



# Responsible

Report of the company Koksownia Częstochowa Nowa on  
non-financial activities for the years 2020-2021



# Table of Content

1. Letter from the President of the Management Board	02-03
2. Foreword	04-07
3. Information about the report	08-13
4. Map of stakeholders	14-15
5. Management issues	16-26
6. Social issues	27-28
7. Employee issues	29-37
8. Environmental issues	38-51
9. Innovations and research	52-57
10. Table of GRI indicators	58-63

# 01

## Letter from the President of the Management Board



Coke will remain indispensable even in an innovative economy and around this fuel it is possible to build a modern raw material industry that combines high efficiency of operations with an environmentally friendly approach.

Dear Sirs,

It is with pride and satisfaction that I present to you the first report in the history of our Company, covering the issues of sustainable development. We summarize the activities carried out so far and define both strategic direction of changes and principles that guide us today and in the future. The starting point is the belief that while striving to achieve the best economic result, we also respect natural environment and social development.

Being well aware that the coke industry is not indifferent to the natural environment, we also take the position that coke will remain indispensable even in an innovative economy and that a modern raw materials industry can be built around this fuel. Industry that combines high efficiency of business operations with an environmentally friendly approach.

That is why, amongst others, we monitor and analyze the directions of development of modern coking, energy and circular economy technologies in terms of energy management and natural resources obtained from outside and necessary for the production processes, such as water. When planning development, we select innovative solutions, the use of which translates into limiting the impact on the environment, improving the quality and safety of work, but also further increasing the value of the company.

At the beginning of the 18th century, coke, a product of dry coal distillation, revolutionized the steel industry replacing charcoal in the steel smelting process. The use of coke forecasted a revolution in iron metallurgy, it marked the end of a certain era. Today, we want to revolutionize the coke production process so that it is as environmentally and human-friendly as much as possible, while respecting resources, and providing the best quality product with optimal composition and properties. Therefore, for several years we have been conducting investments aimed at obtaining the most optimal coal mixture while reducing gas and dust emissions, improving the energy efficiency of production processes and reducing the energy consumption of machines and devices used.



A milestone in the said projects was the reconstruction and modernization of all coke oven batteries, completed in 2021 with the modernization of coke oven battery No. 2. As a result of these investments, we have increased production efficiency while reducing its energy consumption and significantly reducing fugitive emissions. It was possible thanks to the tightness of the new ceramic mass and the use of innovative technical and technological solutions. Renewing the batteries not only increases the production capacity of the coking plant, but at the same time, thanks to the launch of the most modern dedusting installation, reduces the impact on the natural environment and contributes to the improvement of working conditions in the coking plant itself and life in its surroundings.

We set ourselves realistic goals and consistently strive to achieve them. For the years 2022-2023, we have planned the implementation of two research and development projects important for the future of the Company and its business and social environment. The first one is related to the introduction of a safety assessment system for the operation of coke oven batteries in terms of the production of high-quality coke for the steel sector. The second project aims at developing an innovative and cost-effective technology for the production of bio-coke for the ferroalloy industry. In their implementation, we cooperate with leading institutes and research entities, both domestic and international.

We understand the essence and consequences of corporate social responsibility, which for us means openness and transparency in informing about processes carried out in the company as well. Therefore, we decided to present our activities to you in the form of a sustainable development report. When developing the document, we wanted to clearly present the relationship between our business model and development strategy and non-financial indicators. I hope you will find this report interesting and will enjoy it.

A handwritten signature in blue ink, appearing to read 'M. Serafin'.

Marek Serafin  
President of the Management Board

# 02 Introduction

**We are one of the largest and state-of-the-art coking plants in Poland**

Reported GRI indicators: 102-1, 102-2, 102-3

We are a recognized manufacturer of the best quality coke and carbon derivatives on the European market. We are proud to be a part of one of the most dynamically developing capital groups - ZARMEN GROUP. We create conditions for the stable and harmonious development of our employees. Each year we are also more aware and responsible for our surroundings. The extensive investment programme implemented by us substantially minimizes the impact of coke production on the natural environment. Minimizing our impact on the natural environment is one of our main goals and at the same time it is a tangible manifestation of compliance with the strictest standards that define responsible business.

We are one of the largest and state-of-the-art coking plants in Poland, meeting all environmental standards indicated in the best available practices for the sector (Best Available Techniques - BAT).

Coke is used primarily in the iron and steel industry. Foundries are also an important group of clients. As a result of the comprehensive plant modernization, our production capacity increased to over 900 thousand tonnes of coke annually. The new assortment includes both metallurgical and foundry coke.

# 900 thousand tonnes

Currently, we manufacture over 900,000 tons of coke annually. Our assortment includes metallurgical and foundry coke.

## Production structure:

Blast furnace coke	75%
Foundry coke	25%

The coke production market is largely dependent on steel consumption. According to market forecasts, amongst others World Steel Association, the demand for steel will grow in the coming years. Therefore, we can expect a greater demand for our products. The importance of coke for the economy is confirmed by the position of the European Commission, which in 2020 re-entered coking coal on the list of raw materials of strategic importance for the development of the European economy (Critical Raw Materials for the EU). This unequivocally confirms the importance of coking coal for the development of the European economy.

Blast furnace technology, which uses coke, is still dominant in the steel production process. World production of steel is about 1,850 billion tonnes. About 450 kg of coke are used to manufacture 1 ton of steel. In the European Union, coking coal is mined mainly in Poland and the Czech Republic, which causes its deficit on the European market. It is satisfied by imports from Australia, the USA, Canada, Mozambique and Colombia. Coke consumption in the European Union countries fluctuates around 37 million tonnes, and approx. 1/3 of the demand is imported. As much as 80% of the coke on the European market is used for steel production. About 8 million tonnes of coke are manufactured in Poland, of which 6 million is exported. This kind of coke consumption creates favourable conditions for the development of our company and constitutes a challenge to meet the growing expectations of the market and our customers.



**We are aware that our activities affect the surroundings and the environment, thus our priority is to minimize the negative impact through the use of modern technologies that reduce the emission of harmful substances. Over the last few years, we have taken a number of steps in this regard. All new devices and installations meet the strictest requirements resulting from the best available techniques (BAT), and at the same time guarantee the best quality products and production standards.**

We are continuously looking for the best technological and manufacturing solutions corresponding to the challenges of a sustainable economy. Our partners in these works are: in The Institute for Chemical Processing of Coal in Zabrze, the Central Mining Institute in Katowice, the Tele and Radio Research Institute in Warsaw, the Silesian University of Technology in Gliwice, and the AGH University of Science and Technology in Kraków. Many of the projects implemented are co-financed by the European Union from the European Regional Development Fund under the Smart Growth Programme and as part of the National Center for Research and Development: Fast Track competition, as well as from the funds of the Norwegian Financial Mechanism 2014-2021.

The result of actions taken and implemented solutions is the manufacture of the best-quality coke. By optimizing the composition of the coal mixture, we try to obtain the appropriate parameters of the manufactured coke, while maintaining the efficiency of the production process and striving to minimize the negative impact on the environment.

We are a member of the Coke Producers Consortium, which includes coke plants operating in Poland. The result of our cooperation is the "Declaration of Cooperation" concerning the safe use of chemicals through their registration and evaluation and, in some cases, authorization and use of selected substances.



# SUSTAINABLE DEVELOPMENT GOALS



In September 2015, in New York, the leaders of the United Nations member countries announced the adoption of the 2030 Agenda for Sustainable Development, in which they made a commitment to reduce poverty in all its forms, ensure access to education, food and clean water, equal opportunities, the promotion of human rights, world peace and stability, environmental protection, climate change mitigation and access to sustainable energy sources.

These commitments are reflected in the 17 Sustainable Development Goals, which constitute an ambitious and comprehensive plan and signpost for countries, international and non-governmental organizations, the world of science and business. They define the necessary actions that should be implemented to prevent the main social and environmental risks, so that our planet could develop in a sustainable way, i.e. safe for both present and future generations.

Business plays an increasingly important role in how the Sustainable Development Goals are achieved in a global perspective. We also want to participate in their implementation, which is why we take actions in the areas of sustainable economic growth, responsible functioning in the community and environmental protection. Our initiatives in this area are discussed in detail later in the report.



The company supports  
the Sustainable Development Goals



# 03

## Information about the report

### 3.1. Our statement concerning the report

**Reported GRI indicators: 102-50, 102-53, 102-54**

The report was developed in compliance with:

- Article 49b(1-8) and Article 55(2b-e) of the Accounting Act of 29 September 1994, as amended, which implements the guidelines of Directive 2014/95/EU of the European Parliament and of the Council of 22 October 2014 on disclosure of non-financial information, along with additional subsequent guidelines, including the Communication of the Commission European 2019/C 209/01 of 20 June 2019 with guidelines for reporting non-financial information: Supplement on climate-related reporting,
- Global Reporting Index guidelines – GRI Standards (basic level – Core).

This report is our first report on non-financial activities. Therefore, the reporting period includes information for 2020 and 2021, and also refers to historical data that allowed us to present our activities in the area of sustainable development in a broader context.

While developing the report, we analysed in detail the documents, policies, procedures, risk management principles and other materials that define the standards of our Company's operation. An important source of information was the knowledge of our employees, managers and management, obtained during individual interviews and with the use of questionnaires. An external advisor with experience in the implementation of the sustainable development policy and reporting non-financial aspects of corporate operations participated in the preparation of the report.

