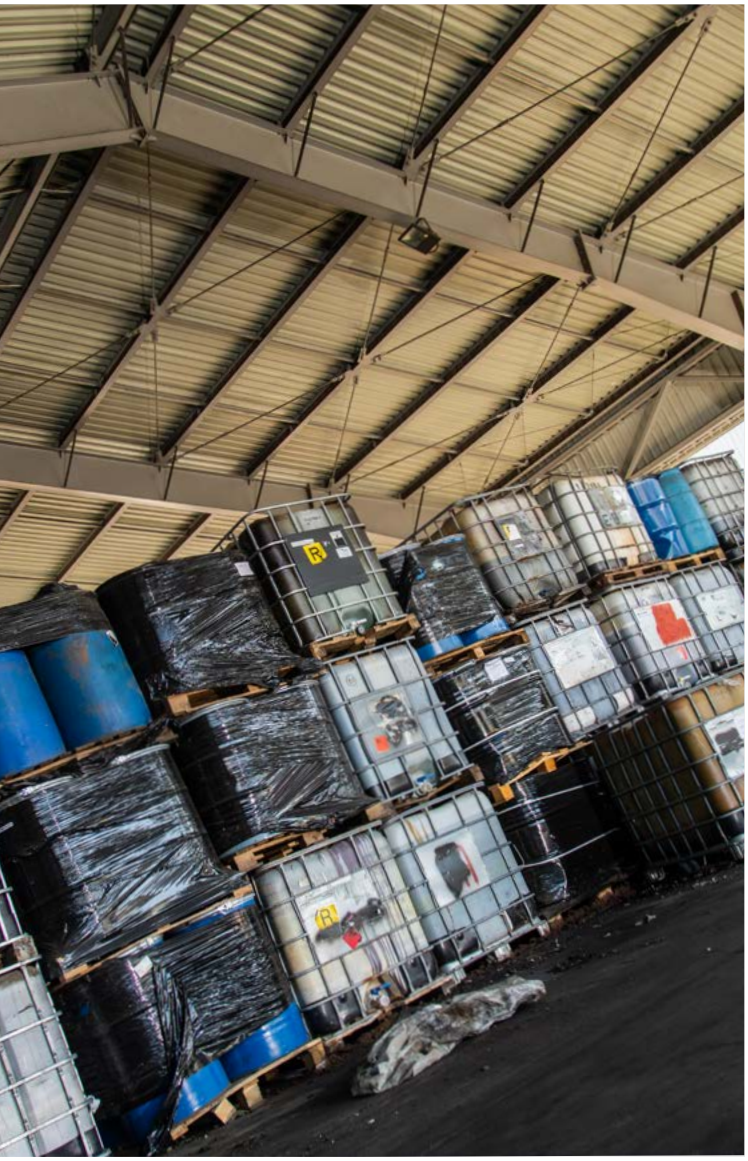
- Recovery: waste is transformed into energy instead of being left as a burden to the environment. Thereby, the need for natural resources and creation of new waste is reduced.
- Emission reduction: Processing ecological bombs reduces the amount of other waste going to landfills and decomposing. Reducing greenhouse gas emissions, in this case primarily methane, is also a crucial element in the fight against global warming.

The Mo-BRUK Group transfers approx. 90% of waste obtained from ecological bombs to incinerators. Incineration produces energy and relatively small amounts of new waste, which is transferred to its own solidification and stabilization plants. Waste that Mo-BRUK is unable to process, such as mercury or asbestos, is transferred to other entities equipped with the appropriate technology.

Neutralization of an ecological bomb has also many positive effects for the local community and ecosystem. First of all, it increases the safety of residents thanks to the removal of hazardous chemicals, including heavy metals, which can put people's health and lives at risk. Natural environment is protected from soil, water and air pollution.

[8] An ecological bomb is a popular name for an area that is heavily polluted and poses a serious threat to people and the environment. In the context of the Mo-BRUK Group's operations, these are locations where waste, mainly of industrial origin, was accumulated in the past, without any protection of the ground.

Chemicals and heavy metals getting into the ecosystem harm plants, animals and aquatic organisms. The removal of bombs contributes to the restoration of the environment's natural balance. Another important effect is the restoration of reclaimed land, as the removal of bombs allows for the clean-up and restoration of land that was previously contaminated, allowing for a safe and sustainable use thereof. Land rehabilitation can include restoration of natural vegetation, restoration of water bodies and restoration of biodiversity. Neutralization of this type of waste contributes to the social and economic development in the given area, and can create new development opportunities, such as infrastructure construction, recreational use of land, or investment in industry and tourism.



> Thanks to the Mo-BRUK Group, the areas that previously posed a threat to residents can now be safely redeveloped by them.

Mo-BRUK is a leader in the processing of ecological bombs in Poland:

- In 2022, the Group reported proceeds in the amount of PLN 24 million on the processing of ecological bombs.
- So far, the Company has executed contracts concerning 12 ecological bombs, comprising waste of a total of 12.6 thousand tons.

According to the Chief Inspector of Environmental Protection, there are more than 800 sites in Poland identified as ecological bombs and sites of illegal dumping of waste containing harmful chemical compounds, ranging from several hundred to several thousand tons. These sites can pose a serious threat to human and animal health and the environment. An important role in their treatment is played by townships, which organize and coordinate the waste management system locally.

> **Harmful waste is often stored in warehouses or barns rented from an owner, such as a farmer, who is not aware of the matter. The waste is then brought in there, and the company disappears, leaving the owner alone with the waste, without any financial security to clean it up. Waste is also dumped on former industrial sites, buried in gravel pits or reclamation areas.**
>
> **Paweł Kadula**
> Combustible Waste Market Manager

The National Fund for Environmental Protection and Water Management intends to earmark PLN 670 million for liquidation of ecological bombs in 2023. The Mo-BRUK Group sees a vast potential for development in supporting townships in disposing of this type waste that is hazardous to people and the environment. The rapidity of their neutralization depends on the pace of actions taken by the State institutions.

The Mo-BRUK Group is able to process approx. 400 t of ecological bomb waste per month. Once the incinerator in Karsy is retrofitted, this volume will significantly grow.

Mo-BRUK Group's revenues from liquidation of ecological bombs

2019 7.5 PLN million

2020 15.5 PLN million

2021 53.5 PLN million

2022 24 PLN million

The Group's revenues from the liquidation of ecological bombs depend on the tenders announced by townships. The value of a single contract to process an ecological bomb depends on the amount of waste collected, and ranges from a few million to more than ten million Polish zloty. Mo-BRUK estimates the value of the domestic market of ecological bombs to be over PLN 15 billion, reflecting the need to neutralize 4.5 million tons of waste.

