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# PRESIDENT GREETINGS

**GRI 2-22** 



## Dear Reader,

I am pleased to commend you our Sustainability Report for the years 2021-2022. For our Company, these two financial years were characterised by their contrast. 2021 was exceptional in terms of profitability, as it brought a significant positive turn in the demand for our products compared to the previous year affected by the COVID pandemic. In 2022, the unprecedented energy prices and high inflation due to the Russian-Ukrainian conflict resulted in completely new and extremely unfavourable market conditions.

Despite the challenges that have arisen, we have made significant progress in promoting sustainable practices. In 2021-2022, we developed and published our Sustainability Strategy and the related Policy as well as Objectives.

We continued the preparations for increasing the self-produced part of our energy demand and implementing the installation of as many renewable energy sources as possible. Our new, natural gas-fired, combined heat and electricity power plant is highly efficient, with the construction of

which our power plant capacity has increased to 100 MW and we have started the implementation of our solar panel installation project.

Our further key and extremely significant environmental protection goals are to reduce our water consumption by 10% by 2030 and mitigate the emission of greenhouse gases (GHG) into the atmosphere, detailed information on which can be found in Article 8 of the Report.

We have completed our recultivation projects, including the demolition of our mercury cathode electrolysis plant. We have launched our second weak nitric acid plant equipped with low GHG emission tail gas purification technology and we have already produced TPU based on bio raw materials.

We are pleased that subsequent to the comprehensive audit performed by EcoVadis, the world's leading sustainability assessment organization, BorsodChem was awarded the highest rating, Platinum, for the third time.

In 2022, our Company developed and then successfully certified its ISCC Plus system for our MDI and TDI products, which, in addition to our commitment to sustainability and responsible procurement practices, proves that we are constantly striving for innovative solutions and reducing our environmental impacts.

We are aware that sustainability is essential not only from environmental and social points of view, but also from a business perspective. Approaching the end of the current declaration period of the EU-ETS, our Company also experiences that the price of CO<sub>2</sub> emission quotas has significantly increased, which is an additional incentive for us to reduce our emissions and apply more sustainable practices.

We treat sustainability principles as a priority in our social relations as well. We placed special emphasis on this even during the COVID-19 pandemic, when we provided continuous support to both our employees and the communities living in our neighbourhood.

In 2021, our Company joined the group of companies that signed the UN Global Compact, with which we undertook all principles of human rights, labour, environmental protection and anti-corruption of the Compact.

Thank you for your interest in our sustainability activities.

De

László Kruppa, President





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# ABOUT THE SUSTAINABILITY REPORT

GRI 2-2 | GRI 2-3 | GRI 2-14

This document is the fourth Sustainability Report (hereinafter referred to as Report) of BorsodChem Zrt. (hereinafter referred to as the Company) which aims to inform stakeholders about the environmental, social and economic impacts of our Company in an understandable and transparent manner. Our report is written in Hungarian and English, there is no difference between the content of the two versions.

# Scope, structure, covered period and publication method of the Report

This Sustainability Report describes the activities of BorsodChem Zrt., owned by Wanhua Chemical Group Co. Ltd., in Hungary. The presented data relate to the impacts of the activities carried out in our site in Kazincbarcika, our development centre in Gödöllő and our sales office in Budapest. The data displayed in Chapter 8.5 about the emission of greenhouse gases cover a different scope.

Our company publishes a Sustainability Report bi-annually in an electronic format only. The frequency of publication of our Sustainability Report differs from the annual reporting practice of our Financial Report, as our sustainable development projects are long-term objectives and it is authoritative to report on our results every two years. The document, together with our previous reports, is available on our website<sup>1</sup>.

BorsodChem Zrt. prepared its report pursuant to the "in accordance with" requirements of the Global Reporting Initiative (GRI) standard, which entered into force in January 2023, for the period from January 1, 2021 to December 31, 2022, which is the same as the periods covered by our Company's financial statements. We defined the content of the Report by means of materiality analysis and its results are presented in Chapter 2.1. No industry-specific standard was available at the time of reporting.

#### Data sources

The data presented in the Report were provided by the organisations of BorsodChem Zrt and were used after they were systemized and reviewed.

#### **Management approval**

Both our Company's Sustainability Report and the summary of the Company's key topics are approved by the President and the Vice President HR and Communication responsible for Sustainable Development issues.

#### **Certification of the Report**

Our report has been certified by Denkstatt Hungary Kft. based on the AA1000AS standard by examining six GRI disclosure indicators in detail. The certification statement can be found in the Report certification chapter.

<sup>&</sup>lt;sup>1</sup> Sustainability Reports



# 2.1 Our material topics

GRI 3-1 | GRI 3-2

The material topics serving as the basis of our Sustainability Report, along which we present our performance in 2021-2022, have been defined in accordance with the guidelines formulated by the GRI standard being in force since January 1, 2023.

In the course of our operations, we continuously monitor our activities and business relationships, their sustainability context and determine the stakeholders (individuals/groups) that may be affected by our Company's activities. Since no chemical industry sector-specific GRI standard was available at the time of the reporting, we assessed the material topics of major chemical industry players within the framework of a benchmark analysis.

During 2021 and 2022, as an integral part of our daily activities, we regularly identified and evaluated our impacts, in cooperation with our stakeholders and experts. Regarding the method and frequency of keeping contact with our stakeholders, you can find more details in Chapter 4.4 Our stakeholders. With customer and employee satisfaction surveys, through our complaint handling processes, and by taking into account the feedback received in forums held for our stakeholders, we followed up on the topics with which our Company's activities have the most impact. On the grounds of information originating from these steps, we identified 43 environmental, corporate governance, economic and social topics on which BorsodChem could have an impact in its own operations and business activities.

During the materiality assessment carried out in 2022, we received feedback from approximately 2 200 internal (employees, management, secondary school and university students) and external stakeholders<sup>2</sup> (customers, suppliers, civil organisations, trade unions, authorities, local government representatives, professional associations, subsidiaries, media, educational- and financial institutions and other companies operating on the Kazincbarcika site) on which sustainability topics they consider important from the point of view of the operation of the Company in relation to the previously identified environmental, corporate governance, economic and social topics.

At the same time, based on Senior Management evaluations, we determined what and how significant (e.g. real or possible, positive or negative) impacts the Company has in the various areas.

The list of material topics has significantly changed compared to our last analysis in 2016. Based on the materiality assessment conducted in 2022 and our Company's impact analysis, many new topics became important, while several topics previously considered important did not come into focus during this period. The reason for this is that in the period since our previous materiality assessment<sup>3</sup> prepared in 2016, there have been many economic, regulatory and social changes that have greatly influenced the priority of sustainability topics, and the GRI's approach to materiality has also changed.

As a final step, we assigned the appropriate GRI topic-specific standards to the material topics which provides the basis of the Sustainability Report. Additionally, we have enriched the presentation of each area with information that gives an even more complete picture of the operation and performance of our Company.

MATERIAL TOPICS		
ELIMINATED TOPICS:	NEW TOPICS:	
Health and safety of our customers	Product quality	
Local communities	Human rights and observance of ethical behavioural standards	
Materials	Appropriate working conditions	
Indirect economic impact	Innovation	
Biodiversity	Climate change adaptation	
Labour relations	Wastewater treatment and emission	

<sup>&</sup>lt;sup>2</sup> You can read more about our stakeholder groups in chapter <u>Our stakeholders</u>.

<sup>&</sup>lt;sup>3</sup> Please find more information on our previous materiality assessment <u>here</u>.

## **Our material topics**

#### ENVIRONMENTAL

- Energy consumption
- Greenhouse gas emissions
- Water use and condition of neighbouring waters
- Environmental compliance
- Waste management
- Climate change adaption
- Wastewater treatment and emission

#### **CORPORATE GOVERNANCE**

- Product quality
- Anti-corruption
- Innovation

## SOCIAL

- Occupational health and safety
- Human rights and observance of ethical behaviourial standards
- Training and education of employees
- Appropriate working conditions
- Employment, number of employees

#### **ECONOMIC**

• Economic performance

ABOUT THE SUSTAINABILITY REPORT

OUR MILESTONES

INTRODUCTION

CORPORATE GOVERNANCE SUSTAINABILITY

RESPONSIBLE

JR ENVIRONMENTAL

OUR SOCIAL

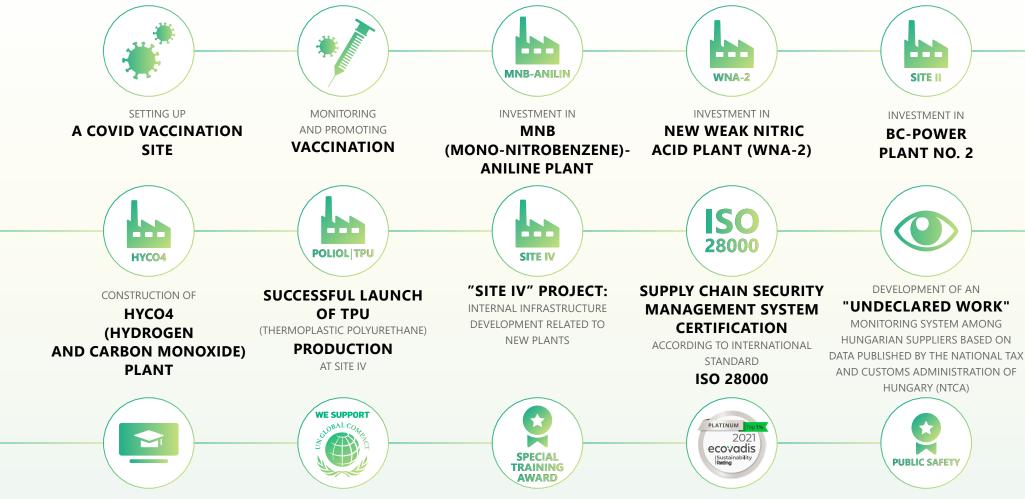
ADDITIONAL



# OUR MILESTONES, ACHIEVEMENTS AND RECOGNITIONS

GRI 2-2 | GRI 2-3

#### Our most important achievements in 2021



LAUNCH OF

OUR INTERNAL TRAINING FOR TECHNOLOGY SYSTEM OPERATORS

TO ENSURE SUCCESSION OF SYSTEM OPERATORS

JOINING THE SCOPE OF SUPPORTERS OF THE

THE UNITED NATIONS
GLOBAL COMPACT
(UNGC)

RECEIVED A

SPECIAL TRAINING AWARD

AT THE RESPONSIBLE EMPLOYER
OF THE YEAR CONTEST FROM
THE HUNGARIAN CHAMBER
OF COMMERCE

WE WERE AWARDED THE

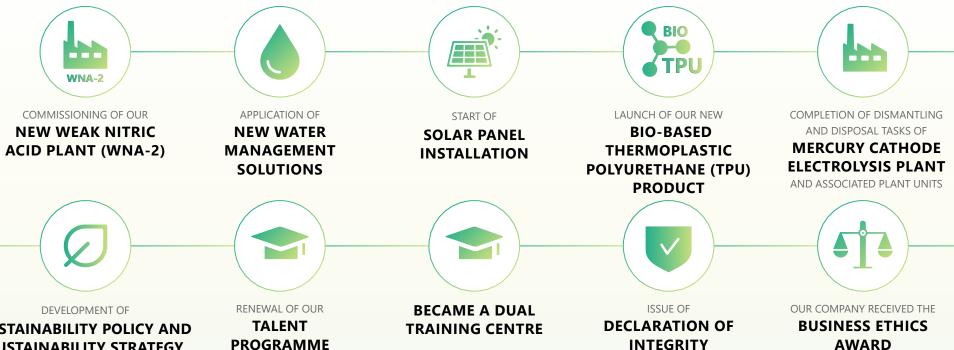
ECOVADIS
PLATINUM MEDAL

OUR FIRE BRIGADE WON THE

KAZINCBARCIKA CITY
PUBLIC SAFETY AWARD

We disclose further information about our recognitions on our website

#### Our most important achievements in 2022



#### SUSTAINABILITY POLICY AND **SUSTAINABILITY STRATEGY**

SETTING OBJECTIVES AND DEVELOPING AN INITIAL ACTION PLAN CONSISTING OF 140 SUSTAINABILITY PROGRAMMES

FOR ETHICAL OPERATION AND **RESPECT FOR HUMAN RIGHTS** 



#### **PUBLICATION OF OUR** FIRST UNGC REPORT

(COMMUNICATION ON PROGRESS, COP)

#### **ECOVADIS PLATINUM MEDAL**

AWARDED FOR THE SECOND TIME

INTRODUCTION OF

PRODUCT LIFECYCLE **ASSESSMENTS** 

OUR COMPANY WON THE

**LOVABLE WORKPLACES AWARD** 

REPEATEDLY

### **Projects in planning and preparation stages**



PREPARATION AND VERIFICATION OF

**GHG INVENTORY** 



ESTABLISHMENT AND VERIFICATION OF A

PRODUCT CARBON FOOTPRINT DATABASE



EU TAXONOMY REGULATION COMPLIANCE

**ASSESSMENT** 



CONSTRUCTION OF A

NEW VINYL CHLORIDE PLANT



INSTALLATION OF ADDITIONAL

**SOLAR PANELS** 



4

# INTRODUCTION OF BORSODCHEM ZRT.

GRI 2-2 | GRI 2-3 | GRI 2-14



## 4.1 Our Company

**GRI 2-1** 

BorsodChem Private Company Limited by Shares is currently one of Europe's market leaders in the production of plastic raw materials and inorganic chemicals, whose legal predecessor started its operation in the industry in 1949. The headquarters of BorsodChem Zrt. and the centre of its production activities in Hungary are located in Kazincbarcika. Our site (in the administrative area of the settlements of Kazincbarcika, Berente and a smaller part of Múcsony) is located on approximately

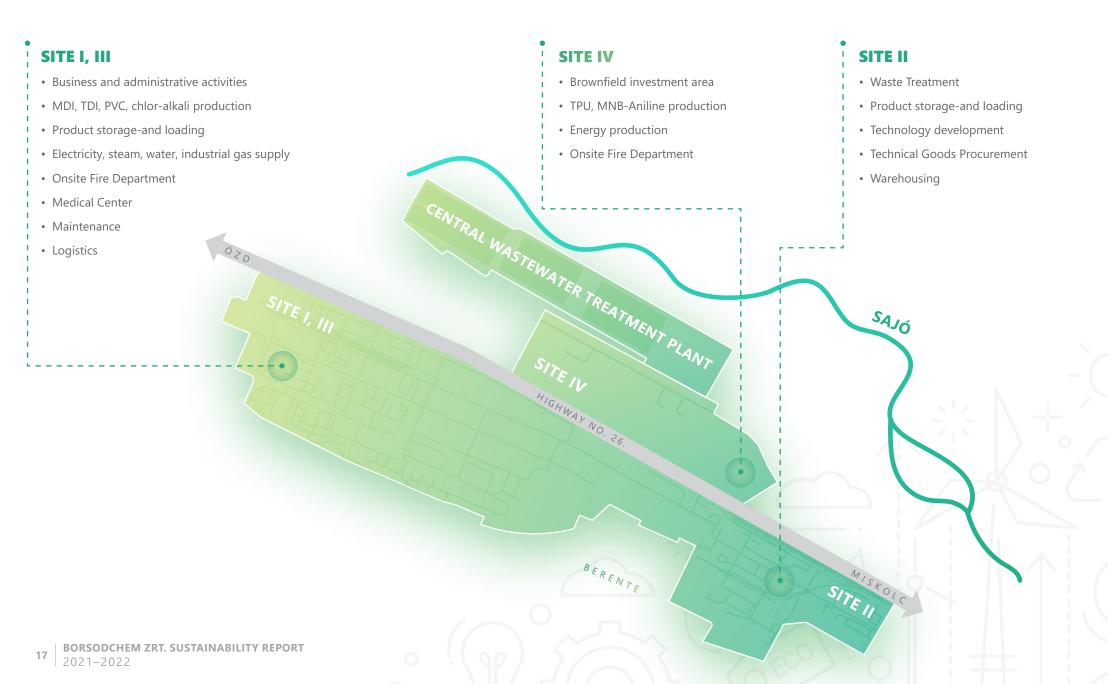
450 hectares. In addition, we operate a research and development centre in Gödöllő and we manage a part of our commercial activities from our offices, branches and sales subsidiaries in Budapest and abroad (Croatia, Turkey). The contact details of our locations, offices and subsidiaries<sup>4</sup> are available in the <u>Contacts</u> menu of our website.

The Kazincbarcika-based chemical company, which now employs more than 3 300 people, initially produced fertilizer, which it expanded with the production of PVC (polyvinyl chloride) in the early sixties. In 1991, the Company reached a decisive milestone, as parallel to the transformation of Borsodi Vegyi Kombinát (BVK) into BorsodChem Rt, the production of MDI (methylene diphenyl diisocyanate) started at the Kazincbarcika site. Isocyanate production was later expanded and from 2001 TDI (toluene diisocyanate) and from 2020 TPU (thermoplastic polyurethane) were also added to the Company's product range.<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> The content of our report does not cover our foreign subsidiaries.

<sup>&</sup>lt;sup>5</sup> Further information about our Company can be found on our website.

#### BorsodChem's Kazincbarcika site



## **Operational locations in Hungary**

#### **KAZINCBARCIKA SITE**

Bolyai tér 1., H-3700 Kazincbarcika, Hungary.

+36 48 511 211

bc@borsodchem.eu

#### **GÖDÖLLŐ SITE**

Industrial Park

Pattantyús Ábrahám krt. 12., H-2100 Gödöllő, Hungary mdispecialitysales@borsodchem.eu

#### **BUDAPEST BRANCH OFFICE**

Szabadság tér 7. H-1054 Budapest, Hungary

Platinum Tower floor 7.

TDI products: tdisales@borsodchem.eu

MDI products: mdicomponentsales@borsodchem.eu

**PVC products:** pvcsales@borsodchem.eu

Chlor-alkali products: chloralkalisales@borsodchem.eu

The increasing market demands and technological developments resulting in the increase of production capacity of polyurethane products have enabled BorsodChem to strengthen its role in the European market. The Company became a member of Wanhua Industrial Group in 2011, then later became a subsidiary of Wanhua Chemical Group Co. Ltd. As a result of the organisational restructuring of Wanhua, on January 31, 2019 Wanhua Chemical Group Co. Ltd. (hereinafter referred to as Wanhua, Parent Company) became the 100% indirect owner of BorsodChem.

With our products, we strive to provide our customers with high-quality chemicals, most of which we sell in Central and Eastern Europe, but we are also present in Western and Southern Europe, North and South America, Africa, Middle – and Far East markets. We export our products to a total of 68 countries for end-users, industry customers and distributors. To support our sales activities, we have established sales offices in several countries, allowing us to be directly present in the respective regions, thus our more thorough market knowledge enables us to maintain a closer relationship with our customers and respond more effectively to market changes and new challenges.

You can read more in detail about the operation of our Kazincbarcika site in the chapter entitled "Introduction of BorsodChem Zrt." in our Sustainability Report of 2019-2020.





# 4.2 Continuous improvement of sustainability in our supply chain

**GRI 2-1** 

Our supply chain management system ensures scheduled sourcing of raw materials in the correct quantity and quality from the shortest possible geographical distances. Our Company recognised that achieving our sustainability goals requires coordinated implementation of joint actions and active involvement of our suppliers. Strategic raw materials for our plants are purchased mainly from our subsidiaries in Hungary and the Czech Republic and to a lesser extent from our external European suppliers.

Technologies of our plants are interwoven, so in addition to exploiting the beneficial effects of our integrated production system, we can pay accelerated attention to the efficient use of our raw materials, including the avoidance of unnecessary movement of goods or maintaining unreasonably high stocks. By prioritising sustainability in our operations and supply chain, we are committed to achieving our business goals in a responsible and sustainable manner. Our strategic goal is to further increase the vertical integration of our supply chain, reduce the proportion of raw materials sourced from external, more distant sources and to reduce our costs and the environmental impacts of

transportation. Towards achieving these goals, we expanded our production system with our MNB/Aniline and new Nitric Acid plants, as well as with our second own power plant which increases the security of our energy supply. We intend to continue to establish new plants, technologies and service units in accordance with the above principles in the near future.

By improving our supply chain, we aim to establish and maintain long-term relationships with suppliers and service providers who establish and maintain a transparent and fair partnership including compliance with the prevailing ethical standards, occupational safety, occupational health and environmental regulations.

Wanhua Group considers the principles of sustainable procurement to be one of the main indicators when selecting and evaluating suppliers, which BorsodChem also follows. Prior to involving a new supplier or contractor, we perform a pre-qualification process to ensure that our prospective partner meets our expectations and standards. All potential suppliers have an equal opportunity to participate in our tenders if they meet our requirements.

During the annual evaluation of suppliers and subcontractors, we classify our partners into categories (A, B, C, D, F), and the results are considered during contracting. In case of loss of quality or performance, we initiate an on-site inspection. We have conducted on-site audits for over 20 years, and we aim to make sustainability guidelines more prominent among our audit criteria.

One of the key areas of our Sustainability Strategy established in 2022 is the Sustainable Procurement. We have started developing our Sustainable Procurement Management System in recent years to continuously improve our supply chain in line with our Sustainability Objectives. The starting point of the Management System is the creation of supplier categories determined by the means of sustainability risk assessment of our suppliers.

In 2019, our parent company became the first Asian company to join the Together for Sustainability (TfS) initiative, which plays an important role in integrating and developing sustainability in our procurement processes.

The TfS assessment methodology of suppliers is also applied by our Company in its procurement practices and supplier assessments.

As a summary of the expectations and principles that our Company considers essential for sustainable and ethical business management, we have published our Supplier Code of Conduct (SCoC), in which we summarize our expectations towards our suppliers in accordance with the principles of the United Nations Global Compact (UNGC). We also expect our suppliers to respect it to the best of their ability. We believe that with the active involvement of our partners and joint actions, we will succeed in achieving our sustainability objectives, also contributing to the achievement of global sustainable development goals by developing a sustainable supply chain in the chemical industry.

# The Company sets the following expectations for its suppliers:

- 1 Compliance with UNGC principles that apply to their operation
- 2 Establishing and maintaining a transparent and fair partnership
- Compliance with our Code of Conduct and Supplier Code of Conduct
- 4 Prohibition of any forms of corruption
- Compliance with safety, health, and environmental regulations
- Respect for human rights and prohibition of child and forced labour

We believe, success lies in working jointly with our suppliers to drive sustainable development and establish a more responsible and ethical supply chain and business ecosystem in the chemical industry.



# 4.3 Our products and services

**GRI 2-6** 

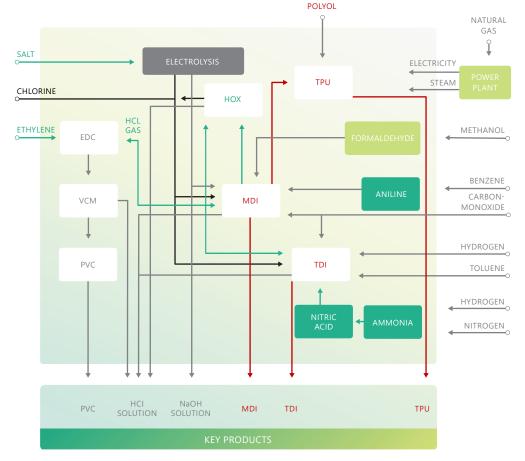
#### **Our production activities**

BorsodChem operates an integrated production system. We utilise materials involved or generated in the chemical processes as much as possible during manufacturing our products, thereby minimising the use of raw materials from primary sources, our losses, logistics costs, energy consumption and the amount of waste generated during production.

In our integrated production system, we have been utilising the by-products generated in our technological processes for several years. On the one hand, these are materials that can be sold on the market (e.g., caustic soda, hydrochloric acid, hypo), have use value (e.g. sodium sulphate), and on the other hand, can be recycled to our own production processes as raw materials (e.g., hydrochloric acid gas, salty process waters, crystallised vacuum salt).6

Chlorine, which provides an illustrative example of the circular processes, is one of the key components of our activities in the operation of our integrated technologies. In our membrane cell electrolysis plants, chlorine gas is produced from industrial salt originated from rock salt mines, which is used for MDI and TDI production. From the hydrochloric acid gas generated in these processes, chlorine gas is recovered in our hydrochloric acid oxidation plant, which is recirculated to the isocyanate production as a raw material.

<sup>&</sup>lt;sup>6</sup>You can read more about the movements of raw materials among our plants and the final sales process in our previous year's Sustainability Reports.