Questions concerning information contained in the report may be directed to the Office of the Management Board of the Company at: [esg@koksownianowa.pl](mailto:esg@koksownianowa.pl)

# GRI

**The report was developed based on selected indicators of Global Reporting Initiative (GRI) in Standard version**

**Environment  
Social  
Governance**



- Environment protection
- Social commitment
- Corporate governance

## **3.2. Reporting standard**

ESG reporting is an expression of the transparency of our activities towards the environment, and non-financial information allows us to present contemporary organizations in a broader context. In this study, we present our activities in the area of environmental protection, social commitment and governance. We present factors determining the measurable effect in the field of energy management, occupational health and safety, emissivity, obtaining materials and raw materials as well as waste and by-product management.

The report presents not only the achieved results, but also our commitments for the future related to sustainable development in terms of both the energy economy and the natural resources necessary for the production.

The report was prepared according to selected Global Reporting Initiative (GRI) indicators in the Standards version (basic level - Core). These standards are the best known and most frequently used document defining the principles of non-financial reporting in the world. The first study containing the standards was published in 2000. Current version of the GRI Standards guidelines was adopted in 2016. Instructions for reporting consist of 36 individual standards.

GRI standards are very flexible and consider many aspects of the functioning of companies and organizations of all sizes. Therefore, when preparing the report, we focused on selected indicators that best correspond to our activities.



The first part, general standards, are universal and applicable in every organization. The second part consists of thematic standards, among which three groups have been distinguished: economic, environmental and social. When preparing the report, we focused on selected indicators that best correspond to our activities. We used indicators from the basic description category (Foundation, GRI 101), profile indicators (General Disclosures, GRI 102), management approach (GRI 103) and selected thematic indicators (Topicspecific Standards) from the economic series (Economic, GRI 200), environmental (Environmental, GRI 300) and social (Social, GRI 400).

A complete list of indicators presented in this document can be found at the end of the report. In addition, each chapter indicates markings of indicators that are reported. When selecting the indicators, information and materials presented in the report, we followed the principles of significance and materiality.

## 3.3. Report structure

The report was divided into 6 parts - each of them covers a separate topic. After the foreword, the substantive part opens with a map of our stakeholders. This is where we present the environment in which we operate, as well as show the relationships and dependencies connecting us with our clients, suppliers, competitors, neighbours and all the people and institutions with whom we cooperate on various levels.

Management issues are a chapter in which we want to introduce our business model, as well as the values that are the foundation of our work. This section also covers our approach to risk management. The next chapter is social issues. This section of the report takes a look at our role in the local community. Employees are the foundation of our company, which is why the chapter devoted to employee issues presents our approach to building safe and stable working conditions, as well as providing our employees with opportunities for professional development.

### The report was divided into 6 parts:



Map of stakeholders



Management issues



Social issues



Employee issues



Environmental issues



Innovations and research

We function in a business environment where we establish relationships with people and organizations. We are also aware that we operate in the natural environment, and this relationship must be built primarily on our responsibility and minimalization of our impact on it.

Innovation sets the direction of our activities. Therefore, a very important part of this report is the chapter devoted to our research and development activities. It includes a summary of the most important projects that have been implemented recently, as well as our plans for the future. We believe that investments in innovation will allow us to achieve the goals of improving the production process and obtaining the best quality product with the lowest possible environmental impact.

The last item in the report is the GRI index table. It allows us to quickly check what information we report and which part of the document includes more related data.



”

Understanding expectations of our stakeholders, as well as shaping permanent relationships with them, is an important element of our sustainable development strategy. Thanks to this attitude and practice, we can make better business decisions, manage risk more efficiently, strengthen the potential for innovation and verify our activities on an ongoing basis.

Marek Podstawa  
Member of the Management Board

# 04

## Our stakeholders




### Map of stakeholders

Reported GRI indicators: 102-40

Our key stakeholder groups include customers, business partners and suppliers, employees, trade unions, local communities and non-governmental organizations, administration, national and international regulators, and the business environment.

We believe that establishing relationships with stakeholders should be based on the principles of responsibility, openness and mutual respect. We make sure that communication with key stakeholder groups is carried out in a transparent manner. We are open to dialogue and cooperation. We identify the needs of our stakeholders and on this basis we communicate with them, selecting the appropriate frequency and form.



- Internal surrounding 
- Social surrounding 
- Market surrounding 

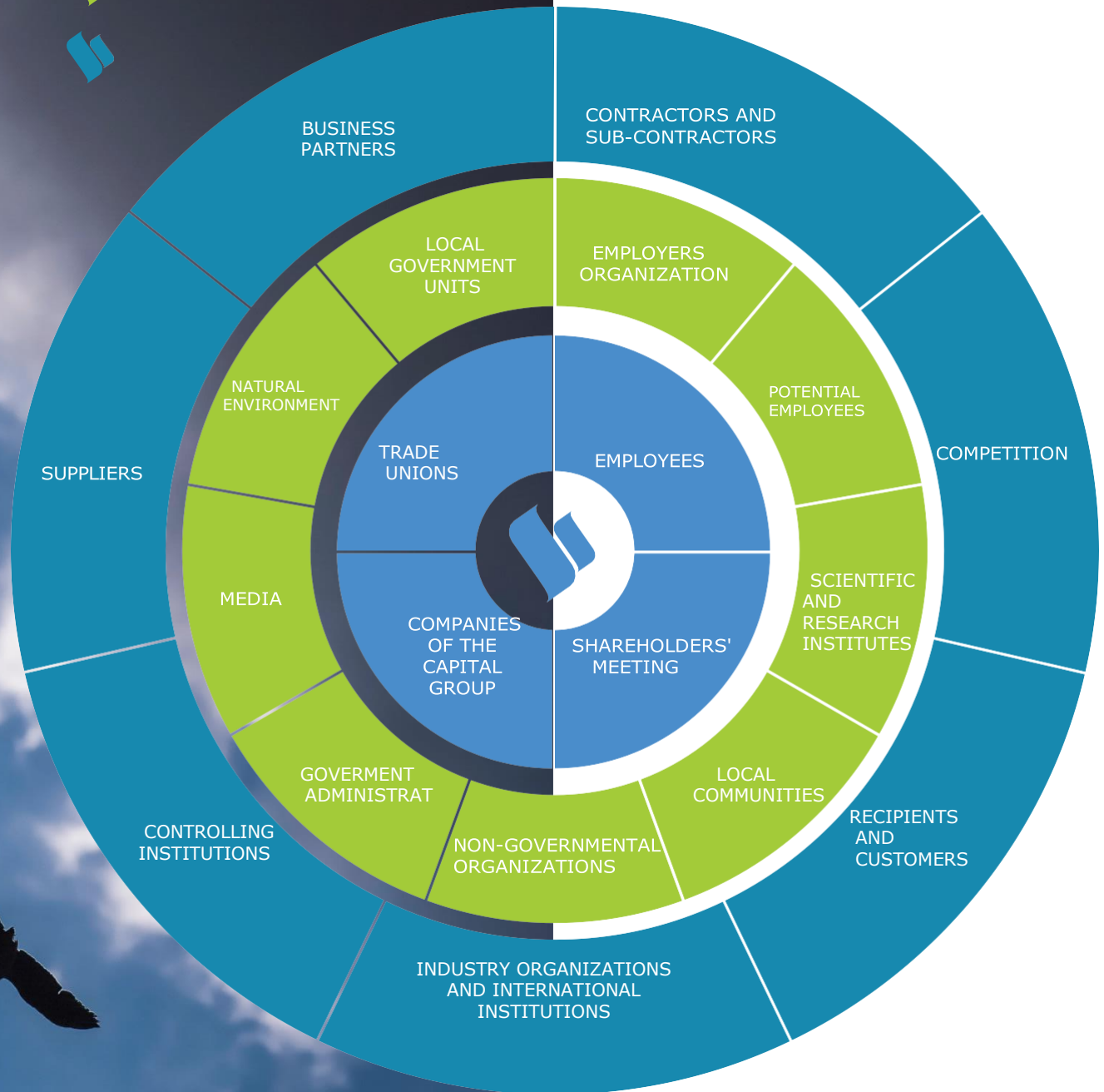


Fig. 1 – Map of stakeholders



# MANAGEMENT

## Management issues

Reported GRI indicators: 102-2, 102-4, 102-6, 102-7

”

Our priority is to provide our customers with the best quality product with optimal technological parameters, while minimizing our impact on the natural environment. Therefore, we take care of every stage of the production process, starting at the purchase of raw material, proper coking coal storage, through the use of modern coke oven batteries, to ensuring an effective delivery process.

Damian Zebisz  
Head of the Coal Department



## 5.1. Business model

Objects of our activity is the production of high-quality blast furnace coke, industrial and heating coke, foundry coke and coal-based products.

The vast majority of our clients are recipients from European markets: Germany, France, Great Britain, Belgium, Switzerland, Italy, the Czech Republic, Slovakia and Austria. About 20% of the production goes to the Polish market.

Coke is a high-calorific fuel obtained in the process of heating hard coal in special furnaces at a temperature of 600-1200 °C. It is characterized by a very high content of elemental carbon, which is at least 90-95%. It is used primarily in the smelting of iron in smelters – so it is of strategic importance for the development of many industrial sectors. In addition, it is used as a high-quality fuel for firing boilers and in metal foundries. Blast furnace coke accounts for the vast majority of the coke manufactured in our company.

The coke production process is associated with the formation of a number of by-products. In addition to coke, raw coke oven gas is manufactured. Thanks to a modern coke oven gas purification system from volatile coking products, coke oven tar and water are obtained after cooling. As a result of absorption, benzol is leached, and undesirable sulphur compounds and ammonia are removed by chemical methods. We are a large manufacturer of these valuable carbon products. Our Coking Plant has a power unit that uses by-products from coke production, such as hydrogen, to produce energy.