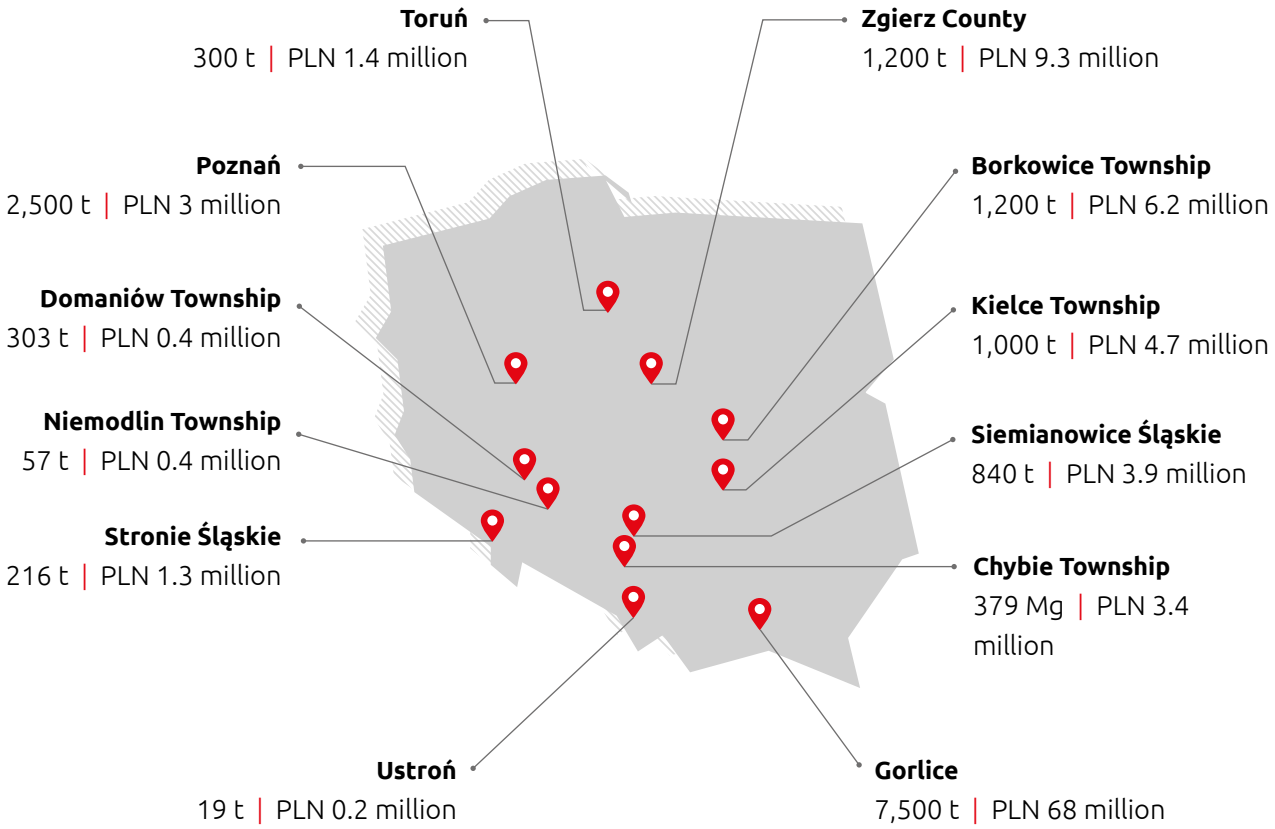
In 2022, the following ecological bombs were neutralized:

Gorlice:
2,375.6 t

Borkowice:
1,235.6 t

Ruda Śląska:
35 t

To date, the company has signed contracts for 12 sites totaling 12,600 tons of illegally stored waste.



We take all necessary measures to accurately identify and neutralize hazardous materials, thereby minimizing health and environmental risks. We cooperate closely with relevant services and specialists in the removal of ecological bombs to ensure that these operations are carried out efficiently and safely. Our company is committed to providing staff training, aligning appropriate procedures and investing in the necessary equipment and technology so as to be prepared for any situation. We strive to achieve complete and permanent disposal of hazardous waste in areas that can later serve as a clean and safe place to live and thrive.

Andrzej Rytka
Vice-President of the Management Board

Ecological bomb processing

The Mo-BRUK Group removes ecological bombs in compliance with the principles of due care and safety, following the guidelines provided for in Instruction I6.1. Once the Group accepts an order, the specific site becomes its waste storage. The measures taken reduce the effects of any negative impact on the environment.

On-site inspection

- carried out by a team of chemists and people from logistics unit
- assessment of the actual hazard based on the examination of waste samples

Take-over of the site

- securing and protecting the site: provision of equipment, preventing spontaneous combustion and illegal dumping of further waste

OHS Procedure

- provision of equipment, including firefighting equipment, specialized work clothing and masks

Research

- designating a project manager
- testing the properties of waste on the basis of samples taken
- selecting the appropriate processing method

Liquidation of an ecological bomb

- securing the waste, transporting, repackaging or pumping it into appropriate containers
- consultation with technology and environmental specialists regarding the site treated
- cooperation with fire brigade and environmental protection inspector in case of failures

OWN INDICATOR: Cooperation with local governments

Waste accumulated in a given area is the responsibility of the owner. It is the township authorities that determine who the owner is, but usually the owner has no funds to cover the costs of waste management. In accordance with the law on substitute performance, the township authorities may acquire funds for this purpose from the National Fund for Environmental Protection and Water Management and launch the liquidation. Such financing may cover up to 80% of total costs. Townships receive funding and announce public tenders in which the Mo-BRUK Group participates.

They contract bomb disposal to specialized companies that follow appropriate regulations and ensure high safety standards. The Mo-BRUK Group is committed to cooperate with local governments, supporting them at each stage of neutralization of an ecological bomb.

Mo-BRUK takes orders from townships for the disposal of an estimated amount of waste in a designated area.

If the actual amount of waste is larger, the township submits another order.

Mo-BRUK reports the efficiency of operations on the basis of weighing-in and transport documents entered in the Waste Database

The project is supervised by the township coordinator who has access to works carried out by Mo-BRUK.

Effect of cooperation:

- The site or facility may be reused by society
- Thermal energy is recovered from neutralized waste and residues become a resource for manufacturing useful products, e.g. aggregate

Case study – cooperation with the city of Gorlice

Approximately 3 km from the center of Gorlice, within the site of the former Glimar refinery, there is an illegal waste dump site with an area of several hectares in which petrochemical, varnish, paint, motor industry and chemical production waste is landfilled. Mo-BRUK has been engaged in its closure.
As part of expanding the agreement with the city entered into in October 2020, the Group signed an annex concerning the management of additional 2,700 tons of waste. The Group has removed more than 7,500 tons in aggregate of hazardous waste from that site.

Questions and answers

Q: Why is waste incineration with energy recovery an important element of the circular economy concept despite the fact that its position in the waste hierarchy is low?

O: Waste incineration with energy recovery is an important element of the circular economy concept, because it helps to protect everything that has not been otherwise treated, before being landfilled. In spite of the fact that it occupies a low position in the waste hierarchy, the main purpose of which is to avoid and minimize waste generation, incineration with recovery is a key tool for using energy from waste which otherwise would be landfilled. An incineration process enables heat or electricity to be generated, which contributes to bringing down the consumption of traditional fossil fuels, reducing thereby an adverse impact on the environment. Modern incineration technologies also make it possible to minimize the emissions of harmful substances, which improves the ecological aspect of this process. Thus, the Group's activities are consistent with the circular economy concept, since they contribute to making the use of resources more efficient, reducing the amount of waste bdisposed of at landfills and achieving a more sustainable and ecological approach to waste management.

Q: Can alternative fuels, such as RDF, be used outside cement production processes and the heat generation sector to be consistent with the circular economy concept?

A: Alternative refuse-derived fuels offer a much broader potential for use than just in cement production and in the heat generation sector to support the circular economy concept. In some chemical industry processes, such as fertilizer production, RDFs can be used as a fuel for ensuring the necessary heat. An example of such thermal processes is the heating of kilns for the production of ceramics or glass or for firing other materials. In some steel industry plants, RDFs can be used as a fuel for generating heat necessary to melt metals or other materials. Although at present the use of RDFs in machinery which is set in motion is limited, there is a potential for further technological development in this respect.

Continuous technological development may lead to new and innovative ways of applying alternative fuels. The introduction of RDFs into various areas of the economy is important from the point of view of achieving circular economy and sustainable development objectives. The development of the Mo-BRUK Group which is a leader in its sector will be based on the above-outlined trends.

Q: What is the effect on the health of living organisms of the hazardous waste dumped in illegal landfills and neutralized by Mo-BRUK as part of defusing ecological bombs?