Thanks to our hydrochloric acid oxidation technology, we eliminate the need to extract and transport nearly 325 000 tonnes of rock salt per year. With this solution, we can avoid nearly 50 000 tonnes of greenhouse gas emissions. Additional advantages of the process, against the electrolysis-based chlorine production, are that caustic soda is not generated as a twin product during the decomposition of hydrochloric acid and significantly less electricity is required for production of one ton of chlorine, compared even to the energy demand of membrane cell electrolysis used exclusively by BorsodChem today.

PVC production is also special in case of BorsodChem, as more than 56% of the mass of PVC produced originates from the hydrochloric acid gas generated as by-product in the isocyanate production processes. This means that chlorine content of the PVC produced by BorsodChem comes entirely from hydrochloric acid gas by-product, since every chlorine atom incorporated into our PVC molecules has already gone through the TDI or MDI production process at least once.

We also use the opportunities offered by our integrated production system to neutralize our alkaline and salty wastewaters. The salty wastewater generated in our processes is crystallized, then the recovered salt is reused in the electrolysis of brine, the beginning of our production processes, thus reducing our GHG emissions and environmental impact resulting from rock salt mining and transportation of the raw material. Another advantage of the purification method is that the quality of crystalline salt produced by us far exceeds the quality and purity of industrial rock salt purchased from salt mines. The energy demand of the cleaning process is covered by the so-called waste heat generated in chemical reactions in our plants, thus minimising losses and utilizing the most of the opportunities provided by our technologies.

Compared to our previous reporting period, there has been a change in our production activity. During the financial year 2022, we significantly expanded our weak nitric acid production capacity, as a result of which we put a new plant with low GHG emission into production.

**Our sustainable products** 

Our sustainable solutions contribute to meeting the emerging needs of our customers,

within the framework of which, in 2022, we conducted a successful pilot production

for a bio-based TPU product. We used biopolyol from natural sources to produce our

new, sustainable TPU product. In the future, we will be able to serve our customers

with a sustainable TPU product. Another result of ours is that, in 2022, we successfully prepared for the ISCC PLUS certification of our MDI and TDI products (more informa-

The sustainability approach has been integrated into the everyday operation of the Company, and BorsodChem intends to continue this environmentally and economically beneficial practice also in the future. The secret of our current outstanding production performance lies in our integrated production technology, optimized logistics and inventory management solutions, as well as low specific material and energy consumption, in addition to a high level of product yield.

## Our products and services

Our company has been producing for several decades isocyanates under the ONGRONAT® brand, ONGROVIL® PVC resins, chlor-alkali, and specialty chemical products. In order to satisfy expanding customer needs, our product range has recently been supplemented by thermoplastic polyurethanes (TPU). Our Company has set itself the goal of developing a sustainable and premium product portfolio by 2050,

for the implementation of which we invest significant resources in our research and development activities.

Our products produced during our plastic raw material manufacturing activities are the most useful raw materials of modern technology – MDI, TDI, PVC, caustic soda, hydrochloric acid, hypo, and TPU products<sup>7</sup> – which have gained an undeniable reputation over the past

decades by extremely wide and diverse possibilities of their use. We can meet the processed variants of our products in many areas of life, as we supply our raw materials to over 30 industries, including the automotive, packaging, construction and furniture industry, as well as the production of electricity, electronic products and raw materials for clothing. Our products provide comfort, safety, and durability in many fields of life, focusing on sustainable

development, environmental protection and energy efficiency during their production and use.

<sup>&</sup>lt;sup>7</sup> More information about our products can be found on our website.



## 4.4 Our stakeholders

**GRI 2-29** 

As a responsible company, we consider it extremely important to establish close relationships with all stakeholders, since our activities have mutual impacts. In our opinion, the individuals or groups whose interests are or may be affected by our Company's activities belong to the category of stakeholders. Our goals are often the same, so in many cases they can only be achieved through joint efforts.

The purpose of our Sustainability Report is to address our stakeholders listed in the table below and provide them with information in the areas that were defined on the basis of the materiality assessment carried out with the involvement of our stakeholders, described in the chapter 2.1 Material topics.

OUR STAKEHOLDERS	MEANS OF COMMUNICATION	FREQUENCY
EMPLOYEES	Presentation of news, trainings, and programmes via intranet	Regular
	Communication emails on key topics	Regular
	"HR Let's chat" programs	Monthly
	BC Click, BorsodChem's internal electronic newspaper, in which we present the main events concerning the Company	Monthly
	Roundtable discussions with senior executives	Quarterly
	Employee Forum	Annually
	Employee satisfaction survey	At least every 2 yrs
	Via Trade Unions, representing employees' interest	Regular
LOCAL COMMUNITIES	Company brochure	Continuous
	Company website	Continuous
	Green newspaper on in-house news affecting the local inhabitants	Quarterly
	Open day, forum, public hearing, other online contacts (e.g., social media)	Occasional

OUR STAKEHOLDERS	MEANS OF COMMUNICATION	FREQUENCY
CUSTOMERS	Contact via email	Regular
	Contact through personal visits	Regular
	Customer satisfaction survey	Every 2 years
	Customer forum	Occasional
	Personal meetings, exhibitions, conferences	Occasional
EDUCATIONAL INSTITUTIONS	Professional collaborations	Continuous
	Research programmes	Continuous
	Participation in dual training	Continuous
SUPPLIERS	Daily business contact	Regular
	Supplier audits	Regular
AUTHORITIES	Open day, forum	Regular
	Authority requests and audits, authorisations	Regular
SUCCESSION	Career orientation programs	Occasional
INDUSTRY ORGANISATIONS	Organisational memberships, professional forums and events	Regular



# 4.5 Professional association memberships

**GRI 2-28** 

BorsodChem, as a member of several national and international professional organisations, takes an active role in projects servicy and environmental protection goals. With our memberships in international propliance beyond the regulatory requirements. ous development.

Even in the past two years, we proved a high level of commitment with our activities supporting the programmes of these organiing sustainable development, climate pol- sations, and our memberships provided us the opportunity to cooperate with other companies, to gain common knowledge, to fessional associations, we undertake com- exchange experiences and for the continu-

#### In addition to the above, we actively support the goals set by the following organisations<sup>8</sup>

INTERNATIONAL ALLIANCE MEMBERSHIPS
III (International Isocyanate Institute)
MNB&DNT Safety Conference (MDSC)
ISO 9000 Forum Association
ISOPA (European Diisocyanate and Polyol Producers Association)
PU Europe
Euro-Moulders
European Panel Federation
Euro Chlor
EPCA (The European Petrochemical Association)
AC-Fiduciaire
SNPU (Syndicat National des Polyuréthanes)
NVPU (Nederlandse Vereniging van Polyurethaan hardschuimfabrikanten)
IVPU (Industrieverband Polyurethan-Hartschaum e. V.)
IMA (Insulation Manufacturers Association Ltd)
FEICA (Association of the European Adhesive and Sealant Industry)
Europur (European association of flexible polyurethane foam blocks manufacturers)
SIPUR (Polish Association of PUR and PIR Insulation Producers and Processors)

HUNGARIAN ASSOCIATION MEMBERSHIPS
Hungarian Chemical Industry Association (MAVESZ)
Association of Hungarian Chemists (MKE)
National Confederation of Employers and Industrialists (MGYOSZ)
Hungarian Innovation Association (MISZ)
Hungarian Hydrological Society (MHT)
National Association of Facility Fire Brigades (LTSZ)
Hungarian Public Benefit Organisation of Internal Auditors
BAZ County Chamber of Commerce and Industry (BOKIK)
Association of North Hungarian Industrialists
Hungarian Credit Management Association
Hungarian Private Railway Carriage Association
Circular Economy Technology Platform (KGTP)

<sup>&</sup>lt;sup>8</sup> You can read more about our memberships in our <u>2019-2020 Sustainability Report.</u>

PRESIDENT

SUSTAINABILITY REPORT

OUR MILESTONES

INTRODUCTION



# CORPORATE GOVERNANCE



# **5.1 Company Management**

GRI 2-9 | GRI 2-10 | GRI 2-11 | GRI 2-15

The governing body of BorsodChem is the Board of Directors that is responsible for making decisions related to the Company's Management. The development of corporate strategy falls within the competence of the Company Sole Shareholder. Our Company is organised according to functions and this structure serves the effective implementation of our strategic goals. The heads of departments are responsible for implementing corporate strategy and coordinating operational processes. Since our previous Sustainability Report, there have been no significant changes to our corporate governance structure.

#### **Management levels**

Members of our Management team come from a diverse range of social and cultural backgrounds. At the end of 2022, one member of our Senior Executives was female and six members were Hungarian citizens. The members of the Board of Directors as well as its Chairman have relevant professional qualifications (in engineering or economics) and extensive experiences

Based on BorsodChem's Deed of Foundation, the appointment of members of the Board of Directors falls within the competence of the Sole Shareholder. In addition to the mandatory requirements of existing legislation, in the process there are no clearly defined rules for the selection of members. However, the Sole Shareholder takes certain aspects (e.g., competence, experience and independence) into account. External stakeholders are not involved in the selection process. The term for the members of the Board of Directors is three years.

OUR MILESTONES

Level n President

Level n-1 Senior executives (Vice President, Chief Officer)

Level n-2 Middle managers (Director)

Level n-3 Line Managers (Senior Manager/Manager)

Lower managers (Officer, Deputy Manager, Chief Supervisor, Shift Supervisor)

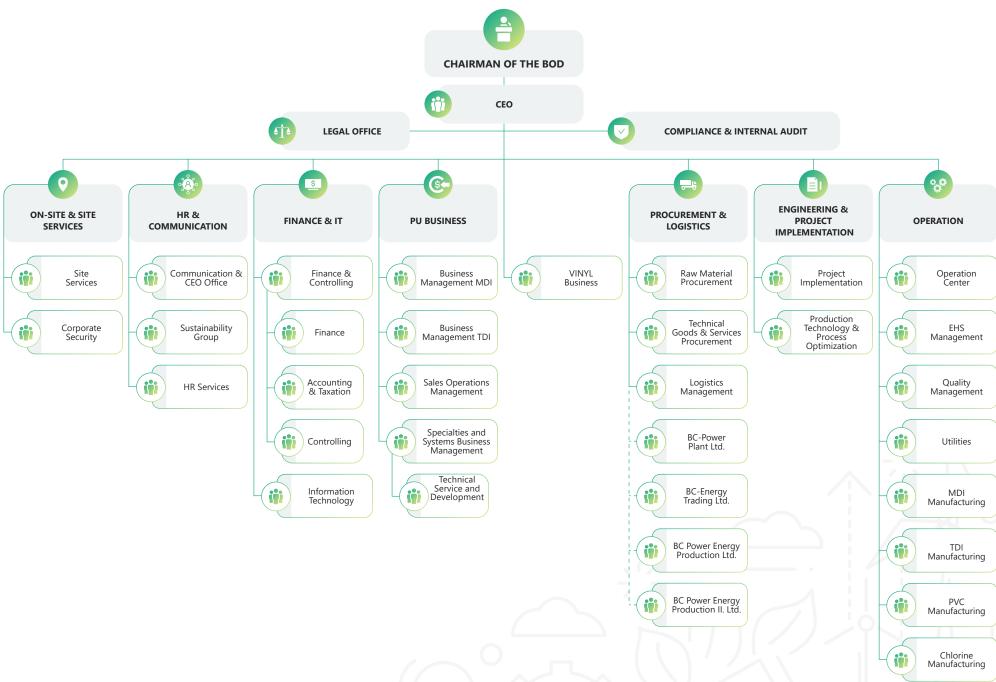
In order to eliminate concerns on conflict of interests, the Chairman of the Board of Directors is a non-executive member in our organization. The members of the Board of Directors are required to immediately report to the Board of Directors and the Chairman of the Supervisory Board if there is a conflict of interest or any reason or circumstance that would justify their exclusion. In our organization, there are no relationships leading to conflicts of interest.

Since its foundation, the Management of our company has paid special attention to the reliable operation of processes supporting our main production activities. In line with external and internal requirements, functional directorates perform various tasks with the help of additional organisational units in order to ensure continuous development. The corporate processes and the tasks of each organisation<sup>9</sup> are included in a detailed regulatory system. Senior Management's commitment is reflected in the policies we publish as part of our governance systems.<sup>10</sup>



<sup>&</sup>lt;sup>9</sup> You can read more details about the structure and operation of our departments in our 2019-2020 Sustainability Report.

 $<sup>^{10}</sup>$  More information can be found on our website  $\underline{\text{Our Policies (borsodchem.com)}}$ 





#### **Our management systems**

BorsodChem's responsible, sustainable and effective operation is based on an appropriately designed and documented integrated company management system, which ensures that the requirements for our products, environmental, health and safety activities, energy management, sustainable development and supply chain security performance are met.

In 2022, a management decision was made to involve the process of sustainability in the operation of the Integrated Management System.

By operating our Integrated Management System, our goal is to continuously improve the effectiveness of our processes, to present our production and service activities as well as the operation and performance of the subsystems of the Management System to the stakeholders.

# **5.2 Corporate governance**

GRI 2-12 | GRI 2-13 | GRI 2-17

#### Standards used in the integrated management system

STANDARD	DESCRIPTION
MSZ EN ISO 9001:2015	Quality Management System (QMS)
MSZ EN ISO 14001:2015	Environmental Management System (EMS)
MSZ ISO 45001:2018	Occupational Health and Safety Management System (OHSMS)
MSZ EN ISO 50001:2019	Energy Management System (EnMS)
ISO 28000:2008	Supply Chain Security Management System (SCS)
SA 8000:2014	Social Engagement System

We operate and continuously develop our corporate management system considering our stakeholders' and customers' needs, legal regulations and internal properties, thereby ensuring the fulfillment of the requirements imposed on our Company. Our commitment to each of these areas are stipulated in our Quality Policy, EHS Policy, Energy Policy, Supply Chain Security Management Policy and Sustainability Policy.

We are committed to continuous improvement, we regularly define and update our Quality, EHS, Energy, SCS and Sustainability Objectives as required by our policies, based on the tasks identified during our risk analysis. In addition to all of these, we define actions and programs that support the achievement of our goals. In the course of our regular risk assessment, beyond external and internal environmental factors, we also identify and analyze the risks related to our stakeholders and define programs for their management, which are evaluated and reviewed quarterly.

#### **POLICIES**

- HSE Policy
- Energy Policy
- Quality Policy
- SCS Policy
- Sustainability Policy

#### **OBJECTIVES**

- HSI
- Sustainability
- Energy
- Quality
- SCS

#### PROGRAMS

- HSE
- Energy
- Quality
- SCS
- Sustainability Action Plan

We communicate our policies and goals to all our employees and provide access to our stakeholders on our website.

We manage the implementation of all of our activities – following the principles of the Integrated Management System – in a regulated and documented manner.

We ensure the monitoring and controlling of the proper functioning of our Integrated Management System, the determination and implementation of the necessary corrective and preventive actions during internal audits, management meetings, annual management reviews and on-site inspections. In case of any differences, we determine and implement corrective actions.

Our management systems are certified by an external independent party.

# The role of sustainability in corporate governance

For enforcing the sustainable development principles, our Company has established its Sustainability Management System and has defined the responsibilities of each organisational level related to sustainability. BorsodChem involves its internal stakeholders in the implementation of its Sustainability Objectives through the Sustainability Management System.

## Carrying out responsibilities related to sustainable development are exercised at four levels:

Level 1 Sustaina

Sustainability Steering Committee: Management

Level 2

Climate Task Force: coordination of sustainability programs, supporting and monitoring the achievement of goals, regular reporting on sustainability-related performance indicators, support for strengthening the sustainability approach within the company

Level 3

Directors, Managers: ensuring and monitoring the implementation of programs, regular reporting on sustainability-related performance indicators

Level 4

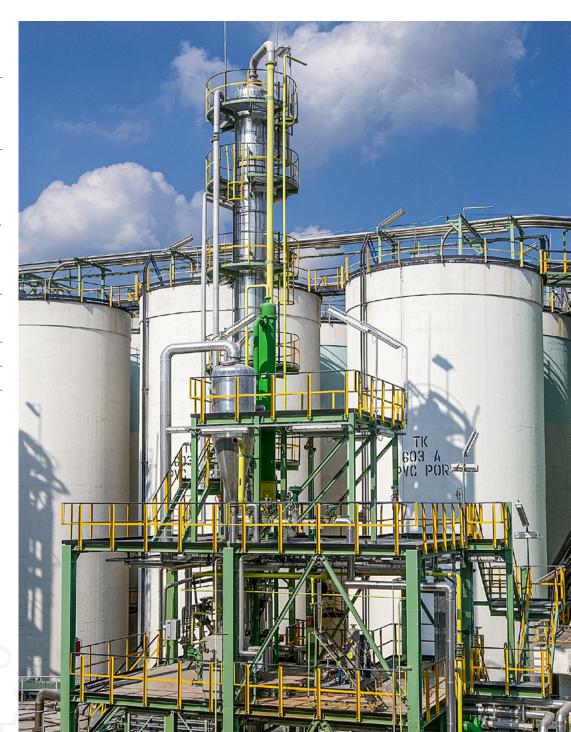
Employees: proactive cooperation

#### Sustainability Steering Committee

Our Sustainability Steering Committee consists of the Chairman of the Board, the President, the Vice Presidents, and the Chief Officers. The main tasks of the Committee include, among others, controlling and approving BorsodChem's Sustainability Policy, Sustainability Strategy, Objectives and Action Plan, appointing Sponsors responsible for the implementation of the Sustainability Strategy and approving projects supporting its implementation, prioritizing sustainability principles and aspects during decision-making, monitoring the progress of sustainability projects, regularly supervising and evaluating the sustainability-related performance indicators, regularly informing stakeholders about sustainability activities, and providing

the resources necessary for implementation of the Strategy and its annual review, as well as raising awareness of sustainability principles at all levels of the Company. Among the members of the Sustainability Steering Committee, Vice President HR and Communication, who is obliged to report directly to the President, is responsible for coordinating activities related to sustainable development.

The members of the Committee continuously develop their relevant knowledge on the subject of sustainability in accordance with the core values of our Company. The opportunity to develop collective knowledge, experience and skills are ensured through information provided by our Company's experts and external consultants.





# 5.3 Ethical behaviour, compliance and anti-corruption

GRI 2-23 | GRI 2-24 | GRI 2-26 | GRI 2-27 | GRI 205-1 | GRI 205-2 | GRI 205-3 | GRI 3-3 |

#### **Ethical behaviour**

We believe that corporate integrity, legal compliance, and the ethical commitments of our community should have the importance equal to our business performance. We are committed to complying with the generally accepted ethical standards and business rules at all times in our operations.

The Compliance and Internal Audit has been operating as an independent organisational unit for several years, thereby indicating our Company's position on the importance of the topic. Its main tasks are to review and support the compliance with internal rules, the observance of ethical standards as well as the prevention and management of fraud and corruption. It operates independently of the corporate management and reports directly to the President and the Supervisory Board.

The three pillars of our ethical values are the Code of Conduct, the Anti-Fraud Policy and the Whistleblowing Policy, which are publicly available on <a href="BorsodChem's website">BorsodChem's website</a>. We apply the regulations continuously and we impose their compliance as an obligation towards our own employees.

We investigate all incidents where violations of our ethical standards can be assumed. Verified violations and abuses result in accounting for responsibility.

In 2021, we expressed our requirements in the fields of human rights, ethics, anti-corruption and environmental protection towards our business partners by introducing the Supplier Code of Conduct. We disclose the requirements of the Code to all of our business partners and suppliers, and their compliance is part of our contractual requirements. The Code is publicly available on our website.

We provide our employees and those in partnership with BorsodChem several platforms to share their comments and complaints concerning the practical application of our responsible business policy. Our Whistleblowing Line has been an independent and confidential channel accessible to any external partner and employee for over ten years. On the Whistleblowing Line, the whistleblower has the opportunity to report any concerns or specific grievances that he/she perceives or suffers as a result of the operations of BorsodChem. The President, who is also a member of the Board of Directors, is informed about the announcements.

OUR MILESTONES

If, after investigating the case reported on the Whistleblowing Line, the suspicion of abuse or bribery is confirmed, the Company acts in accordance with the principles of zero tolerance and consistency against all perpetrators of abuse or bribery.

It is an integral part of our corporate culture, a self-evident practice, that managers disclose and report any critical problems that may arise in a transparent manner. The Company holds Board meetings at regular intervals, monthly and quarterly, which provide a good opportunity for issues to be released and discussed.

The Board of Directors is able to monitor the Company's business management on a daily basis, which is due on the one hand to the Company's ownership structure (Sole Shareholder), and on the other hand to the fact that the Board of Directors includes several Senior

Managers employed by the Company. In BorsodChem's practice, the Board of Directors plays an extremely active role, there is close communication and there are frequent discussions and meetings among the members. All of these guarantee that the Board of Directors is aware of any significant concerns and problems. During the years 2021 and 2022, there were no concerns or specific events of such a magnitude (including human rights, safety, environmental protection and legal operations) that would have required the Board of Directors to be provided with priority information or to order special measures.

We organise roundtable discussions and other events (e.g., Coffee Time Meeting, HR Let's Chat) for our employees, where they can get answers to their questions about the operation of the Company from the representatives of Management and HR.

#### **Compliance**

It is a core principle of our operation that we respect all relevant laws applicable in the legislative area related to our Company's business activities, including regulations on accounting and control activities, anti-corruption and antimoney laundering legislation, environmental and labour protection laws. We carry out our activities in full compliance with regulations and restrictions affecting international trade.

In the period 2021-2022, our Company received only one significant instance of non-compliance<sup>11</sup> rwith legal or regulatory requirements. In 2022, one of our employees was exposed to adverse impact during work, for which our Company received a fine from the competent Hungarian authority. The necessary corrective measures have been taken and the person concerned continues his work at BorsodChem.

As a new initiative, in 2022 we provided an opportunity for our employees – on a voluntary basis – to confirm and certify their commitment to the ethical values of our Company by signing a so-called Declaration of Integrity. By signing the Declaration, they firmly reject all forms of fraud and corruption. By the end of 2022, 75% of our employees, and by the time this Report was prepared, 89% confirmed their commitment.

<sup>&</sup>lt;sup>11</sup> The Company set the value limit of the significant instances of non-compliance to be reported to external parties as well, in the interest of transparency, at EUR 25 000. One of the reasons for this is that, in view of BorsodChem's scale and financial processes, a fine that reaches or exceeds this value limit can already be perceived as a substantial and extraordinary impact or event. The other reason is that, according to BorsodChem's experience, the fines that reach this limit are the ones that deserve the attention of the Company's stakeholders and about which the Company, naturally, wishes to provide information to its stakeholders. Thanks to BorsodChem's general compliant behaviour, the value of the imposed fines is far below the above value limit and their number - especially considering the extensive regulatory system affecting Borsod-Chem's operation - is negligible...

#### **Actions against corruption**

Our Company distances itself from all forms of fraud and corruption and considers them incompatible with its operation. Corruption would not only pose legal and reputational risks to our Company, but it would also negatively affect our business relationships and the employee community. In the spirit of fairness, we act against all forms of corruption and oblige all our employees to do so. We also expect our partners to comply with these standards.

Our goal is to maintain an ethical employee community, to preserve and strengthen employees' trust in the Company, furthermore promote compliance and anti-corruption among our partners. We can state that in the reporting period of 2021-2022, we did not identify any cases of corruption related in any way to BorsodChem's activities.

In accordance with our legal obligations, the Company presents its anti-corruption activities in its annual report and we also report in detail on the support and compliance with the Compact's principle of anti-corruption

<u>in our UNGC COP report</u> Information about our anti-corruption measures can also be found <u>on our website</u>.

We conducted a corruption risk assessment for the first time in 2021 for 35% of the Company's key business processes. The analysis covered a total of six processes (procurement, logistics, sales, finance, HR and product packaging). No high-risk areas or processes were identified during the survey. The assessment is conducted by the Company on an ad hoc basis, therefore data for 2022 are not available. In the medium term, we plan to repeat the survey.

Our goal is to incorporate the principles of corporate and individual behaviour set out in our Code of Conduct into the corporate work culture. All of our leaders and employees are responsible for achieving this goal, as well as for legal and ethical compliance. BorsodChem communicates its anti-corruption regulations to all board members and employees. All new colleagues receive an extract from the Company's Code of Conduct and participate in a mandatory ethical training.

Our employees regularly attend ethical trainings. In addition to ethics, the topics of the trainings cover also issues of conflicts of interest, business gifts, fraud and corruption. Since 2020 participation in the trainings has been integrated into the organisational performance indicators, and as a result of it, the participation rate increased significantly.