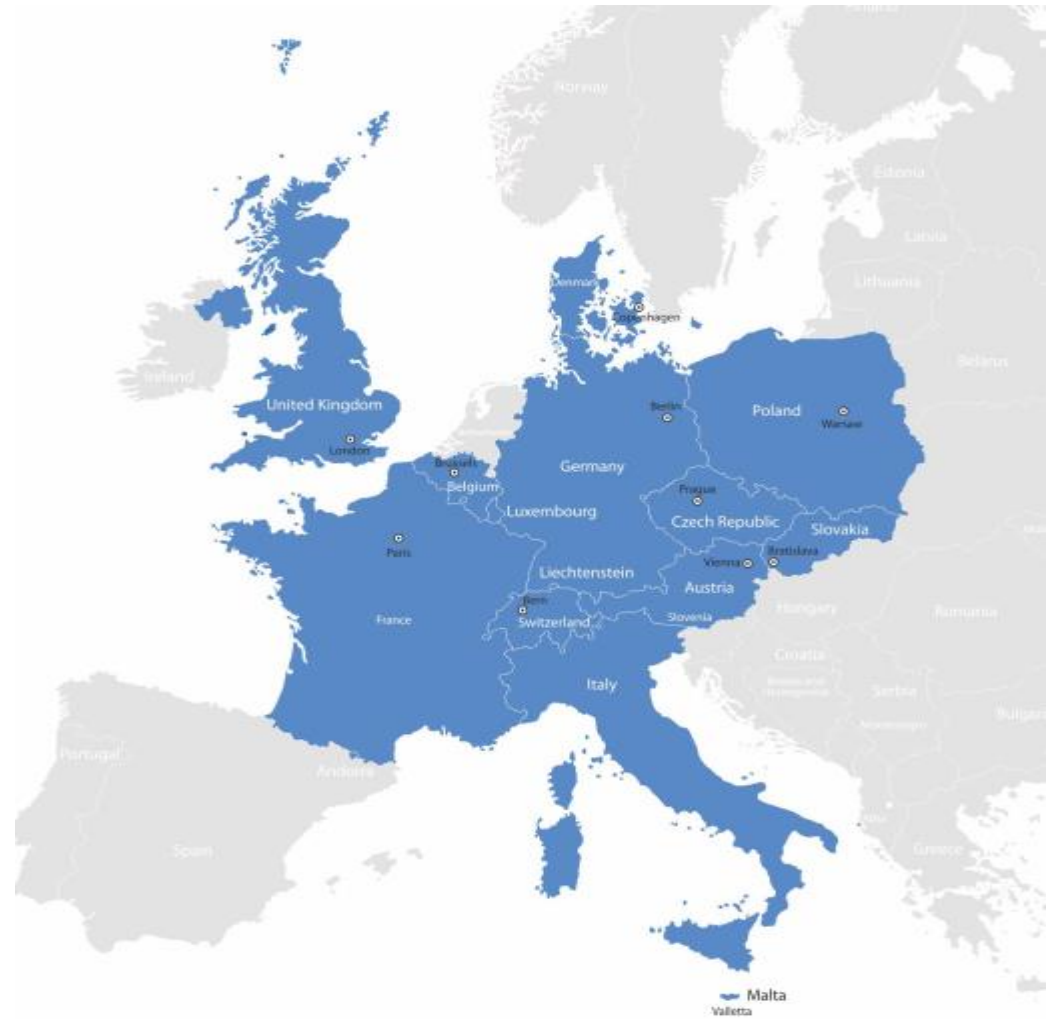


Fig. 2 – Sales markets

01

SUPPORT

BASIC  
ACTIVITIES

03

SUPPORT

CUSTOMERS

02

04

Management of people

Management of infrastructure

Finances

IT

R&D

Corporate management

Supply / Purchase



Production



Logistics

Trade and Customer Service

Sales

Marketing



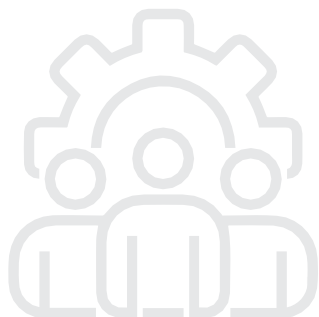
Energetics

Metallurgy

Industry



Fig. 3 – Business model



## 5.2. Strategy

We are a modern company oriented to development, and at the same time firmly rooted in the production tradition of our region. The industry in which we operate requires special care from us to maintain the highest standards, transparent activities and respect for resources. Therefore, our activities and plans for further development are based on three pillars that determine our strategic decisions.

**Table 1 – Pillars of activity and development plans**

 <b>INNOVATION</b>	 <b>QUALITY</b>	 <b>ENVIRONMENT</b>
<ul style="list-style-type: none"> <li>• Effective improvement of technical and emission parameters year to year based on modernized assets.</li> <li>• Innovation is an integral part of our reality. It means willingness to change and an innovative approach. Today's environment requires us to be open to changes and new solutions, both in the production and organizational areas. Innovation is the core value of our company. Our goal is to improve processes and obtain the highest quality product.</li> </ul>	<ul style="list-style-type: none"> <li>• The best quality and optimal coke parameters are the hallmarks of our products.</li> <li>• We pay special attention to ensuring that all our products meet the strictest quality assessment criteria and declared parameters. We expect the same from our suppliers – all input products and semi-finished products used in production processes are purchased from reliable suppliers who ensure appropriate parameters. Before being put into production on an industrial scale, each raw material undergoes tests in our laboratory and production tests.</li> </ul>	<ul style="list-style-type: none"> <li>• We will reduce environmental pollution by 50% by 2035.</li> <li>• At every stage of coke production, storage and transportation, we make every effort to neutralize the impact on the environment. We are constantly working on improving and searching for new solutions to reduce the emission of harmful substances, we introduce new technologies in production and storage. We use natural resources responsibly, striving to implement a circular economy system. The confirmation of the effects of our efforts is obtaining the ISO 14001 environmental certificate.</li> </ul>



## 5.3. Risk management

Reported GRI indicators: 102-15, 102-30, 201-2

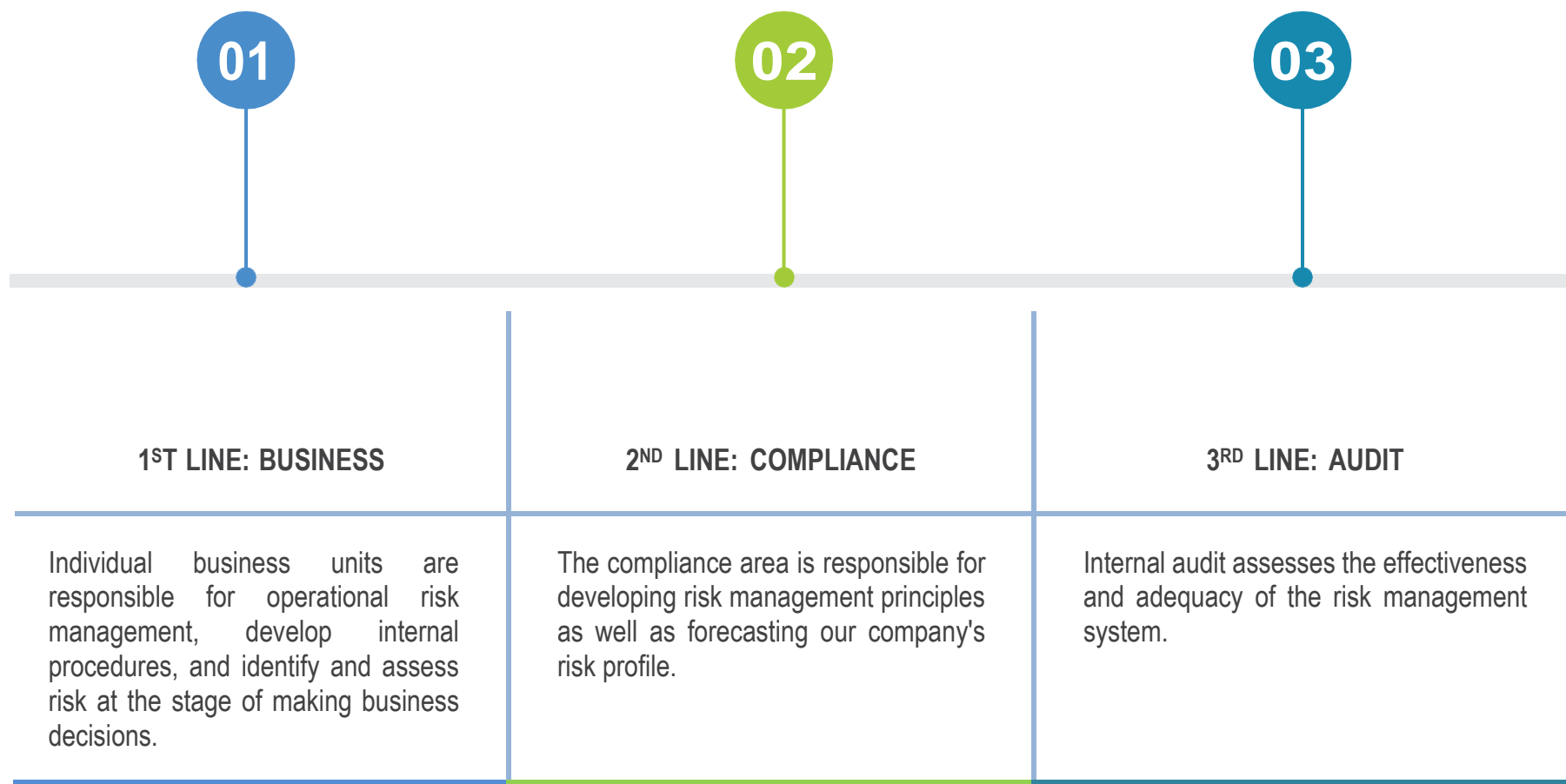


Risk is a natural element of any business activity, however we are aware that in the event of industrial activities such as the production of coke, it is a particularly important element and concerns many areas. Therefore, we approach the risk management process in a comprehensive manner. We identified key risks, identified and implemented ways to eliminate their negative effects.