A: Hazardous waste which is disposed of at illegal landfills may cause a number of serious threats for human life and the life of animals, both directly and indirectly. Illegally landfilled hazardous waste may leak to soil or ground or surface water which results in environmental contamination. People and animals exposed to contaminated environment may experience poisoning and develop various types of conditions, such as damage to the nervous system, respiratory tract, skin, internal organs, etc. People and animals exposed to such waste are more prone to infections which may develop into various infectious diseases. Some hazardous waste contain carcinogenic substances which may lead to the development of cancer. Toxic substances may have an adverse effect on fertility. Additionally, exposure to these substances during a development period may lead to pathologies in embryonic or fetal development or to developmental disorders in juveniles.

It is worth noting that illegal landfilling of hazardous waste not only poses a threat to human health and the health of animals, but also to the environment in general. Therefore, it is important that relevant waste management laws and practices are complied with, to minimize the risk of such threats. Mo-BRUK's experience in this regard enables the Group to have a positive impact on its environment.

Environmental issues

4

Positive impact on the ecosystem through prudent waste management

Compliance with environmental regulations, prevention of abuse and non-compliance with environmental laws and regulations

GRI: 304-1 | 304-2

Environmental protection is a constituent element of the Mo-BRUK Group's profile. By carrying out recovery and neutralization processes involving waste generated in economic activities, the Group reduces the consumption of primary raw materials, prevents waste disposal and landfills and supports the closing of the waste loop. At the same time, by carrying on its activities, the Mo-BRUK Group undertakes a number of operations to reduce the adverse impact on nature. None of the locations in which the Group operates is adjacent to protected areas or recognized as an area of high biodiversity value and, given the specific nature of its activities, the land is neither forestland nor shrubland and there are no natural water reservoirs on it. The Group did not identify any significant impact on biodiversity in 2022.

Mo-BRUK Group's activities are strongly regulated in environmental laws. The most important norms in this respect include:

- Environmental Protection Law
- Waste Act
- Water Law

GRI: 3-3 Compliance with environmental regulations, prevention of abuse and non-compliance with environmental laws and regulations | 2-27

All the Mo-BRUK Group's activities are based on strict compliance with environmental regulations, and internal procedures provide protection against possible abuses. No instances of non-compliance with environmental protection laws and regulations were recorded in the Mo-BRUK Group in 2022.

The Environmental Management System is in place in the Group, which is based on international ISO standards: 14001:2015 in the case of Mo-BRUK S.A. and 9001:2015, 14001:2015 and 45001:2018 in the case of Raf-Ekologia Sp. z o.o. Compliance with this system ensures a clear framework for management aimed at reducing impact on the environment, meeting legal requirements and building stakeholders' trust. The ISO standard warrants that the organization's approach to the planning, implementation and management of the environmental management system is a systematic one. The Environmental Management System constitutes the basis for the functioning of the Quality and Environmental Policy in accordance with which the Group guarantees meeting the ISO 14001:2015 standards, inter alia by operating in compliance with environmental protection laws, preventing pollution and managing industrial waste so as to minimize its impact on nature.

Waste treatment and the environment

GRI: 3-3 Health impact of waste incineration, safety during waste incineration

Waste has become one of the most important challenges in the 21st century. Along with a growing population and economic and technical development, man has become the largest producer of waste in nature. These issues have been increasingly clearly noticed also in Polish society – according to a tracking survey conducted in 2021 by the Ministry of Climate and Environment[1] 50% of Poles view the problem of waste as the most serious environmental problem.

The activities of the Mo-BRUK Group are consistent with the systemic solution of the problem of waste and enable industrial waste intended for thermal transformation to be managed in compliance with environmental requirements. Owing to cooperation with the Group, a lot of companies may provide own waste to be treated in compliance with law, which makes it possible for them to mitigate environmental risks associated with the need to store it on a long-term basis in their own sites. At the same time, the Mo-BRUK Group's activities enable the closure of illegal dump sites, referred to as ecological bombs. The scale of the problem is shown by figures – according to the estimates of the Ministry of Climate and Environment, there are more than 1.5 thousand sites in Poland in which waste is illegally stored or dumped[2] – 230 such sites were identified in 2022 alone.

READ MORE

More information about the management of ecological bombs by the Mo-BRUK Group and the support for Circular Economy can be found in Chapter 3 Mo-BRUK Group's activities for circular economy

GRI: 3-3 Environmental impact of technologies and solutions applied by the company in the waste incineration and stabilization process

In accordance with its strategic principles, the Mo-BRUK Group aims at increasing its processing and production capacities, implementing the world's state-of-the-art technologies and its own waste treatment technologies and at promoting a broadly understood pro-ecological waste management. At the same time, the Group is aware of the risks involved in the thermal treatment of waste, including inter alia the risk of potential emission of substances harmful for health and the environment, particulate matter, soil pollutants and noise.

In order to counter them, the Group strictly complies with emission standards, implements solutions that ensure the efficient treatment of exhaust gas and monitors the quality of the air, water and soil around incineration plants.

The Group's plants are equipped with, among other things, advanced exhaust gas treatment systems, filter and removal devices which considerably reduce the emission of harmful substances, gases, dust and other pollutants. The work of incineration plants is also monitored in the real time, to ensure their correct operation and detect problems or irregularities, if any.

[1] https://www.gov.pl/web/klimat/badania-swiadomosci-i-zachowan-ekologicznych-mieszkancow-polski-w-2020-r-badanie-trackingowe

[2] https://smoglab.pl/bomby-ekologiczne-w-polsce/

Incineration safety is also ensured in the Mo-BRUK Group by appropriate waste management before the incineration process. Waste is correctly sorted, stored and transported in a manner that minimizes the risk of leakage of hazardous substances. The Group's facilities treat waste classified as hazardous and non-hazardous. The composition and properties of waste accepted for treatment differs depending on its producer – the Group examines waste in terms of its suitability for treatment in its own, accredited company laboratory covered by the ISO: PN-EN ISO/IEC 17025:2018-02 system or uses analyses provided by the waste supplier. A formula for a separate physico-chemical treatment procedure is established for each consignment of waste on the basis of laboratory results – this refers to the production of synthetic aggregate.

The entirety of the incineration processes is supervised by appropriately trained staff familiar with the principles of safety. The Group's employees know emergency procedures, adhere to principles of hygiene and safety, and are aware of potential hazards associated with process of waste incineration. Additionally, the Group's plants – like other companies of this type – are subject to strict monitoring by regulatory authorities. Inspections, audits and risk assessments are conducted to ensure compliance with norms, regulations and standards concerning safety and environmental protection.

GRI: 413-2 | 416-2

In 2022, no instances of non-compliance with regulations or voluntary codes concerning the impact of products and services on health and safety were recorded in the Mo-BRUK Group. The Group did not identify any significant impact on local communities either. Most of the Group's plants – except for the Niecew Waste Recovery Plant – are located a long way from residential developments. In the case of the Niecew Plant, the closeness of the local community involves a possible risk of adverse effects of a potential failure of the plant's systems.

Greenhouse gas emissions and means of reducing them, striving for low carbon emissions

GRI: 3-3 Greenhouse gas emissions and means of reducing them, striving for low carbon emissions

WSE: E-S2

Despite the fact that no formal strategy for the management of greenhouse gas emissions has been implemented in the Group, a number of activities are undertaken that reduce and mitigate the harmfulness of emissions. Filters are replaced in the plant on a regular basis and new specialized emitters were installed in 2022 and 2023 in Skarbimierz and Niecew. Consistently with the BAT conclusions, the Group monitors the emission level by measuring emissions on a periodic basis and comparing the measurement results with the limit values. The Group did not record any incidents of exceeding limits, whether in 2022 or in previous years. The methods of monitoring comply with all legal regulations and in the Mo-BRUK Group's assessment there is no need to implement any modifications in this respect.

The Mo-BRUK Group has prepared its first carbon footprint calculation report for 2022 – the organization treats the determination of the emission values as the first step towards identifying possibilities for reducing them. The calculations were made for Scopes 1 and 2 on the basis of recognized coefficients provided by

DEFRA, AIB, EMBER and IPCC AR5. In accordance with the GHG Protocol standards, the Group has calculated the Scope 2 carbon footprint based on two methodologies – MARKET (market-based), reflecting the emissions from the consumption of energy from the seller and LOCATION (location-based), showing the average emission in the grid. The report is available on the Mo-BRUK Group's website.[3]

The year 2022 was adopted in the organization as the base year for disclosing the carbon footprint.