#### Number and proportion of board members, leaders and employees trained against corruption<sup>12</sup>

		2019	2020	2021	2022
BOARD MEMBERS <sup>13</sup>		1	4	4	5
BOARD MEMBERS		11%	44%	44%	56%
	Senior managers	2	5	7	8
	Sellioi Illallageis	22%	56%	78%	89%
	Middle managers	15	17	21	21
		54%	61%	81%	78%
EMPLOYEES	Line managers	62	75	78	77
		83%	96%	100%	94%
	Lower managers	152	262	257	261
		64%	107%	99%	98%
	People employed in independent positions	53	2 023	2 371	2 600
		2%	75%	84%	91%
TOTAL EMPLOYEES		284	2 382	2 734	2 967
		10%	78%	86%	92%

#### **Protection of human rights**

BorsodChem pays special attention to employees' rights and working conditions. Rules and requirements for human and labour rights form an integral part of the corporate culture and operation, thanks to the Company's decades-long, conservative law-abiding practice. BorsodChem complies with all laws that support and ensure the respect for human rights.

Within the Company, Compliance and Internal Audit is primarily responsible for the protection of human rights. Its leader, Director Compliance and Internal Audit, together with Vice President HR and Communication and Director EHS, ensures that human rights are taken into account and properly followed in the Company's internal policies and processes.

The framework for the protection of human rights and the development of safe working conditions is established by our Code of Conduct and various officially issued internal regulations.

<sup>12</sup> The proportions were calculated using the number of employees at the end of the year, which explains the figure above 100%.

<sup>&</sup>lt;sup>13</sup> All board members work at our Kazincbarcika site.

Our Social Engagement Policy further deepens our standards on human rights and employment issues and delegates them to other policies and regulations. The safe working conditions are established through comprehensive EHS regulation and management systems.

We consider the protection of human rights, diversity and equality to be important from the side of both our colleagues and partners, and we expect them to accept our directives and policies. In our business relationships, compliance with our commitments regarding human rights and labour rights is ensured by insurance contracts, framework agreements with healthcare providers and contracts related to EHS activities – whose primary stakeholders are our employees.

We are committed to ensuring that our stakeholders should not be affected by any discrimination. We apply the principle of equal treatment when hiring, evaluating and terminating the employment relationship of our employees, which is also a requirement in our Collective Bargaining Agreement. To put our obligations into practice, we provide ethical trainings to our employees every year and upon new entry.

To protect human rights and equal opportunities, we provide various communication channels for stakeholders to make their announcements. Possible complaints related to human and labour rights are governed by the Code of Conduct, the Anti-Fraud Policy and the Whistleblowing Policy. The announcements are handled by Compliance and Internal Audit. Investigations are carried out in accordance with the relevant legislation and with respect for the human dignity of the persons concerned.

Following the example of Wanhua Chemical Group, our Company joined the circle of signatories to the UN Global Compact in 2021. Support for the principles set out in the Agreement is confirmed annually by the President Officer in accordance with the expectations of the UNGC.

#### **UNGC:** The world's largest corporate sustainability initiative

The UN Global Compact calls on companies to align their strategies and operations with universal principles of human rights, the world of work, the environment and the fight against corruption, and to take measures that contribute to achieving social goals. Under the leadership of the United Nations (UN) Commission on Sustainability Development, UNGC signatories and participants are all at the forefront of advancing sustainability. The human rights principles of the UN Global Compact are derived from the Universal Declaration of Human Rights.

<sup>&</sup>lt;sup>14</sup> For more detailed information, see Ethical Functioning, Compliance and Anti-Corruption.

In our 2022 UNGC COP Report, our human rights commitment was to continuously increase the proportion of managers and employees participating in annual ethics and anti-corruption trainings. BorsodChem's UNGC report is

available on the website of our Company and the <u>UNGC</u>. We also reported on the support of the Global Agreement for our employees on the Company intranet.

#### Third party verification of respect for human rights

In addition to environmental aspects, the EcoVadis assessment also includes respect for ethical corporate operations and human rights. The assessment is based on such international sustainability standards as the Ten Principles of the UN Global Compact, International Labour Organisation (ILO) conventions, Global Reporting Initiative standards, ISO 26000, CERES roadmap and UN Business and Human Rights Principles, also known as the Ruggie framework.



PRESIDENT

SUSTAINABILIT'

OUR MILESTONES

INTRODUCTION

CORPORATE GOVERNANCE SUSTAINABILITY

RESPONSIBLE
BUSINESS ACTIVITIES

OUR ENVIRONMENTAL

OUR SOCIAL

ADDITIONAL INFORMATION



### SUSTAINABILITY AT BORSODCHEM

"Every day we work for a more sustainable chemical industry"

**Sustainability Policy** 



6.1
Our approach
to sustainability

**GRI 2-22** 

In today's world, sustainability formes the foundation of responsible economic and modern societal thinking. Our commitment to sustainability increasingly contributes to the success of BorsodChem. The sustainability approach has always played a prominent role in the operation of our Company. Striving for maximum safety and adopting an environmentally conscious approach are both essential elements of our approach to sustainability. We aim to secure our Company's long-term successes with technological solutions and

products that create high added value for the environment, the economy and the society.

As a member of the Wanhua Chemical Group, BorsodChem's vision is to become an innovative, world-class chemical company that is admired by employees and respected by the community. The Management of BorsodChem is continuously working to further strengthen the sustainability perspective in the Company's operations. As part of this, we established our Climate Task Force to address the current tasks related to climate change, and also support the development and implementation of our Company's Sustainability Strategy. By creating our Sustainability Strategy, we wish to emphasize our Company's firm intention to strive not only for strengthening our market position and partner relationships, but also to reduce our impact on the environment.

#### **Our Sustainability Strategy**

In 2022, our Company developed its Sustainability Strategy, which was created in harmony with the Sustainability Policy<sup>15</sup> and the Sustainability Objectives<sup>16</sup> aligning with our Parent company's global sustainability efforts.

"In recent years our Company has made significant steps in the areas of sustainable development, ESG and corporate responsibility. Each of these aspirations and commitments are expressed in our Sustainability Policy and Strategy. The realization of the objectives set out in these areas is not only key to the success of BorsodChem, but also for the entire chemical sector, as our industry plays a significant role in the fight against climate change. Bearing all this in mind, we are firmly committed to leading by example, showcasing our continuous efforts to reduce our environmental footprint, enhance our social responsibility, and building a sustainable chemical supply chain. Our commitment to sustainability, responsible operations and ethical business practices is also reflected in our triple EcoVadis Platinum certification.

As part of our Sustainability Strategy, we aim to achieve the Objectives set in our Action Plan containing 140 programs through cross-industry innovation-driven collaborations, leveraging our more than seven decades of experience to strive for long-term value creation

for our commercial partners, employees and external stakeholders, and the wider community alike. We regard the implementation of the Sustainable Strategy and collaboration with our stakeholders as a priority task, all in the interest of a brighter, sustainable future."

#### Anna Fridel, Officer Sustainability



<sup>&</sup>lt;sup>15</sup> Our Sustainability Policy

<sup>&</sup>lt;sup>16</sup> Our Sustainability Objectives

Alongside our Sustainability Strategy, we established our Sustainability Management System, within which we founded our Sustainability Steering Committee. Based on the mandate of the Committee, the Officer Sustainability and the Climate Task Force defined the seven focus areas of the Sustainability Strategy and the Sustainability Objectives related to the seventeen Sustainable Development Goals (SDGs) formulated by the United Nations detailed below, based on the triple approach to sustainable development – economic, environmental and social.

In the Action Plan – as part of the Strategy-, our Company's Management, in close collaboration with representatives of the involved organizations, identified those programs that support the implementation of the twelve Sustainability Objectives (SD 1-12), to ensure adherence to the principles of sustainable development in every business process, decisions, and daily operation, thereby reinforcing the sense of responsibility of our Company's Management and all employees towards the environment, society, and the economy. We have incorporated our Sustainability Management System and the associated Action Plan into our Integrated Management System.

For the period of 2022-2050, we have defined Sustainability Objectives that are divided into seven focus areas.

The Sustainability Objectives align with the European Union's climate policy, concentrating on the milestones set for 2030 and 2050, and are reviewed annually.



 SUSTAINABILITY IS THE BASE OF ALL MANAGEMENT DECISIONS



**SUSTAINABLE** 

**PROCUREMENT** 

**WATER AND ENVIRONMENTAL PROTECTION** 

 CONTINUOUS IMPROVEMENT OF SUSTAINABILITY IN THE SUPPLY CHAIN













NET ZERO

- **CARBON EMISSIONS** BY 2050
- STRIVE FOR SBTI CERTIFIED ABSOLUTE **CARBON REDUCTION** TARGET BY 2030
- SCOPE 3 **EMISSION** REDUCTION

**GHG EMISSION** 

**REDUCTION** 

**SUSTAINABILITY** MANAGEMENT

**SYSTEM** 

**HEALTH AND SAFETY** 

- 10% REDUCTION IN WATER WITHDRAWAL FROM SAJÓ RIVER BY 2030
- ZERO WASTE TO LANDFILL BY 2040
- MINIMISING **ENVIRONMENTAL** IMPACT























**CIRCULARITY** 

 SUSTAINABLE, PREMIUM PRODUCT **PORTFOLIO BY 2050** 







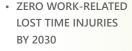








**EMPLOYEES** AND CORPORATE SOCIAL RESPONSIBILITY



 ZERO LEVEL 2 PROCESS SAFETY ACCIDENTS BY 2030









 PROFESSIONAL, SMART, SUSTAINABLE, VISIBLE & RESPONSIBLE COMPANY





In addition to the annual internal evaluation of BorsodChem's sustainability performance, we also participate in surveys conducted by independent, external parties. We measure ourselves in CDP (Carbon Disclosure Project) at Wanhua Group level and in EcoVadis independent assessment at corporate level.

# 6.2 Our sustainability performance

GRI 2-18 | GRI 2-22

Over the past few years, we have seen continuous changes in the market demands and trends, as well as the escalating expectations, as opportunities, which as a result have expanded our sphere of sustainability activities. In addition to the increasing demand for products derived from bio-, bio-circular and recycled sources, we regard the use of renewable, carbon-neutral energy and the chemical recycling of our products as significant development opportunities. Our Company operates a highly integrated production and management system in the spirit of sustainability, allowing for the optimal exploitation of synergies within the Company. By implementing and enhancing circular material flows among our technologies, we further reinforce the application of our sustainability principles.

In the EcoVadis assessment of year 2022, we received the Platinum Medal for the third time in a row. A score of 80 on a scale of 100 is a notable achievement which exemplifies the quality and extent of our efforts in the field of sustainable development. The Platinum Medal is the highest recognition awarded by EcoVadis, indicating that BorsodChem is among the top 1% of companies rated for sustainability and corporate social responsibility in its industry.

Following the evaluation of the results of both internal and external independent surveys, corrective actions are defined with the involvement of relevant departments. The implementation of these corrective actions fall under the supervision of the Sustainability Steering Committee.



### **6.3 EU Taxonomy Directive**

**GRI 2-22** 

In 2022, BorsodChem voluntarily initiated the assessment of its compliance with provisions of Regulation 2020/852 of the European Parliament and of the Council (hereinafter referred to as: EU Taxonomy Regulation, Taxonomy or Regulation) with the involvement of relevant departments and external advisories. During this process, we are examining our contributions towards achieving the objectives of the Regulation concerning climate change mitigation and adaptation, as well as determining what percentage of our

revenue, capital- and operational expenditures can be deemed sustainable according to the requirements of the Taxonomy.

During the assessment, we identify those economic activities generating revenue that can be eligible with the so-called Taxonomy. As a next step we evaluate the alignment of our activities along the technical screening, DNSH and MS criteria of the Regulation. BorsodChem identified two material economic activities (manufacture of chlorine and manufacture of plastic in primary

#### **EU Taxonomy Regulation**

The EU Taxonomy Regulation, which entered into force in 2020, provides a framework for determining which economic activities can be considered environmentally sustainable. The Taxonomy Regulation defines "green" activities that substantially contribute to achieving at least one of the six environmental objectives highlighted in the Regulation: climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, protection and restoration of biodiversity and ecosystems.

In addition, according to the Taxonomy Regulation, it must be ensured that the 'do no significant harm' (DNSH) principle corresponding to five additional environmental objectives is implemented. Alongside environmental aspects, the conformity of the conducted activities with the OECD Guiding Principles and the UN Guiding Principles on Business and Human Rights also needs to be assessed, thereby fulfilling the criterion related to minimum social safeguards (MS) as well. If any of these requirements are not met, the particular business activity or investment cannot be considered as aligning with the EU Taxonomy.

Based on the Taxonomy Regulation, companies falling under its jurisdiction have reporting obligations concerning the extent to which their activities relate to defined environmentally sustainable activities, which need to be demonstrated through the financial dimension of associated revenue, capital expenditure (CAPEX) and operational expenditure (OPEX). The implementation of the provisions of the Regulation is expected to become mandatory for BorsodChem from 2026 onwards.

form) and also defined the scope of data and information to be examined during the technical screening, DNSH and MS criteria. In 2022, 63% of our revenue comes from economic activities that can be eligible with the Taxonomy. 79% of capital- and 62% of operational expenditures are Taxonomy eligible.

During the next financial year, BorsodChem will assess the proportion of its economic activities that are aligned with the Taxonomy. In addition to the fulfilment of the technical screening criteria, we will also examine the fulfillment of the principle to avoid causing significant harm (Do No Significant Harm, DNSH) and adherence to criteria for established minimum social safeguards (Minimum Safeguards, MS), and we will develop an action plan to increase the degree of alignment.

#### 2022 revenue distrubution

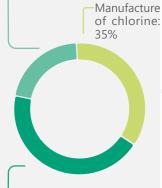
Activity that can not be aligned with Taxonomy: 37%

Manufacture of chlorine: 7%

Manufacture of plastic in primary from: 56%

#### 2022 CapEx distrubution\*

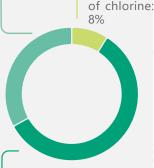
Activity that can not be aligned with Taxonomy: 21%



Manufacture of plastic in primary from: 44% \*gross value

#### 2022 OpEx distrubution

Activity that can not be aligned with Taxonomy: 38%



-Manufacture

Manufacture of plastic in primary from: 54%



### RESPONSIBLE BUSINESS ACTIVITIES



### 7.1 Our economic performance

GRI 3-3 | GRI 201-1 | GRI 201-4

As a prominent player in the industry, we apply high-level innovative technologies and continuously strive for advance in product and technology development, enhancing efficiency while concurrently adhering to environmental protection standards. At the corporate level, we evaluate the risks across our entire value chain, reconsidering the Company's development directions from raw material supply through production to sales. Moreover, to ensure dynamic yet quality growth, we have developed and are implementing a capacity expansion and efficiency improvement plan, which requires a targeted and forward-looking strategy from our Company.

During the business years of 2021-2022, our Company has further strengthened its market position through the realization of our ongoing investments, alongside successful operations. At the end of 2022, the MNB/Aniline plant investment was completed and with its commissioning in 2023, we started the local production of a strategic raw material of a core product, MDI, facilitating significant economic and environmental benefits including saving on transportation costs and reducing our carbon footprint, as well as reducing supply security risks and improving product quality.

To facilitate anilin production, we increased our weak nitric acid production capacity by establishing a new plant (WNA-2). In 2021, we expanded our MDI capacity from 330 kt/year to 350 kt/year. As a result of significant investments, the security of supply of our Company is continuously improving and we are planning further capacity expansions in the near future to increase our market share. We built a new power plant to meet the energy needs of the new production plants and the MDI plant with increased capacity. Our Company maintains the minimization of environmental impact as

a primary task and takes real steps in this direction through the implementation of energy efficiency and environmental protection developments. Our Company pays special attention to addressing the risks posed by climate change, detailed information on our environmental investments can be found in the <a href="Innovation">Innovation</a> and R&D activities chapter.

Thanks to the capacity-increasing measures taken in previous years and the strong market demand for our products, our Company achieved a record result in 2021. Despite the energy crisis that began in the second half of 2021 and worsened in the following year due to the Russian-Ukrainian conflict, we managed to achieve significant results in 2022. Owing to the outstanding profitability, our tax and contribution payments have become a substantial factor at the national economy level. Our new plants and investments contribute significantly to the GDP growth of the Northern Hungarian region, which is still marked as underdeveloped on the regional map issued by the European Commission, directly and indirectly enhancing the region's job creation and retention capabilities.

#### Our direct economic performance

During the financial year 2021, our Company, generating a record sales revenue, achieved a profit after tax of EUR 665.4 million, which represents an outstanding performance with a growth of 217.9% compared to the year 2020. The main factor behind this increase in net profit was a significant rise in sales revenue. The net sales accounted for 2021 was 2 517.2 million euros, 1 109.3 million euros higher than the previous year's figure of 1 407.9 million euros, which is fundamentally attributable to the extraordinary market demand for our products. In the favourable market environment, we managed to significantly raise the sales price of our main products. In the case of MDI, alongside the price increase, the volume of product sales also exceeded the level of the previous year. Our operating costs in 2021 amounted to 1 777.9 million euros, primarily due to rising raw material and energy prices, surpassing the 2020 level of 1 102.4 million euros by 675.5 million euros. To counterbalance the increasing costs, we implemented extensive cost-efficiency measures to reduce our general expenses in recent times.

2021 **€ 665.4 million**PROFIT AFTER TAX

217.996

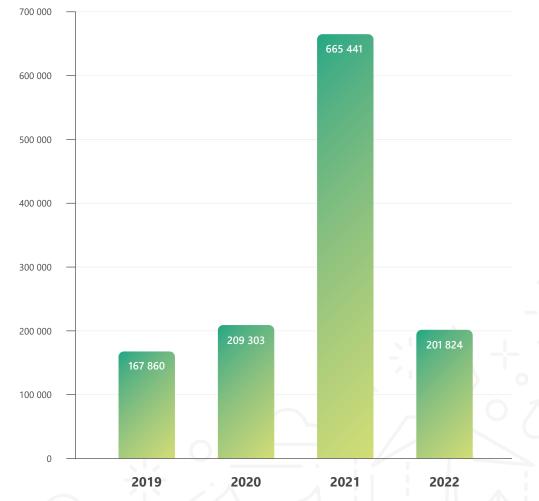
GROWTH COMPARED TO THE YEAR 2020

Our profit after tax in 2022 was 201.8 million euros, indicating a decrease of 69.7% compared to the exceptional business year of 2021. This downturn was caused by a 53.4% increase in operating costs due to higher raw material and record energy prices, presenting our Company with grave challenges. The deepening European energy crisis during 2022, soaring prices of natural gas and electricity, high inflation and the increasing interest rate environment all put the Company under pressure. Thanks to the efficient management of escalating costs, we managed to increase our net sales revenue in 2022 by 535 million euros, reaching a total of 3 052.3 million euros. The challenging market environment required to focus on cost consciousness and the implementation of mea sures to reduce general expenses. Despite the

extremely difficult economic circumstances, we managed to ensure the continuity of business operations. The Company's financing is stable, and our business plan for 2023 still predicts successful operation.

Compared to our profit after tax published in our previous Sustainability report in 2020, we were able to record a profit of EUR 7.5 million lower in 2022 due to considerably different economic circumstances – energy crisis, general issues in the supply chain, high inflation, increasing interest rates – that characterised the year 2022. Nevertheless, the Management and Owner of the Company find BorsodChem's performance satisfactory.

#### **Our direct economic performance**



Profit after tax (thousand EUR)

"In 2022, the economic environment was predominantly shaped by the Russian-Ukrainian conflict that commenced at the beginning of the year, intensifying uncertainty in the European markets. This led to several unforeseen consequences: diminished dem-

and, production difficulties, logistical problems and an energy crisis with unprecedented price levels. BorsodChem's material and energy costs increased by more than 40% compared to the previous year, nearly 65% of which was attributed to higher energy prices. The purchase prices of both electricity and natural gas increased significantly, which directly reflected in the production costs. In response to these adverse effects our Company reduced production levels and optimized the product portfolio, while maintaining continuous control over energy consumption. We were able to flexibly manage our raw material purchases to ensure continuous supply. Despite the unfavourable economic factors, our intensive investment activities were continued in 2022. As a result, we started aniline production at BorsodChem's Kazincbarcika site in the first half of 2023 and a new natural gas-fired cogeneration heat and power plant was launched. In the longer term, these investments will further strengthen the security of raw material and energy supplies, reducing our vulnerability to external market factors."



Péter Dudra Director Controlling

#### Our generated and distributed economic value

OUR GENERATED AND DISTRIBUTED ECONOMIC VALUE (THOUSAND EUR)	2019	2020	2021	2022
GENERATED ECONOMIC VALUE	1 427 311	1 412 615	2 590 193	3 065 510
REVENUE	1 427 311	1 412 615	2 590 193	3 065 510
DISTRIBUTED ECONOMIC VALUE	1 259 452	1 203 313	1 924 752	2 863 685
Operating cost	1 163 239	1 102 363	1 777 901	2 727 867
Employee wages and benefits	83 630	84 548	105 617	96 701
Payments to providers of capital	0	0	0	0
Payments to the government	12 409	16 266	41 144	39 001
Community investment <sup>17</sup>	174	136	90	116
NET PROFIT <sup>18</sup>	167 859	209 302	665 441	201 825

<sup>&</sup>lt;sup>17</sup> GRI 201-1: Term corresponding Community investments as used in BorsodChem's annual reports.

<sup>&</sup>lt;sup>18</sup> GRI 201-1: Term corresponding Economic value retained: 'direct economic value generated' less 'economic value distributed' as used in BorsodChems's annual reports.

We sell the majority of our products in Central and Eastern Europe, which accounted for 44.4% of our sales revenue in 2022. Additionally, rate of our sales in Western Europe was 29.4%, and domestic sales 18.1% of our revenue. Our export activities generate, on average, more than 80% of our Company's revenue.

Our debt portfolio increased by 237.5 million euros, or 28%, compared to the preceding year, predominantly due to ongoing investments and growing working capital financing needs, while at the end of the business year 2022, debt and liability stocks decreased by 5.0 million euros.

#### **Our capital structure**

	2019	2020	2021	2022
TOTAL CAPITAL (THOUSAND EUR)	1 987 873	2 351 080	3 258 186	3 454 930
Equity (thousand EUR)	1 287 841	1 494 993	2 159 622	2 361 331
Debt stock (thousand EUR)	700 032	856 087	1 098 564	1 093 599

BorsodChem finances its investments from its own resources, however, in the case of certain projects, state subsidies also contribute to their implementation beside own resources. Our Company's capital strength is demonstrated by the fact that during the years 2021 and

2022, the rate of equity significantly exceeded the debts, and the equity to debt ratio reached the value of 70-30%.

BorsodChem has received state subsidies for several of its investments in recent years.

#### Total monetary value of financial assistance received from the Hungarian State during the reporting period

	2019	2020	2021	2022
Tax reliefs and credits (thousand EUR)	5 012	7 727	26 770	0
State subsidies (thousand EUR)	0	175	0	0
Investment grant, grant for research and development (thousand EUR)	2 234	4 670	1 008	109

### Our policies and commitments related to our economic performance

With the assistance of the manufacturing technology expertise of our Parent company, Wanhua Chemical Group Co. Ltd., our Company has achieved significant results in the field of cost-efficiency. The exploitation of synergies and mutual knowledge sharing in the areas of technology and product development, combined with a global market presence, strengthens our market position and results in a steady increase in the production rate of higher value-added products.

Interwoven with product development, application-technological supports are playing an increasingly important role in gaining and retaining customer satisfaction. Along with active support for development and market introduction of new products, our Company provides technical customer support. With the involvement of our colleagues, we have further optimised our processes through LEAN and ESP ideas,

allowing us to reduce our specific material and energy consumption, thus being able to further reduce the burden on the environment while enhancing our economic performance.

During the financial analysis of our activities, along with a precise and detailed presentation of past transactions, special emphasis is placed on the preparation of short and medium-term forecasts and decision-supporting analyses. Our Company reviews its business processes during internal audits, aiming to expose potential deficiencies. In such cases, our internal auditors make recommendations to eliminate deficiencies by exploring modification opportunities to implement efficiency improvements.

Our financial, accounting and taxation processes comply with the prevailing accounting and tax laws. BorsodChem Zrt. prepares its individual annual report according to the Hungarian Accounting Act<sup>19</sup>, while the consolidated report presenting the financial performance of BorsodChem Group is prepared in accordance with the International Financial Reporting Standards approved by the European Union.

#### **DIRECTIONS**

Accounting policy

Cost calculation policy

Policy for management accounting

Transfer pricing policy

Financial risk management policy

Policy on competition law

#### **Disclosure of our financial** results

Our Company discloses its financial results to our external stakeholders through the individual and the consolidated Annual Report and Business Report. The information flow to the Owner and the Management is provided through the monthly reports prepared by the Controlling Department on the development of balance, changes in income and cash flow items, as well as on the profitability of the products sold.



7.2 **Product quality** 

**GRI 3-3** 

In our activities, our core priority is to manufacture products in consistent and reliable quality while maintaining stable operation. By retaining our excellent product quality, we intend to maintain durable and long-term partnerships with our current and prospective customers.