Magdalena Mucha  
Head of the Integrated Management Systems Office

Each, even the best and most efficiently conducted business activity is exposed to various types of risks, which, if any, may result in costly and difficult to repair damages. We take preventive actions aimed at recognizing, minimizing and eliminating all types of risks so as to effectively prevent negative effects of threats. Our risk defense mechanisms are derived from key business processes and are based on three lines of defense.

**Table 2 - three lines of defense**



As part of preventive actions, we identify risks related to the macroeconomic, social, geopolitical and business environment. Recognizing them allows the management board to develop an optimal development strategy for the company and eliminate the possible occurrence of individual risks.

## Risks related to the macroeconomic, social and geopolitical environment

### Threats related to socio-political events

Being the results of actions destabilizing domestic economies and international trade in goods, such as a global pandemic, armed conflict. Social unrest related to soaring inflation, falling employment levels, violent natural disasters, refugee movements.

### The risk of a recession in the global economy

A downturn resulting from the economic crisis or caused by other events affecting the freedom of economic circulation (economic and financial sanctions affecting suppliers or recipients) having a direct impact on the activities of key producers in the steel sector. Events that would consequently affect the operations, results and financial condition of our Company.

### Fluctuations in coke demand and supply

The decline in demand for coke, which is a derivative of turbulence in the steel industry in the world markets, may cause a significant drop in its prices, which may have an adverse effect on the operations of our Company and its financial situation.

### Coke price changes

In order to limit the effects of this risk, we monitor and analyse price trends on the supplier and customer markets. Contracts entered into with coking coal suppliers and coke customers enable periodic price negotiations.







## Consequences of the EU climate policy

They mainly relate to the consequences of the regulations contained in the Fit for 55 package, including comprehensive changes in the emissions trading system (EU ETS), the proposal to introduce the carbon duty mechanism (CBAM), the regulation on effort sharing (ESR) defining emission reduction targets or updating the directives in the field of renewable energy, energy efficiency and energy taxation. The package is a consequence of the European Green Deal adopted in December 2019 and the increased emission reduction target of 55% by 2030 accepted by all EU countries a year later. Achieving climate neutrality in 2050 is associated with a consistent reduction of CO<sub>2</sub> emissions in all areas of economy. We are aware that the higher prices of CO<sub>2</sub> emission allowances caused by Fit for 55 will translate into a significant increase in the costs of these industries and will increase the pressure to switch to less emission methods of production.

It is worth emphasizing that despite the uncertainty of forecasting the pace of decarbonisation in energy-intensive industries, due to the early stage of development of technologies supporting this trend, coke producers, including us, are aware and observe work on the technology, which, according to scientists, may contribute to a partial replacement of coke used in metallurgy by the use of hydrogen.



## Business risks

### Increased industry competition

We monitor the competitive environment and flexibly respond to any changes taking place therein. We pay more and more attention to the observation of R&D works carried out by competitive coking plants. Our production activity is influenced by many factors that may cause a decrease in production, problems with maintaining quality or an increase in costs. In this group of operational threats, we distinguish the following risks in the conducted business activity:

- limited technical and organizational possibilities of the enterprise,
- outflow of technical staff due to external factors beyond our control,
- improper determination of the delivery time of production raw materials, but also consumables, devices and spare parts,
- conducting the planning process only on the most likely scenarios and lack of comprehensive scenario analysis.

In order to avoid risks, we take actions in various areas of operation. Production planning is based on the monitoring and analysis of production indicators, forecasts of the market situation. Production is carried out on the basis of production and investment plans.



### Logistics threats

In the field of transport and forwarding, we cooperate with external companies, which creates, among others, the following risks:

- lack of availability of rolling stock, which may result in limiting the possibility of delivering goods and liquidated damages;
- reduction of the capacity of railway routes in connection with the renovation of infrastructure, limiting the possibilities of timely delivery of goods;
- failures and limitations in logistics processes that may generate additional cost.

We minimize the occurrence of the risks in question by establishing cooperation with reliable partners in the field of rail transport and searching, together with the recipients, for the most effective logistic solutions.



### **Change of the legal environment and change of regulations related to environmental protection**

We analyse legislative changes and constantly adjust regulations and internal procedures to currently applicable legal and regulatory standards.

### **Consequences of lack of production flexibility in the supply chain**

A group of risks related to the technical and organizational conditions of the conducted production activity, errors in the production planning process, extension of the delivery schedule of materials, equipment and spare parts, and finally unexpected changes in the coal and steel market, poor allocation of human resources and delays in the implementation of agreed orders.

We undertake various activities on an ongoing basis aimed at minimizing the risk by systematically adjusting the production level to changes in the demand for coke. We also constantly analyse the situation of our most important suppliers and recipients as well as the most important potential threats to the functioning of the supply chain.

### **Conducting business with an increased risk of failure**

Due to the nature of the business and the presence of hazardous substances on the premises of the plant, our plant was reported to the Provincial Inspector for Environmental Protection and the Municipal Commander of the State Fire Service in Częstochowa as the Increased Risk of a Major Industrial Accident (ZZR). In the event of a major accident, we are obliged to immediately notify these institutions of this fact and cooperate with them in order to minimize the negative effect.

**Additionally, at the end of each chapter, risks associated with the discussed area of our activity are presented.**



# Society

## Social issues

Reported GRI indicator: 413-1

### 6.1. Local communities and social commitment

The history of our company has always been associated with Silesia. Over the past two centuries, the coke and chemical industry has played and continues to play an important role in the economic life of the region. We continue this tradition, and at the same time care for relations with the local community in many aspects. We recruit our employees from the local community, cooperate with local entrepreneurs, universities, local governments and other institutions. That is why, we are actively involved in projects oriented to the needs and expectations of the local community.



For many years we have been involved in initiatives important from the point of view of the development of local communities. We sponsor sports and educational events that promote a healthy lifestyle, as well as events for school children and seniors.

We also try to direct our help to the most needy inhabitants of the region. Therefore, we also support charity campaigns. We engage in activities for the benefit of various social groups, including providing financial support.



## 6.2. Risks in social area

AREA	RISKS DESCRIPTION	WHAT DO WE DO TO ELIMINATE RISK?
Brand and image management.	Use of the Company's brand in a negative context.	We care for relationships with our stakeholders and monitor information that may relate to our activities.
Corporate social responsibility.	Negative perception of the Company due to insufficient care for social interests.	We conduct open, transparent communication, focused on dialogue with stakeholders, we strive to build trust with our stakeholders.

Table 3 – Risks in social area

# 07



# Employees

## Employee issues

Reported GRI indicators: 102-8, 401-1, 403-1, 403-2, 403-5, 403-7, 403-9, 404-2



”

Knowledge, skills and competences of employees are our most important resource and constitute our potential. Providing a stable and safe workplace is particularly important to us, as it supports the development of human potential.

Paulina Surmik  
Director of Labour and Administration



Though we make extensive use of modern technologies and devices, we are well aware that effective production would not be possible without the commitment and experience of people. Our approach to employee issues has been registered in the Collective Labour Agreement, the Human Resource Management Procedure and the Organizational Regulations.

### **7.1. Employment, Wages, Equality and Diversity**

We meet the requirements of applicable law and international conventions. The Company has a Collective Labour Agreement agreed with the public in 2016. Over the next years, it was updated twice with additional protocols. We provide employees with appropriate remuneration and stable jobs in accordance with the standards and legal regulations. We pay particular attention to maintaining a balance between work and private life by our employees.

Team work and trust are our values. Open and honest dialogue is extremely important to us, and in our daily relations we are guided by honesty and respect. We create a work environment in which employees have the opportunity to use their full potential, their talents and skills and develop their interests. We promote equal opportunities and counteract discrimination in the recruitment, promotion, training and development of employees. The hiring decision is made solely on the basis of experience, individual skills and professional competences. In the recruitment process, during the employment period and after its termination, we do not allow any discrimination based on race, colour, religion, origin, pregnancy, gender, gender identity or expression, sexual orientation, age, marital status, mental or physical disability, medical condition or other characteristics protected by law. We fulfil our obligations under the provisions protecting the rights of disabled people.

As of 31 December 2021, we employed 363 people under an employment contract and 2 cooperating persons.



The rules for remunerating employees are set out in the Collective Labour Agreement. We provide employees with non-wage benefits. They include not only those resulting from legal regulations, such as benefits under the social benefits fund, but also additional ones being the initiative of the Company. Since 2019, we have been co-financing private medical care packages for employees. This way they have access to high-quality comprehensive medical care for themselves and their loved ones. Understanding how important it is now to build a sense of security, we have introduced a group insurance program for our employees, their spouses and adult children.

## 7.2. Relationships with society

Representatives of trade unions represent employees and their professional interests, playing an important role in the process of shaping the personnel policy. There are 6 trade union organizations in our company:



- Inter-enterprise organization of NSZZ “Solidarność” ISD Huta Częstochowa,
- Inter-Enterprise Trade Union of Employees from ISD Huta Częstochowa,
- Inter-enterprise Trade Union of Continuous Movement Employees based at ISD Huta Częstochowa Sp. Z o.o.,
- Inter-enterprise Trade Union “Kadra” Huta Częstochowa,
- Trade Union “Juvenia”,
- Inter-enterprise Committee of NSZZ Solidarity ‘80 ISD Huta Częstochowa.