GRI: 305-1 | 305-2 WSE: E-P1

Emissions	Total [tCO_2e]	CO_2 [t]	CH_4 [t]	N_2O [t]	HCF [t]	PFC [t]	SF_4 [t]
Scope 1	28,307.706	28,280.915	0.087	0.092	0	0	0
Scope 2 (MARKET)	5,933.583	5,933.583	0	0	0	0	0
Scope 2 (LOCATION)	4,391.141	4,391.141	0	0	0	0	0

[3] https://mobruk.pl/wp-content/uploads/2023/06/RaportzkalkulacjisladuweglowegoMoBRUKza222rok.pdf

Emission information

Emissions broken down by source types	[tCO_2e]
Scope 1: **Direct emissions from own/controlled operations**	**28,307.71**
Direct emissions from stationary combustion sources	27,110.06
Direct emissions from mobile combustion sources	1,197.08
Direct emissions from process sources	0.57
Direct emissions from fugitive sources	-
Direct emissions from agricultural sources	-
Scope 2: **Indirect emissions from the use of purchased electricity, steam, heating and cooling (MARKET)**	**5,933.583**
Indirect emissions from purchased/acquired electricity	5,921.09
Indirect emissions from purchased/acquired steam	-
Indirect emissions from purchased/acquired heating	12.50
Indirect emissions from purchased/acquired cooling	-
Scope 2: **Indirect emissions from the use of purchased electricity, steam, heating and cooling (LOCATION)**	**4,391.14**
Indirect emissions from purchased/acquired electricity	4,378.65
Indirect emissions from purchased/acquired steam	-
Indirect emissions from purchased/acquired heating	12.50
Indirect emissions from purchased/acquired cooling	-

Climate risks

GRI: 201-2 WSE: E-P3

The Mo-BRUK Group has defined three key risks associated with climate change – all of them have been classified as physical risks. These are:

Prolonged high temperatures and droughts

Risk description

Prolonged high temperatures and droughts will lead to rain deficits and resulting limited availability of water for the plants.

Risk impact description

In a long run, the risk may result in stopping the production cycle, and consequently in slowing or holding back the supply chain

Heavy rains

Risk description

Heavy rains pose a risk of flooding plants and destroying the infrastructure; in the case of torrential rains, the sewerage system may prove inefficient

Risk impact description

The risk associated with flooding may have an adverse impact on the plants' infrastructure and waste treatment processes

Violent storms and hailstorms, windstorms

Risk description

Unexpected sudden hailstorms as well as lightning and windstorms may cause damage to the infrastructure and result in destruction of power grids

Risk impact description

Violent storms and windstorms generate the risk of destruction of the plants' infrastructure. Additionally, a potential effect of such phenomena may be destruction of transmission grids, which may result in delays or stoppages in the collection and treatment of waste

Responsibility in resource management

Raw materials

GRI: 301-1

Natural resources which the Mo-BRUK Group uses in its activities include quarry stone and sand. Their consumption totaled 36,788.4 tons in 2022, which was more than 19,000 tons higher than in 2021. An increase in the consumption of resources is an effect of the increased production of synthetic aggregate in 2022. The volume of non-renewable materials used in 2022 totaled 207.6 m^3.

Use of raw materials in 2022:

crushed rock

15,272 tons

sand

20,986 tons

Associated process materials, i.e., materials that are needed for the manufacturing process but are not part of the final product

	Weight [t]	Volume [m^3]
lubricants for production machinery	0.02	
gear oils		1.4
motor oils		1.7
hydraulic oils		6.6
refrigerating fluids		0.7
spare parts for lines		225 units
diesel oil for cars and machinery		194

Semi-manufactured goods or parts, including all forms of materials and components other than raw materials that are part of the final product

	Weight [t]	Volume [m³]
chemicals used in incineration plants	421.32	

Other materials

	Weight [t]	Volume [m³]
refractory concretes	78	
foaming agent		2.9
welding wire	0.6	
liquid chemicals		0.3
steel fiber	1.1	
hydrated lime	0.1	
road salt	0.05	
cleaning cloth	0.2	
other tools	29	

Renewable materials used

	Weight [t]	Volume [m³]
cement	9,458	

Energy

The Mo-BRUK Group undertakes activities aimed at changing its own energy mix and at using both renewable energy sources and the energy potential associated with the activities conducted. The Group's plans include the installation of a photovoltaic system with a capacity of approx. 200 kW, as well an increase in the capacity of its energy generation facilities to over 2.5 MW by mid 2024. Most of this energy will be generated with the use of the organic Rankine cycle (ORC) technology, enabling waste heat from incineration plants to be transformed into electricity.

GRI: 302-1 WSE: E-P2

Total consumption of non-renewable energy in the organization

Consumption of non-renewable energy	Value [GJ]	Value [MWh]
Gasoline	9,122	2,534
Diesel fuel	420,835	116,899
Heating oil	18,084	5,023
TOTAL	**448,041**	**124,456**

Electricity consumption	Value [GJ]	Value [MWh]
TOTAL	**21,684.51**	**6,023.47**

Water

The technological processes carried out by the Mo-BRUK Group involve the use of significant water resources. The Group's plants take water from surface and underground water sources and from municipal water supply systems and use it – depending on the specific nature of the relevant entity – inter alia to recover inorganic materials (waste) or for the purposes of physico-chemical treatment. Water is also used for consumption and utility purposes by employees. Water withdrawal is monitored – the Group's authorized employees take water meter readings on a regular basis, and the results are recorded in a logbook. Water withdrawal reports are submitted to the competent administration authorities on an annual and quarterly basis. Water is not drawn from areas affected by its scarcity.

The Mo-BRUK Group held in 2022 and still holds appropriate water permits to carry out all activities related to water and wastewater. Water withdrawal and the volume and quality of wastewater discharged are monitored and comply with the approvals obtained.

GRI: 303-1 WSE: E-S4

Management of water resources in the Mo-BRUK Group:

Niecew Plant:

water withdrawal:

- surface water from the Jasienianka creek, a feeder of the river Biała
- underground water

use of water if there is no liquid waste:

- R5 – recycling/reclamation of other inorganic materials

Karsy Plant:

water withdrawal:

- two wells drawing water from the basin of the Vistula

use of water:

- R1 – principally as a fuel or other means to generate energy
- D10 – incineration on land

Wałbrzych Plant:

water withdrawal:

- well drawing water from the central Oder area

use of water

- consumption and utility needs of the Coal Sludge Plant employees

Skarbimierz Plant:

water withdrawal:

- municipal water supply system

use of water if there is no liquid waste:

- R5 – recycling/reclamation of other inorganic materials
- D9 – physico-chemical treatment

BEST PRACTICE

The Mo-BRUK Group adheres to the water use hierarchy in water resource management in the Niecew and Skarbimierz Plants. In the first place, liquid waste is used in technological processes. Once it has been used up, precipitation water is used, and finally the Group uses surface water or groundwater.

The Skarbimierz Plant uses approximately 5 thousand m^3 of precipitation water and meltwater. This water is collected in a storage reservoir with a capacity of 50 m^3 located within the Plant's site.

GRI: 303-3 | 303-5 WSE: E-S3

Total water withdrawal and consumption in 2022

	Volume [m³]
Niecew Plant	456
Karsy Plant	30,175
Skarbimierz Plant (for a system requiring an integrated permit)	2,162
Wałbrzych Plant	10.3
Total	**32,803.3**

Wastewater

GRI: 303-2

OWN INDICATOR: **Description of the environmental impact of technologies applied by the Mo-BRUK Group | Scope of environmental standards met**

The quality of wastewater discharged is monitored and complies with the water permits held by the Mo-BRUK Group. The Niecew Plant discharges treated wastewater, which is a mixture of rainwater and industrial wastewater constituting leachate water from waste storage sites, to the Jasienianka creek. These sites are tightly concreted and connected to the sewer system, which prevents the leachate water from penetrating into the soil and water environment. The flow rate and the aggregate amount of wastewater are monitored with the use of a special ultrasound sensor.