Our Integrated Management System, which has been certified and operated for decades, along with our ISO 17025 accredited laboratory having professional experience and outstanding instrumentation, guarantee the high level of compliance with the requirements set forth for our products. Our in-house laboratory checks the incoming materials and the compliance of in-process material flows throughout the entire production process. Our IT system enables rapid intervention in the production process based on laboratory measurements, thus ensuring that during the final product inspection we only detect a final product of a different quality than planned in exceptional cases.

However, product quality does not only mean guaranteeing the quality of products getting out of the production process, but it is highly

"Our severe intention is to understand and meet the demands of our customers."

**Quality Policy** 

affected by the logistics processes. The quality of means of transport, the professional preparedness of freight forwarder also has a serious impact on our customers satisfaction with BorsodChem's performance. Therefore we pay special attention thereto. The external partners involved in our logistics processes are selected based on careful evaluation, we regularly assess their performance, occasionally monitoring their operations through on-site audits. As a member of ISOPA, in the spirit of responsibility we take for our products, we aim to share as comprehensive knowledge as possible to our customers and professionals working directly with our products.

The systematic and professional risk-based approach of the Quality Management System (QMS), which has been operated and certified according to ISO 9001 for more than 25 years, has been integrated into our everyday practice. Our pursuit for continuous development ensures our increasing level of operation and maintaining the quality of our products at the level expected by our customers continuously.

In addition to our mission, changes in the global market also encourage our Company to strive for the continuous improvement of our products and services. Complying with these expectations required improvements of the product audit process. We constantly measure the satisfaction of our cusomers and investigate any notifications related to our products in every instance.

We develop our products in close cooperation with our customers, keeping in mind the everhigher level of fulfillment of their needs. During the year 2022, we initiated the introduction of the ISCC PLUS certification system to satisfy our partners's demands for certified sustainable MDI and TDI products. You can read more about the certification system in details in Chapter 7.3 Product Development section of our Report.

We believe that each of our colleagues is individually responsible for the quality of their own work. You can read more about our <u>Quality Policy</u> and related <u>Objectives</u> in detail on our website.<sup>20</sup>



<sup>&</sup>lt;sup>20</sup> You can find more information about our policies on our website: Our Policies (borsodchem.com)

#### Involvement of external stakeholders<sup>21</sup> stakeholders in our quality management systems

OUR STAKEHOLDERS	INVOLVEMENT OF OUR STAKEHOLDERS IN MAINTAINING AND DEVELOPING PRODUCT QUALITY	FREQUENCY
	Internal application for complaint handling	Continuously available
	Customer satisfaction survey	Every two years
CUSTOMERS	Sales Manager visits at our customers	Regular
	Public customer meetings	Ad hoc
	Customer on-site audit	Ad hoc
SUPPLIERS	Complaints database	Continuously available
SUFFLIENS	Annual pre-maintenance comment meeting	Annually
LOCAL COMMUNITIES	Citizens' Forum	Ad hoc

You can read more about our corporate management systems in the Chapter 5 Corporate governance.

<sup>&</sup>lt;sup>21</sup> You can read more about our further actions and contacts with our stakeholders in chapter <u>Our stakeholders</u>.



# 7.3 Our innovation and R&D activities

GRI 3-3 | GRI 201-2

#### **Innovation**

The primary guarantee of our competitiveness is continuous innovation, therefore we consistently give special attention to our investments, product, and technological developments. Innovation is an intensive creative activity, which requires continuous development in our Company's business processes. The period of 2021-2022 was also outstanding in terms of developments in the history of BorsodChem, as we continued the trend of the past decade and implemented significant investments.

Compliance with the continuously tightening requirements of domestic regulations and Best Available Techniques (BAT) necessitates ongoing innovation from our development units. Separate groups within our Company deal with development of the products and the technologies. The innovative approach permeates our entire Integrated Management System, hence we have not formulated a separate innovation policy.

Our stakeholders can be informed about our developments through our Sustainability reports, our website and our regularly published Green Newspaper, as well as through our Inegrated Pollution Prevention and Control (IPPC) review documentation. Our IPPCs are publicly available on the <a href="website">website</a> of the Department of Environmental Protection, Nature Protection and Waste Management of the Government Office of Borsod-Abaúj-Zemplén County.

During the environmental permitting processes associated with our developments, we mandatorily inform the public about all investments subject to permits within the framework of

#### Major investments in 2021-2022<sup>22</sup>

INVESTMENT	BRIEF DESCRIPTION OF THE PROJECT
INSTALLATION OF NITRIC ACID CONCENTRATION UNIT	Capacity expansion investment.
CONSTRUCTION OF MONO-NITROBENZENE PLANT	Investment in improving supply chain security and competitiveness.
ANILINE PLANT CONSTRUCTION	Investment in improving supply chain security and competitiveness.
PROJECT "SITE IV"	Implementation of internal infrastructure developments related to the new plants: railway, road network, service buildings, reception, changing room, fire barracks, maintenance building.
MDI PLANT	Capacity expansion investment.
HCL CONVERSION PLANT	Capacity expansion investment.
HYCO IV	Investment in improving supply chain security and competitiveness.
ODCB DECONTAMINATION OF WASTEWATERS AND HYDROCHLORIC ACID GASES	Development of wastewater pre-treatment system.
CONSTRUCTION OF WEAK NITRIC ACID 2 PLANT <sup>23</sup>	Investment in improving supply chain security and competitiveness with significant environmental improvements in terms of emissions (lower GHG emissions).

public hearings. To maintain transparent communication, we organise an open day annually for local governments, representatives of authorities and the public with the participation of BorsodChem's Management. During the event, participants can get insight into our current investments, receive information about our future plans, and learn about our environmental and social responsibility activities.

<sup>&</sup>lt;sup>22</sup> You can read about our other significant innovation achievements on our website.

<sup>&</sup>lt;sup>23</sup> You can read more about the successful trial operation of our new nitric acid production unit, our noise protection investments and other environmental performance in our Green Newspaper.

BorsodChem treats the reduction of greenhouse gas emissions with high priority. To reduce our direct GHG emissions, our Company established a new natural gas-fired combined heat and power plant, which was commissioned in 2023. In the WNA-2 plant, we installed a new tail gas cleaning unit, which significantly reduces the amount of nitrogen oxides leaving the technology. Consequently, the GHG emissions of our new plant are almost 90% lower compared to the old one. In our MNB/Aniline plant, we installed a by-product incineration system that reduces the concentration of gases emitted by the plant. The installation of solar panels and the direct connection of the generated renewable electricity

into our system is also an essential element in enhancing our adaptation to climate change. This carbon-free, clean energy source enables the production of low-carbon emission products, contributing to the reduction of our Company's indirect GHG emissions.

There has also been progress in fulfilling the objectives of our Sustainability Strategy to reduce our water consumption and environmental impacts. The initiation of production in our new plants at our Site IV comes with increased wastewater treatment demands. To cover this, we have implemented capacity development of our Central Wastewater Treatment Plant, which is now capable of handling the technological

wastewater streams from the new plants as well. In the PVC plant, we installed a new wastewater pretreatment equipment. Through our developments, which In addition to significantly reducing the suspended matter content of the water resulting from the technology and thus relieving the load on the Wastewater Treatment Plant, also provide an opportunity for us to recycle the treated water in the technology, we contribute to the realization of the basic human right to a cleaner environment..

Further information on our developments related to water consumption reduction and wastewater treatment can be found in chapter 8.3 Water use and wastewater treatment.

#### **Our investment costs in recent years**

	2019	2020	2021	2022
Investment performance value (thousand EUR)	166 509	213 154	261 138	206 465
Costs of environmental investments (thousand EUR)	16 517	12 101	14 466	10 504

#### Our measures taken to avoid risks caused by climate change and their costs are presented in the table below:

COST OF OUR MEASURES TAKEN TO AVOID RISKS CAUSED BY CLIMATE CHANGE IN THE YEARS OF 2021-2022	DETAILED DESCRIPTION OF THE MEASURE	COST (THOUSAND EUR)
CONSTRUCTION OF ANILINE PLANT	With a capacity of 200 000 tonnes/year, the plant provides a significant quantity of aniline, our main raw material for MDI production. On-site production also contributes to reducing our Company's carbon footprint.	173 800
INSTALLATION OF SOLAR PANELS ON THE ROOFS OF OUR BUILDINGS AND OFFICE BUILDINGS	We installed solar panels on the roof structures of four of our buildings (Hotel BorsodChem, Commercial Office Building, Process Control Office Building and the changing room for 800 people at Gate 4). The carbon-free electricity produced in this way contributes to the reduction of our indirect GHG emissions.	204
IMPLEMENTATION OF WASTEWATER TREATMENT PROJECTS	Capacity expansion of our Wastewater Treatment Plant for the treatment of new wastewater streams with excess nitrogen and organic matter content coming from the Aniline and HPM Plants. As a result of the developments, nitrogen (ammonium, nitrate, nitrite) and suspended solids emitted into the River Sajó are reduced, the quality of activated sludge is improved and electricity savings are achieved	6 178
IMPLEMENTATION OF WASTE MANAGEMENT PROJECTS	During our waste management development, we expanded our pre-treatment machinery, which allowed us to replace the low-capacity equipment with modern ones (balers, grinders) with a capacity corresponding to the amount of waste generated. During our second waste management project, we installed a press container for handling of the packaging waste at our Site IV.	522
RECULTIVATION ACTIVITY	Our Company has implemented several steps to reduce environmental impact in the recultivation process of the salty lagoons. During the project, we reused construction and demolition waste originated from the demolition of our old plants and technologies for recultivation purposes, thus avoiding the extraction and supply of large amounts of virgin raw materials, and we did not burden the environment with the transportation and disposal of our demolition waste as well.	7 640
DEMOLITION OF OLD PLANTS AND DISPOSAL ACTIVITIES DEMOLITION OF OLD PLANTS AND DISPOSAL ACTIVITIES	The demolition of our out-of-service technological units and buildings and their integration into the landscape are also parts of our environmental impact reduction activity. A substantial part of the generated concrete demolition waste is reused during our construction and recultivation activities. By demolishing our old buildings, brownfield areas are obtained, thus avoiding the use of industrially untouched, greenfield areas.	9 890

#### **Our product developments**

Our ongoing product developments and the corresponding innovative activities are aimed at fulfilling customer needs at a higher level. We consistently monitor trends in the industry and are open to implementing technological novelties. The market is focusing on increasing the share of non-fossil raw materials, demanding from our Company the development of a new, sustainable product portfolio. Our premium, sustainable product portfolio represents higher added value, competitive advantage, increased prestige, social recognition and lower environmental footprint. Due to its novelty, the topic raises a significant demand for innovation, potentially fostering closer collaborations

among stakeholders, including suppliers, customers, R&D organisations, universities, professional associations and related industries.

Currently, a predominant portion of our raw materials are from fossil sources, as our strategic raw material suppliers are petrochemical or chemical companies (refineries, crackers), where the production using fossil raw materials is a characteristic that can be replaced with difficulties, or only at the cost of significant investments. Due to the complexity and high cost of the necessary steps for transition, sustainable raw materials are currently available in limited quantities and at high price. The majority of bio-based materials currently

available on the market predominantly originate from first-generation (directly agricultural) sources. We believe that the diversification of resources is also an important factor in this case; hence, we are exploring the availability of second-generation sources (e.g., agricultural waste), bio-circular materials (e.g., used cooking oil) and raw materials produced from recycled waste at both our existing and potential suppliers.

Our company has implemented a certified, sustainable supply chain management system, within the framework of which we operate the ISCC Plus certification system.

#### Our research and development projects between 2020 and 2022

	2020	2021	2022
ANNUAL R&D TOPICS	18	14	14
R&D PROJECTS FINANCED ALSO FROM EXTERNAL SOURCES	1	2	2

As a result of the developments of our MDI and TDI plants, we have achieved dynamic growth in production volumes. The implementation of the MDI capacity expansion project was based on our own

technology derived from our R&D activities; with the commissioning of the new crystallization and by the more efficient isomeric separation, we can serve a wider range of customer needs.

#### **ISCC Plus**

In 2022, BorsodChem established its sustainability system and the processes required for its operation. As a result, in 2023 we successfully obtained the ISCC Plus certification, which alongside demonstrating our commitment to sustainable and responsible procurement practices, proves that we are continuously striving for sustainable innovation and reducing our environmental impact. The ISCC Plus is a globally recognised certification system that verifies the traceability and sustainability of bio- and recycled/circular materials throughout the entire value chain. As a result of obtaining this certification, we can now satisfy the needs of our customers with certified bio-MDI and bio-TDI products.

#### Our long-term plans for technology and product development

Our goal is to develop a premium sustainable product portfolio by 2050 and to realize a transition to more sustainable production through the initiation of the following technologies and production plants.

- Carbon dioxide separation from emitted flue gases
- Production of new products from captured CO<sub>2</sub>
- **3** Green hydrogen production
- 4 Establishment of an e-Methanol plant



8

## OUR ENVIRONMENTAL PERFORMANCE



### 8.1 Energy management

GRI 3-3 | GRI 302-1 | GRI 302-3 | GRI 302-4 | GRI 302-5 BorsodChem's energy consumption is significant even at a national level, given that our production processes operate with significant energy consumption. The required electricity is partly sourced from the national grid, and we also have own natural gas-fired combined heat and power plants, which ensure not only our electricity needs but also the steam demand of our technologies. The production units of our Kazincbarcika site are able to share the thermal energy generated during chemical processes with each other in the form of steam, thanks to their integration.

This characteristic contributes not only to enhancing our competitiveness, but also to reducing our carbon footprint.

To manage natural resources responsibly and to enhance the economic viability of our operations, we steadily work to utilize the energy consumed as efficiently as possible. In 2016, we introduced our Energy Management System (EMS), which complies with the ISO 50001 standard requirements and is an integral part of our Integrated Management System.

Within the EMS, we have formulated our Energy Policy and Objectives, which we update every three years. To support the achievement of our energy objectives we initiate programs, the status and accomplishment of which we report in our electronic Document Management System (DMS). If necessary, we define corrective actions. In 2021, we launched 64 programs, and in 2022, 76 programmes to support the fulfillment of our Energy Objectives. These primarily targeted the replacement, modernisation and improvement of our equipments in use. As a result of all these efforts, we achieved a total saving of 26 186 MWh

(approximately 1%) in our steam and electricity consumption in two years compared to the previous reporting period

Our Energy Policy is in harmony with our Sustainability Strategy, with a priority goal to achieve 150 000 MWh energy savings and at least 3% improvement in energy efficiency between 2022 and 2024. We aspire to achieve our Energy Objectives through continuous developments, optimisation of our technological processes and by purchasing equipment with low-energy consumption. Moreover, a larger-scale implementation of elements

of Industry 4.0 (digitalized production process optimized with intelligent production methods) can also contribute to reducing our energy consumption.

We also strive to move towards a greater proportion of renewable energy production and use. Therefore, at the end of 2022, we commenced the installation of solar panels. Our additional objective is to increase the share of certified renewable electricity purchased from the energy market. We are committed to increasing our renewable energy resources with a capacity of 5 MW and the proportion of

renewable energy in our energy consumption up to a minimum of 40% by 2030.

A significant part of our energy consumption consists of purchased, non-renewable energy. In our natural gas-fired combined heat and power plants, we produce electricity in smaller quantities and steam in larger quantities to meet our energy needs. The majority of our fuel consumption consists of non-renewable natural gas, gasoline and diesel oil, while a smaller part is renewable biogas generated during wastewater treatment processes. When calculating our energy consumption, we

considered all natural gas, electricity and steam used, regardless of their use for technological or building energy purposes. Our current energy consumption also depends on our current market situation, and along with the economic slowdown in Europe, the demand for our products and proportionally the amount of consumed energy has also decreased.

#### In two years

we achieved a total saving of

26 186 MWh



and electricity consumption

**Between 2022 and 2024** 

achieve

150 000 MWh

energy savings and at least

improvement in energy efficiency

By 2030

increase the proportion of renewable energy in our energy consumption up to a minimum of

40%

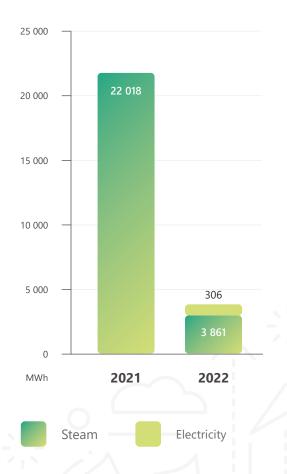
and our renewable energy resources with a capacity of

5 MWh

"Climate change, besides posing serious risks, also brings opportunities for the world, including the chemical industry. Our Company is committed to promoting innovative solutions, which preparation brings us measurable results in addition to continuous daily tasks. In meeting these challenges, we aim to build a stronger, more resilient and more sustainable company. The installation of solar panels and the direct connection of the generated renewable electricity to our system is one element of this strategy. The systems handed over in 2023, which are installed on roof surfaces, will be followed by the construction of a 30 MWe solar power plant planned to be installed in our recultivated areas. Sustainable, renewable energy sources enable the production of low carbon footprint products while reducing costs and improving competitiveness. These ongoing projects reflect our Company's commitment to responsible and sustainable business practices, outlining the steps we are taking to ensure our environmentally conscious and socially responsible operations."

János Szabó VP Procurement and Logistics

#### Reduction in energy consumption, by energy types



Total energy consumption in MWh<sup>24</sup>

	2019	2020	2021	
TOTAL FUEL CONSUMPTION	2 630 609	2 601 670	2 696 706	2 415 314
NON-RENEWABLE SOURCES	2 627 025	2 598 249	2 691 556	2 410 387
NATURAL GAS	2 620 532	2 591 838	2 685 046	2 404 709
GASOLINE	760	737	709	692
DIESEL OIL	5 733	5 674	5 801	4 986
RENEWABLE SOURCES	3 583	3 421	5 150	4 927
BIOGAS	3 583	3.421	5 150	4.927
PURCHASED ENERGY	1 444 858	1 455 139	1 565 981	1 439 258
NON-RENEWABLE ENERGY SOURCES	1 444 858	1 455 139	1 565 981	1 439 258
ELECTRICITY	1 241 123	1 264 197	1 342 347	1 271 564
STEAM	203 735	190 943	223 634	167 694
ENERGY SOLD	1 981 864	1 977 748	2 039 036	1 867 434
NON-RENEWABLE ENERGY SOURCES	1 981 864	1 977 748	2 039 036	1 867 434
NON-RENEWABLE ENERGY SOURCES	353 565	338 789	337 120	281 828
STEAM	1 628 298	1 638 959	1 701 916	1 585 606
TOTAL IN-HOUSE ENERGY CONSUMPTION <sup>25</sup>	232 777	229 584	235 226	247 534

<sup>&</sup>lt;sup>24</sup> In accounting for our total energy consumption, we included the energy producing (BC Power Plant, BC Therm) and other subsidiaries under our operational control and our sites in Hungary, in accordance with our GHG Inventory. Our energy consumption in 2019 and 2020 was recalculated following the methodology of the GHG Inventory.

<sup>&</sup>lt;sup>25</sup> Total energy consumption = fuel consumption + purchased energy + own energy production - sold energy. In order to avoid double accounting, the energy demand of own electricity and steam production was considered in natural gas consumption.

INTRODUCTION

### **Energy intensity (MWh/tonnes of product)**



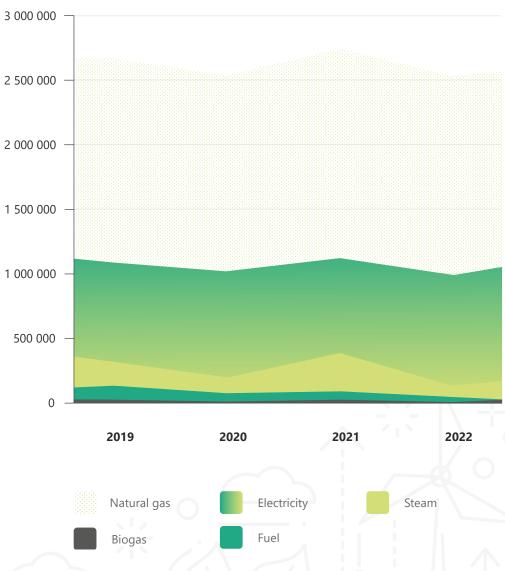
Energy intensity (MWh/tonnes of product)

Energy intensity, i.e. total energy consumption per unit of product<sup>26</sup> increased slightly in the last two years, while the amount of energy<sup>27</sup> used for the production of our

products decreased due to the extraordinary market situation and a temporary decline in demand for our products.

### <sup>26</sup> In the calculation, the quantity of the leading products corresponds to the total annual quantity of MDI, TDI, PVC and caustic soda production.

### **Energy consumed (MWh) /Produced product (t)**



<sup>&</sup>lt;sup>27</sup> Total energy consumption = purchased energy + own energy production - sold energy

The energy consumption of each activity is monitored on a daily basis using our continuously improved measurement systems. Our leaders are informed about the results of the measurements in the form of a report. The production plants report to the Chief Operation Officer on a weekly basis on the changes in the specific values of energies in the given period, while the Director Operation Centre reports on the current development of planned and actual values for Senior Management at the Quarterly Summary Meetings. Our Senior Management receives information on the implementation of annual energy efficiency improvement programmes through reports and management reviews. We inform external stakeholders about our efforts and achievements, among others,

through our Sustainability report, website, digital and printed publications and during our open days.

We believe that energy management is not just a legal obligation prescribed by standards. Therefore, we consider it important that all our colleagues receive appropriate training, where they can gain knowledge about our energy efficiency efforts and programmes. Results can only be achieved through joint efforts, driven by a common goal, and we also need the active participation of all our colleagues for the efficient operation of our Energy Management System. Energy awareness contributes to the development of both our Company and our environment.





# 8.2 Compliance with environmental regulations

GRI 3-3 | GRI 2-27

We have to comply with a number of regulations that apply to our Company's activities. All our production technologies have an Integrated Pollution Prevention and Control Permit (IPPC). Our technological processes are highly compliant with the requirements of Best Available Techniques (BAT). In relation to its environmental performance, BorsodChem has not received significant fines (over EUR 25 000) or non-monetary penalties in the recent period. This is due to the fact that we comply with legal obligations in all cases, we follow any changes

and comply with them in time. We monitor our environmental performance both at the level of individual departments and at corporate level. This includes both the values specified in external legislation and our self-defined values. With our memberships in international professional associations, we undertake compliance beyond the law. The Environmental Protection Department coordinates company-wide audits and data analysis.

### **Mercury-free BorsodChem program**

Based on the decision of the European Union, we have ceased chlorine production with mercury cell technology, instead from 2018 we continue our chlorine production activities exclusively using membrane cell technology. The decommissioned production unit was dismantled in accordance with our Decommissioning Plan approved by the environmental protection authority, in compliance with all official regulations and the generated waste was disposed of. In 2023, we continue to implement our "Mercury-free BorsodChem" programme, the final phase of which will be the demolition of the Caustic soda plant, which was closed decades ago.

Our objective in our Sustainability Strategy is to minimise the environmental impacts. Accordingly, we use the best available techniques (BAT) in our production activities. During the implementation of investments and developments, we always take into account the possible environmental impacts and risks and try to minimise them. We strengthen our commitment in our EHS Policy and Objectives. In 2022, we set new <u>targets</u> that will

set the course for our occupational health, safety and environmental development over the next three years.

An important part of our corporate incentive system is the evaluation of environmental related activities such as waste management, energy and water use. You can read more about our corporate incentive system in Chapter 9.2. We inform the Company's Senior

Management about the progress of environmental goals on a quarterly basis.

The IPPC review documentation contains our environmental developments and their evaluation is publicly available on the website of the Department of Environmental Protection, Nature Protection and Waste Management of the Government Office of Borsod-Abaúj-Zemplén County. In addition, we regularly inform our stakeholders about our efforts and measurement results related to environmental protection, water use, waste management and air quality protection through various forums, including through open days and our website our Sustainability reports, our internal communication platforms and the Green Newspaper.