In relations with trade unions, we focus on dialogue and cooperation. The president of the management board and the director of labour and administration are responsible for cooperation with the employee side.

We also attach great importance to the protection of employees’ rights in the employer-employee relationship. The company implemented, among others, the Anti-mobbing Policy, which contains the principles of counteracting mobbing, in particular regarding informing about the dangers and consequences of mobbing. The policy provides for regular training for employees in this area.





**Table 4 – Employment structure acc. To the type of agreement**



 Type of agreement	 No. of employees
Employment contract	363
- probation period	9
- specified period of time	27
- unspecified period of time	327
Contract of Mandate	1
B2B contract	1



**Table 5 – Employment structure acc. To job position**

 Job position	 No. of employees
Blue-collar employees	253 (238 M, 15 F)
White-collar employees	110 (71 M, 39 F)
Managers and independent employees	34 (23 M, 11 F)
Directors	4 (2 M, 2 F)
Management Board	2 (2 M)

**Table 6 – Employment structure acc. To age**

 Age	 No. of employees
Below 35 years old	52
35-55 years old	227
Above 55 years old	84
In total	363

### 7.3. Occupational Health and Safety



We operate in a sector where the exposure to accidents at work is relatively high. Therefore, issues related to ensuring safety and health protection are our priority. The actions taken so far have allowed us to significantly reduce the number of accidents at work, to the expected target – 2 or less per year.

Sebastian Osadzin  
Head of OHS Office

Thanks to the efforts made over the last few years, we have significantly improved safety indicators and significantly reduced the number of accidents at work.

**Our goal is 0 accidents at work.**

Safety and health of our employees is our priority. Therefore, as part of the Human Resource Management Procedure in force, we have committed ourselves to:

- Continuous improvement of occupational health and safety,
- Maintaining compliance with legal and industry requirements,
- Preventing accidents at work and their consequences

Year	2019	2020	2021	2022	2023	2024
Goal	-	2	2	1	1	0
No. of accidents	7	1	2	-	-	-

Table 7 – No. of accidents at work in years 2019-2024

**S**  
**A**  
In order to improve occupational safety, we systematically conduct internal and external trainings, paying particular attention to identified threats and methods of protection against them, as well as procedures. We are also constantly working on the improvement of the safety management system.

**In 2021, we launched a programme to improve the area of occupational health and safety, under which, amongst others, we award financial rewards to employees for reporting near misses. The aim is to motivate employees to actively participate in activities aimed at improving safety. In addition, we have developed and implemented the iSafety application that allows issuing orders and work permits, which ensures more effective control and supervision, in particular in the field of works related to increased risk. The notification system is successively extended with new production departments.**

**F**  
**E**  
We monitor the factors that may contribute to the emergence of occupational diseases on an ongoing basis. We periodically conduct research on the working environment and assess the potential risk of impact on employees' health. Measurements are carried out by laboratories accredited by PCA LAB – SERWIS laboratory. The results confirmed that all our employees have conditions in accordance with the standards set out in the Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the maximum permissible concentrations and intensities of harmful factors in the work environment.

**T**  
**Y**  
The management of the security area in our company is based on national and European Union regulations. In addition, we apply the principles of good practice for the chemical industry. We have also implemented an internal system of organizational acts including policies, regulations, ordinances, procedures, instructions and official orders in the area of personal, process and fire safety. From 2020, the Occupational Health and Safety Management System has been operating according to the PN-ISO 45001: 2018-06 standard. It is another step for us in our pursuit of continuous improvement of safety – previously, we implemented a certified Occupational Health and Safety Management System according to PN-N 18001: 2004.

The health and safety of employees is a priority for us, which has an equal status with our business goals. Occupational safety and health are an integral part of all business processes and are included from the outset in all technical, economic and social aspects of our operations. We care about safety and health in our work environment and compliance with health and safety regulations. When selecting subcontractors, we take into account the standards applied by them in the field of protection of their health and safety and that of our employees. We introduce and improve procedures aimed at increasing the level of occupational safety and health protection of employees, with the aim of completely eliminating accidents in the workplace. We raise the qualifications of employees in the field of occupational health and safety and promote attitudes of commitment in actions to improve working conditions.



### **List of procedures and internal regulations regarding occupational safety:**

- Procedure for Occupational Risk Management,
- General Health and Safety Instructions,
- Fire safety instruction,
- Programme for Preventing Serious Industrial Accidents, Instructions for Safe Performance of Work at Height,
- Instructions for Safe Operation of Vehicles in Internal Transport,
- Instructions for Safe Conducting of Vertical Transport Works,
- Procedure in case of Failures.

### **List of external certificates:**

- Integrated Management System ISO 9001: 2015, 14001: 2015, 45001 2018, 50001: 2018
- Quality Management System according to PN-EN ISO 9001: 2015-10 standard,
- Environmental Management System according to PN-EN ISO 14001: 2015-09 standard,
- Occupational Health and Safety Management System according to PN-ISO 45001: 2018-06,
- Energy Management System according to PN-EN ISO 50001: 2018-09.

## 7.4. Development and education

People are our greatest capital, therefore we provide employees with opportunities to raise and develop their professional qualifications through participation in trainings and courses. Each year, we create a training plan and budget based on the needs of employees identified individually for each organizational unit. The process of their preparation is carried out on the basis of the Human Resource Management Procedure.

In 2018, for several months, we ran an intensive education and development programme for the managerial staff called “Akademia Lidera *Academy of a Leader*”]. Seventy people strengthened their competences in areas such as: communication, cooperation, team building, problem solving, shared responsibility, creative thinking, assertiveness. Importantly, the project allowed for the sharing of insights and experiences, and allowed for the integration of participants

In the following year, 2019, our employees increased their competences in the area of quality control, changes in legal regulations, as well as those supporting the automation process, i.e. IT systems operation, programming, diagnostics of the operation of machines and devices.

In 2020, we focused on training required by the energy law. The modernization and increasing automation of the process required carrying out updating training necessary for the performance of official tasks, competences for employees involved in the operation of networks and devices and installations specified in the provisions of the energy law. More than 200 employees underwent trainings and examination before the qualification committee.

In 2021, 191 employees participated in trainings aimed at raising and developing qualifications supporting personal development, as well as competences important for the Company.

We place great emphasis on activities related to building a culture of occupational safety as well as trainings and educational programmes that help to properly identify and counteract existing threats. In 2021, 310 employees of our company were trained in the field of health and safety. Trainings are mainly used by production workers for whom they are conducted every year. In addition, we train administration employees and all newly hired persons.

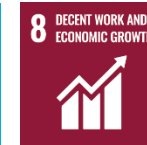


## 7.5. Employee related risks

AREA	RISK	WHAT DO WE DO TO ELIMINATE RISK?
Availability of employees on the job market.	Leaving of key personnel due to reaching retirement age, shortage on the labour market of employees with appropriate knowledge and experience	We take care of favourable working conditions for our employees. We provide opportunities for professional development and promotion. We build the brand of a good employer, we meet potential candidates, e.g. during career days organized by universities in our region.
Accidents at work	Accident at work on the premises of the plant - damage to health or death.	We have introduced a system for reporting potential health and safety hazards, we assess the occupational risk, supervise the hazard identification process, and adopted detailed instructions specifying the rules of work

Table 8 – Employees related risks





# Environment

## Environmental issues

Reported GRI indicators: 302-1, 303-1, 303-2, 303-3, 303-4, 303-5, 305-1, 305-2, 305-4, 305-5, 305-7, 306-1, 306-2, 308-2



”

Our activities are confirmed by the implemented certified management systems and standards. In addition, by participating in programmes co-financed by the European Union, we undertook to comply with strict standards and regulations regarding environmental protection and safe working conditions..

Piotr Bargiel  
Head of the Environmental Protection Office



## 8.1. Approach to climate change

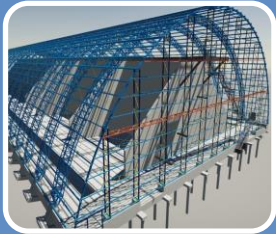
Climate change and related environmental problems, including in particular the loss of biodiversity, are today one of the most important global risks. They are progressing faster and more forcefully than the experts thought. Over the past five years, we have recorded the world's highest temperatures in history, natural disasters have become more frequent and intense, and we have been witnessing extreme weather conditions in many regions of the world. All these events remind us that without urgent measures to support sustainable development, we will not be able to prevent the effects of changes that may become irreversible. As representatives of responsible business, we understand the role we have to play - even greater commitment to environmental protection and taking into account environmental challenges in our business strategy. Therefore, as part of the Integrated Management System, we have adopted the principle of minimizing the use of natural resources and the emission of pollutants. We approach technical, technological and environmental issues in a comprehensive manner, which allows us to develop the company in a sustainable manner.

As representatives of responsible business, we understand the role we have to play - even greater commitment to environmental protection considering environmental challenges in our business strategy.

<sup>2</sup>World Economic Forum, Global Risk Report 2020, <https://www.weforum.org/agenda/2020/01/top-global-risks-report-climate-change-cyberattacks-economic-political/>



Sustainable development, environmental and climate protection, responsible investments and resource efficiency are our key corporate goals. By developing new products and services and operating production equipment, we ensure that all environmental and climate impacts are kept to a minimum, and that our products have a positive impact on environmental and climate protection for our customers. Each employee is responsible for protecting natural resources and helping to protect the environment and climate through their individual behaviour.