GRI: 303-4

In 2022, the Mo-BRUK Group discharged 58 96.52 m³ of wastewater to the Jasienianka creek, down by 4 663 m³ compared with 2021.

Permitted wastewater contamination indicators for the Niecew Plant

- pH: **6.5-9**
- general suspended matter: **35 mg/l**
- oil derivative hydrocarbons: **15 mg/l**
- mercury: **0.06 mg/dm³**
- cadmium: **0.4 mg/dm³**
- lead: **1.0 mg/dm³**
- copper: **1.0 mg/dm³**
- zinc: **5.0 mg/dm³**
- chrome: **+6: 0.2 mg/dm³**
- nickel: **1.0 mg/dm³**

Waste

GRI: 306-1 | 306-2 WSE: E-S6

The Mo-BRUK Group's products are manufactured as a result of the treatment of waste generated by other entities in the economy. From a formal point of view, these products are also classified as waste, although they are, to a large extent, utilized economically and forwarded e.g. to cement plants as fuel (this refers to the Karsy and Wałbrzych Plants). The Group estimates that its activities make it possible to effectively utilize approximately 300-400 thousand tones of waste, including hazardous waste, annually.

The Group systematically pursues means to ensure the maximum treatment of waste – both that received for processing and that generated as a result of its own activities. An ecological principle followed by the Group is to promote the recovery of materials over the production of alternative fuels. Therefore, part of packaging waste accepted by the Group is transferred to external entities engaged in e.g. the recovery of plastics. Minor metal waste, such as wire, sheet metal articles or springs, which contain impurities in the form of a minor plastic fraction, is also forwarded to specialized companies. This waste is collected with the use of electromagnets during the process of shredding alternative fuels, and external entities obtain ferrous and non-ferrous scrap metal from it.

BEST PRACTICE

When transferring waste outside the organization, the Mo-BRUK Group checks the permits held by the external entities and audits the facilities of potential business partners.

The details of the accepted and transferred waste are monitored in the BDO system. The Group also prepares daily production reports taking into account inventory levels in individual plants and the amounts of waste generated and forwarded to other branches and external entities.

The treatment of industrial waste streams also involves the generation of waste which cannot be used in further production of alternative fuels or synthetic aggregate due to the presence of incombustible impurities or mechanical inclusions and due to limitations relating to the available technologies. In the case of thermal transformation of waste, the by-production of, among other things, slags and ashes is also unavoidable. Additionally, the generation of waste depends also on its “quality” and the way in which is it packaged by its original producers. Therefore, the Group conducts education campaigns addressed to clients on the quality of waste generated by them. Special emphasis is placed on the selective storage of waste and on the need to avoid situations where specific waste fractions are contaminated with undesirable components, e.g. to avoid plastic inclusions in waste to be used to produce synthetic aggregate. The Group encourages clients to supply waste in bulk, e.g. in dump or tanker trucks or in containers. This reduces the amount of packaging waste generated.

Identified waste

1. Volume of inputs used for the production of the organization's products or services that will become waste after being used in the process

Short description of the waste	[t]
Alternative fuel	81,171.68
Slags and bottom ashes	15,214.90
Solid wastes from flue waste	15,214.90
Ferrous metals, iron and steel	150,939.96

2. Volume of waste products generated in the organization's own operations or volume of products supplied by the organization to other buyers in the value chain that will ultimately become waste when they reach the final form

Short description of the waste	[t]
Alternative fuel	75,598.83
Slags and bottom ashes	4,007.05
Solid wastes from flue waste	352.88
Ferrous metals, iron and steel	2,323.20

3. Hazardous characteristics of inputs or waste products

Short description of the waste	[t]
Alternative fuel	None
Slags and bottom ashes	None
Solid wastes from flue waste	Strongly alkaline, potentially toxic waste – contains soluble heavy metals
Ferrous metals, iron and steel	None

GRI: 306-3

The Mo-BRUK Group generated over 105,670 tons of waste in 2022 – up by more than 14,540 tons compared with 2021. More than 97% of the waste generated was non-hazardous waste.

Waste generated

Hazardous waste

Type of waste*	Weight [t]	Composition
13 01 10 Mineral based non-chlorinated hydraulic oils	0.19	The waste is used oil: it is a mixture of used base oils contaminated with metallic particles and other impurities
13 02 08 Other engine, gear and lubricating oils	0.15	The waste is used oil: it is a mixture of used base oils contaminated with metallic particles and other impurities
13 05 02 Sludges from oil/water separators	1.90	The waste is a highly hydrated mixture of light and heavy hydrocarbons, sand and mineral impurities. It is generated during periodic maintenance and cleaning of equipment (sewers) from accumulated suspended solids and oils
15 01 10 Packaging containing residues of or contaminated by hazardous substances	103.85	Plastic and metal packaging. Contaminated with residual oils, liquids or chemicals. Empty packaging in which waste is delivered for processing.
15 02 02 Absorbents, oil filter materials not otherwise specified, wiping cloths (e.g. rags, wipes), protective clothing contaminated with hazardous substances (e.g. PCB)	0.120	Cleaning cloth and used protective clothing. Fabric filters contaminated with cement and dusty waste
16 05 06 Laboratory and analytical chemicals (e.g. chemical reagents), consisting of or containing hazardous substances, including mixtures of laboratory and analytical chemicals	0.020	Used chemical, laboratory and analytical reagents, packaging of reagents used

Type of waste*	Weight [t]	Composition
16 81 01 Waste showing hazardous properties	2,375.620	Waste generated as a result of liquidation of ecological bombs. Solids, liquids, flammable and inflammable substances. They contain chemicals, oils, gasoline, heavy metals and other substances recognized as hazardous.
19 01 06 Aqueous liquid wastes from gas treatment and other aqueous liquid wastes	24.690	Heavily hydrated waste, containing reacted and unreacted sodium hydroxide and contaminants from flue gases from thermal transformation of industrial waste, such as heavy metals, residual dust and ash, acidic combustion products (sulfur oxides, nitrogen oxides, hydrogen chloride, hydrogen fluoride)
19 01 07 Solid wastes from gas treatment	381.390	Spent sorbent and volatile dust from waste gas treatment. The waste is hazardous due to its content of heavy metals, dioxins and furans.
19 01 15 Boiler dust containing hazardous substances	114.270	It contains pollutants from flue gases resulting from thermal transformation of waste; mainly heavy metals, dioxins, furans and acidic combustion products.
19 02 11 Other wastes containing hazardous substances	0.160	Solid or liquid waste containing, or contaminated with, organic substances such as oils and solvents
19 12 11 Other wastes (including mixtures of materials) from mechanical treatment of waste containing dangerous substances	444.400	Alternative fuel created by treating hazardous waste. Composition: plastics, natural fibers, post-production waste with high calorific value, contaminated with hazardous substances (oils, gasoline, organic solvents)

* Waste classification based on the Regulation of the Minister of Environmental Protection, Natural Resources and Forestry of 24 December 1997 on waste classification.