# 8.3 Water use and wastewater treatment

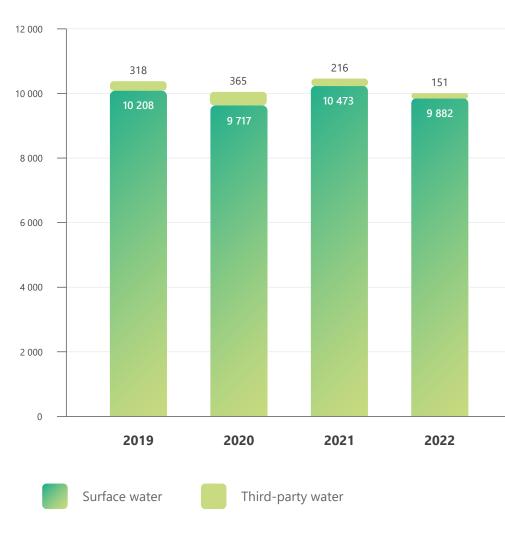
GRI 3-3 | GRI 303-1 | GRI 303-2 | GRI 303-3 | GRI 303-4 | GRI 303-5

### **Water withdrawal**

During our activities at our Kazincbarcika site, we use a significant amount of raw water, which is taken entirely from the River Sajó with a relatively low and fluctuating flow. The maximum the amount of water can be withdrawn from the Sajó is regulated by the water rights permit issued by the Water Management Authority. Each year we report on the actual withdrawal determined by measurements. The amount of water withdrawn from the River Sajó required for our industrial activities' accounts for 98% of our total water consumption. The remaining 2% is our drinking water

consumption, which is provided by ÉRV Zrt. from the filtered wells of the River Sajó and the reservoir of Lázbérc. The raw water withdrawn from the river is pre-treated and produced into soft water and deionized water, which is mainly used for cooling purposes and steam production. In all cases, we strive to recycle the water as much as possible, thus reducing our impact on the environment. The technological water use depending on the volume of production, is closely associated with the demand for our products, while the amount of purchased drinking water may be affected by the number of people working on the site, the level of summer heat and the volume of works currently underway. 100% of the water consumed is fresh water, which is originated from non-water-scarce areas.

### Total water withdrawal (thousands m³)



The River Sajó is of high importance for the operation of our Company and for this reason we place a great emphasis on maintaining and protecting the good condition of its quantity and quality. Since 2008, we have been carrying out quantitative and qualitative assessments of the River's condition based on the requirements of the Water Framework Directive. In addition to these assessments, we perform annually a voluntary ecological status assessment with the involvement of an external partner. The main purpose of the study is to monitor any changes in ecological status that may have occurred. Based on the assessment results, it can be shown that the emissions from BorsodChem's activities do not have a significant impact on the ecosystem of the River Sajó.

In our Sustainability Strategy, we have set a target of reducing our water withdrawal from River Sajó by 10% by 2030, compared to 2021. In 2022, we invited a water treatment expert from Germany to BorsodChem's site in Kazincbarcika to review and assess the targeted water saving opportunities and provide expert support in implementing our water reduction options. To achieve our EHS and Sustainability

Objectives, we have launched ten environmental protection programmes to support the reduction of water use, which include, for example, prioritising waterless or water-saving technologies in the investment projects, increasing the amount of water recirculation, as well as finding and using alternative water sources. Senior Management is informed about the results achieved on a monthly basis.

Thanks to the careful designing of our engineers, treatment of the salty wastewater of our VCM Plant has also become more sustainable. After treatment, the salty wastewater generated in the plant is recycled in our systems. As part of our ongoing investment, we are building a new chemical oxidation unit to expand circular solutions for salty water treatment.

Within the framework of the LIFE-CLIMCOOP, project supported by the EU, we have installed a water treatment equipment prototype, which provides an opportunity to experiment with the possibilities for reusing grey waters and certain wastewater streams after purification, thus it may reduce the likelihood of climate risks related to drought periods and

as such helps the water management of settlements and other companies operating in the Sajó River Basin. You can read more about our LIFE project in Chapter 8.5. economy - back to the beginning of our production processes, i.e. the membrane cell electrolysis process, where it is again involved in the production of chlorine gas and other chlor-alkali products necessary for our production processes.

values set in the applicable national and EU regulations (BAT). Every year, we prepare a report for the Water Authority on the amount of treated water that is cleaned and returned to Sajó. In the past 15 years, there has been no violation of limit values at our Company.

### **Wastewater treatment**

At our Kazincbarcika site mainly technological wastewater is generated in a significant amount. The treatment of wastewaters – within our integrated wastewater treatment system – typically takes place after pre-treatment in our own specially designed central Wastewater Treatment Plant. The wastewater treatment system has been designed in such a way that untreated wastewater from BorsodChem cannot reach the receiver without proper cleaning and treatment.

We hold a patent for wastewater treatment based on the combined application of chemical and biological purification methods. With the help of our innovative salty wastewater treatment technologies, we turn the wastewater with high salt content of our plants into organic-free brine, which, thanks to its high purity can be recycled - in accordance with the principle of circular

### PARAMETERS MEASURED IN DISCHARGED WASTEWATER:

рΗ

total suspended matter

adsorbable organic halogen compounds

biological and chemical oxygen demand

inorganic nitrogen

pollutants (mercury, MNT, DNT, ODCB, TDA)

After appropriate cleaning of the wastewater, the treated water is returned to the River Sajó. The amount of discharged water primarily depends on the production volume. The quality of the treated water returned to the River is tested and controlled by the specialists of our laboratory according to strict rules, considering the limit

In order that BorsodChem's Central Wastewater Treatment Plant will be able to handle the increased volume and changed composition of the wastewater stream due to the new facilities (MNB/Aniline, HPM, HYCO plants), the Management of our Company decided to develop and expand our wastewater treatment technology. With the investment completed during the years 2021-2022, we are able to comply not only with the ever-tightening authority limits, but also with the emission limits undertaken by us voluntarily and thus being stricter. With the development of this technology, we increased the efficiency of biological treatment in our continuous and intermittent systems, in addition to intensifying the decomposition of wastewater with nitrogen content, and we also carried out general renewal works in the entire area of the Wastewater Treatment Plant.

	2019	2020	2021	2022
Total water discharge (thousand m³) <sup>28</sup>	7 869	6 830	7 315	6 949

Our goals and objectives related to water use and wastewater treatment are set out in our EHS Policy and our Sustainability Strategy<sup>29</sup>. Compliance with these requirements is monitored and evaluated on a quarterly basis. We investigate any environmental incidents that may occur and, if necessary, we take measures to eliminate the root cause. Our internal governance structure is regularly reviewed and adapted to experience.

### **Water consumption**

Approximately three-quarters of all withdrawn water is returned to the Sajó after purification. Most of the losses come from the evaporation of cooling towers and a smaller part from incorporation into products. One of our long-term goals is the development and operation of water-saving cooling towers.

	2019	2020	2021	2022
Total water consumption thousand m <sup>3</sup>	2 339	2 887	3 158	2 933

"At the end of the '70s, the River Sajó was to me a black, foul-smelling, turbid, deserted water, in which, if someone tried to fish, they almost never succeeded, but if they did, the fish caught was unsuitable for consumption. I remember that by the cessation of industrial activities (paper production, mining, metallurgy) during the period of regime change, the condition of the river apparently improved day by day, but the restoration of ecological



status was still a process lasting several decades. I experienced this process, actively participated in it and accordingly my belief is that it is the responsibility of every river user to maintain and improve this condition. In this spirit, we continuously strive to reduce our footprint and every year, we prepare the ecological status assessment of the River Sajó, by which we can demonstrate the cumulative effect and extent of the BorsodChem beside the environment users on the upstream section."

Sándor Szentpéteri Senior Manager Environmental Protection

<sup>&</sup>lt;sup>28</sup> Our water discharge also includes the municipal wastewater of the municipality of Berente, by the treatment of which BorsodChem contributes to improving the quality of life of the local people.

<sup>&</sup>lt;sup>29</sup> Our EHS Policy and Objectives are available on our website.



### 8.4 Waste management

GRI 3-3 | GRI 306-1 | GRI 306-2 | GRI 306-3 | GRI 306-4 | GRI 306-5

We consider the waste hierarchy to be the basic principle of our waste management, which is required not only by the environmentally conscious attitude and social responsibility, but also by economic aspects. During our production, our primary goal is to avoid the generation of waste. In line with the circular economy approach, we maximize material recycling in our technological processes. Primarily, we try to reuse or recycle the generated by-products and wastes and secondly utilize them energetically. Disposal of waste by landfilling is used as a last option. All tasks related to the collection,

pre-treatment and disposal of waste can only be carried out by our partners with the appropriate permits.

Reducing waste streams is an ongoing priority within our Company. Our objective is to reduce the amount of wastes disposed by landiling to zero by 2040. To support the achievement of this goal, we have launched waste reduction programmes that are also aligned with our EHS Policy and Objectives, which include, for example, the processing of technological wastes into recoverable materials and the optimisation of demolition processes. In order to achieve our objectives, we have defined specific waste indicators, which are examined and evaluated quarterly for each of our production plants. The results are regularly reported to our Management.

Our Waste Treatment Plant collects, sorts, pretreats, and prepares wastes for transport. Our activities related to waste management are carried out in accordance with the relevant legal regulations. We have developed an SAP-based system for recording processes, with the help of which we track the path of wastes from their

### Waste hierarchy

### **PREVENTION**

PREPARATION FOR REUSE

RECYCLING

OTHER RECOVERY

**DISPOSAL** (landfilling, incineration)

generation to their handover to the treatment partner. We prepare our declaration about wastes annually to the Department of Environmental Protection, Nature Protection and Waste Management of the Government Office of Borsod-Abaúj-Zemplén County.

Our largest waste stream is the sludge-like waste generated in water- and wastewater treatment and the technology of Chlorine Plant, but the amount of construction and demolition waste – not directly related to production – is

also significant. After mechanical pre-treatment, construction waste generated by the demolition of buildings that are no longer in operation and taken out of production is reused as building material, thereby saving the use of thousands of tonnes of mined gravel. Other demolition waste resulting from demolitions is recovered during our recultivation activities, so their disposal does not burden nearby landfills. The areas thus integrated into the landscape are then available for other industrial activities as brownfields, so there is no need to involve greenfield sites.

	2019	2020	2021	2022
Total waste generated (t)	24 721	28 991	94 586	30 200
Non-hazardous waste (t)	22 760	26 732	87 561	18 693
Hazardous waste (t)	1 961	2 259	7 024	11 507

Recently, the amount of hazardous waste generated has continuously increased. The growth can be considered as temporary, a significant part of these originates from, among other things, the dismantling of our mercury cell Chlorine Plant and the replacement of the heat transfer oil of one of our high-voltage electrical equipment. The amount of non-hazardous waste has decreased, mainly due to recovery in recultivation processes.

To save resources, BorsodChem places great emphasis on waste recovery. We can prepare a smaller part of our non-hazardous waste for reuse locally, while the majority is recycled off-site through recycling and other operations such as composting. In 2021, the outliers were caused by the large-scale reuse of demolition waste recovered during our recultivation

activities. The amount of hazardous waste recovered off-site is also increasing. We do not have the possibility to utilize them locally, they are treated by our external partners (e.g., the recovery of precious and rare earth elements from our used catalysts).

In 2021 and 2022, the largest share of hazardous waste disposed of off-site consisted of demolition and contaminated soil waste from demolitions. The demolition of our unused buildings at the Kazincbarcika site will continue in 2023 and will probably end at the beginning of 2024. During this period, the amount of demolition wastes will increase, a part of which will be recovered and reused in order to minimize the amount of waste disposed of by landfilling.



### **Total waste recovered by recovery method**

	2019	2020	2021	
TOTAL WASTE RECOVERED (t)	20 995	25 372	83 685	16 808
RECOVERED NON-HAZARDOUS WASTE (t)	20 507	24 858	83 213	16 184
ON-SITE RECOVERY (t)	1 033	329	38 147	1 230
Preparation for re-use (t)	1 033	329	38 147	1 230
OFF-SITE RECOVERY (t)	19 474	24 529	45 066	14 954
Recycling (t)	19 292	24 336	44 805	14 675
Other recovery operations (t)	182	192	261	279
RECOVERED HAZARDOUS WASTE (t)	488	514	472	624
OFF-SITE RECOVERY (t)	488	514	472	624
Recycling (t)	415	370	252	378
Other recovery operations (t)	73	144	220	246

### Total waste disposed of by disposal method

	2019	2020	2021	2022
TOTAL WASTE DISPOSED OF (t)	4 668	4 732	10 533	14 508
DISPOSED OF NON-HAZARDOUS WASTE (t)	3 427	2 755	3 998	3 654
ON-SITE DISPOSAL (t)	3 018	2 287	1 916	2 321
Landfilling (t)	3 018	2 287	1 916	2 321
Off-site disposal (t)	409	468	2 082	1 333
Incineration (with energy recovery) (t)	33	35	217	144
Landfilling (t)	375	433	1 865	1 189
Disposal of hazardous waste (t)	1 241	1 977	6 535	10 855
Off-site disposal (t)	1 241	1 977	6 535	10 855
Incineration (with energy recovery) (t)	430	950	1 011	1 178
Incineration (without energy recovery) (t)	140	3	-	-
Landfilling (t)	607	993	5 457	9 669
Other disposal operations (t)	63	31	67	8



# 8.5 Greenhouse gas and other emissions to air

GRI 3-3 | GRI 305-1 | GRI 305-2 | GRI 305-3 | GRI 305-4 | GRI 305-5 | GRI 305-7

### **Greenhouse gas emissions**

To establish our Company's emission reduction strategy and to monitor the implementation and fulfilment of its Sustainability Objectives, BorsodChem assessed and prepared an inventory of greenhouse gas emissions. Our Company prepared its full scale voluntary GHG Inventory covering the Scope 1, Scope 2, and Scope 3 emission categories for the first time for the 2021 financial year, which was also determined as the base year of the inventory.

BorsodChem will publish its GHG Report annually to transparently inform its owners, customers, and other internal and external stakeholders in accordance with the Company's commitments undertaken in its Sustainability Policy and Strategy.

Our GHG Inventory has been prepared in accordance with the requirements set out in the GHG Protocol Corporate Accounting<sup>30</sup> and Reporting Standardand ISO 14064-1:2018 "Greenhouse Gases" Part 1: "Specification with guidance at the organisation level for quantification and reporting of greenhouse gas emissions and removals"<sup>31</sup>

The calculation of Scope 3 emissions is based on the Greenhouse Gas Protocol "Corporate Value Chain (Scope 3) Accounting and Reporting <sup>32</sup> Standard" and the World Business Council for Sustainable Development (WBCSD)"Guidance for Accounting and Reporting Corporate GHG Emissions in the Chemical Sector Value Chain"<sup>33</sup>. The Scope 3 emissions are calculated by category in accordance with the guidelines of the GHG Protocol Standard (at least "minimum boundaries").

<sup>&</sup>lt;sup>30</sup> The Grenhouse Gas Protocol; A Corporate Accounting and Reporting Standard

<sup>&</sup>lt;sup>31</sup> ISO 14064-1:2018 Greenhouse Gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals

<sup>&</sup>lt;sup>32</sup> Greenhouse Gas Protocol, Corporate Value Chain (Scope 3) Accounting and Reporting Standard

<sup>33</sup> World Business Council for Sustainable Development (WBCSD); Accounting and Reporting Corporate GHG Emissions in the Chemical Sector Value Chain

Our GHG inventory was verified using a "limited assurance" engagement in line with the Greenhouse Gas Protocol "Corporate Accounting and Reporting Standard" and the Greenhouse Gas Protocol "Corporate Value Chain (Scope 3) Accounting and Reporting Standard", in accordance with ISAE 3410.

Our GHG Reports are available with their entire content on our website. <sup>34</sup> <sup>35</sup>.

BorsodChem Zrt. applies the operational control approach to account for the emissions. Management of the Company decided to fully assess the GHG Inventory of its facilities operating at its sites in Hungary. Accordingly, organisations included in the GHG Inventory:

its own facilities located at BorsodChem
 Zrt.'s sites in Hungary (Kazincbarcika, Berente,
 Múcsony, Gödöllő, Budapest), and

"At our Company, we attach great importance to the inventory of our greenhouse gas emissions and the Product Life Cycle Assessment. Our GHG Inventory and determining the carbon footprint of our products allow us to map our environmental impacts and identify areas where we can reduce the carbon footprint of our Company. By continuously monitoring and managing our GHG emissions, we can make substantiated decisions, mitigate our contribution to climate change and induce positive changes for our Company and the environment."

Mónika Horváth Sustainability Specialist the subsidiaries operating in Hungary over which BorsodChem Zrt. has 100% or majority operational control, including activities from the establishment of operational regulations to the implementation of investments, developments and energy efficiency-enhancing projects (BC-Erőmű Kft., BC Power Energiatermelő II Kft., BC-KC Formalin Kft.).

Emissions of offices, branches and subsidiaries operating outside Hungary are not accounted in the GHG Inventory.

In our GHG inventory, we take into account sources of emissions – facilities, subsidiaries – with emissions exceeding 1% of our total emissions. BorsodChem Zrt. determined the economic year 2021 as the base year for its comprehensive GHG Inventory – covering Scope 1, Scope 2 and Scope 3 emissions – taking into account the following aspects.

BorsodChem Zrt. has determined the financial year 2021 as the base year of its complete GHG Inventory – covering Scope 1, Scope 2 and Scope 3 emissions – taking into account the following aspects:

- Our Company has defined the year 2021 as
  the base year for following up the results
  of GHG reduction programs and activities
  specified in the Action Plan, which is part of
  our Sustainability Strategy disclosed in 2022.
- Due to the pandemic, the year 2020 did not reflect the GHG emissions of normal operating conditions. In 2021, the economic situation and production level stabilized for BorsodChem.

<sup>34.</sup>https://borsodchem.com/en/borsodchem-zrts-report-on-greenhouse-gas-emissions-in-2021

<sup>35</sup> https://borsodchem.com/en/borsodchem-zrts-report-on-greenhouse-gas-emissions-in-2022

### Greenhouse gases considered in our 2021-2022 GHG Inventory:

carbon dioxide

 $CO_2$ 

methane

CH<sub>4</sub>

dinitrogen oxide

 $N_2O$ 

hydrofluorocarbon gases

**HFC** 

sulfur hexafluoride

SF<sub>6</sub>

NF<sub>3</sub> and perfluorocarbon compounds (PFC-s) are not used at our Company. A significant portion of our Scope 1 emissions originates from our stationary combustion equipment, while a smaller part comes from technological processes. About two-thirds of our Scope 2 emissions come from our purchased electricity and one-third from purchased steam consumption. Our emissions related to electricity consumption were determined using a location-based calculation method, i.e., we used the average emission intensity of power plants producing for the Hungarian grid as the base.

### **Total Scope 1 and Scope 2 emissions (t CO2e)**





### **Our Scope 1 and Scope 2 emissions by GHG type**

GHG	20	21	20	22
GHG	TONNES OF GHG	TONNES OF CO₂e	TONNES OF GHG	TONNES OF CO₂e
CARBON DIOXIDE				
Scope 1**	525 135	525 135	476 848	476 848
Scope 2	296 418	296 418	262 888	262 888
METHANE*				
Scope 1**	-	-	-	-
Scope 2	-	-	-	-
NITROGEN OXIDE				
Scope 1**	70	20 975	53	14 002
Scope 2	-	-	-	-
HFCS				
Scope 1**	11.73	17 285	2.04	7 001
Scope 2	-	-	-	-
SULPHUR HEXAFLUORIDE				
Scope 1**	0.02	481	0.03	609
Scope 2	-	-	-	-

Our biogenic carbon dioxide emissions come from burning biogas, which amounted to 1 012 tonnes of  $CO_2e$  in 2021 and 968 tonnes of  $CO_2e$  in 2022.

<sup>\*</sup> Methane: Methane is generated during the waste and wastewater treatment activities of our company. Biogas with a high methane content generated in our wastewater treatment activity is burnt and recycled as heat. Thus, direct methane emissions from the activity are not typical.

 $<sup>^{**}</sup>$  N<sub>2</sub>O, CH<sub>4</sub>, HFC and SF<sub>6</sub> emissions were converted to CO<sub>2</sub> equivalents using Global Warming Potential (GWP) values applicable according to the current regulations for official reports – IPCC Fourth Assessment Report, 2007 and IPCC Fifth Assessment Report, 2014.

By recycling the biogas generated, combustion of significant amounts of methane are avoided. The resulting avoided emissions amounted to  $8\,713$  tonnes of  $CO_2e$  in 2021 and  $8\,452$  tonnes of  $CO_2e$  in 2022, which we included in our Inventory for informational purposes.



In our GHG Inventory, our indirect Scope 3 emissions are accounted for in the following categories, relevant to our Company's operations

### **Category 3.1**

**Purchased goods and services** 

### **Category 3.2**

**Capital goods** 

### Category 3.3

Fuel- and energy-related activities

### Category 3.4

Transportation and distribution of purchased goods (upstream)

### Category 3.5

Waste generated in operations

### **Category 3.6**

**Business travel** 

### Category 3.7

**Employee commuting** 

### Category 3.9

Transport and distribution of products (downstream)

### Category 3.11

Use of sold products

### Category 3.12

**End-of-life treatment of sold products** 

### Scope 3 emissions by subcategories (tCO<sub>2</sub>e)

	2021 (BASE YEAR)	2022
Purchased goods and services	1 568 018	1 405 359
Capital goods	65 179	50 008
Fuel- and energy-related activities	424 481	398 102
Upstream transportation and distribution	53 766	52 124
Waste generated during operations	6 526	6 457
Business travel	9	75
Employee commuting	3 770	4 129
Downstream transport and distribution	94 627	86 902
Use of sold products	1 833	1 083
End-of-life treatment of sold products	464 722	395 082
TOTAL SCOPE 3 EMISSIONS	2 682 931	2 399 323

### **GHG** emission intensity

	2021	2022
Total GHG (Scope 1+2+3) emissions (tCO <sub>2</sub> e)	3 543 226	3 160 671
Total core products <sup>36</sup> (t)	1 124 546	972 177
GHG EMISSION INTENSITY (TCO₂E / T PRODUCT)	3.15	3.25

Our GHG emissions in 2022 decreased by more than 10% compared to the base year (-10.8%), mainly due to the significant decrease in our capacity utilisation and sales volumes during the year as a result of the changes in the global economic situation (-13.5%).

Decrease in our Scope 1 emissions in 2022 is partly due to the reduction of our  $N_2O$  emissions. During fall of 2021, we launched our new weak nitric acid plant (WNA-2), which is equipped with a technology that results in almost 90% lower  $N_2O$  emissions than our old Weak Nitric Acid (WNA-1) Plant.

<sup>&</sup>lt;sup>36</sup> In the calculation, the quantity of the key products corresponds to the total annual quantity of MDI, TDI, PVC and caustic soda production.

### **Product Life Cycle Assessment**

In 2022, we launched our Life Cycle Assessment (LCA) project, within the framework of which we model our entire integrated production system at BorsodChem's Kazincbarcika site with the help of a life-cycle analysis software (GaBi) and determine the values of the Product Carbon Footprint (PCF) of our main products – MDI, TDI, PVC, caustic soda – with "cradle-to-gate" approach. Our carbon footprint calculations are based on the relevant EU regulations – ISO 14067/2018 standard, GHG Protocol and the "Product Footprint Guideline for the Chemical Industry" published by Together for Sustainability 2022. As a result of the project, in addition to increasing customer satisfaction, we would like to prepare to meet the requirements of the EU Taxonomy Regulation and monitor the impact of our GHG reduction projects on our products.

### **Emissions to air**

Our emissions to air contain nitrogen oxides, sulphur dioxide, carbon dioxide, particulate matter, and volatile organic compounds. We monitor our emissions at the frequency specified in our permits under national legislation and EU BAT regulations and we also operate continuous flue gas monitoring circuits at some of our point sources. Based on the results of the measurements, we prepare our annual report for the authorities.

To continuously reduce our emissions, our plants operate a Key Performance Indicator (KPI)-based comprehensive performance management and incentive system (you can read more about our KPI system in Chapter 9.2), we evaluate our results annually and strive to minimise the levels of emissions through continuous technological developments. Good examples of it are the nitrogen oxides (NOx) and nitrous oxide (N<sub>2</sub>O) arising inherently during weak nitric acid production, the amount

of which is minimised by using a flue gas cleaning unit. Due to our extensive operational experience and significant emission reduction impact, we will also install this type of system in our WNA-1 plant.

The extent of our emissions is publicly available through the website of the National Environmental Information System (OKIR). In addition to monitoring our emissions, we regularly examine and monitor the ambient air quality, which extends beyond the measurement of general pollutants to the measurement of manufacturing technology-specific pollutants. During the years 2021-2022, there were no emission and immission limit values exceeded. Local citizens and other stakeholders are regularly informed about the level of emissions.

The annual emission values indicated in the table are cumulative data based on the results of point sampling.