### Roofed coal storage yard

- Fugitive coal dust emissions are reduced by 90%



### Installation for the production of coke Battery 1, Battery 2 and Battery 4bis

- 40% of total dust emissions (PM10 and PM2.5) reduced
- 30% of SO2, NO2 and CO emissions reduced



### Installation of coke oven gas purification

- 90% of fugitive BTX emissions reduced (benzene, toluene, xylene)





TYPE OF EMISSIONS	TOTAL ANNUAL EMISSIONS OF GASES AND DUST FROM COKE PRODUCTION INSTALLATION - Mg / year				
	Emission admissible acc. to the decision	Sum 2018	Sum 2019	Sum 2020	Sum 2021
Total dust	57.83	26.01	23.71	20.20	16.44
Suspended dust PM 10	35.66	21.70	20.10	16.40	13.80
Dust PM 2.5	20.34	9.13	8.22	6.11	4.84
<b>Hydrogen cyanide</b>	<b>0.118</b>	<b>0.013</b>	<b>0.011</b>	<b>0.0031</b>	<b>0.000</b>
<b>Phenol</b>	<b>6.98</b>	<b>0.32</b>	<b>0.11</b>	<b>0.0076</b>	<b>0.000</b>
<b>Hydrogen sulfide</b>	<b>11.98</b>	<b>0.79</b>	<b>0.036</b>	<b>0.0016</b>	<b>0.000</b>
<b>Cresol</b>	<b>0.010</b>	<b>0.008</b>	<b>0.006</b>	<b>0.003</b>	<b>0.000</b>

Table 9 - Gas and dust emissions from coke production installations

**We have completely eliminated emissions:**

- Hydrogen cyanide
- Phenol
- Hydrogen sulfide
- Cresol

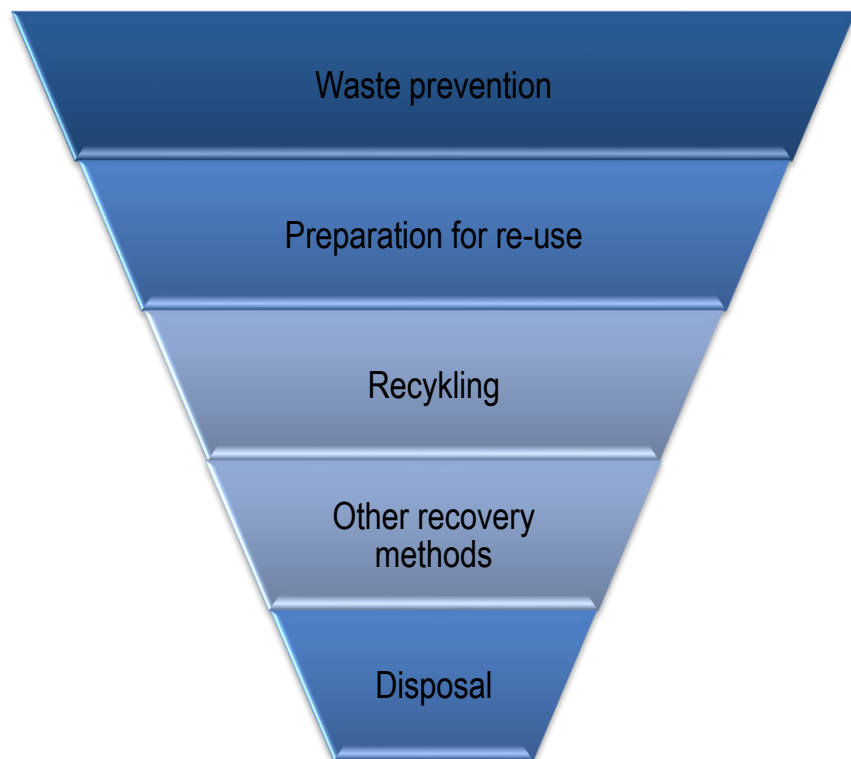


We manage waste and implement solutions limiting its formation.

The actions we take in this area are:

- Using solutions enabling the recovery of waste,
- Ensuring the disposal of waste, the generation of which could not be prevented, in accordance with the principles of environmental protection,
- Keeping records of the generated waste in accordance with applicable regulation

Here is the waste management hierarchy in Koksownia Częstochowa Nowa Sp. z o.o.



Waste type	Waste weight in tonnes		
	2019	2020	2021
Mixed packaging waste	55.22	51.39	44.17
Paper and cardboard packaging	2.02	1.75	1.35
Plastic packaging	1.76	1.20	0.96
Mineral hydraulic oils which do not contain hydrochloric compounds	2.18	1.96	-
Packaging containing residues of hazardous substances or contaminated	0.29	0.18	0.12
Sorbents, filter materials, wiping cloths, protective clothing	1.01	0.60	0.20

Table 10 - Weight of generated waste



## 8.2. Raw materials

Raw material used for the manufacture of coke is coking coal, which we obtain from suppliers from all over the world, mainly from Canada, the United States, Australia and Poland.

Raw material is one of the main factors determining the quality of coke, therefore we apply detailed quality criteria to all suppliers. Before we introduce raw material to production, each supplier must confirm the quality of the offered coal with an appropriate certificate. Then, the coal samples are checked for technological suitability in our laboratory and in another independent, accredited centre.

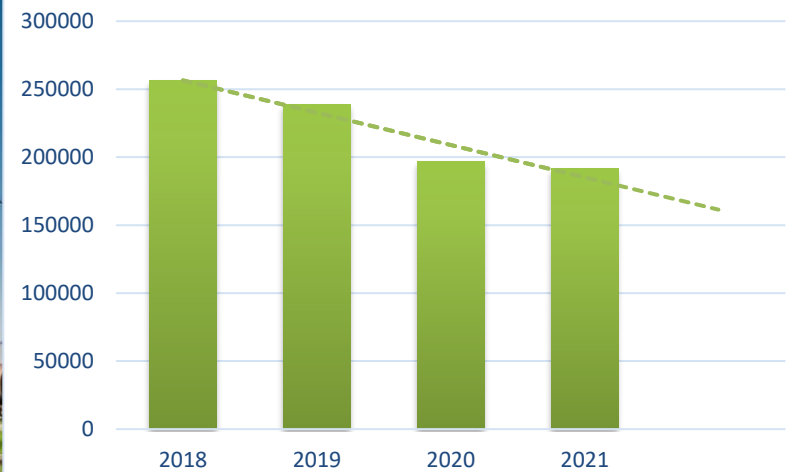
The process of purchasing raw materials is supervised by the Office of Strategic Raw Materials, which conducts negotiations with bidders, sets the schedule and delivery dates, and assesses the properties of the offered raw material based on the conducted research. Relationships with suppliers are a very important element of the management system for us, which is why we care about timely fulfilment of our obligations towards partners.



### 8.3. Carbon footprint

We monitor the carbon footprint as the sum of greenhouse gas emissions from the processes implemented by our company. All processes in the supply chain, i.e. from raw material to final product, are included here.

**Total GHG emissions [Mg] in 2018-2021**



## 8.4. Energy consumption

Effective energy management allows for tangible benefits - both from the point of view of our organization and the environment. It reduces costs, translates into cleaner air and lower consumption. Since 2017, we have been certified according to the ISO 50001 energy management system, which is an international standard that sets best practices in this area.

Currently, the energy consumed by our Company comes from three independent sources: PGNiG Termika, Tauron Sprzedaż and Elsen, with its continuous consumption from the first two suppliers, while the power supply from Elsen is related to the operation of submersible pumps at Korfantego Street and the railway infrastructure.

In 2021, we started test runs of the 30 MW coke oven gas power unit. The cleaned coke oven gas contains 60 percent hydrogen. Ultimately, it will allow us to fully meet the energy needs of our plant. This will happen after the Zarmen Group receives a license to distribute electricity and the establishment of a distribution system operator.



**Our combined heat and power plant is powered by green fuel which in**



**over 60% is pure hydrogen.**

Table 11 - Energy consumption index

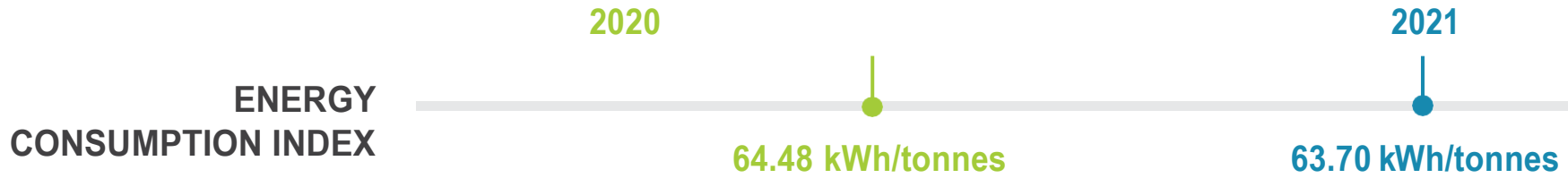


Table 12 - energy consumption

	2020	2021
Total consumption of process steam per ton of coke production [GJ / ton]	0.52	0.51
Total coke oven gas consumption per tonne of coke production [Nm3 / tonne]	218.32	214.15
Electricity per ton of coke production [kWh / ton]	22.63	22.15
Gas consumption per ton of coke production [thousand Nm3 / ton]	208.56	173.18





## 8.5. Emissions to the atmosphere

Since 2009, we have been consistently implementing a wide investment programme with a total value of over PLN 600 million, thanks to which we have implemented production technologies reducing the negative impact on the environment. As a result of completed investments, we are now one of the state-of-the-art companies in the industry. The largest projects include the implementation of the "Intelligent Coking Plant" programme (2009-2013) and the construction of:

- Compact coke oven battery no. 1 (2011),
- Installation of coke oven gas treatment (2015),
- A roofed coal storage (2020),
- Coke oven battery no. 2 (2021)



Thanks to these investments, we introduce solutions reducing emissions at every stage - from the beginning of the production process, through storage, to transport of the finished product to the customer. One of the key projects was the construction of a new roofed coal storage. The investment allowed for the reduction of dust emissions to the atmosphere by approximately 85%.