Non-hazardous waste

Type of waste*	Weight [t]	Composition
15 01 01 Paper and cardboard packaging	0.320	Packaging waste: cardboard barrels, boxes made of materials such as paper or cardboard
15 01 02 Plastic packaging	214.120	Packaging waste - barrels, plastic barrels, pallets, canisters, plastic film packaging, Big-Bags – used packaging made of plastics (including polypropylene, polyethylene, polyethylene terephthalate)
15 01 03 Wooden packaging	6.860	Wooden pallets and crates
15 01 06 Mixed packaging	27.290	Used wooden, steel, plastic packaging, which may be contaminated with the packaged substances
15 02 03 Absorbents, filter materials, wiping cloths (e.g. rags, wipes) and protective clothing other than those mentioned in 15 02 02	0.030	Wipes and used protective clothing not contaminated with hazardous substances.
16 02 14 Discarded equipment other than those mentioned in 16 02 09 to 16 02 13	0.126	End-of-life and decommissioned electronic equipment (computers, printers, etc.)
17 04 05 Iron and steel	76.935	Metal components (wires, rods, sheet metal, etc.) separated from waste streams
19 01 12 Bottom ash and slag other than those mentioned in 19 01 11	4,172.898	Residue created in the thermal waste transformation process. The waste consists of sintered oxides of calcium, silicon, iron and other oxide-like substances. It may contain small amounts of heavy metals and chloride and sulfate salts. It may also contain ferrous and non-ferrous scrap metal, ceramic impurities, minerals and unburned elements.

Type of waste*	Weight [t]	Composition
19 02 06 Sludges from physico-chemical treatment other than those mentioned in 19 02 05	2.400	The waste contains dust generated in waste shredding processes and anti-adhesive agent aqueous solution residues
19 03 07 Solidified wastes other than those mentioned in 19 03 06	12,600.360	Chemical composition: calcium compounds, silicates, carbonates, metal hydroxides. Properties: non-combustible, with a smell of concrete
19 12 02 Ferrous metals	2,929.924	Metal components (wires, rods, sheet metal, etc.) separated from waste streams
19 12 09 Minerals (e.g. sand, stones)	2,641.000	Ceramic, glass, ash, sand, stones. Separated from the waste streams intended for production of alternative fuels.
19 12 10 Combustible waste (refuse-derived fuel)	77,913.930	Solid waste with high calorific value. Properly selected and shredded waste, mainly plastics, wood, plastic foil, paper
19 12 12 Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	1,637.971	The waste includes plastics, packaging waste not suitable for reuse or material recovery, used Big-Bags, paper waste and others
Total weight of hazardous waste (t)		**3,446.755**
Total weight of non-hazardous waste (other) (t)		**102,224.164**
Total weight of waste generated (t)		**105,670.919**

* Waste classification based on the Regulation of the Minister of Environmental Protection, Natural Resources and Forestry of 24 December 1997 on waste classification.

GRI: 306-4 WSE: E-S6

Out of the total weight of waste generated by the Group, 16,514 tons were designated for landfill disposal, whereas 89,157 tons were diverted from disposal, which accounted for 84% of all waste generated.

Waste diverted from disposal

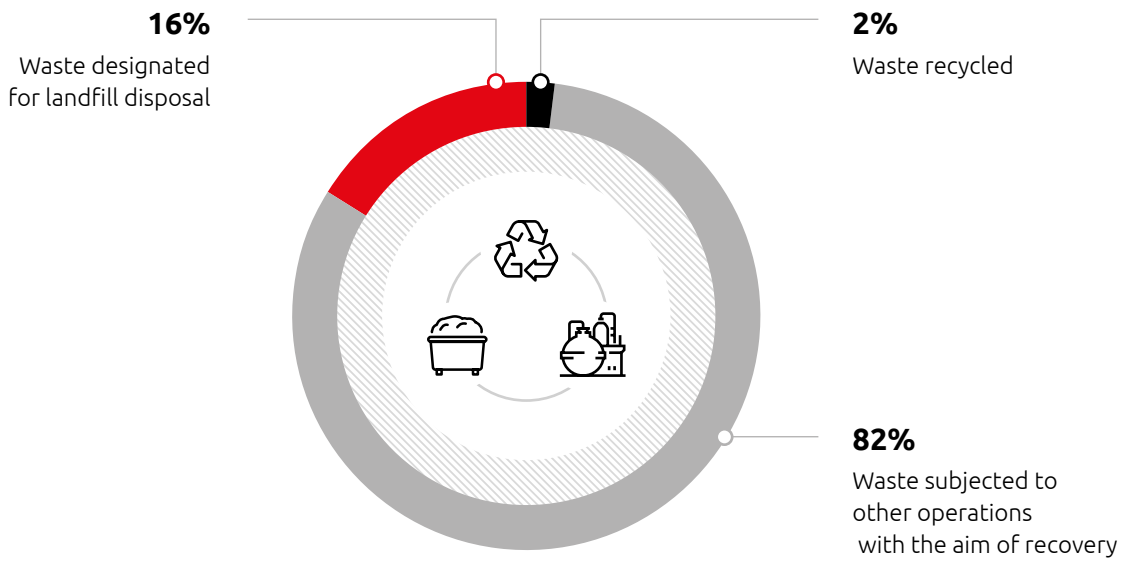
Composition and weight of the waste diverted from disposal*	Weight [t]
13 01 10 Mineral based non-chlorinated hydraulic oils	0.18
13 02 08 Other engine, gear and lubricating oils	0.15
13 05 02 Oil/water separator sludges	1.90
15 01 10 Packaging containing residues of or contaminated by hazardous substances	103.85
15 02 02 Absorbents, filter materials (including oil filters not otherwise specified), wiping cloths (e.g. rags, wipes), protective clothing contaminated by hazardous substances (e.g. PCB)	0.12
16 81 01 Waste showing hazardous properties	109.28
19 01 06 Aqueous liquid wastes from gas treatment and other aqueous liquid wastes	24.69
19 01 07 Solid wastes from gas treatment	381.39
19 01 15 Boiler dust containing hazardous substances	444.40
19 12 11 Other wastes (including mixtures of materials) from mechanical treatment of waste containing dangerous substances	1,180.13
15 01 01 Paper and cardboard packaging	0.32

Composition and weight of the waste diverted from disposal*	Weight [t]
15 01 02 Plastic packaging	214.12
15 01 06 Mixed packaging waste	27.29
16 02 14 Discarded equipment other than those mentioned in 16 02 09 to 16 02 13	0.13
17 04 05 Iron and steel	76.94
19 01 12 Bottom ash and slag other than those mentioned in 19 01 11	4,172.90
19 02 06 Sludges from physico-chemical treatment other than those mentioned in 19 02 05	2.40
19 03 07 Solidified wastes other than those mentioned in 19 03 06	1,260.36
19 12 02 Ferrous metals	2,272.17
19 12 09 Minerals (e.g. sand, stones)	1,951.90
19 12 10 Combustible waste (refuse-derived fuel)	75,598.83
19 12 12 Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11	1,333.58
Total weight of waste diverted from disposal [t]	**89,157.03**

* Waste classification based on the Regulation of the Minister of Environmental Protection, Natural Resources and Forestry of 24 December 1997 on waste classification.

The Mo-BRUK Group generated 2,246.09 tons of hazardous waste in 2022 which was diverted from disposal – all that waste was subjected to operations aimed at recovery other than reuse and recycling. In addition, the Group generated 86,910.94 tons of non-hazardous waste, of which 2,349.11 tons were recycled and 84,561.89 tons were subjected to other recovery methods.

Use of raw materials 2022:



The Group strives to process waste to the greatest possible extent; this applies to the waste it receives when performing its operations as well as the waste generated as a result of the treatment of waste within its own organization. For this purpose, there are transfers of generated waste between plants: the waste from thermal transformation is delivered to the plants that engage in solidification and stabilization, plastic and packaging waste is forwarded for the production of alternative fuels.

Where waste cannot be treated any further, it is forwarded to entities engaged in other treatment methods. The Group checks permits held by external entities and audits potential business partners. These steps reduce the risk of having the waste handled in an incorrect manner.

Questions and answers

Q: Is it possible to carry out a thermal transformation process is such a way so as to completely eliminate emissions?