### Significant emissions to air (kg)

	2019	2020	2021	2022
NO <sub>x</sub>	62 277	60 036	60 358	41 178
SO <sub>x</sub>	97	85	103	97
PERSISTENT ORGANIC POLLUTANTS (POPS)	0	10 <sup>-5</sup>	0	10 <sup>-5</sup>
VOLATILE ORGANIC COMPOUNDS (VOCS)	11 183	9 500	7 697	6 791
HAZARDOUS AIR POLLUTANTS (HAP)	98	11	148	62
PARTICULATE MATTER (PM)	5 572	5 879	14 537	12 954
TOTAL SIGNIFICANT EMISSIONS TO AIR	79 227	75 511	82 843	61 082

INTRODUCTION



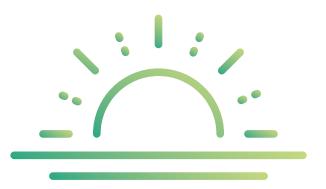
### 8.6 Climate change adaptation

**GRI 3-3** 

BorsodChem is exposed to the effects of climate change through its production and business activities, which entails serious risks as well as opportunities for development. Our industrial activities may be negatively affected by extreme weather conditions (e.g., extreme heat, intense rainfall, strong winds). For example, they can affect production, the transport of raw materials to the site and the delivery of products.

BorsodChem launched its Climate Adaptation Project (LIFE-CLIMCOOP) together with the University of Miskolc and the Municipality of Kazincbarcika, which is supported by the European Union's LIFE programme and co-financed by the Ministry of Innovation and Technology. One of the main objectives of the programme is to facilitate adaptation to the effects of climate change and reduce climate risks. Within the framework of the LIFE-CLIMCOOP project, we increase the resilience of both our Company and the surrounding populated areas, so that our employees and the residentals around us can benefit from the work carried out in connection with the project. We are currently working on a joint climate adaptation strategy that could serve as a guide for more similar collaborations. In the LIFE project, we undertook to develop the following tasks to reduce the effects of climate change:







Managing our challenges during periods of extreme rainfall or water scarcity (protection against flash floods, reducing vulnerability to floods, managing BorsodChem's refrigeration and industrial water supply risks, preparing for potential drinking water supply risks during summer, reducing vulnerability to drought),

Protection of human health against heat waves and other climate impacts (preparing the health care system for the additional summer demand, continuing, and expanding responsive municipal and corporate practices, applying (municipal) architectural solutions mitigating the effects of heat waves, implementing health awareness awareness-raising, creating a local regulatory environment responsive to heat waves),

Mitigating the vulnerability of the region to damages caused by storms for both BorsodChem and Kazincbarcika (reducing the vulnerability of BorsodChem and the vulnerability of the municipal built environment to storm damage, strengthening the adaptability of the local leisure economy),







Improvement and expansion of natural areas and urban green areas (application of adaptive forest management solutions in the area, mitigation of forest and bushfire risk, conservation and enhancement of biodiversity, development of networked green and blue infrastructure),

Strengthening urban, regional, and corporate climate awareness, increasing the effectiveness of responses (sensitizing stakeholders to climate impacts and more sustainable lifestyle/operation, encouraging the flow of information between regional actors, integrating climate adaptation content into municipal and sectoral strategy documents, preparing for climate change-related, global economic and geopolitical climate challenges).

Maintenance and further development of cooperation mechanisms between the city of Kazincbarcika and BorsodChem for climate adaptation (regional dissemination of locally developed adaptive good practices, maintenance, and content filling of the established climate adaptation institutional elements).

Within the framework of the project, 850 trees were planted in BorsodChem's areas in 2022 and we plan to plant another 690 in 2023. In addition, within the framework of the LIFE project, we make reusable IBC tanks available as rainwater collectors to the local residentals who require them. In 2012, 27, in 2022 33, and in 2023 another 30 tanks will be distributed for collecting and storing rainwater.

Participation in the LIFE project also requires continuous information provided to employees, residentals of the city of Kazincbarcika, suppliers and partners on climate change adaptation measures and their results. This takes the form of lectures, workshops, printed newsletters and locally distributed newspapers. Further information is available electronically on the website of the Project the city's website, and our Company's website. The city and the Company operate a Climate Platform to facilitate adaptation.

"We won the European Union's climate adaptation, so called LIFE-CLIMCOOP project in 2019 together with the city of Kazincbarcika, led by the project of the University of Miskolc. The aim of the project is to establish cooperation between our industrial park and the City closely connected to it to facilitate adaptation to climate change. The climate adaptation project places the main emphasis on managing the risks of extreme water conditions, with special emphasis on conscious preparation for flash floods and drought periods.

Within the framework of the project, BorsodChem purchased a water treatment equipment prototype, which can produce reusable quality water from industrial greywater during multi-stage water purification operations. The equipment provides extremely useful information to select additional industrial solutions to be used to achieve the Company's water-saving targets.

The project also aims at increasing the climate awareness of the surrounding population. Within this framework, Borsod-Chem will distribute a total of 120 IBC tanks to the residentals of Kazincbarcika through tenders during the four years of the project, thus encouraging them and local employees of our Company to collect rainwater and use it in their households.

We have established a bus stop with a so-called green roof system within the territory of the Company. Green roof surfaces contribute, among other things, to the effective retention of rainwater, the relief of the sewer network, the maintenance of the natural water cycle and the improvement of the microclimate. With the help of the green roof installed by us, we examine the effectiveness of all these functions.

Within the framework of the project, we will also plant more than 1 500 native trees, reducing the likelihood of forming heat islands. The planted wooded areas are also offer a pleasant sight. An educational trail and bird observation ambush have also been built along the wetland of the Company's area, thus supporting the local strengthening of nature-friendly attitude.

BorsodChem is also contributing to climate change adaptation with its commitments made so far in the project."

László Farkas Manager Technology Support; Principal Engineer



OUR SOCI

OUR SOCIAL RESPONSIBILITY



### 9.1 **Employment**

GRI 3-3 | GRI 2-7 | GRI 2-8 | GRI 2-30 | GRI 401-1 We believe that the development of our Company is determined by the satisfaction and performance of our employees. To enhance this, our goal is to provide long-term and reliable job for our employees in a liveable, loveable and successful corporate environment. Our employment spans generations and it is a priority for us to attract and develop young

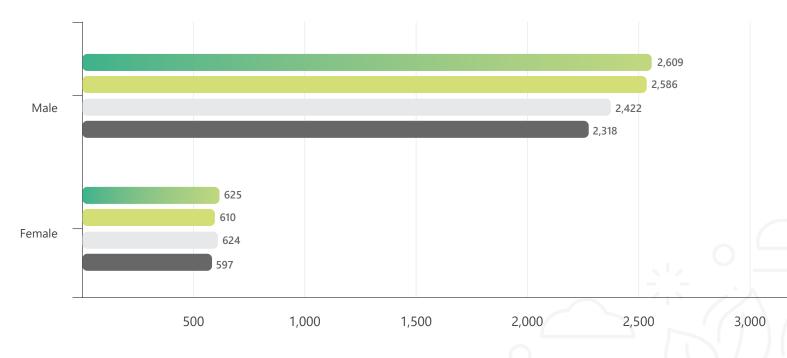
people starting their careers and talents. We are proud that in 2022, we received again the Loveable Workplaces Award for our commitment as an employer.

Thanks to new investments and expansions at our Kazincbarcika site, we have created additional jobs.

### The closing number of employees by locations of operation

REGIONS AND LOCATIONS	2019	2020	2021	2022
BUDAPEST	32	34	34	34
KAZINCBARCIKA	2 847	2 973	3 122	3 160
GÖDÖLLŐ	23	20	20	20
INTERNATIONAL	13	19	20	20
TOTAL:	2 915	3 046	3 196	3 234

### **Number of BorsodChem's employees by gender**



The higher proportion of male employees is due to industrial characteristics and the high proportion of occupations preferred and practised primarily by men (chemical system operations, maintenance, product loading and packaging, electrical services, etc.), while the increase in the number of our female employees is mainly resulted by the laboratory activities of the commencing, new plants.









### Distribution of our employees by the types of employment contracts, broken down by places of operation and gender

	LOCATION OF OPERATION	2019	2020	2021	2022
	BUDAPEST	25	24	27	29
	KAZINCBARCIKA	2 633	2 697	2 873	2 911
PERMANENT EMPLOYEES	GÖDÖLLŐ	19	17	18	18
	INTERNATIONAL	13	18	20	20
	TOTAL:	2 690	2 756	2 938	2 978
	BUDAPEST	7	10	7	5
	KAZINCBARCIKA	214	276	249	249
TEMPORARY EMPLOYEES	GÖDÖLLŐ	4	3	2	2
	INTERNATIONAL	-	1	-	-
	TOTAL:	225	290	258	256
	GENDER	2019	2020	2021	2022
	FEMALE	536	536	547	546
PERMANENT EMPLOYEES	MALE	2 154	2 220	2 391	2 432

	GENDER	2019	2020	2021	2022
	FEMALE	536	536	547	546
PERMANENT EMPLOYEES	MALE	2 154	2 220	2 391	2 432
	TOTAL:	2 690	2 756	2 938	2 978
	FEMALE	61	88	63	79
TEMPORARY EMPLOYEES	MALE	164	202	195	177
	TOTAL:	225	290	258	256

Our Company employs both full-time and parttime employees. In 2022, the number of female employees who had already retired, but continued to work in part-time jobs increased.

### Distribution of our employees by periods of employment, locations of operation and gender

INTRODUCTION

		LOCATION OF OPERATION	2019	2020	2021	2022
		BUDAPEST	31	33	33	33
		KAZINCBARCIKA	2 838	2 966	3 113	3 147
ı	FULL-TIME EMPLOYEES	GÖDÖLLŐ	23	20	20	20
		INTERNATIONAL	13	19	20	20
		TOTAL:	2 905	3 038	3 186	3 220
		BUDAPEST	1	1	1	1
ı	PART-TIME EMPLOYEES	KAZINCBARCIKA	9	7	9	13
		TOTAL:	10	8	10	14
		GENDER:	2019	2020	2021	2022
		FEMALE	591	619	603	614
	FULL-TIME EMPLOYEES	MALE	2 314	2 419	2 583	2 606
		IN TOTAL:	2 905	3 038	3 186	3 220
		FEMALE	6	5	7	11
	PART-TIME EMPLOYEES	MALE	4	3	3	3
			10	8	10	14

At our Kazincbarcika site, we also employ young people in non-employee relationship, but with vocational training and student contracts in dual training forms, and additionally, we operate an internship programme for university students. Their number decreased in 2022, primarily due to the expiration of their fixed-term contracts.

### Number of employees in non-employee relationship

PLACE OF OPERATION	2019	2020	2021	2022
KAZINCBARCIKA	70	63	62	50

BorsodChem has a Collective Bargaining Agreement in force for all of its employees employed in Hungary, with the exception of the top management, which provides more favourable employment and remuneration conditions than the Hungarian Labour Code. Furthermore, the Collective Bargaining Agreement also supports the achievement of objectives set out in our Company's Sustainability Strategy.

The labour shortage in certain professions (e.g., chemical industry professionals, engineers) experienced increasingly on the labour market recently also poses challenges for our Company. For successful headcount management, it is important to make up for the staff shortages caused by employee turnover, as well as to recruit, train further and retain motivated and highly qualified personnel. Our goal is to

ensure the acquisition of outstanding professional knowledge through continuous developments and to strengthen the commitment of our employees by increasing their satisfaction.

### Number and percentage of all employees covered by the Collective Bargaining Agreement

	2019	2020	2021	2022
TOTAL NUMBER OF EMPLOYEES	2 915	3 046	3 196	3 234
ALL EMPLOYEES COVERED BY THE COLLECTIVE BARGAINING AGREEMENT	2 893	3 018	3 167	3 205
PERCENTAGE OF TOTAL EMPLOYEES COVERED BY THE COLLECTIVE BARGAINING AGREEMENT	99.25%	99.08%	99.09%	99.10%

### **Number of new employee hires and employee turnover**

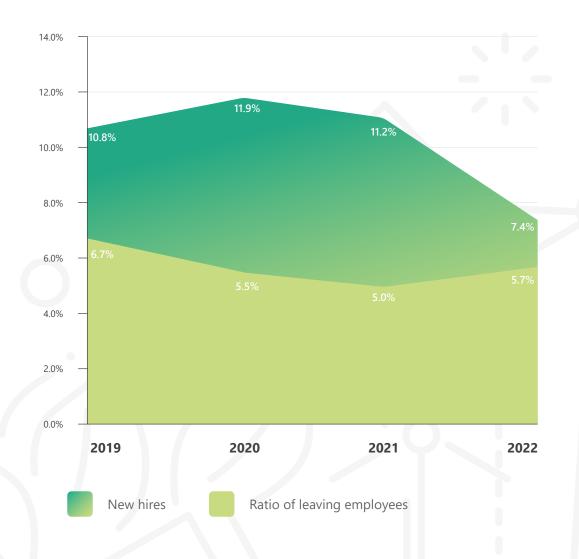
LOCATION OF OPERATION	NEW EMPLOYEE HIRES	2019	2020	2021	2022
	MALE	0	1	1	0
	<30	0	0	1	0
	30-50	0	1	0	0
	50<	0	0	0	0
BUDAPEST	FEMALE	4	5	3	0
	<30	1	1	2	0
	30-50	2	3	1	0
	50<	1	1	0	0
	TOTAL::	4	6	4	0
	MALE	253	269	317	184
	<30	109	94	139	74
	30-50	122	160	167	101
	50<	22	15	11	9
KAZINCBARCIKA	FEMALE	57	82	36	53
	<30	28	44	17	26
	30-50	27	35	14	24
	50<	2	3	5	3
	TOTAL:	310	351	353	237

LOCATION OF OPERA- TION	NEW EMPLOYEE HIRES	2019	2020	2021	
	MALE	1	2	0	2
	<30	0	1	0	1
	30-50	1	0	0	1
GÖDÖLLŐ	50 <	0	1	0	0
	FEMALE	0	2	0	0
	<30	0	0	0	0
	30-50	0	2	0	0
	50 <	0	0	0	0
	TOTAL:	1	4	-	2
TOTAL NUMBER	OF	315	361	357	239

LOCATION OF OPERATION	EMPLOYEE TURNOVER	2019	2020	2021	2022
	MALE	3	2	1	1
	<30	1	0	0	1
	30-50	1	2	1	0
	50<	1	0	0	0
BUDAPEST	FEMALE	3	2	3	0
	<30	0	1	0	0
	30-50	1	1	3	0
	50<	2	0	0	0
	TOTAL:	6	4	4	1
	MALE	150	125	123	150
	<30	31	30	28	36
	30-50	73	54	65	65
	50<	46	41	30	49
KAZINCBARCIKA	FEMALE	36	34	32	31
	<30	3	6	5	8
	30-50	11	11	5	6
	50<	22	17	22	17
	TOTAL:	186	159	155	181

LOCATION OF OPERA- TION	EMPLOYEE TURNOVER	2019	2020	2021	2022
	MALE	0	3	0	0
	<30	0	0	0	0
GÖDÖLLŐ	30-50	0	2	0	0
	50<	0	1	0	0
	FEMALE	2	2	1	1
	<30	0	1	0	0
	30-50	2	1	1	0
	50<	0	0	0	1
	TOTAL:	2	5	1	1

### **Rate of new employee hires and turnover**





In 2021, we introduced a vaccination rewarding programme to increase the vaccination coverage of our employees against COVID-19 infection on a voluntary basis. We acknowledged our colleagues' disciplined, joint efforts against the pandemic, their exemplary endurance and persistent work with an exceptional bonus at the end of the year.

In 2022, considering the impacts of the extraordinary circumstances on our employees, we contributed to the additional costs of our colleagues' lifestyles with a one-time compensation.

### 9.2 Remuneration of our employees

GRI-2-20 | GRI 401-2

In 2021 and 2022, we deemed it essential to offer our employees an attractive career path and renumeration, thereby enhancing employee satisfaction and the employee retention force of BorsodChem. Over the past two years, several unfavourable market events have had impacts worldwide and in Hungary alike. The increasing energy prices and inflation initiated numerous adverse processes that developed unpredictable and extreme conditions and imposed unprecedented burdens on both our Company and our employees.

To develop and implement actions and systems for further increase of our employees' remuneration primarily are the responsibilities of the HR Services Department and the Communication Office, however, all organisational unit leaders should take an active part in enhancing employee satisfaction and, consequently, increasing retention force.

We believe that compensation is a long-term commitment towards our employees; therefore we operate a sustainable, job evaluation based wage system, aiming to maintain internal equity INTRODUCTION

BorsodChem operates a comprehensive performance management and incentive system interpreted on three levels. The highest level is the KPI set at the company level, the achievement of which is supported by the target system formulated at the level of the organizations. This is followed by the KPI objective defined for employees as individuals.

Organizational unit-level KPI goals consist of the following subtypes:

- financial indicators
- · key tasks/projects
- quality management objectives
- health, safety and environmental protection objectives
- LEAN objectives
- training, development.

The results achieved in the comprehensive performance management and incentive system at the employee level have an impact on the amount of their wage increase and the amount of their annual bonus. and our competitiveness in the labour market. The basis of our remuneration policy is a wage system based on job evaluation, which makes it possible to provide fair income for our Company's employees, while considering the employees' earnings ratio at our competitors. Additionally, national macroeconomic indicators and the current labor market situation are always taken into account, when determining remuneration. Furthermore, our Collective Bargaining Agreement and our Regulation on Renumeration provide a wide range of benefits to our employees, often significantly exceeding the stipulations of the Labor Code.

When determining the annual wage increase, the Hungarian labor market wage data serve as references in individual job categories.

In both 2021 and 2022, we continued to expand the range of employee benefits, the average rate of annual wage increases aligned with and exceeded the labour market average. and we have recognised our employees' performance through bonus payments in accordance with our all-employee performance appraisal system. 2021 was the most successful year of our Company's existence, we thanked our employees for their contribution with an extraordinary reward corresponding to 2 months of additional basic salary. Our fringe benefit system provides a wide range of benefits to our employees at our locations in Kazincbarcika, Budapest and Gödöllő. Our benefits include personal insurance covering both spouses, as well as private health care services available free of charge to all employees, which includes not only specialist clinic care, but also preventive examinations.

As an employer, we encourage and support the self-care of our employees, thus providing them with voluntary pension contributions.

# Our company provides the following fringe benefits to its employees

INTEREST

**FREE LOAN** 

# **CAREER START-UP SUPPORT**

We contribute to the start of young employees' career path and independent lives with career start-up support.

# INTEREST FREE LOAN

BorsodChem, as employer provides interest free loans for house building, purchasing, modernization and enlargement for its employees in order to support their housing and strengthen their adequate loyalty and commitment.



# **CAREER START-UP SUPPORT**

**"YOU CAN RELY ON US" PROGRAM** 

# RECREATIONAL **ALLOWANCE**

We provide non-refundable employer housing support and interest-free housing employer loans to our young employees.

# **CAFETERIA BENEFIT**

Every employee can allocate the available budget among the included benefits for the actual year.

# **ACCOMMODATION ALLOWANCE**

BorsodChem contributes to solving the accommodation problems of our employees. In the sake of this, in case of employees recruited for open positions that cannot be filled by local manpower, our Company may grant accommodation allowance for a maximum period of 4 years.

**RECREATIONAL ALLOWANCE** 

Employees who have been working in rotating shifts for over 20 years are entitled to recreational benefits, which is provided

by the employer by transferring it to the

# "YOU CAN RELY ON US" PROGRAM

The program, which is accessible to our employees and their close family members, was introduced in collaboration with an external service providers. The program offers anonymous and free expert advice in private life, legal and financial issues, as well as in relation to a healthier lifestyle.



YOUNG

**EMPLOYEES** 



# **HOUSING SUPPORT FOR** YOUNG EMPLOYEES

employee's "Széchenyi" card.



# 9.3 Employee health and safety

GRI 3-3 | GRI 403-1 | GRI 403-2 | GRI 403-3 | GRI 403-4 | GRI 403-5 | GRI 403-6 | GRI 403-7 | GRI 403-8 | GRI 403-9 | GRI 403-10 During the manufacturing of our products, we work with hazardous substances under industrial conditions, therefore it is the basis of our corporate values that we all are responsible for both our personal health and safety and that of the others. We expect all of our employees, as well as the employees of external contractors working at BorsodChem's permises, to actively participate in compliance with our environmental and occupational safety regulations. Our aim is to minimize the risks present in our working environment and reduce the number of accidents down to zero. To achieve

our goals, our Company operates an Occupational Health and Safety Management System (OHSMS) according to ISO 45001 standard, which was complemented by the Process Safety Risk Management (PSRM) system introduced in 2018. The basis of our management system is the assessment and identification of risks, as well as the determination and implementation of risk-reducing measures. In addition to the legal requirements for BorsodChem, the management system was introduced based on our internal regulations on risk identification and assessment. The scope of our management systems extends to nearly all of our operational locations, employees and activities.

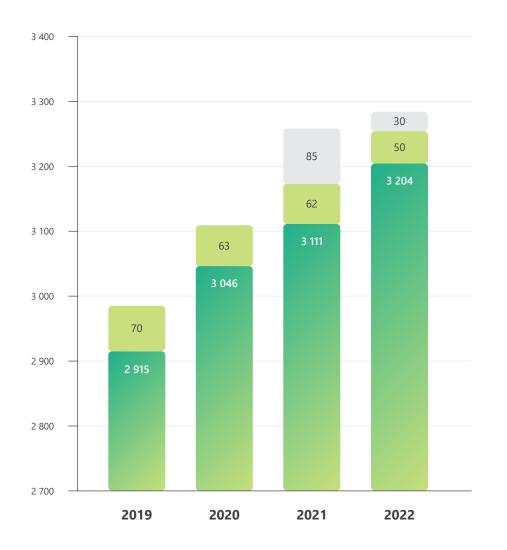
# Rate of employees subject to the OHSMS as a proportion of the total number of employees

	2019	2020	2021	2022
EMPLOYEES SUBJECT TO OHSMS (%)	100%	100%	97%	99%
EMPLOYEES (%)	100%	100%	97%	99%
WORKERS WHO ARE NOT EMPLOYEES (%)	100%	100%	100%	100%
PERCENTAGE OF EMPLOYEES SUBJECT TO OHSMS <sup>37</sup> AND CONTROLLED BY THE EHS	95%	95%	92%	90%
EMPLOYEES (%)	95%	95%	92%	90%
WORKERS WHO ARE NOT EMPLOYEES (%)	100%	100%	100%	100%



<sup>&</sup>lt;sup>37</sup> Controls by OHSMS EHS include both internal and external audits.

# **Number of employees subject to OHSMS**



# Percentage of employees subject to OHSMS and controlled by the EHS





Number of employees



Non-employed workers



Non-covered employees

Our Company operates numerous risk assessment processes. In order to meet occupational safety and health requirements and to identify and mitigate the risks that occure during work, we conduct occupational risk assessments annually, considerably more frequently than required by law. We continuously monitor the safety non-conformities identified during our occupational risk assessment processes and our periodic, regular inspections, as well as their elimination, and we control progress in our weekly, monthly, and quarterly reporting system. Furthermore, technological risks are analysed before initiating a new plant or section of a plant by preparing HAZOP studies, which are revised every five years at most.

Our 'Safety First' approach is an essential element of the trust that we seek to reinforce among our colleagues, partners and within local communities. We believe that operations free from accidents, incidents and emissions are attainable, therefore we have set as a goal to reach zero in terms of safety and environmental incidents and injuries in our daily activities, to

which all of our organisational units can contribute through their own programs. By 2024, we have defined the following occupational safety objectives:

- Decrease the indices of injuries LTI index that occurred in relation with the Company's operations at BorsodChem Zrt.'s site by 15% compared to 2021.
- Decrease the number of injuries that occur at service providers and contracting companies working at BorsodChem Zrt.'s site by 10% compared to 2021.

We implement strict safety regulations and training programs to ensure that our employees possess the knowledge and skills necessary for safe work.

- Training for contractors;
- Introduction of supply chain security management system;

# **ISOPA training programs:**

- Walk-the-talk program: transfer of knowledge and experiences related to the treatment of isocyanates to our customers;
- One step ahead program in Africa and the Near East;
- Training for drivers transporting our isocyanate products;
- · Emergency drills.

We manage the agreement made with the external service providers operating at Borsod-Chem site on the adoption and implementation of a unified safety standard through a separate regulation. We ensure in this way that the appropriate working conditions are provided across the entire area of our Company. We issue work permits only to employees engaged by external service providers who have been previously registered in our Electronic Work Permit (EWP) system by their employer. Our goal is to extend the scope of the EWP also to the construction areas handed over for work by 2024. For further information regarding the provision of appropriate working conditions,

please visit the <u>'Safety First'</u> and <u>'ISOPA information'</u> subsections on our website.

At our Company, the organisation of Work Safety and Health Protection is authorized to carry out the professional activities related to occupational safety and health of employees. The procedures pertaining to the identification and management of work-related hazards and risks are documented in the work safety regulations and the instructions on EHS requirements for external service providers. Our policies ensure that employees can report existing hazards to the responsible organisation without any adverse consequences and can abstain from work in cases where the working conditions might result in injuries or illnesses. Our Event Investigation and Management Regulation describes the process of investigating work-related safety incidents, and specifies the risk assessments carried out annually, as well as the extraordinary risk assessment procedures that are enacted in the event of serious accidents.