85%

**Table 13 - Actual dust emissions from the landfill**

<b>DUST EMISSION</b>	<b>2018 - OPEN LANDFILL</b>	<b>2019 - OPEN LANDFILL</b>	<b>2020 - OPEN LANDFILL</b>	<b>2021 - NEW ROOFED LANDFILL</b>
<b>TOTAL DUST</b>	8945 kg	8381 kg	8120 kg	1191 kg
<b>DUST PM10</b>	1534 kg	1355 kg	1218 kg	178 kg

The construction of a new coal storage brought another positive effect. It enables the optimal use of the production capacity of coke oven batteries due to the elimination of the influence of changes in coal moisture in the charge to the coking chambers. Its optimum humidity is 9%. Each 1% increase in moisture content extends the coking time by approximately 1 hour compared to the design time of 22 hours. This, in turn, affects the production capacity, because longer coking time means fewer operations in a given period time interval. Of course, it is possible to shorten the coking time of a mixture with a moisture content greater than 9%, but it requires increasing the temperature in the coking chamber, i.e. burning more coke oven gas, and thus emitting a correspondingly greater amount of contaminants than indicated in the technical and technological data.

**Table 14 - Reduction of gas and dust emissions, including those related to the creation of a covered coal storage**

<b>TYPE OF POLLUTION</b>	<b>TOTAL ANNUAL EMISSIONS OF GASES AND DUST FROM COKE PRODUCTION INSTALLATION - Mg / year</b>				
	<b>Emission admissible acc. to the decision</b>	<b>Sum 2018</b>	<b>Sum 2019</b>	<b>Sum 2020</b>	<b>Sum 2021</b>
Sulphur dioxide	122.83	42.11	38.27	35.33	30.44
Nitrogen dioxide	624.59	397.25	358.76	324.84	276.25
Carbon monoxide	840.94	87.40	72.22	55.17	47.06

In addition, the roofed landfill also means 90% lower energy consumption and 15% less noise compared to open space storage of coal. The contact of carbon with the ground has also been excluded by using sealed tanks, which means that no substances can get into the soil.

As a result, over the years, all the investments implemented over the past years have enabled us to reduce fugitive emissions of dust and gases SO<sub>2</sub>, CO, NO<sub>x</sub> from the coke production installation, and fugitive emissions from the coke production installation and coke oven gas purification installations.



## 8.6. Water and wastewater

Water is one of the most valuable resources, the source of life on our planet and the driving force of the economy - it is needed in all sectors: for irrigation, cooling or as a factor of production. Today, the forecasts for the state of the world's waters are extremely alarming. Poland is one of the water-poorest countries in Europe. In the years 1946-2016, the annual average of water resources in Europe per citizen was 5,000 m<sup>3</sup>, while in Poland it was only 1,800 m<sup>3</sup>. That is why we use it in a sustainable way. We reuse the water used in our production processes where possible. This allows us to reduce the amount of water ultimately drawn from the environment.

We use water resources on the basis of water permits issued by the Director of Polish Waters of the Regional Water Management Authority in Poznań. However, we use our own wells on the basis of a permit issued by the Marshal of the Silesian Voivodeship.

For industrial purposes, we use water from 3 independent sources from the network of Przedsiębiorstwo Wodociągów i Kanalizacji and our own submersible pumps. We systematically report information on water use to the competent authorities

**Table 15 - Water abstraction and water use by source and type in 2020 and 2021**

TYPE OF WATER	2020	2021
Waste water indicator for coke production	571.12 m <sup>3</sup>	452.94 m <sup>3</sup>
An indicator of the amount of drinking water used in relation to the production of coke	117.54 m <sup>3</sup>	114.54 m <sup>3</sup>
Indicator of the amount of industrial water used in relation to the production of coke	948.57 m <sup>3</sup>	837.02 m <sup>3</sup>

We do not discharge industrial wastewater to external sewage systems. We have our own biological sewage treatment plant on the premises of our plant, which receives industrial and partly sanitary sewage. After treatment, the water is used in the extinguishing towers to extinguish the coke. We discharge rainwater and post-cooling sewage to the PWiK rainwater drainage system on the basis of concluded contracts. Thanks to the built-in measuring systems, we monitor water intake and sewage discharge on an ongoing basis.



## 8.7. Environment related risks

AREA	RISK	WHAT DO WE DO TO ELIMINATE RISK?
Climate change.	Adapting to a low-carbon economy.	At every stage of production, we use solutions that reduce emissions to the atmosphere. All parameters of the emitted substances do not exceed the applicable standards.
Market trends.	Growing expectations of the market / stakeholders in the field of environmental protection.	We conduct research to optimize the production process and reduce the negative impact on the environment.
New environmental regulations.	New, more stringent standards, e.g. in the field of financial and technical security - production processes inconsistent with applicable standards.	We monitor legal requirements for environmental protection on an ongoing basis and implement investments to meet all requirements. We are subject to certification in accordance with international standards, thanks to which we meet the strictest production standards.
Environment pollution.	Contamination due to accident / breakdown.	We have implemented safety procedures, there is a rescue group on the premises of the plant, prepared to secure the plant and to take immediate action in the event of a failure.
Sewage and waste management.	Wastewater discharge inconsistent with the permit. Generation of waste contrary to the granted conditions.	With the help of measuring systems, we monitor water intake and wastewater discharge on an ongoing basis.



# Innovation

## Innovations and research

Reported GRI indicator: 102-12

”

Aiming at obtaining the best possible quality of the product and to achieve optimal production efficiency, we conduct research and tests of new coking coals, characterized by various coking properties. They concern various aspects of the production process, ranging from determining the coal resistance to crushing and determining the degree of its grinding, through the coking process, both on a laboratory and industrial scale, the development of new compositions of coal mixtures, to the creation of innovative technologies for the production of renewable bio-coke. We are convinced that new technological solutions will allow us to simultaneously gain a competitive advantage and constantly reduce the impact of our activities on the environment.

Marta Wojciechowska  
Head of Quality Control Office



Our company manufactures metallurgical, foundry and heating coke. The recipients of our products are mainly renowned entities operating in the metallurgical, chemical, mining and sugar industries, lime and soda plants, as well as manufacturers of insulation materials, foundries and parts manufacturing plants for the automotive and construction industries. To meet the expectations of the market, we conduct our own research based on the work carried out by the research and development department and participate in research and development programs aimed at improving production processes and searching for technological innovations that would allow us to increase the safety, effectiveness and efficiency of our production together with simultaneous and gradual reduction of the company's impact on the environment.



Execution date	Project name
2020	Development of a new coke quenching technology with the use of a nozzle
2020	Modification of the sulphur production plant using the Claus method
2020	Automatic system for measuring the amount of tar in the decanter (preliminary assumptions)
2021	Automatic system for measuring the amount of tar in the decanter (continued)
2021	Installation for water tar condensate level measurement in decanters

**Table 17 - List of internal research projects carried out by the R&D department**

”

Confirmation that the offered product is of the best quality and that the environmental protection requirements have been met during its production is possible thanks to tests carried out in a laboratory using modern measuring and research equipment as well as the knowledge and experience of qualified personnel.

Tests are carried out at every stage of the production process cycle in compliance with the requirements of Polish and international standards in cooperation with accredited research units.