A: Given the Mo-BRUK Group's profile, our activities involve gas emissions into the air – it is not technically and technologically viable to conduct the thermal waste management process in such a way so as to completely eliminate emissions. This is due mainly to the complicated structure of waste, especially industrial and municipal waste. Incineration of a heterogeneous mixture poses technical challenges relating to the optimum incineration conditions for each type of waste. Additionally, the incineration of some waste may not be a complete process, which leads to the generation of by-products. Incineration of biomass and other organic waste may also result in greenhouse gas emissions.

These challenges do not imply that the thermal treatment of waste is not an effective method of its management. The application of advanced emission cleaning and control technologies by Mo-BRUK, combined with promoting waste reduction, recycling and alternative processing methods, considerably lessens the adverse impact on the environment. What is more, the thermal methods applied by the Group tighten the closed loop in the economy, which is elaborated on more in detail in Chapter 3.

Q: What are Mo-BRUK's objectives as regards a reduction in energy consumption in the Company's plants?

O: A co-generation system is planned to be installed, which will enable heat generated in incineration plants to be used to generate electricity. Such units will be installed in both our incineration plants. We are also planning to use roof surfaces to install and operate photovoltaic systems. This will enable us, by the end of 2024, to generate more energy than we use and we will be able to sell it outside the organization.

Q: What are the additional activities, apart from sample testing and checking compliance with regulations, undertaken by the Group in relation to waste producers and clients in order to efficiently manage waste?

A: The Mo-BRUK Group treats waste generated by other companies representing various industry sectors. It promotes and encourages the suppliers of waste to deliver it (where possible) in bulk – in dump trucks, containers or cisterns. In order for waste to be delivered in this form, the Group had to implement appropriate procedures and loading and unloading systems, and to ensure specialist means of transport. The purpose of these activities is to eliminate the generation of additional packaging waste in which waste is transported for treatment. This is how Mo-BRUK additionally contributes to a reduction in the use of resources, which is beneficial for the environment.

Packaging waste which cannot be avoided in the process of cooperation with clients is forwarded to external entities in order for them to recover materials (e.g. plastics). Although the Group could treat this waste in the processes applied by it, by forwarding it for recycling, it ensures its more efficient management.

About the report

5

Our ESG report as a contribution to a dialogue with stakeholders

Information about the report and materiality analysis

GRI: 2-3 | 2-3 | 2-5

The purpose of reporting sustainable development issues by the Mo-BRUK Group is to fairly present information concerning three areas: environment, society and corporate governance.

Reporting makes it possible for stakeholders to better understand the Group's impact on its environment. For Mo-BRUK, the reporting process is also one of the key elements of development in accordance with the principle of corporate social responsibility.

This report covers activities undertaken by the Mo-BRUK Group (Mo-BRUK S.A. and Raf-Ekologia Sp. z o.o.) in the period from 1 January 2022 to 31 December 2022. Where relevant, the report refers to developments taking place in 2023, and also to plans and strategies for the future. The Group reports non-financial information on an annual basis: the reporting period corresponds to the consolidated financial statements of the Mo-BRUK S.A. Group of companies. The information included in the previous ESG report, concerning 2021, was not restated.

The report has been prepared on the basis of sustainable development reporting standards established by the Global Reporting Initiative (GRI Universal Standards 2021) and the Stock Exchange guidelines (ESG Reporting Standards). The Group discloses information also on the basis of its own indicators recognized as important for the understanding of the specificity of how the Group operates in the waste sector.

The reporting topics have been selected on the basis of a materiality analysis. Appropriate indicators have been chosen for them, whose aim is to show the stakeholders, in the best possible way, Mo-BRUK's approach to sustainable development and the material impact that the Group has on the environment, society and the governance issues within the organization. The entire reporting process has been supported by an advisory company – TAILORS Group.

GRI: 3-1

The key stage in the process of preparing the report was an analysis of the Group's impact on its environment: various areas and stakeholder groups; the topics on which the Group had the greatest impact in the reported period were identified and prioritized. The analysis consisted in verifying internal documentation, assessing the waste sector's context, as well as holding workshop meetings with the representatives of the Group and external stakeholders. External stakeholders (more information about them can be found in the "Cooperation with stakeholders" section in Chapter 1), representatives of the Management Board and senior management and a team of ESG experts were engaged in the dialogue.

The actual and potential, as well as positive and negative, impacts on the economy, environment and society, including human rights, have been identified as a result of the analysis. The identified impact areas ensue from the Group's activities and its business relationships in their entirety. In the materiality assessment, Mo-BRUK's representatives also took into account the impact of sustainable development issues on the Group's financial result.

GRI: 3-2

Taking into account the external and internal stakeholders' perspective, 12 topics which are most relevant for both groups have been finally identified and presented in detail in the ESG Report of the Mo-BRUK Group for 2022. Compared with

the preceding reporting period, new material topics have arisen concerning, among other things, waste incineration potential, alternative fuel production and the neutralization of ecological bombs. A change in approach as regards certain material topics is due to an urgent need to diversify energy sources from the point of view of the Polish economy and to counter environmental pollution and growing amounts of waste. Given the crisis in the energy market relating to the geopolitical situation in Poland's immediate neighborhood and a growing concern for the natural environment, the stakeholders' perspective has partly changed.

No.	Material topic in 2022*	Area
1	Potential of waste incineration for Poland’s power industry	Governance
2	Compliance with environmental regulations, prevention of abuse, non-compliance with environmental laws and regulations	Environment
3	Occupational health and safety, protective measures and implemented solutions aimed at ensuring employee safety	Society
4	Impact on the development of circular economy at the stage of waste treatment and reducing consumption of natural resources	Environment
5	Health impact of waste incineration, safety during waste incineration	Society
6	“Ecological bomb” management	Governance
7	Greenhouse gas emissions and means of reducing them, striving for low carbon emissions	Environment
8	Potential utilization of alternative fuels (RDF) in cogeneration plants and heat generation companies	Environment
9	Pending and planned investments, improvements and modernizations	Governance
10	Innovation and research and development work	Governance
11	Environmental impact of technologies and solutions applied by the company in the waste incineration and stabilization process	Environment
12	Organization’s value chain – cooperation with suppliers, supplier policies	Governance

* Ranked from the highest to the lowest in terms of materiality in the materiality assessment.

GRI: 2-3

The report has not been externally reviewed.

GRI content index

GRI Standards content index ("with reference")

Application statement	The Mo-BRUK Group has reported data for the period from 1 January 2022 to 31 December 2022 based on the GRI Standards
Applied GRI 1	GRI 1: Foundation 2021
Applicable GRI sector standards	Not applicable

Standard name	Disclosure	Section in the report
GENERAL DISCLOSURES		
The organization and its reporting practices		
GRI 2: General Disclosures 2021	2-1 Organizational details	Management and corporate governance
	2-2 Entities included in the organization's sustainability reporting	Management and corporate governance
	2-3 Reporting period, frequency and contact point	About the report
	2-4 Restatements of information	About the report
	2-5 External assurance	About the report
Activities and workers		
GRI 2: General Disclosures 2021	2-6 Activities, value chain and other business relationships	Mo-BRUK Group's activities for circular economy, Management and corporate governance
	2-7 Employees	Employees
	2-8 Workers who are not employees	Employees

Standard name	Disclosure	Section in the report
Corporate governance		
GRI 2: General Disclosures 2021	2-9 Governance structure and composition	Management and corporate governance
	2-10 Nomination and selection of the highest governance body	Management and corporate governance
	2-11 Chair of the highest governance body	Management and corporate governance
	2-12 Role of the highest governance body in overseeing the management of impacts	Management and corporate governance
	2-13 Delegation of responsibility for managing impacts	Management and corporate governance
	2-14 Role of the highest governance body in sustainability reporting	Management and corporate governance
	2-15 Conflicts of interest	Management and corporate governance
	2-16 Communication of critical concerns	Management and corporate governance
	2-17 Collective knowledge of the highest governance body	Management and corporate governance
	2-18 Evaluation of the performance of the highest governance body	Management and corporate governance
	2-19 Remuneration policies	Employees
	2-20 Process to determine remuneration	Employees
	2-21 Annual total compensation ratio	Employees
ESG reporting guidelines	GPW G-P1 Structure of management bodies	Management and corporate governance
	GPW S-P2 Pay equity ratio	Employees