In order to facilitate the continual enhancement of the OHSMS system, annual reports are generated from the data recorded in the risk assessment software. The report serves to define corporate-level tasks, each with assigned responsibles and deadlines. Significant risks are recorded in the INTEGRISK system.

Our Company committed to promoting workplace safety and health preservation, undertakes initiatives such as health preservation campaigns, provides vaccination points, and facilitates first-aid training sessions. Furthermore, we ensure the presence of a first-aider in every shift to guarantee prompt response in case of emergencies.

In all our production plants, EHS coordinators supervise and manage the tasks related to occupational health and safety, technical safety and environmental protection.

They draw the attention of managers, employees, external service providers and contractors to any discrepancies or deviations. Our employees can also contribute to the continuous improvement of workplaces and technological processes by submitting their ideas and suggestions through our Employee Suggestion Program (ESP), which are then evaluated by unit leaders and forwarded to the Management for consideration.

At our Company we operate a parity-based occupational safety committee, which offers BorsodChem employees the opportunity to participate in representation of interests covering all employees. During the committee's quarterly meetings, in addition to discussing and documenting the EHS related complaints and suggestions from employees, we also agree on the annual EHS results. Another aim of the Committee is to monitor the annual tasks of the elected occupational health and safety representatives.

# Our general and specialized occupational health and safety training programs include:

- Safety training for new employees
- Quarterly safety trainings
- Comprehensive occupational safety and fire protection trainings every 4 years,
   trainings required for issuing permits for general works and fire hazard works
- Trainings for issuing permits for work inside equipment
- Post-examination system in production plants
- Monthly EHS coordinator and plant manager briefings
- Comprehensive safety trainings and examinations for the employees of external service providers and contractors
- Trainings for the employees of external service providers and contractors on plant-specific hazards before starting work
- Safety trainings for students

Beyond the legal obligations, BorsodChem offers and requires the completion of numerous trainings and educational sessions customized to various professional fields according to its corporate rules.

We ensure appropriate medical and health preservation care of our employees through the operation of a 0–24-hour medical centre at our site, a dedicated ambulance service and a Mini-Hospital providing specialised medical services.

# **BorsodChem as a sporty employer**

Between 2021 and 2022, our company received numerous awards for its sporting activities. Thanks to its complex health and exercise programme for our employees, we won the #BeActive Workplace Award of the Magyar Szabadidősport Szövetség in 2021.

In the spirit of community sports, we encouraged all corporate organisations and employees to adopt a more health-conscious lifestyle. In 2021 we joined the Challenge Day organised by the Magyar Szabadidősport Szövetség with 16 teams and in 2022 with 32 teams, where BorsodChem finished in the second place in Hungary's Most Sporty Workplace category in both years.

Our employees can learn about the health-care services provided by BorsodChem on posters placed around the site, the corporate news portal, EHS campaigns, the Success Factor system and informational and educational materials published by Work Safety & Health Protection Department. In order to facilitate making an appointment at the Mini Hospital, we provide an electronic check-in interface. Through a private healthcare provider, we offer health insurance to all of our employees. Recognizing our responsibility in

encouraging the employees' health preservation, we organise a health week annually.

Our company, beyond the provided medical and health care services, offers a variety of health preservation and wellness promotion programs and services for its employees. Alongside corporate bicycle tours and the free use of swimming pool and gym, we have been participating in sports events initiated by both national and European Union entities for many years.

Since 2018, the preservation of health has been incorporated into our benefit system, wherein we provide a range of medical and health preservation services. Our goal is to increase the number of voluntary health screening opportunities by 10% and the number of participants by 15% by 2024, compared to 2021. Further details about our benefits system can be found in the chapter Remuneration of our employees.

For further information on our prescribed entrance and security measures for our employees and the employees of external companies working at our sites, please refer to the section entitled <a href="Ensuring good working">Ensuring good working conditions</a>.

Between 2021 and 2022, the number of employees subject to the OHSMS increased due to the new employees hired for providing staff for the expanding and the new facilities.

Work-related hazards that pose a risk of serious injuries with grave consequences primarily include the risk of tripping, contact with chemical substances, exposure, or other mechanical injuries. There were not any accidents resulting in fatal outcomes or severe injuries at our operational sites either in the current or in the previous reporting period. Accidents that occurred during the course of work were mostly characterized by incidents that happened while walking or due to human carelessness, which in most cases resulted in foot and/or hand injuries, or were caused by corrosive chemicals.

# Safety training video for external service providers working at the Company's site

In ensuring appropriate working conditions, one of our key tasks is to manage the risks arising through business relations with contractors arriving at BorsodChem's site. To facilitate this, our Company has prepared a publicly available safety training video for the employees of our external service providers.

We registered 24 work-related accidents among non-employee workers<sup>38</sup> in the year 2021, and 43 in the year 2022. The increase in the number of accidents is correlated with the escalated number of contractors due to the constructions at site IV. The injuries were of the same type mentioned above. To prevent injuries among the external companies and contractors working at the Company's sites in Hungary, BorsodChem launches campaigns annually. They can start their work at the Company's premises after fulfilling stricter exam criteria. In the year 2022, a training video was made about the workplace safety rules to make safety trainings more demonstrative and effective.

We share the experiences and preventive measures related to the occurred injuries with the concerned external parties through our electronic work permit system (EWP).

We organize regular trainings for contractors.

# Number of work-related accidents and hours worked

	2019	2020	2021	2022
TOTAL NUMBER OF ACCIDENTS	37	56	61	50
TOTAL NUMBER OF REPORTABLE ACCIDENTS	19	19	16	19
RATIO OF REPORTABLE WORK ACCIDENTS <sup>39</sup>	0.75	0.71	0.57	0.66
TOTAL NUMBER OF HOURS WORKED-OFF	5 044 584	5 350 660	5 598 034	5 780 065

In the past four years, there was only one instance for a work-related illness, which we wrote about in more details in <u>Chapter 5.3.</u> In order to prevent further illnesses, our Company is notably striving to tighten the internal regulation on and supervision of the works.

 $<sup>^{\</sup>rm 38}$  Employees of external companies and contractors working at the Company's sites.

<sup>&</sup>lt;sup>39</sup> Accident rates at work were calculated on the basis of 200 000 hours worked.



# 9.4 Ensuring Appropriate Working Conditions

**GRI 3-3** 

We place special emphasis on creating safe and non-hazardous working conditions both for our own employees and the employees of our external partners. This is not only important for complying with legal requirements but also can significantly influence work efficiency and employee satisfaction. In ensuring appropriate working conditions, noise protection is treated as a particularly critical

area<sup>40</sup>. We conduct noise measurements in case of every newly installed or modified technology and operational development, which we repeat, where justified.

Our company operates an integrated management system (IMS), which includes, among others, the systems established according to ISO 45001:2018 (OHSMS) and ISO 14001:2015 (EMS) standards. The OHSMS is designed to guarantee a safe working environment for all employees arriving at the BorsodChem site. To ensure this, we conduct the periodic workplace risk assessments prescribed by the Hungarian laws annually instead of the stipulated every three years. The risk assessment also includes the evaluation of the working environment of external service providers entering our Company's site.

The EHS Policy and Objectives, the Sustainability Policy and Objectives<sup>41</sup> and the programs supporting their implementation address the

<sup>&</sup>lt;sup>40</sup> You can find more information about our noise protection activities on our website.

<sup>&</sup>lt;sup>41</sup> The documents are publicly available on the "Documents" webpage.

# **Number of EHS managerial inspections**

2019	2020	2021	2022
2 215	1 808	2 735	2 789

impacts related to the provision of appropriate working conditions. In 2022, we set new EHS objectives that outline the directions of development for the next three years. Our Company operates a comprehensive performance management and incentive system (more information in Chapter 9.2.), among others, to achieve the EHS objectives, the progress of which is evaluated on a quarterly basis. In order to encourage and monitor compliance with the regulations, there are also regular safety inspections conducted by the managers at various levels.

As a component of the IMS, the results of regular and periodic EHS analyses are shared with our employees and external partners on various platforms (e.g., contractor briefings, monthly EHS reports, EWP system) .<sup>42</sup>

The agreement on the acceptance and implementation of a unified safety standard with external companies operating at the BorsodChem site has been documented in the HSE Regulation. This ensures that appropriate working conditions are provided across the entire territory of our Company. It is allowed to issue work permits only for the workers employed by external companies who have been registered by their employer in our Electronic Work Permit (EWP) system. Our goal is to extend the scope of the EWP also to the construction areas handed over for work by 2024.

In collaboration with the occupation healthcare provider, we operate a unified entry system that applies equally to the companies operating at our site and the contractors arriving here. The purpose of this entry system is to ensure that employees have the health status required for filling the given job position.

# **Employee satisfaction**

Since 2013, we have regularly – at least every 2 years – conducted employee satisfaction surveys. Our management is committed to continuous improvement of employee satisfaction. Due to numerous negative economic events in recent years coupled with the uncertainties caused by the pandemic, there has been a decrease in satisfaction among our employees. Our aim is to counterbalance the negative effects by providing our employees

# **BorsodChem's Fire Department**

Our Company has been operating its onsite Fire Department since 1994. Their primary responsibilities are the immediate handling and mitigation of emergencies, the protection of the health and safety of our employees, and providing first aid with their own ambulance vehicle in the event of an accident within our Company site. In 2021, our Fire Department was recognized for their work in maintaining public order and safety.

One of our EHS goals is to expand our emergency response resources and develop responsiveness in line with BorsodChem's capacity expansions. The area of operation of our Fire Department has been extended even to Site IV, where a separate station was established.

<sup>&</sup>lt;sup>42</sup> You can find more information about BorsodChem's activities aimed at ensuring decent working conditions on our website.

with employer care, a liveable working environment, and ensuring an excellent workplace atmosphere.

Our survey, from 2020 onwards, was completed with new questions, which enabled us to examine dimensions of growing significance in recent years concerning satisfaction. Based on the results from the surveys, our employees expressed the highest levels of satisfaction with the tasks they performed, their direct supervisors, and the utilization of their knowledge and skills. As areas to be improved were identified the actions related to remuneration, corporate information flow and communication, as well

as change management. We take these findings into account when determining the components of the annual wage increase and during the annual review of the various HR systems and programs, and we strive to improve them accordingly. Feedbacks on communication and information flow can clearly be derived from the limited opportunities during the COVID-19 period. Therefore, once the corporate defense rules were released, we immediately reverted to using direct communication channels, such as our HR Let's Chat events, where employees and representation bodies can ask questions that concern them directly and without any formal obligations.

# **Family-friendly workplace**

It is important for us to provide our employees with a family-friendly working environment. For this reason, we have developed family-friendly programmes and services for the children of our employees:

- Summer camping support
- Providing the possibility and financial support for kindergarten groups in Kazincbarcik
- Santa Claus Day gift-giving, in which children received gift vouchers in 2021 and 2022





9.5
Our commitment to education and training

GRI 3-3 | GRI 404-1 | GRI 404-2 | GRI 404-3 Chemical industry is an extremely knowledge-intensive and fast evolving sector that constantly requires the supply of highly qualified workforce. The activities of our Company require specialized knowledge and skills that are difficult to acquire through education in the traditional school system. As a responsible employer, we provide the knowledge necessary for safe and efficient operation through extensive and intensive training activities. In 2021, in the "Responsible Employer

of the Year" tender, BorsodChem was honored with the special award of the Hungarian Chamber of Commerce and Industry for the Company's training system and for its work to promote vocational training in the chemical industry<sup>43</sup>.

The number of graduates in chemistry or mechanical engineering from formal education is below the needs of companies with a similar profile in the country and the region. To ensure the supply of suitably qualified workforce, we strive to offer various training and diverse cooperation opportunities.

The basic rules and procedures pertaining to employee training are primarily outlined in the Training Regulation, the Talent management system Policy and the Career path Regulation. All employees receive regularly occupational safety training, the content and frequency of which depends on the job position held. We consistently ensure the arrangment of regulatory trainings required for our operations.

<sup>&</sup>lt;sup>43</sup> You can find more information about our education and training activities on our website.

Internal, professional trainings of our Company are provided in the form of face-to-face and in an increasing proportion in form of e-learning. A significant part of our external trainings are trainings aimed at acquiring qualifications prescribed by authorities, and participation in specialized courses and conferences. The trainings span a wide range from 1–2-hour lectures to courses extending over several months. Progress on education and training programs is regularly presented during the quarterly management reporting.

# Annual average training hours per employee, by gender and employee category

	2019	2020	2021	2022
AVERAGE ANNUAL TRAINING H	OURS BY GEN	DER		
FEMALE	24.37	2.84	9.24	7.48
MALE	32.95	8.42	22.55	19.19
AVERAGE ANNUAL TRAINING HOURS	BY EMPLOYEE	CATEGORY		
INTELLECTUAL EMPLOYEES	28.98	2.71	9.04	14.67
EMPLOYEES ENGAGED IN MANUAL LABOUR	33.27	11.54	29.57	18.94
ANNUAL AVERAGE TRAINING HOURS OF OUR EMPLOYEES	31.19	7.28	20.01	16.92

There were several reasons for the decrease in training hours in 2022, including the cessation of the NQR (National Qualifications Register) vocational training courses and shortening of the duration of courses. A further decrease in the number of training hours was caused by the fact that almost all internal trainings were held online.

We support our employees's participation in school system trainings by providing working time allowance and bearing the costs. The secondary courses are mainly vocational trainings for chemical technicians, while the high grade courses include several technical fields.

# Career Starter: BC Technological System Operator Course

Due to the low number of young people with secondary chemical qualification entering the labour market from the school system, a new solution was introduced at the beginning of 2021 to ensure the replenishment of our system operator staff. Employees acquire the basic knowledge necessary to commence their on-the-job training through a 3-month internal course called the BC Technological System Operator Course. During the training, which is organised with the assistance of our own professional instructors, participants can acquire the basic chemical and mechanical concepts and knowledge that are generally useful for learning all of our plant technologies.

Within six months after completing our BC Technological System Operator training, we conduct a questionnaire survey for each group. During the survey, participants evaluate to what extent the training facilitated them to start their learning phase, and how stable foundations they gained during the training for learning the plant technologies.

In addition to providing internal and external trainings, we operate a mentoring system for employees, with the aim of facilitating knowledge sharing and continuous development. Alongside our mentorship system,

performance and career development evaluations take place at least twice a year, namely at the end of the year and mid-year. The participation rate of our employees in these evaluations approached 99% in 2022.



# Percentage of employees undergoing regular performance and career development assessments<sup>44</sup>

	2019	2020	2021	2022
BY GENDER				
FEMALE	99.3%	97.8%	102.0%	99.5%
MALE	95.4%	96.2%	96.0%	98.7%
BY EMPLOYEE CATE	GORY			
SENIOR MANAGER	100.0%	100.0%	100.0%	100.0%
MIDDLE MANAGER	96.4%	96.4%	107.7%	111.1%
LINE MANAGER	98.7%	94.9%	102.6%	98.8%
TEAM MANAGERS	102.1%	102.4%	100.4%	99.2%
PEOPLE EMPLOYED IN INDEPENDENT POSITIONS	95.6%	96.0%	96.6%	98.7%
TOTAL EMPLOYEES	96.2%	96.5%	97.2%	98.9%

For colleagues with exceptional skills and outstanding performance, we run a Talent Program in which they can participate in professional and leadership skills development trainings that contribute to the more effective application of their professional knowledge and the realisation of their career-building goals. We conducted a questionnaire survey among the participants to assess the effectiveness of our Program. During the survey, participants evaluated every program element, the utilization of the knowledge they acquired, their satisfaction with the trainers, the contents of the program and the online platform.

<sup>&</sup>lt;sup>44</sup> Values above 100% are derived from the fact that according to indicator GRI 2-7 headcount is calculated according to closing headcount, while employees working as pensioners also participated in evaluations according to indicator 404-3.

# **Focus on talent management**

2022 was the year of Talent Management at both BorsodChem and our parent company. We completely revised our previous Talent Programme and spotlighted talent identification and the talent development programme itself. In the programme we provide participants developments with various contents specified according to their company experience and possible future career orientation.

Beyond developing soft skills, we organise additional programmes that help become familiar with our Company and provide professional training for our colleagues. In addition, our colleagues can strengthen their network of contacts within the Company at lectures and Talent Club events, and an experienced mentor accompanies them throughout the entire process of the Talent Programme.

# **Our educational collaborations**

The continuous innovation that characterizes our operations requires us to make significant efforts to keep our experts' knowledge up to date. Beyond employee training, we place great emphasis on expanding our education and training activities and developing our educational collaborations.

Considering the interests of our Company, we are taking on an increasingly important role in the field of dual vocational training in the chemical industry by providing internship opportunities for students in secondary

vocational education and higher education. Under a collaboration agreement with the Irinyi János Reformed Education Centre in Kazincbarcika, we offer students the chance to gain insights into our operations and technologies during the practical internships.

As a dual training place, we are involved in higher education at the University of Miskolc, the University of Debrecen, and the University of Pannonia in Veszprém. Within the framework of cooperation agreements, we accept chemical engineering, materials engineering, mechanical engineering, and economics

students for dual education, within which the involved students participate in practical traineeship at our Company in accordance with the dual curriculum of their respective faculty.

We continuously participate in the development of vocational training related to our activities, in close cooperation with primary, secondary, and higher education institutions in our local and wider community. In recent years, we have established the following cooperations:

Career orientation programmes and chemistry courses for primary school students

- Scholarship for high school and high grade students with outstanding performance
- Launch of a "BC chemistry faculty" at Szalézi Szent Ferenc Secondary School in Kazincbarcika preparing students for further education. Our company takes part in the compilation of curriculum, provides chemicals required for experiments and offer students the opportunity to visit our production plants.
- Our Company established an outsourced department in cooperation with the University of Miskolc in 2006 and the University of Debrecen in 2018, further strengthening our professional and educational partnerships.
- In cooperation with the Faculty of Technical Materials Science of the University of Miskolc and the chemical companies of the county, we

successfully contributed to the launch of the chemical engineering bachelor's programme started in September 2019. Thanks to further development of the cooperation, the master's programme in chemical engineering was successfully launched at the Faculty of Materials and Chemical Engineering from February 2021 and in 2022 the outsourced correspondence course in Kazincbarcika also began

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established our own training centre at our Kazincbarcika site, equipped with demonstration equipments required for practical training. Beside retraining programmes, the centre also hosts numerous in-house training sessions and internships organized for secondary school students.

# What is secondary dual education?

"It is a training system in which students gain work experience and professional knowledge already during their secondary school years. In 2022 we started working with 18 chemical technician students who attend corporate training two days a week. The venue of theoretical and practical trainings is the classroom, computer room, teaching laboratory, small factory of the Education Centre and the plants and laboratories of BC for the summer practice.

# What are its advantages?

Students can learn about chemical technologies in a real-life working environment and gain professional experience directly from specialists. After passing the technician exam, they start their career with experience from the world of work.

We believe that the impressions gained during the training about our Company, our employees and the advantageous remuneration package will motivate the trainees to start working at BorsodChem."



Gabriella Kovács, Mihály József Pogonyi Professional instructors



# 10 GRI CONTENT INDEX

BorsodChem Zrt. prepared this report for the period between January 1, 2021 and December 31, 2022 in accordance with the requirements of the GRI standard that entered into force in January 2023. The following table containing the GRI indices helps you find the topics covered in the Report.

GRI INDICATOR	INDICATOR NAME	RELEASE	PAGE	DIRECT ANSWER			
GENERAL DISCL	GENERAL DISCLOSURES						
2-1	Organisational details	2021	<u>16–21</u>	Our annual Finance and Sustainability Reports cover the same departments. Link: <u>Elektronikus Beszámoló Portál (gov.hu)</u> . Elérhetőség: >> Keresés a közzétett beszámolók és mérlegek között >> Cégnév: Borsodchem Zrt. >> BorsodChem_Zrt_Kiegeszito_melleklet_2022.pdf			
2-2	Entities included in the organisation's sustainability reporting	2021	6–10; 11–14; 15–29;	The organisation consists of one entity.			
2-3	Reporting period, frequency and contact point	2021	6–10; <u>11–14; 15–29;</u> <u>142–143</u>	BorsodChem publishes its financial report annually and its Sustainability Report every two years.			
2-4	Restatements of information	2021	-	Information for the previous reporting period has not been republished.			
2-5	External assurance	2021	<u>144–146</u>				
2-6	Activities, value chain and other business relationships	2021	22–24	2-6-b-ii: BorsodChem Zrt. carries out its activities in the chemical industry sector, the members of its value chains are also players in the chemical industry sector. 2-6-c: We handle it within BorsodChem's supply chain.			
2-7	Employees	2021	<u>100–107</u>				
2-8	Workers who are not employees	2021	<u>100–107</u>				
2-9	Governance structure and composition	2021	<u>31–33</u>	Our Company's highest governance body is the Board of Directors, which as a single entity is responsible for managing and overseeing the organisation's impact on the economy, the environment and the society.			

GRI INDICATOR	INDICATOR NAME	RELEASE	PAGE	DIRECT ANSWER
2-10	Nomination and selection of the highest governance body	2021	<u>31–33</u>	No diversity criteria have been defined for the appointment and selection of the highest governance body
2-11	Chair of the highest governance body	2021	<u>31–33</u>	
2-12	Role of the highest governance body in overseeing the management of impacts	2021	<u>34–37</u>	
2-13	Delegation of responsibility for managing impacts	2021	<u>34–37</u>	
2-14	Role of the highest governance body in sustainability reporting	2021	<u>6–10; 15–29</u>	
2-15	Conflicts of interest	2021	<u>31–33</u>	
2-16	Communication of critical concerns	2021	-	Our Company has not developed a procedure as how to inform the highest governance bodies when critical concerns arise. During the reporting period, no critical concerns were identified that needed to be communicated to the Company's highest governance body. During the reporting period, no critical concerns were identified that needed to be communicated to the Company's highest governance body.
2-17	Collective knowledge of the highest governance body	2021	<u>34–37</u>	
2-18	Evaluation of the performance of the highest governance body	2021	<u>49</u>	
2-19	Remuneration policies	2021	_	The information to be disclosed is confidential, it is BorsodChem's intellectual product.
2-20	Process to determine remuneration	2021	<u>108–110</u>	There is no remuneration consultant involved in setting remuneration and no remuneration committee overseeing the remuneration. Voting by stakeholders (including shareholders) on remuneration policies and proposals is not relevant to BorsodChem.

GRI INDICATOR	INDICATOR NAME	RELEASE	PAGE	DIRECT ANSWER
2-21	Annual total compensation ratio	2021	-	The information to be disclosed is confidential, it is BorsodChem's intellectual product.
2-22	Statement on sustainable development strategy	2021	<u>4–5; 45–48; 49–51</u>	
2-23	Policy commitments	2021	<u>38–43</u>	BorsodChem's operations are not associated with vulnerable groups. The UNGC does not require due diligence or the application of the precautionary principle.
2-24	Embedding policy commitments	2021	<u>38–43</u>	
2-25	Processes to remediate negative impacts	2021	-	There is no formal process in place, but during the reporting period no such or similar impacts were identified in our Company.
2-26	Mechanisms for seeking advice and raising concerns	2021	<u>38–43</u>	
2-27	Compliance with laws and regulations	2021	<u>38–43; 76–77</u>	2-27-b: In the 2021-2022 period, a significant fine of EUR 25 000 or more occurred in one case (EUR 61 954). 2-27-b-ii: During the 2019-2020 reporting period, our Company did not receive any significant fines due to non-compliance with legal or regulatory requirements.
2-28	Membership associations	2021	28–29	
2-29	Approach to stakeholder engagement	2021	<u>25–27</u>	
2-30	Collective bargaining agreements	2021	<u>100–107</u>	To determine the working and employment conditions of senior management, BorsodChem Zrt. uses the collective bargaining agreement covering other employees as a basis.

GRI INDICATOR	INDICATOR NAME	RELEASE	PAGE	DIRECT ANSWER
MATERIAL TOPI	CS			
3-1	Process to determine material topics	2021	<u>8–10</u>	
3-2	List of material topics	2021	<u>8–10</u>	
PRODUCT QUAI	LITY			
3-3	Management of material topics	2021	60-62	
INNOVATION				
3-3	Management of material topics	2021	<u>63–68</u>	
APPROPRIATE V	VORKING CONDITIONS			
3-3	Management of material topics	2021	<u>118–120</u>	
CLIMATE CHAN	GE ADAPTATION			
3-3	Management of material topics	2021	<u>95–98</u>	
ECONOMIC PER	RFORMANCE			
3-3	Management of material topics	2021	<u>53–59</u>	
201-1	Direct economic value generated and distributed	2016	<u>53–59</u>	The presentation of the economic value generated and distributed by our Company is not significant at national, regional or market level. There have been changes in the structure of our business during the 2021 and 2022 financial years.