Katarzyna Rzeszut  
Head of Laboratory



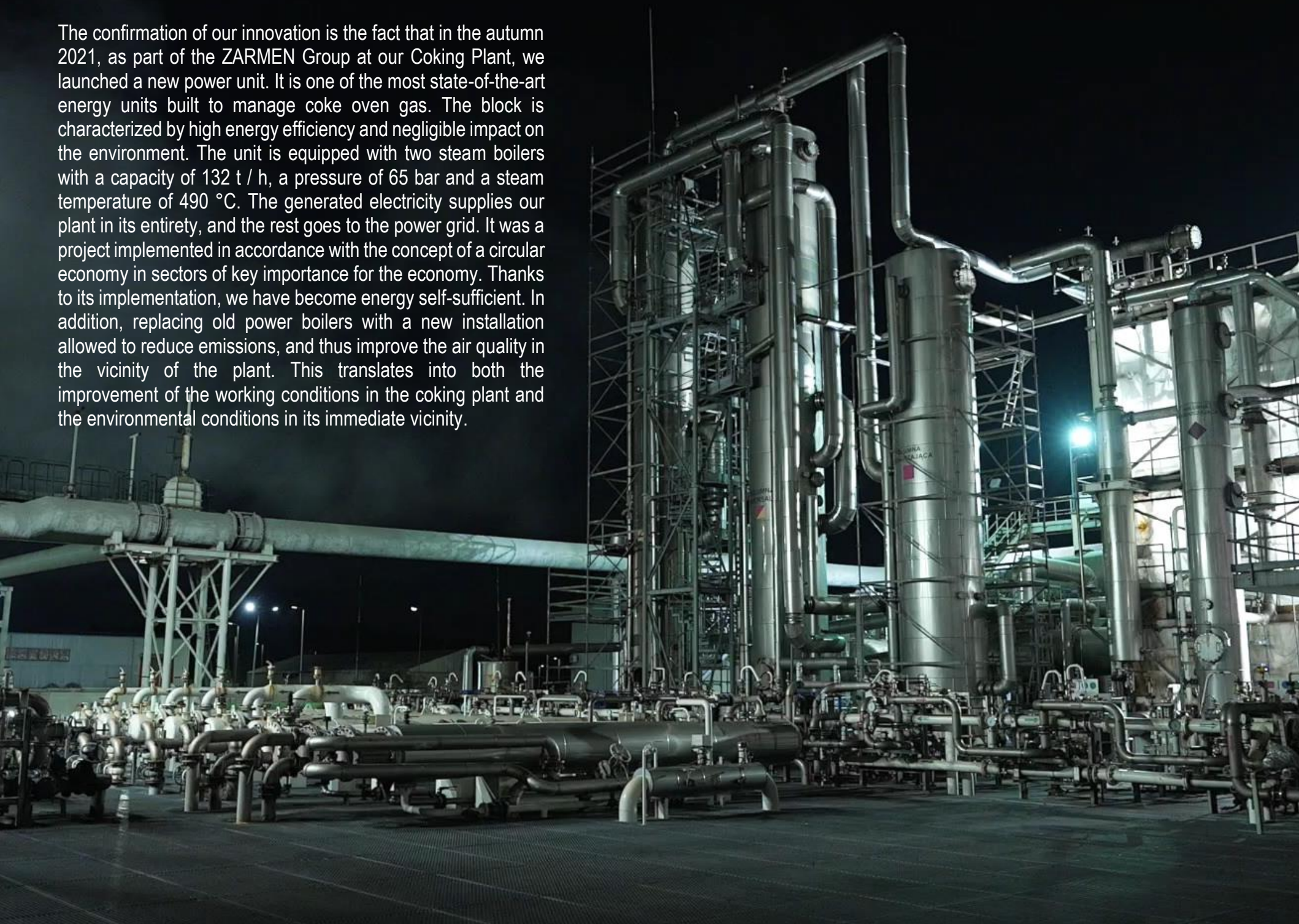
## Scientific cooperation

We know how important cooperation is for the creation of innovation, which is why we participate in research projects carried out with national scientific and research centres and other enterprises. We cooperate with leading institutes and research units in the country, incl. Institute of Fuels and Energy Technology, Central Mining Institute in Katowice, Tele and Radio Research Institute in Warsaw, Silesian University of Technology in Gliwice and AGH University of Science and Technology in Krakow. Two research projects are currently ongoing.

Name	Execution date	Project participants	Project description	Financing
Safety assessment system for coke oven battery operation in terms of the production of high-quality coke for the steel sector.	2021-2023	Koksownia Częstochowa Nowa Sp. z o.o., HPH-Hutmaszprojekt Sp. z o.o., Zarmen Sp. z o.o.	The main assumption of the project is to create an innovative on a European scale prototype system for assessing the safety of coke oven battery operation and preparing it for implementation for production in our company.	Project co-financed by the European Union from the European Regional Development Fund under the Intelligent Development Programme.
Biocoke for ferroalloys industry production	2021-2023	Institute of Fuel and Energy Technology, SINTEF AS, ERAMET NORWAY AS, Koksownia Częstochowa Nowa Sp. z o.o.	The aim of the project is to develop an innovative and cost-effective technology for the production of bio-coke for the primary iron alloy manufacturing industry.	The project received funding from the Norwegian Financial Mechanism 2014-2021.

**Table 18 - List of external research projects in which our Company participates**

The confirmation of our innovation is the fact that in the autumn 2021, as part of the ZARMEN Group at our Coking Plant, we launched a new power unit. It is one of the most state-of-the-art energy units built to manage coke oven gas. The block is characterized by high energy efficiency and negligible impact on the environment. The unit is equipped with two steam boilers with a capacity of 132 t / h, a pressure of 65 bar and a steam temperature of 490 °C. The generated electricity supplies our plant in its entirety, and the rest goes to the power grid. It was a project implemented in accordance with the concept of a circular economy in sectors of key importance for the economy. Thanks to its implementation, we have become energy self-sufficient. In addition, replacing old power boilers with a new installation allowed to reduce emissions, and thus improve the air quality in the vicinity of the plant. This translates into both the improvement of the working conditions in the coking plant and the environmental conditions in its immediate vicinity.



# We look into the future

---

Common belief is that coking coal is today technologically irreplaceable in the production of steel, i.e. also in the energy transformation. Production of the steel needed to build one wind turbine of approximately 1 MW requires 200 tonnes of coking coal.

We are closely following research that may change the future of the coke industry. In May 2021, the European Parliament adopted a resolution on the research programme of the Research Fund for Coal and Steel, which supports research to increase the competitiveness of the sector. The fund is to run, among others, research on the use of both coking coal and by-products obtained during the coke making process. In this context, there is more and more talks about carbon fibres, the wider use of gas tar and pitch coke. We already know and research confirms that the products of coke tar processing can be used to obtain material for the anodes of Li-ion batteries. It is worth mentioning that this way it would be possible to both reduce the demand for natural graphite and significantly increase the scale of production while reducing its costs. We are convinced that research in this area should significantly contribute to the construction of a modern, environmentally friendly circular economy. Due to the fact that the fund's activities are financed from European funds, all European entities operating in the industry, including our company, will be able to use their results.



# 10

# GRI indicators

## Table of GRI indicators

Reported GRI indicator: 102-55

Indicator category	Indicator	Description
GRI 102	102-1	Name of organization
GRI 102	102-2	Basic brands, products and services
GRI 102	102-3	Location of the organisation headquarters
GRI 102	102-4	The number of countries where the organization operates, including the names of those countries where the main operations of the organization are located or which are particularly important in relation to the sustainability topics covered in the report
GRI 102	102-5	The nature of ownership and legal form
GRI 102	102-6	Markets served by the organization (including geographic breakdown, sectors served, and types of customers and beneficiaries)
GRI 102	102-7	The scale of the organization's activities
GRI 102	102-8	Total number of employees by type of employment, type of employment contract and region, and gender
GRI 102	102-9	Supply chain description
GRI 102	102-12	External initiatives, declarations or rules relating to economic, environmental or social issues that the organization has signed or to which declarations, rules and other initiatives apply

<b>STRATEGY</b>		
GRI 102	102-14	A statement by top management on the importance of sustainability to the organization and its strategy
GRI 102	102-15	Description of key impacts, risks and opportunities
<b>STAKEHOLDER ENGAGEMENT</b>		
GRI 102	102-40	List of stakeholder groups engaged by the organization
<b>REPORTING PRACTICE</b>		
GRI 102	102-50	Reporting period
GRI 102	102-53	Contact person
GRI 102	102-54	Indication whether the report was prepared in accordance with the GRI Standard in the Core or Comprehensive option
GRI 102	102-55	A table indicating the place where the indicators are included in the report
<b>THEMATIC INDICATORS</b>		
<b>ECONOMIC ISSUES</b>		
GRI 203	203-1	Contribution to the development of infrastructure and the provision of services to society through commercial activities, the transfer of goods and pro bono activities. The impact of these activities on society
<b>ANTI-CORRUPTION</b>		
GRI 102	205-2	Communication and training on anti-corruption policies and procedures

## ENVIRONMENTAL ISSUES

### MATERIALS

GRI 301	301-1	Materials used by weight and volume
---------	-------	-------------------------------------

### ENERGY

GRI 302	302-1	Energy consumption by the organization taking into account the type of raw materials
---------	-------	--

GRI 302	302-3	Energy consumption intensity
---------	-------	------------------------------

GRI 302	302-4	Reduction of energy consumption
---------	-------	---------------------------------

### WATER

GRI 303	303-1	Interaction with water as a shared resource
---------	-------	---

GRI 303	303-2	Management of the effects of water discharge
---------	-------	--

GRI 303	303-3	Total water withdrawal by source
---------	-------	----------------------------------

GRI 303	303-4	Drainage
---------	-------	----------

GRI 303	303-5	Water consumption
---------	-------	-------------------

### BIODIVERSITY

GRI 304	304-1	Biodiversity
---------	-------	--------------

GRI 304	304-2	Impact of activities, products and services on biodiversity
---------	-------	---

**EMISSIONS**

GRI 305	305-1	Direct greenhouse gas emissions
GRI 305	305-4	Greenhouse gas emission intensity
GRI 305	305-5	Reduction of greenhouse gas emissions
GRI 305	305-7	Emission of NOx, SOx and other significant compounds emitted to the air

**AGENTS AND WASTE**

GRI 306	306-1	Total waste water by quality and destination
GRI 306	306-2	Total weight of waste by type of waste and disposal method
GRI 306	306-3	Total number and volume of significant spills

**EMPLOYMENT**

GRI 401	401-1	Total number and rates of hiring new employees and employee turnover by age group, gender and region
---------	-------	--

**OCCUPATIONAL HEALTH AND SAFETY**

GRI 403	403-1	Occupational health and safety management system
GRI 403	403-2	Type of injury and rates of injuries, occupational diseases, lost days and absenteeism, and work-related fatalities by region and gender
GRI 403	403-7	Preventing negative impacts on health and safety in the workplace and mitigating them directly related to business relationships
GRI 403	403-9	Work-related injuries



## EDUCATION AND TRAININGS

GRI 404	404-1	Average number of training hours per year per employee
GRI 404	404-2	Programmes for the development of managerial skills and lifelong learning that support the continued employment of employees and facilitate the process of retirement



**Thank you for attention**



[koksownianowa.pl](http://koksownianowa.pl)

[biuro@koksownianowa.pl](mailto:biuro@koksownianowa.pl)

---

**Registered office**

ul. Chłodna 51  
00-867 Warszawa  
NIP: 521-34-52-579  
KRS: 0000284737

**Management Board  
Office**

ul. Odlewników 20  
42-213 Częstochowa