Standard name	Disclosure	Section in the report
Strategy, policies and practices		
GRI 2: General Disclosures 2021	2-22 Statement on sustainable development strategy	Management and corporate governance
	2-25 Processes to remediate negative impacts	Management and corporate governance
	2-26 Mechanisms for seeking advice and raising concerns	Management and corporate governance
	2-27 Compliance with laws and regulations	Environmental issues, Management and corporate governance
	2-28 Membership associations	Management and corporate governance
ESG reporting guidelines	GPW G-P4 Breach notification mechanism	Management and corporate governance
Stakeholder engagement		
GRI 2: General Disclosures 2021	2-29 Approach to stakeholder engagement	Management and corporate governance
	2-30 Collective bargaining agreements	Employees
ESG reporting guidelines	GPW S-P4 Freedom of association and collective negotiations	Employees
MATERIAL TOPICS		
GRI 3: Material Topics 2021	3-1 Process to determine material topics	About the report
	3-2 List of material topics	About the report
Material topic: Potential of waste incineration for Poland's power industry		
GRI 3: Material Topics 2021	3-3 Management of material topics	Mo-BRUK Group's activities for circular economy

Standard name	Disclosure	Section in the report
Material topic: Compliance with environmental regulations, prevention of abuse, non-compliance with environmental laws and regulations		
GRI 3: Material Topics 2021	3-3 Management of material topics	Environmental issues
GRI 2: General Disclosures 2021	2-27 Compliance with laws and regulations	Environmental issues
GRI 205: Anti-corruption 2016	205-2 Communication and training about anti-corruption policies and procedures	Management and corporate governance
	205-3 Confirmed incidents of corruption and actions taken	Management and corporate governance
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Environmental issues
	304-2 Significant impacts of activities, products, and services on biodiversity	Environmental issues
Own indicator	Number of environmental standards met	Environmental issues
	Scope of environmental standards met	Environmental issues
ESG reporting guidelines	GPW G-P2 Ethical standards	Management and corporate governance
	GPW G-P3 Anti-Corruption Policy	Management and corporate governance
Material topic: Occupational health and safety, protective measures and implemented solutions aimed at ensuring employee safety		
GRI 3: Material Topics 2021	3-3 Management of material topics	Employees
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	Employees
	403-2 Hazard identification, risk assessment and incident investigation	Employees

Standard name	Disclosure	Section in the report
GRI 403: Occupational Health and Safety 2018	403-3 Occupational health and safety services	Employees
	403-4 Worker participation, consultation, and communication on occupational health and safety	Employees
	403-5 Worker training on occupational health and safety	Employees
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Employees
	403-9 Work-related injuries	Employees
	403-10 Work-related ill health	Employees
ESG reporting guidelines	GPW S-S1 Occupational health and safety	Employees

Material topic: Impact on development of circular economy at the stage of waste treatment and reducing consumption of natural resources

GRI 3: Material Topics 2021	3-3 Management of material topics	Mo-BRUK Group's activities for circular economy
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	Mo-BRUK Group's activities for circular economy
	306-2 Management of significant waste-related impacts	Mo-BRUK Group's activities for circular economy
	306-3 Waste generated	Mo-BRUK Group's activities for circular economy
	306-4 Waste diverted from disposal	Mo-BRUK Group's activities for circular economy
	GPW E-S6 Waste management	Mo-BRUK Group's activities for circular economy
Own indicator	Own indicator: Description of products offered by the Mo-BRUK Group	Mo-BRUK Group's activities for circular economy

Standard name	Disclosure	Section in the report
Material topic: Health impact of waste incineration, safety during waste incineration		
GRI 3: Material Topics 2021	3-3 Management of material topics	Environmental issues
GRI 403: Occupational Health and Safety 2018	403-2 Hazard identification, risk assessment and incident investigation	Employees
GRI 413: Local Communities 2016	413-2 Operations with significant actual and potential negative impacts on local communities	Environmental issues
GRI 416: Customer Health and Safety 2016	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	Environmental issues
Material topic: Ecological bomb management		
GRI 3: Material Topics 2021	3-3 Management of material topics	Mo-BRUK Group's activities for circular economy
Own indicator	Number of ecological bombs managed	Mo-BRUK Group's activities for circular economy
	Cooperation with local governments	Mo-BRUK Group's activities for circular economy
	Impact of ecological bomb management on the society	Mo-BRUK Group's activities for circular economy
Material topic: Greenhouse gas emissions and means of reducing them, striving for low carbon emissions		
GRI 3: Material Topics 2021	3-3 Management of material topics	Environmental issues
GRI 201: Economic Performance 2016	201-2 Financial implications and other risks and opportunities due to climate change	Environmental issues

Standard name	Disclosure	Section in the report
GRI 302: Energy 2016	302-1 Energy consumption within the organization	Environmental issues
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	Environmental issues
	305-2 Indirect (Scope 2) GHG emissions	Environmental issues
ESG reporting guidelines	E-P1 Greenhouse gas emissions	Environmental issues
	E-P2 Consumption of energy	Environmental issues
	E-P3 Risks and opportunities related to climate	Environmental issues
	E-S1 GHG emissions intensity	Environmental issues
	E-S2 Emission management	Environmental issues
Material topic: Potential utilization of alternative fuels (RDF) in cogeneration plants and heat generation companies		
GRI 3: Material Topics 2021	3-3 Management of material topics	Mo-BRUK Group's activities for circular economy
Own indicator	Number of alternative fuel buyers	Mo-BRUK Group's activities for circular economy
	Description of alternative fuel utilization potential	Mo-BRUK Group's activities for circular economy
	Energy value of alternative fuels produced in 2022	Mo-BRUK Group's activities for circular economy
Material topic: 3 Pending and planned investments, improvements and modernizations		
GRI 3: Material Topics 2021	3-3 Management of material topics	Management and corporate governance
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	Management and corporate governance

Standard name	Disclosure	Section in the report
Own indicator	Number of improvements and upgrades completed in 2022	Management and corporate governance
	Description of investment plans	Management and corporate governance
	Scope of improvements and upgrades completed in 2022	Management and corporate governance
Material topic: Innovation and research and development activities		
GRI 3: Material Topics 2021	3-3 Management of material topics	Management and corporate governance
Own indicator	Patents owned and pending	Management and corporate governance
	Waste treatment innovations implemented in 2022	Management and corporate governance
	Cooperation with universities and research centers in 2022	Management and corporate governance
Material topic: Environmental impact of technologies and solutions applied by the company in the waste incineration and stabilization process		
GRI 3: Material Topics 2021	3-3 Management of material topics	Environmental issues
Own indicator	Description of the environmental impact of technologies applied by the Mo-BRUK Group	Environmental issues
Material topic: Organization's value chain – cooperation with suppliers, supplier policies		
GRI 3: Material Topics 2021	3-3 Management of material topics	Management and corporate governance
GRI 2: General disclosures 2021	2-6 Activities, value chain and other business relationships	Mo-BRUK Group's activities for circular economy, Management and corporate governance
	2-29 Approach to stakeholder engagement	Management and corporate governance

Standard name	Disclosure	Section in the report
OTHER TOPICS		
GRI 301: Materials 2016	301-1	Environmental issues
GRI 303: Water and effluents 2018	303-1	Environmental issues
	303-2	Environmental issues
	303-3	Environmental issues
	303-4	Environmental issues
	303-5	Environmental issues
ESG reporting guidelines	GPW E-S3	Environmental issues
	GPW E-S4	Environmental issues

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