GRI INDICATOR	INDICATOR NAME	RELEASE	PAGE	DIRECT ANSWER
201-2	Financial implications and other risks and opportunities due to climate change	2016	<u>63–68</u>	
201-3	Defined benefit plan obligations and other retirement plans	2016	-	BorsodChem does not provide defined benefit or other retirement plans for its employees.
201-4	Financial assistance received from government	2016	53–59	
ANTI-CORRUPT	ION			
3-3	Management of material topics	2021	<u>38–43</u>	There is no substantive measurement to monitor the effectiveness of anti-corruption measures.
205-1	Operations assessed for risks related to corruption	2016	38–43	
205-2	Communication and training about anti-corruption policies and procedures	2016	<u>38–43</u>	100% of colleagues working at our Kazincbarcika site participated in the anti-corruption training.
205-3	Confirmed incidents of corruption and actions taken	2016	38–43	
ENERGY CONSU	JMPTION			
3-3	Management of material topics	2021	<u>70–75</u>	
302-1	Energy consumption within the organisation	2016	<u>70–75;</u> <u>76–77</u>	302-1-2.1.4, -a, -b, -e: BorsodChem collects its data on energy consumption in MWh and therefore uses this unit of measurement in the report. (1 Wh = 3 600 J) 302-1-g: Based on the methodology used in the BorsodChem GHG Report.

GRI INDICATOR	INDICATOR NAME	RELEASE	PAGE	DIRECT ANSWER
302-2	Energy consumption outside of the organisation	2016	-	BorsodChem does not measure its external energy consumption, because no adequate data from the supply chain is available, and their impact on BorsodChem's energy consumption is not significant. As part of the preparation for compliance with the regulatory requirements (CSRD), the relevant procedure is being developed at the time of the preparation of the Report, which is expected to be completed by the beginning of 2024. More information can be found in the Company's GHG Report.
302-3	Energy intensity	2016	<u>70–75</u> ;	
302-4	Reduction of energy consumption	2016	<u>70–75</u> ;	BorsodChem collects its data on energy consumption in MWh and therefore uses this unit of measurement in the report. (1 Wh = 3 600 J)
302-5	Reductions in energy requirements of products and services	2016	<u>70–75</u> ;	BorsodChem collects its data on energy consumption in MWh and therefore uses this unit of measurement in the report. (1 Wh = $3600J$ )
WATER USE ANI	D CONDITION OF EFFLUENTS WASTEWATER TREAT	TMENT AND D	ISCHARGE	
3-3	Management of material topics	2021	<u>78–81</u>	
303-1	Interactions with water as a shared resource	2018	<u>78–81</u>	BorsodChem collects data on water use and wastewater treatment in thousands of $m^3$ and therefore uses this unit of measurement in the report. (1 MI = 1 000 m3)
303-2	Management of water discharge-related impacts	2018	<u>78–81</u>	BorsodChem collects data on water use and wastewater treatment in thousands of m3 and therefore uses this unit of measurement in the report. $(1 \text{ MI} = 1  000  \text{m}^3)$

GRI INDICATOR	INDICATOR NAME	RELEASE	PAGE	DIRECT ANSWER
303-3	Water withdrawal	2018	<u>78–81</u>	BorsodChem collects data on water use and wastewater treatment in thousands of m³ and therefore uses this unit of measurement in the report.  (1 MI = 1000 m³)  In case of BorsodChem, the category of water from third parties only includes purchased drinking water, thus this is included in the report.
303-4	Water discharge	2018	<u>78–81</u>	BorsodChem collects data on water use and wastewater treatment in thousands of m3 and therefore uses this unit of measurement in the report. (1 MI = 1000 m³)  The water discharged by BorsodChem is not considered fresh water, as the total dissolved solids exceed 1000 mg/l. 100% of the discharge is discharged into surface water, the River Sajó. The Sajó and its surroundings are not classified as a water deficit area.
303-5	Water consumption	2018	<u>78–81</u>	BorsodChem collects data on water use and wastewater treatment in thousands of $m^3$ and therefore uses this unit of measurement in the report. (1 MI = 1000 $m^3$ )
GHG EMISSION	S			
3-3	Management of material topics	2021	<u>87–94</u>	
305-1	Direct (Scope 1) GHG emissions	2016	<u>87–94</u>	Information not detailed in the Sustainability Report is contained in BorsodChem's certified 2021 and 2022 GHG Report.
305-2	Indirect (Scope 2) GHG emissions	2016	<u>87–94</u>	Information not detailed in the Sustainability Report is contained in BorsodChem's certified 2021 and 2022 GHG Report.
305-3	Other indirect (Scope 3) GHG emissions	2016	<u>87–94</u>	Information not detailed in the Sustainability Report is contained in BorsodChem's certified 2021 and 2022 GHG Report.

GRI INDICATOR	INDICATOR NAME	RELEASE	PAGE	DIRECT ANSWER		
305-4	GHG emissions intensity	2016	<u>87–94</u>			
305-5	Reduction of GHG emissions	2016	<u>87–94</u>	Information not detailed in the Sustainability Report is contained in BorsodChem's certified 2021 and 2022 GHG Report.		
305-6	Emissions of ozone-depleting substances (ODS)	2016	-	BorsodChem does not emit any ozone depleting substances (ODS).		
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx) and other significant air emissions	2016	<u>87–94</u>			
WASTE MANAGEMENT						
3-3	Management of material topics	2021	<u>82–86</u>			
306-1	Waste generation and significant waste-related impacts	2020	<u>82–86</u>			
306-2	Management of significant waste-related impacts	2020	<u>82–86</u>			
306-3	Waste generated	2020	<u>82–86</u>	The waste generated covers hundreds of different HAK codes, therefore the data is treated in aggregate.		
306-4	Waste diverted from disposal	2020	<u>82–86</u>	The waste generated covers hundreds of different HAK codes, therefore the data is treated in aggregate.		
306-5	Waste directed to disposal	2020	<u>82–86</u>	The waste generated covers hundreds of different HAK codes, therefore the data is treated in aggregate.		
EMPLOYMENT, NUMBER OF EMPLOYEES						
3-3	Management of material topics	2021	100–107			

GRI INDICATOR	INDICATOR NAME	RELEASE	PAGE	DIRECT ANSWER		
401-1	New employee hires and employee turnover	2016	<u>100–107</u>			
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	2016	<u>108–110</u>	Disability and incapacity insurance, parental leave and shareholding are not relevant. There is no benefit that part-time employees cannot receive.		
401-3	Parental leave	2016	-	BorsodChem does not have any policies, agreements or contracts in place that allow for parental leave at an organisational level beyond the statutory maternity leave.		
OCCUPATIONAL HEALTH AND SAFETY						
3-3	Management of material topics	2021	<u>111–117</u>			
403-1	Occupational health and safety management system	2018	<u>111–117</u>			
403-2	Hazard identification, risk assessment, and incident investigation	2018	<u>111–117</u>			
403-3	Occupational health services	2018	<u>111–117</u>			
403-4	Worker participation, consultation, and communication on occupational health and safety	2018	<u>111–117</u>			
403-5	Worker training on occupational health and safety	2018	<u>111–117</u>			
403-6	Promotion of worker health	2018	<u>111–117</u>			

GRI INDICATOR	INDICATOR NAME	RELEASE	PAGE	DIRECT ANSWER		
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	2018	<u>111–117</u>			
403-8	Workers covered by an occupational health and safety management system	2018	<u>111–117</u>			
403-9	Work-related injuries	2018	<u>111–117</u>			
403-10	Work-related ill health	2018	<u>111–117</u>			
TRAINING AND EDUCATION OF EMPLOYEES						
3-3	Management of material topics	2021	<u>121–126</u>			
404-1	Average hours of training per year per employee	2016	121–126			
404-2	Programs for upgrading employee skills and transition assistance programs	2016	121–126	BorsodChem does not provide transitional support for continued employability.		
404-3	Percentage of employees receiving regular performance and career development reviews	2016	<u>121–126</u>			

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ABBREVIATIONS AND GLOSSARY **BAT** (Best Available Technology/Techniques): The technology that, under acceptance technical and economic conditions, is the most effective in terms of protecting the environment as a whole.

**CAPEX:** Capital expenditures

**CDP (Carbon Disclosure Project):** An assessment and rating system in the field of climate protection.

**CO2e:** (Carbon dioxide equivalent): one ton of CO<sub>2</sub> or equivalent amount of greenhouse gases with global warming potential.

**CSR:** Corporate Social Responsibility

**DMS:** Document Management System

**DNSH:** Do No Significant Harm

**DNT:** Dinitrotoluene

**EHS:** Environment, Health and Safety Department (Hungarian abbreviation: EBK)

**EMS:** Environmental Management System

**EnMS:** Energy Management System

**ESP:** Employee Suggestion Program

**EU-ETS:** EU Emission Trading System

**EWP:** Electronic Work Permit

**GHG (Greenhouse gases):** gases that absorb infrared wavelengths of light that cause global warming.

**GRI (Global Reporting Initiative):** an international civil organization based in Amsterdam with the aim of developing and improving internationally accepted sustainability standards.

**HAZOP** (Hazard and Operability Study): An investigation conducted on a complex operating system to identify risks and issues.

**HPM (High Performance Material):** Materials with outstanding technical characteristics.

**HYCO4:** Hydrogen and Carbon Monoxide Plant

IMS: Integrated Management System

**IPPC (Integrated Pollution Prevention and Control):** Directive 96/61/EC concerning integrated pollution prevention and control.

**ISCC Plus:** International Sustainability Carbon Certification

**ISO 14001:** International standard for establishing and controlling environmental management systems.

**ISO 28000:** International standard setting requirements for security management systems, including supply chain aspects.

**ISO 45001:** International standard providing guidance and requirements for occupational health and safety systems.

**ISO 50001:** International standard for energy management systems.

**ISO 9001:** International standard for quality management, system structure and control

**Isocyanates:** Organic compounds containing the isocyanate group, used in the production of polyurethanes.

**KPI:** Key Performance Indicator

LCA: Life Cycle Assessment

**LEAN:** A corporate organisation system aimed at most economical operation of the company.

**LTI index (Lost Time Injury):** A measure indicating absences from work due to an accident.

MDI: Methylene diphenyl diisocyanate

MNB: Mono-nitrobenzene

MNT: Mononitrotoluene

MSS: Minimum Social Safeguards

**Natura 2000:** A European ecological network created by the European Union to protect biological diversity through the conservation and sustainable use of natural habitats and species.

**NEIS:** National Environmental Information System

**ODCB:** Orthodichlorobenzene

**OECD:** Organisation for Economic Co-operation and Development

**OHSAS 18001:** An international standard that incorporates safety obligations and tasks for companies in the areas of work, health, and fire protection.

**OHSMS:** Occupational Health and Safety Management System (Hungarian abbreviation: MEBIR)

**OPEX:** Operating Expenses

**PCF:** Product Carbon Footprint

**Polyol:** An organic compound containing multiple hydroxyl groups

**PU** (polyurethane): a collective term for plastics produced by the copolymerization of diand polyisocyanate with diand polyol units

**PVC:** Polyvinyl chloride

**QMS:** Quality Management System (Hungarian abbreviation: MIR)

**R&D:** Research and development

**REACH:** Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation, and Restriction of Chemicals

**Recultivation:** Recultivation or land reconstruction, making an area suitable for recycling

**SA 8000:** An international standard aimed at ensuring socially acceptable workplace practices within companies.

**Scope 1 Emissions:** Emissions generated within the company's organizational boundaries and from sources owned or controlled by the company, such as company-owned heating equipment and corporate vehicles, as well as business trips with equipment under the control of the company. The GHG Protocol designates Scope 1 emissions as direct emissions.

**Scope 2 Emissions:** Indirect emissions arising from the production of energy used by the company, purchased energy

Scope 3 Emissions: All other indirect emissions in the company's value chain, including "upstream" and "downstream" emissions, such as those from the production and transport of purchased materials, transportation of sold products, end-of-life disposal, business travel by employees, commuting, etc.

**SCS (Supply Chain Security):** Supply Chain Security Management System

**SDG (Sustainable Development Goals):** Sustainable Development Goals, based on the United Nations' 2015 Summit on Sustainable Development in Paris, which are based on the Millennium Development Goals.

**SDS:** Safety Data Sheet

**Significant fine:** BorsodChem considers fines exceeding € 25 000 to be significant.

**TDA:** Toluenediamine

**TDI:** Toluene diisocyanate

**TfS:** Together for Sustainability

**TPU:** Thermoplastic polyurethane

**UN Global Compact (UNGC):** The UN Global Compact is the world's largest corporate sustainability initiative established by the United Nations.

**VCM:** Vinyl chloride monomer

WIG: Wanhua Industrial Group

WNA: Weak Nitric Acid





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# READER FEEDBACK

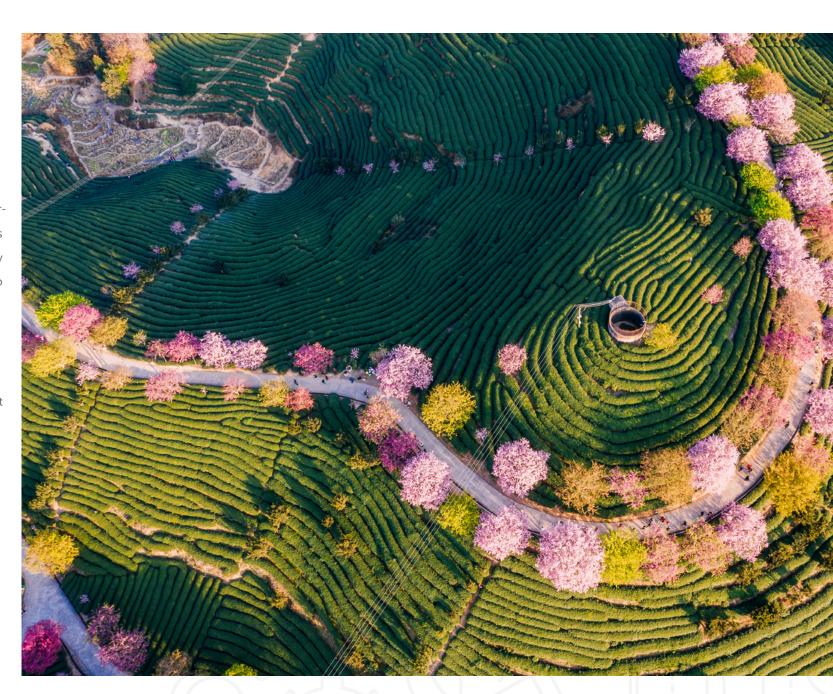
**GRI 2-3** 

# Dear Reader,

When preparing its Sustainability Report, BorsodChem Zrt. considers the opinions of its stakeholders, including yours. If you have any questions about our report or would like to share your feedback with us, please do so at:

# sustainability@borsodchem.eu

Thank you for contributing to the improvement of our operations by sharing your feedback!





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# EXTERNAL ASSURANCE

**GRI 2-5** 

INTRODUCTION



Independent assurance statement for BorsodChem Zrt.'s Sustainability Report 2021-2022

# 1. To the management and stakeholders of BorsodChem Zrt.

denkstat Hungary Kft. was commissioned by BorsodChem Zrt. (hereinafter referred to as "the Company") to provide independent third-party assurance for "BorsodChem Zrt. Sustainability Report 2021-2022" (hereinafter referred to as "the Report").

The assessment was conducted according to the criteria in AA1000AS (AA1000 Assurance Standard v3) to examine the application of the principles of inclusivity, materiality, responsiveness and impact, as described in the AA1000AP (AA1000 Assurance Principles), 2018. Our work also covered verifying the application of the requirements of reporting in accordance with the Global Reporting initiative (GRI) Standards.

denkstatt Hungary Kft. is part of denkstatt Group, an independent international consultancy. Our team of experts has extensive professional experience of assurance engagements related to non-financial information and sustainability management, meaning it is qualified to conduct this independent assurance engagement. denkstatt has implemented a certified quality and environmental management system which complies with the requirements of ISO 9001;2015 and ISO 1400;12015.

denistatt is independent of the Company in every aspect and is not related to it in any way that would risk its independency or its impartiality. We have not performed any tasks or services for the Company that would lead to a conflict of interest. We did not participate in the preparation of any part of the Report.

This Assurance Statement was prepared specifically for the purpose detailed above, shall only be used as part of BorsadChem Zrt's 2021-2022 Sustainability Report and shall not be used or published for any other purposes or a seat of any other documents.

The assurance process was conducted based on the Hungarian version of the Report, with the reporting Company taking responsibility that the contents of the Reports are the same in both languages. This Assurance Statement is a direct translation of the one issued in Hungarian.



## 2. Management Responsibilities

The management of BorsodChem Zrt, is responsible for the content and preparation of the Sustainability Report in accordance with the GRI Standards. The final version of the Report was approved and signed by the CEO.

This responsibility includes the identification of stakeholders and material issues, as well as the formulation of sustainability commitments and the development and maintenance of the internal systems used for the management of sustainability performance that the content of the Report is derived from. Management responsibilities include data collection, the choice and application of methods in line with the requirements of reporting in accordance with the GRI Standards, as well as the communication of the report content.

#### 3. Assurance provider's responsibilities

Denkstatt's responsibilities are to provide professional, third-party assurance for the Report resulting in findings and conclusions regarding adherence to:

- the AA1000 Accountability Principles (2018), and
- the criteria for reporting in accordance with the GRI Standards.

We have also formulated recommendations to support the credibility of future sustainability reports of the Company, as well clarity for the stakeholders.

## 4. Scope of assurance, standards and criteria used

The aim of the moderate assurance engagement was to formulate an opinion whether the Report, covering the period of 1 Jan 2021 - 31 Dec 2022, has been prepared in accordance with the GRI Standards and the requirements of the Aut000 Series of Standards and whether it is free from material misstatements.

We used the criteria in AA1000AS v3 to perform a Type 2 engagement to assess the Company's adherence to the principles of AA1000AP (2018), as well to verify specifically chosen disclosures according to the requirements of the GRI Standards.

#### 5. Methodology, approach, scope of work and limitations

We planned and carried out our work in order to obtain all information, evidence and explanations that we considered necessary to base our conclusions on. We completed the following activities in order to gather necessary evidence:

- gathering information regarding the Report's adherence to the principles of AA1000AP (2018) and the
  requirements of reporting in accordance with the GRI Standards:
- o conducting a higher management interview (Vice President HR and Communication) to verify management commitment to sustainability, as well as the higher management support of sustainability governance, identification of sustainability-related impacts, risks and opportunities, and to verify that the Company has a long-term strategy to manage these:



- conducting interviews with data owners of chosen performance indicators (see below) from the following units: HR and Communication, HR Controlling, Work Safety and Health Protection Department as well as the Environmental Protection Department and the Sustainability Group;
- o interviews with employees in order to get a picture of the accuracy of information presented in the report related to employees, the internal communication and performance evaluation processes of the Company and their effectiveness, as well as to gather views of the internal stakeholders on the relevant areas of corporate governance;
- assessing the methods to collect and disclose the chosen indicators through the interviews with the data owners and the studying of relevant documents and
- assessing the GRI content index in line with the requirements of reporting in accordance with the GRI Standards, with a special focus on the consistence with the relevant parts of the Report text.

The following GRI disclosures were verified:

- 2-20: Process to determine remuneration
- 3-1: Process to determine material topics
- 302-4: Reduction of energy consumption
- 303-3: Water withdrawal
- 306-3: Waste generated
   403-9: Work-related injuries

 $covering \ data \ sources, methods \ of \ data \ collection \ and \ processing, as \ well \ as \ disclosure \ in \ line \ with \ the \ definitions$ 

of these indicators by the GRI Standards.

In addition, other statements were also assessed in the Report, such as the evaluation of employee satisfaction and the follow-up of results, report content related to procurement policy, the handling of complaints, as well as the consistency and coherency of the report test, covering also that of the test and the visual elements.

Apart from the above, no other performance indicators were assessed as part of the engagement.

We are convinced that the evidence gathered is sufficient and serves as a solid basis to formulate our conclusions and recommendations.

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## 6. Findings

#### 6.1. Adherence to AA1000AP (2018)

#### Inclusivity

The 2021-2022 Report was prepared based on the results of the stakeholder engagement carried out by the Company in 2022 for the materiality assessment. The Report also describes the methods and channels of communication with stakeholders.

The COVID-19 pandemic situation significantly limited the possibilities of stakeholder communications even in the reporting period of the current report, especially year 2021; however, the Company maintained the channels and forums of effective communication and information flow. Stakeholders were actively engaged during the materiality assessment, proven also by the significantly increased response rate.

#### Materiality

The list of material topics in the Report and thus the report content is based on the materiality analysis carried out in 2022. The assessment was based on the requirements of the GRI Standards; however, the most up-todate version of the Standards places greater emphasis on the identification of impacts than what is reflected in the questionnaires sent out to stakeholders.

The opinions of both external and internal stakeholders were taken into account when determining material topics and stakeholders were also given the choice to indicate which sustainability subjects were of special interest to them. The analysis revealed which new topics emerged since 2016 and which ones were considered less material.

## Responsiveness

The Company has demonstrated a proactive response to the modified needs of its workforce and local communities since the beginning of the COVID pandemic (also in the reporting period). Besides, it has also been paying attention to managing other impacts of company activities despite the fact that 2021 still posed challenges regarding stakeholder relations.

The effectiveness of the Company's responsiveness is indicated by the small number of complaints from stakeholders. The audit assessed the handling of these complaints and it was found that the Company reacts to them in an adequate way and as soon as possible.

#### Impact

The Company is aware of its environmental and social impacts, it continuously monitors and manages these, integrating them into the Company's risk management system.

The Report describes the sustainability commitments of the Company to manage these impacts with its mediumand long-term goals. However, not all material topics are covered by sustainability goals.

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The Company has recognised that impacts related to its activities may be relevant outside of its production gates, through its value chain. To this end it has been articulating its requirements in its Supplier Code of Conduct (SCoC) to its suppliers and included them in its contracts. The sustainability approach and performance of its suppliers is assessed using the methodology of the TIS framework.

By implementing the ISCC Plus system, BorsodChem ensures the traceability and sustainability of bio and recycled / circular materials through its entire value chain and thus decreases the impacts and risks along the value chain.

#### 6.2. Adherence to the requirements of reporting in accordance with the GRI Standards

Apart from the findings above regarding stakeholder engagement and materiality, the 2022 materiality analysis that the Report refers to does not completely adhere to the definition of materiality in the GRI Standards when assessing impacts on society and the environment as the most up-to-date version of the Standards focuses on the identification of impacts. When engaging stakeholders, impacts were not given emphasis as the basis of determining materiality so stakeholders could only be involved into the identification of impacts and their significance in a limited way. However, the result of the assessment provides relevant information on the sustainability topics that are of interest to the stakeholders. In conformity with the requirements of the chosen in occordance with the GRI Standards spotin, the Report presents the mandatory general disclosures and in case of material topics, the disclosures most relevant to the Company's impacts, facilitating the evaluation of the Company's sustainability topic mance by the stakeholders through these KPIs in order to be able to integrate them into their sustainability estated decisions.

The Company applies a comprehensive database for collecting sustainability-related data. It was found during the audit that data sources are accessible, the procedures to collect and process data as well as to integrate them into the Renort are traceable.

The Company only partially satisfies the GRI Standards guidance on the principle of comparability due to the fact that BorsodChem Zr. applies a 2-year reporting period, therefore it is difficult to apply the guidance by GRI to present information for the current reporting period and at least two previous periods. Disclovers in the Report are presented for at least the reporting period prior to the current one, except for the GHG emissions. This way it can be established that the principle of comparability is not infringed. It is recommended that all historic information disclosed in the Report is presented for the same period in case of all the indicators.

# 7. Conclusions

On the basis of our work, we found nothing to suggest that the information in the Report is inaccurate, contains material misstatements or that would question the reliability of the data and information disclosed.

Any misstatements or discrepancies identified during the engagement were corrected in the final version of the Report. Most of the Verifier's recommendations were integrated into the content of the Report, and the Company intends to consides some of them in future reports.

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During the assurance process, it was confirmed that the concept of sustainability has been integrated into corporate strategy and management decisions are made considering sustainability aspects.

#### 8. Further recommendations

Further recommendations have been submitted to the management of the Company in a separate report. Our recommendations do not influence the conclusions of this Assurance Statement.

Judit Juranic

Lead Auditor

Budapest, 20 December 2023

denkstatt Hungary Kft.

